APPENDIX 3
Commercial/Industrial Sector Data

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Fla
HealtChE1	Healthcare	Chiller	Early	1	Duct Sealing, down to 15%	Leakage of 29%	ton	$1.1597	15	8,192	0.016	81.9192	$95.00	1%	40%	$0.90	0.6819	0
HealtChE2	Healthcare	Chiller	Early	2	Duct Insulation, Add R8	No Insulation	ton	$1.5259	15	8,192	0.016	81.9192	$125.00	1%	50%	95%	0.5183	0
HealtChE3	Healthcare	Chiller	Early	3	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton	ton	$0.3052	15	8,192	0.081	409.5960	$125.00	5%	75%	75%	2.5913	1
HealtChE4	Healthcare	Chiller	Early	4	Energy Recovery Units	No Energy Recovery	ton	$0.2747	15	8,192	0.323	1,638.4	$450.00	20%	75%	75%	2.8793	1
HealtChE5	Healthcare	Chiller	Early	5	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.2782	7	8,192	0.259	1,311	$364.67	16%	75%	75%	1.3195	1
HealtChE6	Healthcare	Chiller	Early	6	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$0.82	15	8,192	0.05	245	$200.00	3%	15%	95%	0.9679	0
HealtChE7	Healthcare	Chiller	Early	7	Adding window shade film	No shade film	q ft window are	$7.0453	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.0371	0
HealtChE8	Healthcare	Chiller	Early	8	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.2028	0
HealtChE9	Healthcare	Chiller	Early	9	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$0.92	20	8,192	0.05	246	$225.00	3%	75%	95%	1.1188	1
HealtChN1	Healthcare	Chiller	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	sq ft	$0.30	20	8,192	0.05	287	$87.00	4%	15%	95%	3.3367	1
HealtChN2	Healthcare	Chiller	New	2	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.2028	0
HealtChN3	Healthcare	Chiller	New	3	Adding reflective roof treatment	Std color roof	sq ft roof area	$4.50	20	8,192	0.05	10	$45.00	0%	100%	95%	0.6610	0
HealtChN4	Healthcare	Chiller	New	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$1.52	20	8,192	0.05	84	$127.43	1%	45%	95%	0.7807	0
HealtChN5	Healthcare	Chiller	New	5	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2579	15	8,192	0.76	989	$255.00	12%	95%	95%	3.8028	1
HealtChN6	Healthcare	Chiller	New	6	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.1426	15	8,192	1.944	2,542	$362.50	31%	95%	95%	6.8787	1
HealtChN7	Healthcare	Chiller	New	7	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.0739	15	19,632	1.728	2,260	$167.00	12%	95%	95%	13.2723	1
HealtChN8	Healthcare	Chiller	New	8	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.2808	15	8,192	0.081	409.5960	$115.00	5%	95%	75%	2.8167	1
HealtChN9	Healthcare	Chiller	New	9	Energy Recovery Units	No Energy Recovery	ton	$0.1526	15	8,192	0.323	1,638.4	$250.00	20%	95%	75%	5.1827	1
HealtChN10	Healthcare	Chiller	New	10	Duct Insulation, Add R8	No Insulation	ton	$1.5259	15	8,192	0.016	81.9192	$125.00	1%	100%	95%	0.5183	0
HealtChT1	Healthcare	Chiller	Turnover	1	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2984	15	8,192	0.76	989	$295.00	12%	95%	95%	3.2872	1
HealtChT2	Healthcare	Chiller	Turnover	2	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.1819	15	8,192	1.944	2,542	$462.50	31%	95%	95%	5.3914	1
HealtChT3	Healthcare	Chiller	Turnover	3	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.2902	15	8,192	1.944	1,434	$416.00	18%	95%	95%	4.0626	1
HealtChN11	Healthcare	Chiller	New	11	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.2902	15	8,192	1.944	1,434	$416.00	18%	95%	95%	4.0626	1
HealtChT5	Healthcare	Chiller	Turnover	5	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.3101	15	8,192	0.081	409.5960	$127.00	5%	95%	75%	2.5505	1
HealtChT4	Healthcare	Chiller	Turnover	4	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.0916	15	19,632	1.728	2,260	$207.00	12%	95%	95%	10.7076	1
OfficFlE1	Office	Fluorescent	Early	1	Premium Efficiency T8 Lighting Replacement (32W lamps with low	Replace (E) T12 Lamp - Bundle	Fixture	$0.5712	14	394	0.011	97	$55.38	25%	95%	41%	1.2582	1
GroceFFT6	Grocery	Fluorescent	Turnover	6	LED Retrofit Tube	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$1.0146	6	163	0.007	64	$65.00	39%	40%	95%	0.3021	0
OfficFlE2	Office	Fluorescent	Early	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2641	14	1,578	0.054	473	$125.00	30%	95%	80%	2.7214	1
OfficFlE3	Office	Fluorescent	Early	3	Photocell dimming control	No prior dimming control	Photocell	$0.2852	9	1,578	0.091	789	$225.00	50%	95%	95%	1.5825	1
LodgiInE6	Lodging	Incandescent	Early	6	Hotel Occupancy Sensors	No prior control	Per Room	$0.7447	10	240	0.019	168	$125.00	70%	90%	95%	0.6819	0
OfficFlN1	Office	Fluorescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1781	15	20,340	0.234	2,034	$362.18	10%	95%	100%	4.3100	1
OfficFlN2	Office	Fluorescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.3561	15	20,340	0.584	5,085	$1,810.90	25%	75%	100%	2.1550	1
HealtHeE1	Healthcare	Heating	Early	1	Re-commissioning	Current Controls not working properly, setpoints not optimized,	sq ft	$0.2710	7	125,500	0.297	20,080	$5,441.68	16%	95%	75%	1.2523	1
HealtHeE2	Healthcare	Heating	Early	2	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$4.44	20	300	0.05	45	$200.00	15%	10%	95%	0.3145	0
HealtHeE3	Healthcare	Heating	Early	3	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.67	20	300	0.05	75	$125.00	25%	10%	95%	0.7302	0
HealtHeE4	Healthcare	Heating	Early	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.75	20	300	0.05	34	$127.43	11%	10%	95%	0.4119	0
HealtHeE5	Healthcare	Heating	Early	5	Humidification with High pressure, Ultrasonic devices	Electric Resistive Elements	unit	$0.1893	10	2,794	0.039	2,641	$500.00	95%	100%	95%	2.5596	1
HealtHeN1	Healthcare	Heating	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5 - Electric Heat	sq ft	$1.93	20	300	0.05	45	$87.00	15%	10%	95%	0.7230	0
WarehHIE1	Warehouse	HID	Early	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.5670	10	1,268	0.043	378	$214.50	30%	85%	80%	0.8956	0
WarehHIE2	Warehouse	HID	Early	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.4472	10	1,856	0.077	671	$300.00	36%	85%	80%	1.1354	1
WarehHIE3	Warehouse	HID	Early	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.5150	10	1,268	0.052	456	$235.00	36%	85%	80%	0.9860	0
WarehHIE4	Warehouse	HID	Early	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.5081	10	1,856	0.074	640	$325.00	34%	85%	80%	0.9994	0
WarehHIT5	Warehouse	HID	Turnover	5	Ceramic Metal Halide lamp	Replace non-ceramic lamp lamp 400 W	Lamp	$0.1282	4	1,560	0.031	273	$35.00	18%	85%	55%	1.5620	1
WarehHIE8	Warehouse	HID	Early	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2465	10	5,070	0.175	1,521	$375.00	30%	85%	85%	2.0596	1
WarehHIE9	Warehouse	HID	Early	9	Photocell dimming control	No prior dimming control	Photocell	$0.2170	10	5,070	0.291	2,535	$550.00	50%	85%	85%	2.3405	1
WarehHIE10	Warehouse	HID	Early	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1972	10	5,070	0.058	507	$100.00	10%	85%	45%	2.5745	1
WarehHIE7	Warehouse	HID	Early	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$1.2166	15	1,268	0.065	566	$688.00	45%	85%	80%	0.6308	0
WarehHIT1	Warehouse	HID	Turnover	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.2921	10	1,268	0.043	378	$110.50	30%	85%	80%	1.7385	1
WarehHIT2	Warehouse	HID	Turnover	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.3354	10	1,856	0.077	671	$225.00	36%	85%	80%	1.5139	1
WarehHIT3	Warehouse	HID	Turnover	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.3178	10	1,268	0.052	456	$145.00	36%	85%	80%	1.5980	1
WarehHIT4	Warehouse	HID	Turnover	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.4065	10	1,856	0.074	640	$260.00	34%	85%	80%	1.2492	1
WarehHIT6	Warehouse	HID	Turnover	6	Multi Lamp Hard Wired CFL	Replace HID Fixture Drawing 400 W	Fixture	$0.5140	10	1,856	0.095	827	$425.00	45%	85%	55%	0.9879	0
WarehHIT7	Warehouse	HID	Turnover	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.6631	15	1,268	0.065	566	$375.00	45%	85%	80%	1.1573	1
OfficInE2	Office	Incandescent	Early	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1159	14	3,594	0.124	1,078	$125.00	30%	95%	80%	6.1996	1
OfficInE3	Office	Incandescent	Early	3	Photocell dimming control	No prior dimming control	Photocell	$0.1252	9	3,594	0.207	1,797	$225.00	50%	95%	95%	3.6052	1
GroceInN1	Grocery	Incandescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0572	15	9,629	0.111	963	$55.11	10%	95%	100%	13.4090	1
HealtInN1	Healthcare	Incandescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0842	15	49,948	0.574	4,995	$420.44	10%	95%	100%	9.1174	1
AlllLaN1	All	Large Appliances	New	1	EnergyStar vending machine	Standard vending machine	machine	$0.2672	15	3,619	0.140	1,310	$350.00	36%	100%	50%	2.8525	1
AlllLaN2	All	Large Appliances	New	2	Beverage machine control	Vending machine with no sensor	machine	$0.1021	5	3,619	0.178	1,665	$170.00	46%	100%	50%	2.4608	1
AlllLaN3	All	Large Appliances	New	3	Other cold product control	Vending machine with no sensor	machine	$0.1111	5	3,504	0.172	1,612	$179.00	46%	100%	50%	2.2624	1
AlllLaN4	All	Large Appliances	New	4	Non-cooled snack control	Vending machine with no sensor	machine	$0.4671	5	745	0.037	343	$160.00	46%	100%	50%	0.5379	0
AlllLaN5	All	Large Appliances	New	5	EnergyStar dishwasher	Std Dishwasher	dishwasher	$0.4015	12	250	0.015	137	$55.00	55%	100%	50%	1.5242	1
AlllLaN6	All	Large Appliances	New	6	EnergyStar refrigerator	Std Refrigerator	refrigerator	$0.3000	12	750	0.011	100	$30.00	13%	100%	50%	2.0397	1
AlllLaN7	All	Large Appliances	New	7	Low-temperature dish machine	High temp dish machine with booster heater	removed kW	$0.0634	15	17,451	0.894	8,362	$530.00	48%	100%	50%	12.0262	1
AlllLaN8	All	Large Appliances	New	8	High-efficiency washer	Standard washer, electric hot water	washer	$0.4380	10	2,262	0.102	959	$420.00	42%	100%	50%	1.1495	1
AlllLaN9	All	Large Appliances	New	9	High-efficiency coin-op washer w/o Electric Water Heat	Coin-op wash, w/out electric hot water	washer	$1.7872	10	1,180	0.025	235	$420.00	20%	100%	50%	0.2817	0
AlllLaN10	All	Large Appliances	New	10	High-efficiency coin-op washer w/ Electric water heat	Coin-op wash, electric hot water	washer	$0.4380	10	2,262	0.102	959	$420.00	42%	100%	50%	1.1495	1
AlllLaT1	All	Large Appliances	Turnover	1	EnergyStar vending machine	Standard vending machine	machine	$0.2672	15	3,619	0.140	1,310	$350.00	36%	100%	50%	2.8525	1
AlllLaT2	All	Large Appliances	Turnover	2	Beverage machine control	Vending machine with no sensor	machine	$0.1021	5	3,619	0.178	1,665	$170.00	46%	100%	50%	2.4608	1
AlllLaT3	All	Large Appliances	Turnover	3	Other cold product control	Vending machine with no sensor	machine	$0.1111	5	3,504	0.172	1,612	$179.00	46%	100%	50%	2.2624	1
AlllLaT4	All	Large Appliances	Turnover	4	Non-cooled snack control	Vending machine with no sensor	machine	$0.4671	5	745	0.037	343	$160.00	46%	100%	50%	0.5379	0
AlllLaT5	All	Large Appliances	Turnover	5	EnergyStar dishwasher	Std Dishwasher	dishwasher	$0.4015	12	250	0.015	137	$55.00	55%	100%	50%	1.5242	1
AlllLaT6	All	Large Appliances	Turnover	6	EnergyStar refrigerator	Std Refrigerator	refrigerator	$0.3000	12	750	0.011	100	$30.00	13%	100%	50%	2.0397	1
AlllLaT7	All	Large Appliances	Turnover	7	Low-temperature dish machine	High temp dish machine with booster heater	removed kW	$0.0634	15	17,451	0.894	8,362	$530.00	48%	100%	50%	12.0262	1
AlllLaT8	All	Large Appliances	Turnover	8	High-efficiency washer	Standard washer, electric hot water	washer	$0.4380	10	2,262	0.102	959	$420.00	42%	100%	50%	1.1495	1
AlllLaT9	All	Large Appliances	Turnover	9	High-efficiency coin-op washer w/o Electric Water Heat	Coin-op wash, w/out electric hot water	washer	$1.7872	10	1,180	0.025	235	$420.00	20%	100%	50%	0.2817	0
AlllLaT10	All	Large Appliances	Turnover	10	High-efficiency coin-op washer w/ Electric water heat	Coin-op wash, electric hot water	washer	$0.4380	10	2,262	0.102	959	$420.00	42%	100%	50%	1.1495	1
OfficMoN1	Office	Motors	New	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.3115	15	12921	0.0282	117.2	$154	0.91%	74.4%	100%	0.6191	0
OfficMoN2	Office	Motors	New	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.4170	15	49501	0.0231	367.6	$521	0.74%	74.4%	100%	0.5311	0
OfficMoN3	Office	Motors	New	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.2732	15	121517	0.0138	541.0	$689	0.45%	66.3%	100%	0.5813	0
OfficMoN4	Office	Motors	New	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.5357	15	244333	0.0121	953.4	$511	0.39%	55.8%	100%	1.3734	1
OfficMoN5	Office	Motors	New	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-500 HP	Motor	$0.4495	15	524346	0.0284	4796.5	$2,156	0.91%	55.8%	100%	1.6318	1
OfficMoN6	Office	Motors	New	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.6710	15	81970	2.109	16,394	$11,000.00	20%	55.0%	100%	1.1544	1
OfficMoN7	Office	Motors	New	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.5604	15	81970	12.153	23197.4	$13,000.00	28%	70.0%	100%	1.6184	1
OfficMoN8	Office	Motors	New	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.5705	15	81970	0.000	22787.6	$13,000.00	28%	80.0%	100%	1.2823	1
OfficMoN9	Office	Motors	New	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.6500	15	81970	12.153	20000.6	$13,000.00	24%	70.0%	100%	1.4385	1
OfficMoN10	Office	Motors	New	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.5705	15	81970	9.205	22787.6	$13,000.00	28%	55.0%	100%	1.5194	1
OfficMoN11	Office	Motors	New	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.6500	15	81970	12.153	20000.6	$13,000.00	24%	30.0%	100%	1.4385	1
OfficMoT1	Office	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.3115	15	12921	0.0282	117.2	$154	0.91%	74.4%	100%	0.6191	0
OfficMoT2	Office	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.4170	15	49501	0.0231	367.6	$521	0.74%	74.4%	100%	0.5311	0
OfficMoT3	Office	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.2732	15	121517	0.0138	541.0	$689	0.45%	66.3%	100%	0.5813	0
OfficMoT4	Office	Motors	Turnover	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.5357	15	244333	0.0121	953.4	$511	0.39%	55.8%	100%	1.3734	1
OfficMoT5	Office	Motors	Turnover	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-250 HP	Motor	$0.4495	15	524346	0.0284	4796.5	$2,156	0.91%	55.8%	100%	1.6318	1
OfficMoT6	Office	Motors	Turnover	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.6710	15	81970	2.109	16,394	$11,000.00	20%	55.0%	80%	1.1544	1

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OfficMoT7	Office	Motors	Turnover	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.5604	15	81970	12.153	23197.4	$13,000.00	28%	90.0%	80%	1.6184	1
OfficMoT8	Office	Motors	Turnover	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.5705	15	81970	0.000	22787.6	$13,000.00	28%	90.0%	80%	1.2823	1
OfficMoT9	Office	Motors	Turnover	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.6500	15	81970	12.153	20000.6	$13,000.00	24%	90.0%	80%	1.4385	1
OfficMoT10	Office	Motors	Turnover	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.5705	15	81970	9.205	22787.6	$13,000.00	28%	80.0%	80%	1.5194	1
OfficMoT11	Office	Motors	Turnover	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.6500	15	81970	12.153	20000.6	$13,000.00	24%	55.0%	80%	1.4385	1
OfficMoT12	Office	Motors	Turnover	12	Motors: Rewind 125-200 HP	(E) Motor	Motor	$0.6069	15	245909	0.159	1235.7	$750	0.5%	35.0%	95%	1.2762	1
OfficMoT13	Office	Motors	Turnover	13	Motors: Rewind 201-500 HP	(E) Motor	Motor	$0.7470	15	532803	0.344	2677.4	$2,000	0.5%	50.0%	95%	1.0370	1
OfficMoT14	Office	Motors	Turnover	14	Motors: Rewind 20-50 HP	(E) Motor	Motor	$0.5601	15	50263	0.057	446.3	$250	0.9%	10.0%	95%	1.3828	1
OfficMoT15	Office	Motors	Turnover	15	Motors: Rewind 500+ HP	(E) Motor	Motor	$0.6474	15	1229546	0.795	6178.6	$4,000	0.5%	70.0%	95%	1.1965	1
OfficMoT16	Office	Motors	Turnover	16	Motors: Rewind 51-100 HP	(E) Motor	Motor	$0.6955	15	124291	0.092	718.9	$500	0.6%	20.0%	95%	1.1137	1
OfficMoT17	Office	Motors	Turnover	17	Downsizing motor during retrofit	Larger hp standard motor	HP Reduction	$0.34	20	186,404	0.190	1,477	$500.00	0.79%	25%	95%	2.9638	1
OfficMoN12	Office	Motors	New	12	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.7031	1
OfficMoN13	Office	Motors	New	13	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.0317	0
OfficMoN14	Office	Motors	New	14	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.6196	1
OfficMoN15	Office	Motors	New	15	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.6444	0
OfficMoT18	Office	Motors	Turnover	18	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.7031	1
OfficMoT19	Office	Motors	Turnover	19	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.0317	0
OfficMoT20	Office	Motors	Turnover	20	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.6196	1
OfficMoT21	Office	Motors	Turnover	21	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.6444	0
AllOfE1	All	Office Equipment	Early	1	PC network power management	No central control	PC	$0.14	5	410	0.023	215	$30.00	52.44%	75%	80%	1.8006	1
AllOfE2	All	Office Equipment	Early	2	Occupancy sensor controls/Smart Strip	Computers, other plug loads	sensor	$0.60	5	413	0.010	124	$75.00	30.02%	55%	95%	0.4104	0
AllOfN1	All	Office Equipment	New	1	ENERGY STAR® Office Equipment	Std Office Equipment	PC	$1.09	5	4,000	0.021	200	$218.00	5.00%	90%	80%	0.2305	0
AllOfN2	All	Office Equipment	New	2	Energy Star - Water Cooler	Std Water Cooler	unit	$1.06	5	453	0.022	204	$215.67	45.08%	35%	80%	0.2377	0
AllOfN3	All	Office Equipment	New	3	80 Plus® PC-desktop	Standard personal computer, desktop	PC	$0.19	5	410	0.014	130	$25.00	31.71%	100%	55%	1.3065	1
AllOfN6	All	Office Equipment	New	6	Data Center - Server/Storage Virtualization	No Virtualization	unit	$1.76	5	4,818	0.452	4,227	$7,434	87.73%	70%	80%	0.1429	0
AllOfT1	All	Office Equipment	Turnover	1	ENERGY STAR® Office Equipment	Std Office Equipment	PC	$1.09	5	4,000	0.021	200	$218.00	5.00%	90%	80%	0.2305	0
AllOfT2	All	Office Equipment	Turnover	2	Energy Star - Water Cooler	Std Water Cooler	unit	$1.06	5	453	0.022	204	$215.67	45.08%	35%	80%	0.2377	0
AllOfT3	All	Office Equipment	Turnover	3	80 Plus® PC-desktop	Standard personal computer, desktop	PC	$0.19	5	410	0.014	130	$25.00	31.71%	100%	55%	1.3065	1
AllOfT6	All	Office Equipment	Turnover	6	Data Center - Server/Storage Virtualization	No Virtualization	unit	$1.76	5	4,818	0.452	4,227	$7,434	87.73%	70%	80%	0.1429	0
HealtPaE1	Healthcare	Packaged DX	Early	1	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$3.13	20	1,261	0.05	64	$200.00	5%	15%	95%	0.4045	0
HealtPaE2	Healthcare	Packaged DX	Early	2	Adding window shade film	No shade film	q ft window are	$7.05	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.0363	0
HealtPaE3	Healthcare	Packaged DX	Early	3	Adding window shade screen	No shade screen	q ft window are	$3.90	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.1973	0
HealtPaE4	Healthcare	Packaged DX	Early	4	Windows U<0.40, .55 SHGC	Existing window specifications	q ft window are	$1.40	30	2	0.000	0	$0.28	13%	50%	95%	0.9850	0
HealtPaE5	Healthcare	Packaged DX	Early	5	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$2.68	20	1,261	0.05	84	$225.00	7%	95%	95%	0.4440	0
HealtPaE7	Healthcare	Packaged DX	Early	7	Automated control system	Baseline DX	ton	$0.38	10	1,332	0.008	67	$25.00	5%	100%	65%	1.3578	1
HealtPaE8	Healthcare	Packaged DX	Early	8	Duct Sealing, down to 15%	Leakage of 29%	ton	$7.92	15	1,261	0.05	12	$95.00	1%	45%	80%	0.2609	0
HealtPaE9	Healthcare	Packaged DX	Early	9	Hotel Keycard Sensors	No prior controls	oom Controlle	$0.29	10	1,132	0.041	342	$100.00	30%	95%	80%	1.7426	1
HealtPaE10	Healthcare	Packaged DX	Early	10	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	ton	$0.55	1	1,371	0.05	64	$35.00	5%	100%	45%	0.1131	0
HealtPaE11	Healthcare	Packaged DX	Early	11	7 day, two stage setback thermostat	Manual Thermostat	ton	$0.44	10	1,261	0.015	125	$55.00	10%	100%	45%	1.1580	1
HealtPaE13	Healthcare	Packaged DX	Early	13	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.27	7	1,261	0.05	202	$55.15	16%	95%	75%	1.3821	1
HealtPaN1	Healthcare	Packaged DX	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	ton	$1.36	20	1,261	0.05	64	$87.00	5%	100%	95%	0.9299	0
HealtPaN2	Healthcare	Packaged DX	New	2	Adding reflective roof treatment	Std color roof	ton	$4.50	20	1,261	0.05	10	$45.00	1%	100%	95%	0.6621	0
HealtPaN3	Healthcare	Packaged DX	New	3	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$1.49	20	1,261	0.05	84	$125.00	7%	100%	95%	0.7992	0
HealtPaN4	Healthcare	Packaged DX	New	4	Green Roof (New construction or roof replacement)	Std Roof	ton	$1.52	20	1,261	0.05	84	$127.43	7%	45%	95%	0.7840	0
HealtPaN5	Healthcare	Packaged DX	New	5	Duct Insulation, Add R8	No Insulation	ton	$10.42	20	1,261	0.05	12	$125.00	1%	100%	95%	0.2535	0
HealtPaN6	Healthcare	Packaged DX	New	6	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$1.16	20	1,086	0.04	78	$90.40	7%	100%	95%	1.0201	1
HealtPaN7	Healthcare	Packaged DX	New	7	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$1.25	20	1,086	0.08	145	$180.81	13%	100%	95%	0.9520	0
HealtPaN8	Healthcare	Packaged DX	New	8	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$1.33	20	1,086	0.12	204	$271.21	19%	100%	95%	0.8925	0
HealtPaN9	Healthcare	Packaged DX	New	9	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$0.65	20	1,261	0.05	84	$55.00	7%	100%	95%	1.8164	1
HealtPaN10	Healthcare	Packaged DX	New	10	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$0.65	20	1,284	0.06	107	$70.00	8%	100%	95%	1.8164	1
HealtPaN11	Healthcare	Packaged DX	New	11	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.10	20	1,412	0.06	105	$115.13	7%	100%	95%	1.0798	1
HealtPaN12	Healthcare	Packaged DX	New	12	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$1.38	20	1,456	0.04	71	$98.39	5%	100%	95%	0.8620	0
HealtPaN13	Healthcare	Packaged DX	New	13	Ground Source HP Open - Water	Air Source Heat Pump	ton	$1.82	15	1,284	0.23	412	$ 750.0	32%	20%	95%	0.5057	0
HealtPaN14	Healthcare	Packaged DX	New	14	Ground Source HP Closed	Air Source Heat Pump	ton	$3.26	15	1,284	0.027	230	$750.00	18%	100%	95%	0.2360	0
HealtPaN15	Healthcare	Packaged DX	New	15	Air-side Economizer	No Economizer	ton	$0.90	15	1,261	0.023	189	$170.00	15%	75%	45%	0.8563	0
HealtPaN16	Healthcare	Packaged DX	New	16	Energy Recovery Units	No Energy Recovery	ton	$0.71	15	1,261	0.030	252	$179.00	20%	100%	95%	1.0844	1
HealtPaN17	Healthcare	Packaged DX	New	17	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$1.85	15	1,332	0.007	60	$110.89	5%	100%	95%	0.4165	0
HealtPaT1	Healthcare	Packaged DX	Turnover	1	Duct Insulation, Add R8	No Insulation	ton	$10.42	15	1,261	0.05	12	$125.00	1%	100%	95%	0.1983	0
HealtPaT2	Healthcare	Packaged DX	Turnover	2	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$1.16	20	1,086	0.04	78	$90.40	7%	100%	95%	1.0201	1
HealtPaT3	Healthcare	Packaged DX	Turnover	3	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$1.25	20	1,086	0.08	145	$180.81	13%	100%	95%	0.9520	0
HealtPaT4	Healthcare	Packaged DX	Turnover	4	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$1.33	20	1,086	0.12	204	$271.21	19%	100%	95%	0.8925	0
HealtPaT5	Healthcare	Packaged DX	Turnover	5	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$0.65	20	1,261	0.05	84	$55.00	7%	100%	95%	1.8164	1
HealtPaT6	Healthcare	Packaged DX	Turnover	6	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$0.65	20	1,284	0.06	107	$70.00	8%	100%	95%	1.8164	1
HealtPaT7	Healthcare	Packaged DX	Turnover	7	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.10	20	1,412	0.06	105	$115.13	7%	100%	95%	1.0798	1
HealtPaT8	Healthcare	Packaged DX	Turnover	8	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$1.38	20	1,456	0.04	71	$98.39	5%	100%	95%	0.8620	0
HealtPaT9	Healthcare	Packaged DX	Turnover	9	Ground Source HP Open - Water	Air Source Heat Pump	ton	$1.82	15	1,284	0.23	412	$ 750.0	32%	5%	95%	0.5057	0
HealtPaT10	Healthcare	Packaged DX	Turnover	10	Ground Source HP Closed	Air Source Heat Pump	ton	$3.26	15	1,284	0.027	230	$750.00	18%	100%	95%	0.2360	0
HealtPaT11	Healthcare	Packaged DX	Turnover	11	Air-side Economizer	No Economizer	ton	$0.90	15	1,261	0.023	189	$170.00	15%	75%	45%	0.8563	0
HealtPaT12	Healthcare	Packaged DX	Turnover	12	Energy Recovery Units	No Energy Recovery	ton	$0.71	15	1,261	0.030	252	$179.00	20%	100%	95%	1.0844	1
HealtPaT13	Healthcare	Packaged DX	Turnover	13	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$1.85	15	1,332	0.007	60	$110.89	5%	100%	95%	0.4165	0
AllReT1	All	Refrigeration	Turnover	1	Vertical night covers	No covers present	linear ft	$0.34	5	4,380	0.006	44	$15.00	1.00%	50%	95%	0.7490	0
AllReT2	All	Refrigeration	Turnover	2	eCube	No eCube	unit	$0.33	9	5,431	0.162	1,222	$399.00	22.50%	95%	95%	1.3927	1
AllReT3	All	Refrigeration	Turnover	3	Anti-sweat heat (ASH) controls - Freezer	ASH without controls	Per Door	$0.16	12	2,985	0.029	1,882	$300.00	63%	95%	85%	3.6933	1
AllReT4	All	Refrigeration	Turnover	4	Anti-sweat heat (ASH) controls - Cooler	ASH without controls	Per Door	$0.29	12	1,621	0.028	1,023	$300.00	63%	95%	85%	2.0185	1
AllReT5	All	Refrigeration	Turnover	5	Floating head pressure controller	Standard head pressure control	ton	$0.46	14	18,314	0.085	641	$296.00	4%	50%	95%	1.5676	1
AllReN1	All	Refrigeration	New	1	Efficient, low-temp reach-in	Standard low-temp reach-in	unit	$0.07	12	5,431	0.222	1,671	$123.33	30.77%	95%	95%	8.4149	1
AllReN2	All	Refrigeration	New	2	No-heat glass doors	Standard low-temp reach-in	door	$0.67	10	3,986	0.106	797	$537.50	20.00%	95%	95%	0.7587	0
AllReN3	All	Refrigeration	New	3	High Efficiency Ice Makers	Standard Ice Maker	Each	$0.16	10	11,815	0.042	318	$50.00	3%	85%	85%	3.2535	1
AllReN4	All	Refrigeration	New	4	Compressor VSD	Base Refrigeration System - Grocery		$0.35	13	5,436	0.101	761	$267.00	14%	75%	86%	1.9199	1
AllReN5	All	Refrigeration	New	5	VFD on cooling tower fans	Base single-speed fan		$0.29	15	7158	0.681	5,132	$1,507.40	72%	25%	95%	2.6315	1
AllReN6	All	Refrigeration	New	6	Reach-in Cooler: Shaded Pole to PSC: 1-37 Watt			$0.60	15	832	0.047	352	$212.50	42%	75%	49%	1.2804	1
AllReN7	All	Refrigeration	New	7	Reach-in Cooler: PSC to ECM: 1-37 Watt			$0.54	15	467	0.022	169	$91.25	36%	75%	49%	1.4316	1
AllReN8	All	Refrigeration	New	8	Reach-in Cooler: Shaded Pole to ECM: 1-37 Watt			$0.59	15	832	0.069	521	$306.25	63%	75%	49%	1.3150	1
AllReN9	All	Refrigeration	New	9	Reach-in Freezer: Shaded Pole to ECM: 1-14 Watt			$0.49	15	832	0.082	622	$306.25	75%	75%	49%	1.5699	1
AllReN10	All	Refrigeration	New	10	Reach-in Shaded Pole to PSC Evaporator Fan Motor			$0.55	15	832	0.051	386	$212.50	46%	75%	49%	1.4041	1
AllReN11	All	Refrigeration	New	11	Reach-in PSC to ECM Evaporator Fan Motor			$0.49	15	467	0.025	185	$91.25	40%	75%	49%	1.5671	1
AllReN12	All	Refrigeration	New	12	Reach-in Shaded Pole to ECM Evaporator Fan Motor			$0.54	15	832	0.076	571	$306.25	69%	75%	49%	1.4412	1
AllReN13	All	Refrigeration	New	13	Walk-in Cooler: PSC to ECM: 16-49 Watt			$0.35	15	711	0.034	258	$91.25	36%	75%	49%	2.1855	1
AllReN14	All	Refrigeration	New	14	Walk-in Freezer: PSC to ECM: 16-49 Watt			$0.30	15	711	0.041	309	$91.25	43%	75%	49%	2.6175	1
AllReN15	All	Refrigeration	New	15	Walk-in Cooler: Shaded Pole to ECM: 16-49 Watt			$0.44	15	1,175	0.093	704	$306.25	60%	75%	49%	1.7769	1
AllReN16	All	Refrigeration	New	16	Walk-in Freezer: Shaded Pole to ECM: 16-49 Watt			$0.36	15	1,175	0.112	842	$306.25	72%	75%	49%	2.1252	1
AllReN17	All	Refrigeration	New	17	Walk-in PSC to ECM			$0.32	15	711	0.038	283	$91.25	40%	75%	49%	2.3972	1
AllReN18	All	Refrigeration	New	18	Walk-in Shaded Pole to ECM			$0.40	15	1175	0.103	773	$306.25	66%	75%	49%	1.9510	1
AllReT6	All	Refrigeration	Turnover	6	High Efficiency Ice Makers	Standard Ice Making		$0.12	10	11,815	0.159	1,197	$140.00	10%	85%	85%	4.3738	1

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Fla
AllReN19	All	Refrigeration	New	19	High Efficiency Ice Machine Self Contained	Standard Ice Machine Self Contained		$0.31	10	4,341	0.042	318	$100.00	7%	85%	85%	1.6267	1
AllReT7	All	Refrigeration	Turnover	7	Fluorescent walk-in light fixture	Incandescent walk-in light fixture	fixture	$0.42	15	792	0.065	491	$206.00	62.00%	85%	45%	1.8414	1
AllReT8	All	Refrigeration	Turnover	8	LED Case Lighting	T12 or T10 fluorescent lighting	Light Bar	$0.43	15	677	0.070	526	$225.00	77.78%	95%	75%	1.8083	1
AllReT9	All	Refrigeration	Turnover	9	LED Case Lighting - Occupancy Sensor	No Occupancy Sensor	Light Bar	$0.15	8	667	0.003	20	$3.00	3.00%	15%	95%	2.7194	1
AllReT10	All	Refrigeration	Turnover	10	Efficient, low-temp reach-in	Standard low-temp reach-in	unit	$0.07	12	5,431	0.222	1,671	$123.33	30.77%	85%	85%	8.4149	1
AllReT11	All	Refrigeration	Turnover	11	High R-Value Glass Doors		door	$0.67	10	3,986	0.106	797	$537.50	20.00%	85%	85%	0.7587	0
AllReT12	All	Refrigeration	Turnover	12	Compressor VSD retrofit	Base Refrigeration System - Grocery		$0.35	13	5,436	0.101	761	$267.00	14%	75%	86%	1.9199	1
AllReT13	All	Refrigeration	Turnover	13	Quick acting freezer doors			$0.62	10	38,544	4.461	33,637	$20,966.00	87%	75%	86%	0.8207	0
AllReT14	All	Refrigeration	Turnover	14	VFD on cooling tower fans	Base single-speed fan		$0.29	15	7158	0.681	5,132	$1,507.40	72%	35%	85%	2.6315	1
AllReT15	All	Refrigeration	Turnover	15	Reach-in Cooler: Shaded Pole to PSC: 1-37 Watt			$0.60	15	832	0.047	352	$212.50	42%	75%	49%	1.2804	1
AllReT16	All	Refrigeration	Turnover	16	Reach-in Cooler: PSC to ECM: 1-37 Watt			$0.54	15	467	0.022	169	$91.25	36%	75%	49%	1.4316	1
AllReT17	All	Refrigeration	Turnover	17	Reach-in Cooler: Shaded Pole to ECM: 1-37 Watt			$0.59	15	832	0.069	521	$306.25	63%	75%	49%	1.3150	1
AllReT18	All	Refrigeration	Turnover	18	Reach-in Freezer: Shaded Pole to ECM: 1-14 Watt			$0.49	15	832	0.082	622	$306.25	75%	75%	49%	1.5699	1
AllReT19	All	Refrigeration	Turnover	19	Reach-in Shaded Pole to PSC Evaporator Fan Motor			$0.55	15	832	0.051	386	$212.50	46%	75%	49%	1.4041	1
AllReT18	All	Refrigeration	Turnover	18	Reach-in PSC to ECM Evaporator Fan Motor			$0.49	15	467	0.025	185	$91.25	40%	75%	49%	1.5671	1
AllReT20	All	Refrigeration	Turnover	20	Reach-in Shaded Pole to ECM Evaporator Fan Motor			$0.54	15	832	0.076	571	$306.25	69%	75%	49%	1.4412	1
AllReT21	All	Refrigeration	Turnover	21	Walk-in Cooler: PSC to ECM: 16-49 Watt			$0.35	15	711	0.034	258	$91.25	36%	75%	49%	2.1855	1
AllReT22	All	Refrigeration	Turnover	22	Walk-in Freezer: PSC to ECM: 16-49 Watt			$0.30	15	711	0.041	309	$91.25	43%	75%	49%	2.6175	1
AllReT23	All	Refrigeration	Turnover	23	Walk-in Cooler: Shaded Pole to ECM: 16-49 Watt			$0.44	15	1,175	0.093	704	$306.25	60%	75%	49%	1.7769	1
AllReT24	All	Refrigeration	Turnover	24	Walk-in Freezer: Shaded Pole to ECM: 16-49 Watt			$0.36	15	1,175	0.112	842	$306.25	72%	75%	49%	2.1252	1
AllReT25	All	Refrigeration	Turnover	25	Walk-in PSC to ECM			$0.32	15	711	0.038	283	$91.25	40%	75%	49%	2.3972	1
AllReT26	All	Refrigeration	Turnover	26	Walk-in Shaded Pole to ECM			$0.40	15	1175	0.103	773	$306.25	66%	75%	49%	1.9510	1
AllStT1	All	Signage	Turnover	1	Induction Street Lighting	Base HID Streetlighting	Fixture	$0.57	15	2,762	0.101	1,619	$925.00	59%	95%	95%	1.2914	1
AllStT2	All	Signage	Turnover	2	LED exit sign - 1 sided	Incandescent exit sign	Exit Sign	$0.15	15	175	0.024	158	$23.50	90%	65%	70%	5.1515	1
AllStT3	All	Signage	Turnover	3	LED exit sign -2 sided	Incandescent exit sign	Exit Sign	$0.16	15	350	0.048	228	$37.50	65%	65%	70%	4.7821	1
AllStT4	All	Signage	Turnover	4	Photoluminescent Exit Sign	Incandescent exit sign	Exit Sign	$0.17	15	175	0.011	175	$30.00	100%	50%	70%	4.3082	1
AllStT5	All	Signage	Turnover	5	LED or equivalent sign lighting -1 sided	Replace fluorescent sign lighting	Exit Sign	$0.28	15	79	0.009	61	$17.36	78%	48%	7%	2.7055	1
AllStT6	All	Signage	Turnover	6	LED or equivalent sign lighting -2 sided	Replace fluorescent sign lighting	Exit Sign	$0.12	15	175	0.002	140	$17.36	80%	48%	7%	5.8276	1
AllStT7	All	Signage	Turnover	7	LED Street Lighting	Std HID Street Lighting	Pole	$0.63	15	2,762	0.047	756	$475.00	27%	95%	95%	1.1736	1
AllStT8	All	Signage	Turnover	8	Red LED Traffic Light	Red Traffic Light	Signal	$0.37	10	332	0.019	299	$112.00	90%	95%	75%	1.2905	1
AllStT9	All	Signage	Turnover	9	Yellow LED Traffic Light	Yellow Standard Traffic Light	Lamp	$12.10	10	12	0.001	10	$121.00	83%	95%	75%	0.0400	0
AllStT10	All	Signage	Turnover	10	Green LED Traffic Light	Green Standard Traffic Light	Lamp	$0.77	10	260	0.014	226	$174.00	87%	95%	75%	0.6279	0
AllStT11	All	Signage	Turnover	11	Hand/Man LED	Pedestrian Standard	Lamp	$0.19	10	1,016	0.059	946	$182.00	93%	95%	75%	2.5126	1
AllWaT1	All	Water Heating	Turnover	1	Ultrasonic Faucet Control	Manual Faucet Control	unit	$1.000	10	1,750	0.010	125	$125	7%	75%	75%	0.4950	0
AllWaT2	All	Water Heating	Turnover	2	Faucet Aerators	Std Flow faucet	unit	$0.246	12	4,122	0.006	61	$15	6%	75%	75%	2.4662	1
AllWaT3	All	Water Heating	Turnover	3	Hot Water (DHW) Pipe Insulation	No insulation present	10 ln ft	$0.292	14	4,122	0.011	124.00	$36.23	3%	75%	75%	2.4218	1
AllWaT4	All	Water Heating	Turnover	4	Low-Flow Showerheads	Std Flow showerhead	unit	$0.108	9	4,122	0.042	461	$50	11%	75%	75%	4.0818	1
AllWaT5	All	Water Heating	Turnover	5	Water Heater Thermostat Setback	Constant setpoint	unit	$0.029	2	4,122	0.053	577.09	$17	14%	75%	75%	3.3345	1
AllWaN1	All	Water Heating	New	1	Ultrasonic Faucet Control	Manual Faucet Control	unit	$0.400	10	4,122	0.011	125	$50	3%	75%	75%	1.2466	1
AllWaN2	All	Water Heating	New	2	Faucet Aerators	Std Flow faucet	unit	$0.082	12	4,122	0.006	61	$5	6%	75%	75%	7.3987	1
AllWaN3	All	Water Heating	New	3	Hot Water (DHW) Pipe Insulation	No insulation present	10 ln ft	$0.292	14	4,122	0.011	124.00	$36.23	3%	75%	75%	2.4218	1
AllWaN4	All	Water Heating	New	4	Low-Flow Showerheads	Std Flow showerhead	unit	$0.108	9	4,122	0.042	461	$50	11%	75%	75%	4.0818	1
AllWaN5	All	Water Heating	New	5	Water Heater Thermostat Setback	Constant setpoint	unit	$0.029	2	4,122	0.053	577.09	$17	14%	75%	75%	3.3345	1
AllWaN6	All	Water Heating	New	6	High Efficiency Water Heater (Electric) EF .93, 28-50 Gal	Std Efficiency water heater	unit	$0.541	14	4,122	0.012	133	$72	3%	75%	100%	1.3071	1
AllWaN7	All	Water Heating	New	7	Heat Pump Water Heater (air source)	Base Water Heating	unit	$0.516	14	4,122	0.176	1,914.00	$988	46%	75%	100%	1.3708	1
AllWaN8	All	Water Heating	New	8	Heat Recovery Unit	Base Water Heating	unit	$0.362	14	4,122	0.190	2,073	$750	50.3%	50%	95%	1.9562	1
AllWaN9	All	Water Heating	New	9	Solar Water Heater	Base Water Heating	unit	$1.206	14	4,122	0.193	2,106	$2,540	82.0%	65%	95%	0.5867	0
AllWaT6	All	Water Heating	Turnover	6	High Efficiency Water Heater (Electric) EF .93, 28-50 Gal	Std Efficiency water heater	unit	$0.541	14	4,122	0.012	133	$72	8.0%	100%	75%	1.3071	1
AllWaT7	All	Water Heating	Turnover	7	Heat Pump Water Heater (air source)	Base Water Heating	unit	$0.516	14	4,122	0.176	1,914.00	$988	46%	75%	100%	1.3708	1
AllWaT8	All	Water Heating	Turnover	8	Heat Recovery Unit	Base Water Heating	unit	$0.458	14	4,122	0.190	2,073	$950	50.3%	50%	95%	1.5443	1
AllWaT9	All	Water Heating	Turnover	9	Solar Water Heater	Base Water Heating	unit	$1.401	14	4,122	0.193	2,106	$2,950	82.0%	65%	95%	0.5051	0
GroceReN1	All	Refrigeration	New	20	Demand Defrost Electric	Base Refrigeration System - Grocery		$0.91	15	4	0.000	0	$0.05	1%	95%	92%	0.8510	0
AllReT27	All	Refrigeration	Turnover	27	Demand Defrost Electric	Base Refrigeration System - Grocery		$0.91	15	4	0.000	0	$0.05	1%	95%	92%	0.8510	0
GroceReN3	All	Refrigeration	New	21	Demand Hot Gas Defrost	Base Refrigeration System - Grocery		$0.35	15	4	0.000	0	$0.05	3%	95%	92%	2.1837	1
AllReT28	All	Refrigeration	Turnover	28	Demand Hot Gas Defrost	Base Refrigeration System - Grocery		$0.35	15	4	0.000	0	$0.05	3%	95%	92%	2.1837	1
GroceReN4	All	Refrigeration	New	22	Efficient compressor motor - scroll	Base Refrigeration System - Grocery		$0.09	15	15,825	0.084	633	$60.00	4%	95%	92%	8.1547	1
AllReT29	All	Refrigeration	Turnover	29	Efficient compressor motor - scroll	Base Refrigeration System - Grocery		$0.09	15	15,825	0.084	633	$60.00	4%	95%	92%	8.1547	1
GroceReN6	All	Refrigeration	New	23	High R-Value Glass Doors	Base Refrigeration System - Grocery	Door	$0.67	10	3,986	0.106	797	$537.50	20.00%	95%	92%	0.7587	0
GroceReN7	All	Refrigeration	New	24	Refrigeration Commissioning	Base Refrigeration System - Grocery	Per refigerator	$0.31	7	8,800	0.187	1,408	$440.00	16%	95%	92%	1.1499	1
AllReE1	All	Refrigeration	Early	1	Refrigeration Commissioning	Base Refrigeration System - Grocery	Per refigerator	$0.25	7	8,800	0.117	880	$220.00	10%	95%	92%	1.4374	1
GroceReN8	All	Refrigeration	New	25	Strip curtains for walk-ins	Base Refrigeration System - Grocery		$0.50	15	29,900	0.079	598	$300.00	2%	45%	78%	1.5408	1
AllReT30	All	Refrigeration	Turnover	30	Strip curtains for walk-ins	Base Refrigeration System - Grocery		$0.50	15	29,900	0.079	598	$300.00	2%	45%	78%	1.5408	1
HealtPaN18	Healthcare	Packaged DX	New	18	Automated control system	Baseline DX	ton	$0.38	10	1,332	0.008	67	$25.00	5%	100%	65%	1.3578	1
HealtPaN19	Healthcare	Packaged DX	New	19	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$0.70	10	1,132	0.007	62	$43.00	5%	100%	95%	0.7315	0
HealtPaT15	Healthcare	Packaged DX	Turnover	15	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$0.70	10	1,132	0.007	62	$43.00	5%	100%	95%	0.7315	0
AllCoN1	All	Cooking	New	1	Commercial Hot Food Holding Cabinets (Energy Star)	Standard Cabinet	Each	$0.94	12	23,411	0.187	1,592	$1,500.00	7%	40%	95%	0.6553	0
AllCoN2	All	Cooking	New	2	High Efficiency Fryers (Energy Star)	Standard Fryer	Each	$5.45	12	18,196	0.027	233	$1,271.00	1%	40%	95%	0.1132	0
AllCoN3	All	Cooking	New	3	High Efficiency Griddle	Standard Griddle	Each	$0.66	12	17,056	0.304	2,595	$1,700.00	15%	40%	95%	0.9425	0
AllCoN4	All	Cooking	New	4	High Efficiency Induction Cooking	Standard Cooking	Each	$1.04	12	29,376	0.248	2,118	$2,213.00	7%	40%	95%	0.5909	0
AllCoN5	All	Cooking	New	5	Electric Steam cooker	Standard Cooker	Each	$0.40	12	46,813	0.439	3,745	$1,500.00	8%	40%	95%	1.5415	1
AllCoN6	All	Cooking	New	6	Electric convection oven	Standard Oven	Each	$1.20	15	12,193	0.265	2,262	$2,713.00	19%	40%	95%	0.6406	0
AllCoN7	All	Cooking	New	7	Electric combination oven	Standard Oven	Each	$1.12	12	39,353	1.769	15,095	$16,884.00	38%	40%	95%	0.5520	0
AllCoT1	All	Cooking	Turnover	1	Commercial Hot Food Holding Cabinets (Energy Star)	Standard Cabinet	Each	$0.94	12	23,411	0.187	1,592	$1,500.00	7%	40%	95%	0.6553	0
AllCoT2	All	Cooking	Turnover	2	High Efficiency Fryers (Energy Star)	Standard Fryer	Each	$5.45	12	18,196	0.027	233	$1,271.00	1%	40%	95%	0.1132	0
AllCoT3	All	Cooking	Turnover	3	High Efficiency Griddle	Standard Griddle	Each	$0.66	12	17,056	0.304	2,595	$1,700.00	15%	40%	95%	0.9425	0
AllCoT4	All	Cooking	Turnover	4	High Efficiency Induction Cooking	Standard Cooking	Each	$1.04	12	29,376	0.248	2,118	$2,213.00	7%	40%	95%	0.5909	0
AllCoT5	All	Cooking	Turnover	5	Electric Steam cooker	Standard Cooker	Each	$0.40	12	46,813	0.439	3,745	$1,500.00	8%	40%	95%	1.5415	1
AllCoT6	All	Cooking	Turnover	6	Electric convection oven	Standard Oven	Each	$1.20	15	12,193	0.265	2,262	$2,713.00	19%	40%	95%	0.6406	0
AllCoT7	All	Cooking	Turnover	7	Electric combination oven	Standard Oven	Each	$1.12	12	39,353	1.769	15,095	$16,884.00	38%	40%	95%	0.5520	0
InstiFlE1	Institutional	Fluorescent	Early	1	Premium Efficiency T8 Lighting Replacement (32W lamps with low	Replace (E) T12 Lamp - Bundle	Fixture	$0.6076	15	371	0.010	91	$55.38	25%	95%	11%	1.2631	1
InstiFlE2	Institutional	Fluorescent	Early	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2809	14	1,483	0.051	445	$125.00	30%	95%	80%	2.5586	1
InstiFlE3	Institutional	Fluorescent	Early	3	Photocell dimming control	No prior dimming control	Photocell	$0.3034	9	1,483	0.085	742	$225.00	50%	95%	95%	1.4878	1
GroceFlE1	Grocery	Fluorescent	Early	1	Premium Efficiency T8 Lighting Replacement (32W lamps with low	Replace (E) T12 Lamp - Bundle	Fixture	$0.2754	11	818	0.023	201	$55.38	25%	95%	55%	2.0442	1
GroceFlE2	Grocery	Fluorescent	Early	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1273	14	3,272	0.113	982	$125.00	30%	95%	80%	5.6443	1
GroceFlE3	Grocery	Fluorescent	Early	3	Photocell dimming control	No prior dimming control	Photocell	$0.1375	9	3,272	0.188	1,636	$225.00	50%	95%	95%	3.2823	1
LodgiFlE1	Lodging	Fluorescent	Early	1	Premium Efficiency T8 Lighting Replacement (32W lamps with low	Replace (E) T12 Lamp - Bundle	Fixture	$0.3246	10	694	0.020	171	$55.38	25%	95%	55%	1.5642	1
LodgiFlE2	Lodging	Fluorescent	Early	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1501	14	2,776	0.096	833	$125.00	30%	95%	80%	4.7886	1
LodgiFlE3	Lodging	Fluorescent	Early	3	Photocell dimming control	No prior dimming control	Photocell	$0.1621	9	2,776	0.160	1,388	$225.00	50%	95%	95%	2.7846	1
HealtFlE1	Healthcare	Fluorescent	Early	1	Premium Efficiency T8 Lighting Replacement (32W lamps with low	Replace (E) T12 Lamp - Bundle	Fixture	$0.2970	11	759	0.021	186	$55.38	25%	95%	44%	1.8954	1
HealtFlE2	Healthcare	Fluorescent	Early	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1373	14	3,034	0.105	910	$125.00	30%	95%	80%	5.2334	1
HealtFlE3	Healthcare	Fluorescent	Early	3	Photocell dimming control	No prior dimming control	Photocell	$0.1483	9	3,034	0.174	1,517	$225.00	50%	95%	95%	3.0433	1
RestaFlE1	Restaurant	Fluorescent	Early	1	Premium Efficiency T8 Lighting Replacement (32W lamps with low	Replace (E) T12 Lamp - Bundle	Fixture	$0.3672	11	614	0.017	151	$55.38	25%	95%	49%	1.5332	1
RestaFlE2	Restaurant	Fluorescent	Early	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1698	14	2,454	0.085	736	$125.00	30%	95%	80%	4.2332	1
RestaFlE3	Restaurant	Fluorescent	Early	3	Photocell dimming control	No prior dimming control	Photocell	$0.1834	9	2,454	0.141	1,227	$225.00	50%	95%	95%	2.4617	1

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Fla
RetailHE1	Retail	Fluorescent	Early	1	Premium Efficiency T8 Lighting Replacement (32W lamps with low	Replace (E) T12 Lamp - Bundle	Fixture	$0.3810	11	591	0.017	145	$55.38	25%	95%	55%	1.4777	1
RetailHE2	Retail	Fluorescent	Early	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1761	14	2,365	0.082	710	$125.00	30%	95%	80%	4.0801	1
RetailHE3	Retail	Fluorescent	Early	3	Photocell dimming control	No prior dimming control	Photocell	$0.1902	9	2,365	0.136	1,183	$225.00	50%	95%	95%	2.3727	1
WarehHE1	Warehouse	Fluorescent	Early	1	Premium Efficiency T8 Lighting Replacement (32W lamps with low	Replace (E) T12 Lamp - Bundle	Fixture	$0.4113	12	548	0.015	135	$55.38	25%	95%	35%	1.4992	1
WarehHE2	Warehouse	Fluorescent	Early	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1901	14	2,191	0.076	657	$125.00	30%	95%	80%	3.7797	1
WarehHE3	Warehouse	Fluorescent	Early	3	Photocell dimming control	No prior dimming control	Photocell	$0.2054	9	2,191	0.126	1,096	$225.00	50%	95%	95%	2.1979	1
MiscHE1	Misc	Fluorescent	Early	1	Premium Efficiency T8 Lighting Replacement (32W lamps with low	Replace (E) T12 Lamp - Bundle	Fixture	$0.3764	11	599	0.017	147	$55.38	25%	95%	44%	1.4958	1
OfficHIN1	Office	HID	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1781	15	621	0.007	62	$11.06	10%	95%	100%	4.3100	1
OfficHIN2	Office	HID	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.3561	15	621	0.018	155	$55.32	25%	85%	100%	2.1550	1
OfficInN1	Office	Incandescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1781	15	2,727	0.031	273	$48.56	10%	95%	100%	4.3100	1
OfficInN2	Office	Incandescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.3561	15	2,727	0.078	682	$242.78	25%	75%	100%	2.1550	1
InstiFIN1	Institutional	Fluorescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1722	15	62,741	0.721	6,274	$1,080.26	10%	95%	100%	4.4574	1
InstiFIN2	Institutional	Fluorescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.3444	15	62,741	1.803	15,685	$5,401.30	25%	75%	100%	2.2287	1
HealtFIN1	Healthcare	Fluorescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0842	15	441,728	5.077	44,173	$3,718.25	10%	95%	100%	9.1174	1
HealtFIN2	Healthcare	Fluorescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1684	15	441,728	12.691	110,432	$18,591.24	25%	75%	100%	4.5587	1
GroceFIN1	Grocery	Fluorescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0572	15	60,020	0.690	6,002	$343.52	10%	95%	100%	13.4090	1
GroceFIN2	Grocery	Fluorescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1145	15	60,020	1.724	15,005	$1,717.60	25%	75%	100%	6.7045	1
LodgiFIN1	Lodging	Fluorescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1012	15	303,563	3.489	30,356	$3,071.87	10%	95%	100%	7.5840	1
LodgiFIN2	Lodging	Fluorescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.2024	15	303,563	8.722	75,891	$15,359.37	25%	75%	100%	3.7920	1
RestaFIN1	Restaurant	Fluorescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0763	15	13,140	0.151	1,314	$100.27	10%	95%	100%	10.0567	1
RestaFIN2	Restaurant	Fluorescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1526	15	13,140	0.378	3,285	$501.37	25%	75%	100%	5.0284	1
RetaiFIN1	Retail	Fluorescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0792	15	60,011	0.690	6,001	$475.15	10%	95%	100%	9.6930	1
RetaiFIN2	Retail	Fluorescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1584	15	60,011	1.724	15,003	$2,375.74	25%	75%	100%	4.8465	1
WarehFIN1	Warehouse	Fluorescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1603	15	44,747	0.514	4,475	$717.11	10%	95%	100%	4.7889	1
WarehFIN2	Warehouse	Fluorescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.3205	15	44,747	1.286	11,187	$3,585.53	25%	75%	100%	2.3945	1
GroceHIN1	Grocery	HID	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0572	15	3,937	0.045	394	$22.53	10%	95%	100%	13.4090	1
GroceHIN2	Grocery	HID	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1145	15	3,937	0.113	984	$112.66	25%	85%	100%	6.7045	1
InstiHIN1	Institutional	HID	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1722	15	2,159	0.025	216	$37.18	10%	95%	100%	4.4574	1
InstiHIN2	Institutional	HID	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.3444	15	2,159	0.062	540	$185.89	25%	85%	100%	2.2287	1
HealtHIN1	Healthcare	HID	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0842	15	15,203	0.175	1,520	$127.97	10%	95%	100%	9.1174	1
HealtHIN2	Healthcare	HID	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1684	15	15,203	0.437	3,801	$639.84	25%	85%	100%	4.5587	1
LodgiHIN1	Lodging	HID	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1012	15	10,539	0.121	1,054	$106.65	10%	95%	100%	7.5840	1
LodgiHIN2	Lodging	HID	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.2024	15	10,539	0.303	2,635	$533.27	25%	85%	100%	3.7920	1
RestaHIN1	Restaurant	HID	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0763	15	459	0.005	46	$3.51	10%	95%	100%	10.0567	1
RestaHIN2	Restaurant	HID	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1526	15	459	0.013	115	$17.53	25%	85%	100%	5.0284	1
RetaiHIN1	Retail	HID	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0792	15	10,313	0.119	1,031	$81.65	10%	95%	100%	9.6930	1
RetaiHIN2	Retail	HID	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1584	15	10,313	0.296	2,578	$408.25	25%	85%	100%	4.8465	1
WarehHIN1	Warehouse	HID	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1603	15	7,843	0.090	784	$125.69	10%	95%	100%	4.7889	1
WarehHIN2	Warehouse	HID	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.3205	15	7,843	0.225	1,961	$628.45	25%	85%	100%	2.3945	1
MiscHIN1	Misc	HID	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0988	15	4,211	0.048	421	$41.61	10%	95%	100%	7.7672	1
MiscHIN2	Misc	HID	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1976	15	4,211	0.121	1,053	$208.03	25%	85%	100%	3.8836	1
MiscFIN1	Misc	Fluorescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0988	15	121,285	1.394	12,128	$1,198.38	10%	95%	100%	7.7672	1
MiscFIN2	Misc	Fluorescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1976	15	121,285	3.485	30,321	$5,991.88	25%	75%	100%	3.8836	1
InstiInN1	Institutional	Incandescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1722	15	7,094	0.082	709	$122.15	10%	95%	100%	4.4574	1
InstiInN2	Institutional	Incandescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.3444	15	7,094	0.204	1,774	$610.75	25%	75%	100%	2.2287	1
GroceInT1	Grocery	Incandescent	Turnover	1	CFL Lamp - 21 Watt	EISA - 75 Watt equivalent - 53W	Lamp	$0.0161	5	309	0.021	186	$3.00	60%	75%	50%	15.8161	1
HealtInT1	Healthcare	Incandescent	Turnover	1	CFL Lamp - 21 Watt	EISA - 75 Watt equivalent - 53W	Lamp	$0.0174	5	286	0.020	173	$3.00	60%	75%	50%	14.6647	1
GroceInN2	Grocery	Incandescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1145	15	9,629	0.277	2,407	$275.57	25%	75%	100%	6.7045	1
HealtInN2	Healthcare	Incandescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1684	15	49,948	1.435	12,487	$2,102.19	25%	75%	100%	4.5587	1
LodgiInN1	Lodging	Incandescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1012	15	72,424	0.832	7,242	$732.89	10%	95%	100%	7.5840	1
LodgiInN2	Lodging	Incandescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.2024	15	72,424	2.081	18,106	$3,664.46	25%	75%	100%	3.7920	1
RestaInN1	Restaurant	Incandescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0763	15	8,649	0.099	865	$66.01	10%	95%	100%	10.0567	1
RestaInN2	Restaurant	Incandescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1526	15	8,649	0.249	2,162	$330.03	25%	75%	100%	5.0284	1
RetaiInN1	Retail	Incandescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0792	15	9,628	0.111	963	$76.23	10%	95%	100%	9.6930	1
RetaiInN2	Retail	Incandescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1584	15	9,628	0.277	2,407	$381.16	25%	75%	100%	4.8465	1
WarehInN1	Warehouse	Incandescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1603	15	5,975	0.069	598	$95.76	10%	95%	100%	4.7889	1
WarehInN2	Warehouse	Incandescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.3205	15	5,975	0.172	1,494	$478.78	25%	75%	100%	2.3945	1
MiscInN1	Misc	Incandescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0988	15	28,936	0.333	2,894	$285.91	10%	95%	100%	7.7672	1
MiscInN2	Misc	Incandescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1976	15	28,936	0.831	7,234	$1,429.55	25%	75%	100%	3.8836	1
MiscHE2	Misc	Fluorescent	Early	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1740	14	2,394	0.083	718	$125.00	30%	95%	80%	4.1299	1
MiscHE3	Misc	Fluorescent	Early	3	Photocell dimming control	No prior dimming control	Photocell	$0.1879	9	2,394	0.138	1,197	$225.00	50%	95%	95%	2.4016	1
MiscFIN4	Misc	Fluorescent	New	4	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0696	14	2,394	0.083	718	$50.00	30%	95%	15%	10.3248	1
MiscFIN3	Misc	Fluorescent	New	3	Photocell dimming control	No prior dimming control	Photocell	$0.1253	9	2,394	0.138	1,197	$150.00	50%	95%	75%	3.6024	1
InstiFIN4	Institutional	Fluorescent	New	4	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1124	14	1,483	0.051	445	$50.00	30%	95%	15%	6.3964	1
InstiFIN3	Institutional	Fluorescent	New	3	Photocell dimming control	No prior dimming control	Photocell	$0.2022	9	1,483	0.085	742	$150.00	50%	95%	75%	2.2318	1
GroceFIN4	Grocery	Fluorescent	New	4	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0509	14	3,272	0.113	982	$50.00	30%	95%	15%	14.1108	1
GroceFIN3	Grocery	Fluorescent	New	3	Photocell dimming control	No prior dimming control	Photocell	$0.0917	9	3,272	0.188	1,636	$150.00	50%	95%	75%	4.9234	1
HealtFIN4	Healthcare	Fluorescent	New	4	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0549	14	3,034	0.105	910	$50.00	30%	95%	15%	13.0835	1
HealtFIN3	Healthcare	Fluorescent	New	3	Photocell dimming control	No prior dimming control	Photocell	$0.0989	9	3,034	0.174	1,517	$150.00	50%	95%	75%	4.5650	1
LodgiFIN4	Lodging	Fluorescent	New	4	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0600	14	2,776	0.096	833	$50.00	30%	95%	15%	11.9714	1
LodgiFIN3	Lodging	Fluorescent	New	3	Photocell dimming control	No prior dimming control	Photocell	$0.1081	9	2,776	0.160	1,388	$150.00	50%	95%	75%	4.1769	1
OfficFIN4	Office	Fluorescent	New	4	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1056	14	1,578	0.054	473	$50.00	30%	95%	15%	6.8034	1
OfficFIN3	Office	Fluorescent	New	3	Photocell dimming control	No prior dimming control	Photocell	$0.1901	9	1,578	0.091	789	$150.00	50%	95%	75%	2.3738	1
RestaFIN4	Restaurant	Fluorescent	New	4	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0679	14	2,454	0.085	736	$50.00	30%	95%	15%	10.5831	1
RestaFIN3	Restaurant	Fluorescent	New	3	Photocell dimming control	No prior dimming control	Photocell	$0.1222	9	2,454	0.141	1,227	$150.00	50%	95%	75%	3.6925	1
RetaiFIN4	Retail	Fluorescent	New	4	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0705	14	2,365	0.082	710	$50.00	30%	95%	15%	10.2003	1
RetaiFIN3	Retail	Fluorescent	New	3	Photocell dimming control	No prior dimming control	Photocell	$0.1268	9	2,365	0.136	1,183	$150.00	50%	95%	75%	3.5590	1
WarehFIN4	Warehouse	Fluorescent	New	4	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0761	14	2,191	0.076	657	$50.00	30%	95%	15%	9.4492	1
WarehFIN3	Warehouse	Fluorescent	New	3	Photocell dimming control	No prior dimming control	Photocell	$0.1369	9	2,191	0.126	1,096	$150.00	50%	95%	75%	3.2969	1
MiscHT2	Misc	Fluorescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0696	14	2,394	0.083	718	$50.00	30%	95%	80%	10.3248	1
MiscHT3	Misc	Fluorescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.1253	9	2,394	0.138	1,197	$150.00	50%	95%	95%	3.6024	1
InstiHT2	Institutional	Fluorescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1124	14	1,483	0.051	445	$50.00	30%	95%	80%	6.3964	1
InstiHT3	Institutional	Fluorescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.2022	9	1,483	0.085	742	$150.00	50%	95%	95%	2.2318	1
GroceHT2	Grocery	Fluorescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0509	14	3,272	0.113	982	$50.00	30%	95%	80%	14.1108	1
GroceHT3	Grocery	Fluorescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.0917	9	3,272	0.188	1,636	$150.00	50%	95%	95%	4.9234	1
HealtHT2	Healthcare	Fluorescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0549	14	3,034	0.105	910	$50.00	30%	95%	80%	13.0835	1
HealtHT3	Healthcare	Fluorescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.0989	9	3,034	0.174	1,517	$150.00	50%	95%	95%	4.5650	1
LodgiHT2	Lodging	Fluorescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0600	14	2,776	0.096	833	$50.00	30%	95%	80%	11.9714	1
LodgiHT3	Lodging	Fluorescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.1081	9	2,776	0.160	1,388	$150.00	50%	95%	95%	4.1769	1
OfficHT2	Office	Fluorescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1056	14	1,578	0.054	473	$50.00	30%	95%	80%	6.8034	1
OfficHT3	Office	Fluorescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.1901	9	1,578	0.091	789	$150.00	50%	95%	95%	2.3738	1
RestaHT2	Restaurant	Fluorescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0679	14	2,454	0.085	736	$50.00	30%	95%	80%	10.5831	1
RestaHT3	Restaurant	Fluorescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.1222	9	2,454	0.141	1,227	$150.00	50%	95%	95%	3.6925	1
RetaiHT2	Retail	Fluorescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0705	14	2,365	0.082	710	$50.00	30%	95%	80%	10.2003	1

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Fla
RetailFT3	Retail	Fluorescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.1268	9	2,365	0.136	1,183	$150.00	50%	95%	95%	3.5590	1
WarehFT2	Warehouse	Fluorescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0761	14	2,191	0.076	657	$50.00	30%	95%	80%	9.4492	1
WarehFT3	Warehouse	Fluorescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.1369	9	2,191	0.126	1,096	$150.00	50%	95%	95%	3.2969	1
GroceFT1	Grocery	Fluorescent	Turnover	1	Premium Efficiency T8 Lighting Replacement (28W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.0650	6	163	0.004	36	$2.32	22%	90%	95%	4.7166	1
GroceFT4	Grocery	Fluorescent	Turnover	4	Premium Efficiency T8 Lighting Replacement (25W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.0990	6	163	0.002	20	$2.02	13%	60%	95%	3.0959	1
GroceFT5	Grocery	Fluorescent	Turnover	5	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.0307	11	582	0.010	83	$2.55	14%	75%	95%	18.3370	1
GroceFIE4	Grocery	Fluorescent	Early	4	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.7257	11	582	0.010	83	$60.38	14%	75%	95%	0.7758	0
HealtFT6	Healthcare	Fluorescent	Turnover	6	LED Retrofit Tube	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$1.0943	7	151	0.007	59	$65.00	39%	40%	95%	0.3259	0
HealtFT1	Healthcare	Fluorescent	Turnover	1	Premium Efficiency T8 Lighting Replacement (28W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.0701	7	151	0.004	33	$2.32	22%	90%	95%	5.0891	1
HealtFT4	Healthcare	Fluorescent	Turnover	4	Premium Efficiency T8 Lighting Replacement (25W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.1068	7	151	0.002	19	$2.02	13%	60%	95%	3.3404	1
HealtFT5	Healthcare	Fluorescent	Turnover	5	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.0331	11	540	0.009	77	$2.55	14%	75%	95%	17.0020	1
HealtFIE4	Healthcare	Fluorescent	Early	4	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.7769	11	540	0.009	77	$59.93	14%	75%	95%	0.7246	0
InstiFT6	Institutional	Fluorescent	Turnover	6	LED Retrofit Tube	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$2.2383	15	74	0.003	29	$65.00	39%	40%	95%	0.3429	0
InstiFT1	Institutional	Fluorescent	Turnover	1	Premium Efficiency T8 Lighting Replacement (28W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.1433	15	74	0.002	16	$2.32	22%	90%	95%	5.3540	1
InstiFT4	Institutional	Fluorescent	Turnover	4	Premium Efficiency T8 Lighting Replacement (25W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.2184	15	74	0.001	9	$2.02	13%	60%	95%	3.5143	1
InstiFT5	Institutional	Fluorescent	Turnover	5	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.0677	11	264	0.004	38	$2.55	14%	75%	95%	8.3121	1
InstiFIE4	Institutional	Fluorescent	Early	4	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.9281	11	264	0.004	38	$35.00	14%	75%	95%	0.6066	0
LodgiFT6	Lodging	Fluorescent	Turnover	6	LED Retrofit Tube	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$1.1959	8	138	0.006	54	$65.00	39%	40%	95%	0.3385	0
LodgiFT1	Lodging	Fluorescent	Turnover	1	Premium Efficiency T8 Lighting Replacement (28W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.0766	8	138	0.003	30	$2.32	22%	90%	95%	5.2856	1
LodgiFT4	Lodging	Fluorescent	Turnover	4	Premium Efficiency T8 Lighting Replacement (25W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.1167	8	138	0.002	17	$2.02	13%	60%	95%	3.4694	1
LodgiFT5	Lodging	Fluorescent	Turnover	5	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.0362	11	494	0.008	71	$2.55	14%	75%	95%	15.5568	1
LodgiFIE4	Lodging	Fluorescent	Early	4	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.4959	11	494	0.008	71	$35.00	14%	75%	95%	1.1353	1
MiscFT6	Misc	Fluorescent	Turnover	6	LED Retrofit Tube	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$1.3867	9	119	0.005	47	$65.00	39%	40%	95%	0.3255	0
MiscFT1	Misc	Fluorescent	Turnover	1	Premium Efficiency T8 Lighting Replacement (28W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.0888	9	119	0.003	26	$2.32	22%	90%	95%	5.0828	1
MiscFT4	Misc	Fluorescent	Turnover	4	Premium Efficiency T8 Lighting Replacement (25W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.1353	9	119	0.002	15	$2.02	13%	60%	95%	3.3363	1
MiscFT5	Misc	Fluorescent	Turnover	5	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.0420	11	426	0.007	61	$2.55	14%	75%	95%	13.4170	1
MiscFIE4	Misc	Fluorescent	Early	4	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.5750	11	426	0.007	61	$35.00	14%	75%	95%	0.9791	0
OfficFT6	Office	Fluorescent	Turnover	6	LED Retrofit Tube	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$2.1044	14	79	0.004	31	$65.00	39%	40%	95%	0.3415	0
OfficFT1	Office	Fluorescent	Turnover	1	Premium Efficiency T8 Lighting Replacement (28W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.1348	14	79	0.002	17	$2.32	22%	90%	95%	5.3329	1
OfficFT4	Office	Fluorescent	Turnover	4	Premium Efficiency T8 Lighting Replacement (25W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.2053	14	79	0.001	10	$2.02	13%	60%	95%	3.5005	1
OfficFT5	Office	Fluorescent	Turnover	5	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.0637	11	281	0.005	40	$2.55	14%	75%	95%	8.8410	1
OfficFIE4	Office	Fluorescent	Early	4	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.8726	11	281	0.005	40	$35.00	14%	75%	95%	0.6452	0
RestaFT6	Restaurant	Fluorescent	Turnover	6	LED Retrofit Tube	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$1.3528	9	122	0.006	48	$65.00	39%	40%	95%	0.3337	0
RestaFT1	Restaurant	Fluorescent	Turnover	1	Premium Efficiency T8 Lighting Replacement (28W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.0866	9	122	0.003	27	$2.32	22%	90%	95%	5.2100	1
RestaFT4	Restaurant	Fluorescent	Turnover	4	Premium Efficiency T8 Lighting Replacement (25W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.1320	9	122	0.002	15	$2.02	13%	60%	95%	3.4198	1
RestaFT5	Restaurant	Fluorescent	Turnover	5	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.0409	11	437	0.007	62	$2.55	14%	75%	95%	13.7527	1
RestaFIE4	Restaurant	Fluorescent	Early	4	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.5610	11	437	0.007	62	$35.00	14%	75%	95%	1.0036	1
RetaiFT6	Retail	Fluorescent	Turnover	6	LED Retrofit Tube	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$1.4036	9	118	0.005	46	$65.00	39%	40%	95%	0.3216	0
RetaiFT1	Retail	Fluorescent	Turnover	1	Premium Efficiency T8 Lighting Replacement (28W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.0899	9	118	0.003	26	$2.32	22%	90%	95%	5.0215	1
RetaiFT4	Retail	Fluorescent	Turnover	4	Premium Efficiency T8 Lighting Replacement (25W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.1369	9	118	0.002	15	$2.02	13%	60%	95%	3.2961	1
RetaiFT5	Retail	Fluorescent	Turnover	5	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.0425	11	421	0.007	60	$2.55	14%	75%	95%	13.2553	1
RetaiFIE4	Retail	Fluorescent	Early	4	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.5820	11	421	0.007	60	$35.00	14%	75%	95%	0.9673	0
WarehFT6	Warehouse	Fluorescent	Turnover	6	LED Retrofit Tube	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$1.5152	10	109	0.005	43	$65.00	39%	40%	95%	0.3351	0
WarehFT1	Warehouse	Fluorescent	Turnover	1	Premium Efficiency T8 Lighting Replacement (28W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.0970	10	109	0.003	24	$2.32	22%	90%	95%	5.2334	1
WarehFT4	Warehouse	Fluorescent	Turnover	4	Premium Efficiency T8 Lighting Replacement (25W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.1478	10	109	0.002	14	$2.02	13%	60%	95%	3.4351	1
WarehFT5	Warehouse	Fluorescent	Turnover	5	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.0459	11	390	0.006	56	$2.55	14%	75%	95%	12.2792	1
WarehFIE4	Warehouse	Fluorescent	Early	4	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.6283	11	390	0.006	56	$35.00	14%	75%	95%	0.8961	0
GroceHIE1	Grocery	HID	Early	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.3797	10	1,893	0.065	565	$214.50	30%	85%	80%	1.3374	1
GroceHIE2	Grocery	HID	Early	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.2995	10	2,772	0.115	1,002	$300.00	36%	85%	80%	1.6956	1
GroceHIE3	Grocery	HID	Early	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.3449	10	1,893	0.078	681	$235.00	36%	85%	80%	1.4724	1
GroceHIE4	Grocery	HID	Early	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.3403	10	2,772	0.110	955	$325.00	34%	85%	80%	1.4924	1
GroceHIT5	Grocery	HID	Turnover	5	Ceramic Metal Halide lamp	Replace non-ceramic lamp lamp 400 W	Lamp	$0.0859	3	2,330	0.047	408	$35.00	18%	85%	55%	1.7624	1
GroceHIE7	Grocery	HID	Early	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.8147	15	1,893	0.097	844	$688.00	45%	85%	80%	0.9420	0
GroceHIT1	Grocery	HID	Turnover	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.1956	10	1,893	0.065	565	$110.50	30%	85%	80%	2.5961	1
GroceHIT2	Grocery	HID	Turnover	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.2246	10	2,772	0.115	1,002	$225.00	36%	85%	80%	2.2608	1
GroceHIT3	Grocery	HID	Turnover	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.2128	10	1,893	0.078	681	$145.00	36%	85%	80%	2.3863	1
GroceHIT4	Grocery	HID	Turnover	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.2722	10	2,772	0.110	955	$260.00	34%	85%	80%	1.8655	1
GroceHIT6	Grocery	HID	Turnover	6	Multi Lamp Hard Wired CFL	Replace HID Fixure Drawing 400 W	Fixture	$0.3442	10	2,772	0.142	1,235	$425.00	45%	85%	55%	1.4752	1
GroceHIT7	Grocery	HID	Turnover	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.4441	15	1,893	0.097	844	$375.00	45%	85%	80%	1.7283	1
HealtHIE1	Healthcare	HID	Early	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.4095	10	1,755	0.060	524	$214.50	30%	85%	80%	1.2400	1
HealtHIE2	Healthcare	HID	Early	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.3230	10	2,570	0.107	929	$300.00	36%	85%	80%	1.5722	1
HealtHIE3	Healthcare	HID	Early	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.3720	10	1,755	0.073	632	$235.00	36%	85%	80%	1.3652	1
HealtHIE4	Healthcare	HID	Early	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.3670	10	2,570	0.102	886	$325.00	34%	85%	80%	1.3837	1
HealtHIT5	Healthcare	HID	Turnover	5	Ceramic Metal Halide lamp	Replace non-ceramic lamp lamp 400 W	Lamp	$0.0926	3	2,160	0.043	378	$35.00	18%	85%	55%	1.6341	1
HealtHIE7	Healthcare	HID	Early	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.8787	15	1,755	0.090	783	$688.00	45%	85%	80%	0.8734	0
HealtHIT1	Healthcare	HID	Turnover	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.2110	10	1,755	0.060	524	$110.50	30%	85%	80%	2.4071	1
HealtHIT2	Healthcare	HID	Turnover	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.2422	10	2,570	0.107	929	$225.00	36%	85%	80%	2.0962	1
HealtHIT3	Healthcare	HID	Turnover	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.2295	10	1,755	0.073	632	$145.00	36%	85%	80%	2.2126	1
HealtHIT4	Healthcare	HID	Turnover	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.2936	10	2,570	0.102	886	$260.00	34%	85%	80%	1.7296	1
HealtHIT6	Healthcare	HID	Turnover	6	Multi Lamp Hard Wired CFL	Replace HID Fixure Drawing 400 W	Fixture	$0.3712	10	2,570	0.132	1,145	$425.00	45%	85%	55%	1.3678	1
HealtHIT7	Healthcare	HID	Turnover	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.4789	15	1,755	0.090	783	$375.00	45%	85%	80%	1.6024	1
InstiHIE1	Institutional	HID	Early	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.8376	10	858	0.029	256	$214.50	30%	85%	80%	0.6062	0
InstiHIE2	Institutional	HID	Early	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.6607	10	1,257	0.052	454	$300.00	36%	85%	80%	0.7686	0
InstiHIE3	Institutional	HID	Early	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.7608	10	858	0.035	309	$235.00	36%	85%	80%	0.6674	0
InstiHIE4	Institutional	HID	Early	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.7506	10	1,257	0.050	433	$325.00	34%	85%	80%	0.6765	0
InstiHIT5	Institutional	HID	Turnover	5	Ceramic Metal Halide lamp	Replace non-ceramic lamp lamp 400 W	Lamp	$0.1894	6	1,056	0.021	185	$35.00	18%	85%	55%	1.6182	1
InstiHIE7	Institutional	HID	Early	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$1.7973	15	858	0.044	383	$688.00	45%	85%	80%	0.4270	0
InstiHIT1	Institutional	HID	Turnover	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.4315	10	858	0.029	256	$110.50	30%	85%	80%	1.1768	1
InstiHIT2	Institutional	HID	Turnover	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.4955	10	1,257	0.052	454	$225.00	36%	85%	80%	1.0248	1
InstiHIT3	Institutional	HID	Turnover	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.4694	10	858	0.035	309	$145.00	36%	85%	80%	1.0817	1
InstiHIT4	Institutional	HID	Turnover	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.6005	10	1,257	0.050	433	$260.00	34%	85%	80%	0.8456	0
InstiHIT6	Institutional	HID	Turnover	6	Multi Lamp Hard Wired CFL	Replace HID Fixure Drawing 400 W	Fixture	$0.7594	10	1,257	0.064	560	$425.00	45%	85%	55%	0.6687	0
InstiHIT7	Institutional	HID	Turnover	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.9796	15	858	0.044	383	$375.00	45%	85%	80%	0.7834	0
LodgiHIE1	Lodging	HID	Early	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.4475	10	1,606	0.055	479	$214.50	30%	85%	80%	1.1346	1
LodgiHIE2	Lodging	HID	Early	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.3530	10	2,352	0.098	850	$300.00	36%	85%	80%	1.4385	1
LodgiHIE3	Lodging	HID	Early	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.4065	10	1,606	0.066	578	$235.00	36%	85%	80%	1.2492	1
LodgiHIE4	Lodging	HID	Early	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.4011	10	2,352	0.093	810	$325.00	34%	85%	80%	1.2661	1
LodgiHIT5	Lodging	HID	Turnover	5	Ceramic Metal Halide lamp	Replace non-ceramic lamp lamp 400 W	Lamp	$0.1012	3	1,976	0.040	346	$35.00	18%	85%	55%	1.4952	1
LodgiHIE7	Lodging	HID	Early	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.9603	15	1,606	0.082	716	$688.00	45%	85%	80%	0.7992	0
LodgiHIT1	Lodging	HID	Turnover	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.2306	10	1,606	0.055	479	$110.50	30%	85%	80%	2.2025	1
LodgiHIT2	Lodging	HID	Turnover	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.2648	10	2,352	0.098	850	$225.00	36%	85%	80%	1.9180	1
LodgiHIT3	Lodging	HID	Turnover	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.2508	10	1,606	0.066	578	$145.00	36%	85%	80%	2.0245	1
LodgiHIT4	Lodging	HID	Turnover	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.3209	10	2,352	0.093	810	$260.00	34%	85%	80%	1.5826	1
LodgiHIT6	Lodging	HID	Turnover	6	Multi Lamp Hard Wired CFL	Replace HID Fixure Drawing 400 W	Fixture	$0.4057	10	2,352	0.120	1,047	$425.00	45%	85%	55%	1.2516	1

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Fla
LodgiHIT7	Lodging	HID	Turnover	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.5234	15	1,606	0.082	716	$375.00	45%	85%	80%	1.4662	1
OfficHIE1	Office	HID	Early	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.7875	10	913	0.031	272	$214.50	30%	85%	80%	0.6448	0
OfficHIE2	Office	HID	Early	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.6211	10	1,337	0.056	483	$300.00	36%	85%	80%	0.8175	0
OfficHIE3	Office	HID	Early	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.7153	10	913	0.038	329	$235.00	36%	85%	80%	0.7099	0
OfficHIE4	Office	HID	Early	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.7057	10	1,337	0.053	461	$325.00	34%	85%	80%	0.7195	0
OfficHIT5	Office	HID	Turnover	5	Ceramic Metal Halide lamp	Replace non-ceramic lamp lamp 400 W	Lamp	$0.1781	5	1,123	0.023	197	$35.00	18%	85%	55%	1.4298	1
OfficHIE7	Office	HID	Early	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$1.6898	15	913	0.047	407	$688.00	45%	85%	80%	0.4542	0
OfficHIT1	Office	HID	Turnover	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.4057	10	913	0.031	272	$110.50	30%	85%	80%	1.2517	1
OfficHIT2	Office	HID	Turnover	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.4659	10	1,337	0.056	483	$225.00	36%	85%	80%	1.0900	1
OfficHIT3	Office	HID	Turnover	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.4414	10	913	0.038	329	$145.00	36%	85%	80%	1.1506	1
OfficHIT4	Office	HID	Turnover	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.5646	10	1,337	0.053	461	$260.00	34%	85%	80%	0.8994	0
OfficHIT6	Office	HID	Turnover	6	Multi Lamp Hard Wired CFL	Replace HID Fixure Drawing 400 W	Fixture	$0.7139	10	1,337	0.068	595	$425.00	45%	85%	55%	0.7113	0
OfficHIT7	Office	HID	Turnover	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.9210	15	913	0.047	407	$375.00	45%	85%	80%	0.8333	0
RestaHIE1	Restaurant	HID	Early	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.5063	10	1,420	0.049	424	$214.50	30%	85%	80%	1.0030	1
RestaHIE2	Restaurant	HID	Early	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.3993	10	2,079	0.086	751	$300.00	36%	85%	80%	1.2717	1
RestaHIE3	Restaurant	HID	Early	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.4598	10	1,420	0.059	511	$235.00	36%	85%	80%	1.1043	1
RestaHIE4	Restaurant	HID	Early	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.4537	10	2,079	0.082	716	$325.00	34%	85%	80%	1.1193	1
RestaHIT5	Restaurant	HID	Turnover	5	Ceramic Metal Halide lamp	Replace non-ceramic lamp lamp 400 W	Lamp	$0.1145	3	1,747	0.035	306	$35.00	18%	85%	55%	1.3218	1
RestaHIE7	Restaurant	HID	Early	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$1.0863	15	1,420	0.073	633	$688.00	45%	85%	80%	0.7065	0
RestaHIT1	Restaurant	HID	Turnover	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.2608	10	1,420	0.049	424	$110.50	30%	85%	80%	1.9471	1
RestaHIT2	Restaurant	HID	Turnover	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.2995	10	2,079	0.086	751	$225.00	36%	85%	80%	1.6956	1
RestaHIT3	Restaurant	HID	Turnover	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.2837	10	1,420	0.059	511	$145.00	36%	85%	80%	1.7898	1
RestaHIT4	Restaurant	HID	Turnover	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.3630	10	2,079	0.082	716	$260.00	34%	85%	80%	1.3991	1
RestaHIT6	Restaurant	HID	Turnover	6	Multi Lamp Hard Wired CFL	Replace HID Fixure Drawing 400 W	Fixture	$0.4590	10	2,079	0.106	926	$425.00	45%	85%	55%	1.1064	1
RestaHIT7	Restaurant	HID	Turnover	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.5921	15	1,420	0.073	633	$375.00	45%	85%	80%	1.2962	1
RetaiHIE1	Retail	HID	Early	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.5253	10	1,368	0.047	408	$214.50	30%	85%	80%	0.9668	0
RetaiHIE2	Retail	HID	Early	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.4143	10	2,004	0.083	724	$300.00	36%	85%	80%	1.2257	1
RetaiHIE3	Retail	HID	Early	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.4771	10	1,368	0.057	493	$235.00	36%	85%	80%	1.0644	1
RetaiHIE4	Retail	HID	Early	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.4707	10	2,004	0.079	690	$325.00	34%	85%	80%	1.0788	1
RetaiHIT5	Retail	HID	Turnover	5	Ceramic Metal Halide lamp	Replace non-ceramic lamp lamp 400 W	Lamp	$0.1188	4	1,684	0.034	295	$35.00	18%	85%	55%	1.6861	1
RetaiHIE7	Retail	HID	Early	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$1.1270	15	1,368	0.070	610	$688.00	45%	85%	80%	0.6810	0
RetaiHIT1	Retail	HID	Turnover	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.2706	10	1,368	0.047	408	$110.50	30%	85%	80%	1.8767	1
RetaiHIT2	Retail	HID	Turnover	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.3107	10	2,004	0.083	724	$225.00	36%	85%	80%	1.6343	1
RetaiHIT3	Retail	HID	Turnover	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.2944	10	1,368	0.057	493	$145.00	36%	85%	80%	1.7250	1
RetaiHIT4	Retail	HID	Turnover	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.3766	10	2,004	0.079	690	$260.00	34%	85%	80%	1.3485	1
RetaiHIT6	Retail	HID	Turnover	6	Multi Lamp Hard Wired CFL	Replace HID Fixure Drawing 400 W	Fixture	$0.4762	10	2,004	0.103	893	$425.00	45%	85%	55%	1.0664	1
RetaiHIT7	Retail	HID	Turnover	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.6143	15	1,368	0.070	610	$375.00	45%	85%	80%	1.2493	1
MiscHIE1	Misc	HID	Early	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.5189	10	1,385	0.048	413	$214.50	30%	85%	80%	0.9786	0
MiscHIE2	Misc	HID	Early	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.4093	10	2,028	0.084	733	$300.00	36%	85%	80%	1.2407	1
MiscHIE3	Misc	HID	Early	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.4713	10	1,385	0.057	499	$235.00	36%	85%	80%	1.0774	1
MiscHIE4	Misc	HID	Early	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.4650	10	2,028	0.080	699	$325.00	34%	85%	80%	1.0920	1
MiscHIT5	Misc	HID	Turnover	5	Ceramic Metal Halide lamp	Replace non-ceramic lamp lamp 400 W	Lamp	$0.1173	4	1,705	0.034	298	$35.00	18%	85%	55%	1.7067	1
MiscHIE7	Misc	HID	Early	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$1.1134	15	1,385	0.071	618	$688.00	45%	85%	80%	0.6893	0
MiscHIT1	Misc	HID	Turnover	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.2673	10	1,385	0.048	413	$110.50	30%	85%	80%	1.8996	1
MiscHIT2	Misc	HID	Turnover	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.3070	10	2,028	0.084	733	$225.00	36%	85%	80%	1.6542	1
MiscHIT3	Misc	HID	Turnover	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.2908	10	1,385	0.057	499	$145.00	36%	85%	80%	1.7461	1
MiscHIT4	Misc	HID	Turnover	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.3720	10	2,028	0.080	699	$260.00	34%	85%	80%	1.3649	1
MiscHIT6	Misc	HID	Turnover	6	Multi Lamp Hard Wired CFL	Replace HID Fixure Drawing 400 W	Fixture	$0.4704	10	2,028	0.104	903	$425.00	45%	85%	55%	1.0794	1
MiscHIT7	Misc	HID	Turnover	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.6069	15	1,385	0.071	618	$375.00	45%	85%	80%	1.2646	1
GroceHIE8	Grocery	HID	Early	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1651	10	7,571	0.261	2,271	$375.00	30%	85%	85%	3.0757	1
GroceHIE9	Grocery	HID	Early	9	Photocell dimming control	No prior dimming control	Photocell	$0.1453	10	7,571	0.435	3,786	$550.00	50%	85%	85%	3.4951	1
GroceHIE10	Grocery	HID	Early	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1321	10	7,571	0.087	757	$100.00	10%	85%	45%	3.8447	1
HealtHIE8	Healthcare	HID	Early	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1781	10	7,020	0.242	2,106	$375.00	30%	85%	85%	2.8518	1
HealtHIE9	Healthcare	HID	Early	9	Photocell dimming control	No prior dimming control	Photocell	$0.1567	10	7,020	0.403	3,510	$550.00	50%	85%	85%	3.2407	1
HealtHIE10	Healthcare	HID	Early	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1425	10	7,020	0.081	702	$100.00	10%	85%	45%	3.5648	1
InstiHIE8	Institutional	HID	Early	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.3642	10	3,432	0.118	1,030	$375.00	30%	85%	85%	1.3942	1
InstiHIE9	Institutional	HID	Early	9	Photocell dimming control	No prior dimming control	Photocell	$0.3205	10	3,432	0.197	1,716	$550.00	50%	85%	85%	1.5843	1
InstiHIE10	Institutional	HID	Early	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.2914	10	3,432	0.039	343	$100.00	10%	85%	45%	1.7428	1
OfficHIE8	Office	HID	Early	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.3424	10	3,650	0.126	1,095	$375.00	30%	85%	85%	1.4829	1
OfficHIE9	Office	HID	Early	9	Photocell dimming control	No prior dimming control	Photocell	$0.3013	10	3,650	0.210	1,825	$550.00	50%	85%	85%	1.6852	1
OfficHIE10	Office	HID	Early	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.2739	10	3,650	0.042	365	$100.00	10%	85%	45%	1.8537	1
RestaHIE8	Restaurant	HID	Early	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2201	10	5,678	0.196	1,704	$375.00	30%	85%	85%	2.3068	1
RestaHIE9	Restaurant	HID	Early	9	Photocell dimming control	No prior dimming control	Photocell	$0.1937	10	5,678	0.326	2,839	$550.00	50%	85%	85%	2.6214	1
RestaHIE10	Restaurant	HID	Early	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1761	10	5,678	0.065	568	$100.00	10%	85%	45%	2.8835	1
RetaiHIE8	Retail	HID	Early	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2284	10	5,473	0.189	1,642	$375.00	30%	85%	85%	2.2234	1
RetaiHIE9	Retail	HID	Early	9	Photocell dimming control	No prior dimming control	Photocell	$0.2010	10	5,473	0.314	2,737	$550.00	50%	85%	85%	2.5265	1
RetaiHIE10	Retail	HID	Early	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1827	10	5,473	0.063	547	$100.00	10%	85%	45%	2.7792	1
MiscHIE8	Misc	HID	Early	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2256	10	5,540	0.191	1,662	$375.00	30%	85%	85%	2.2505	1
MiscHIE9	Misc	HID	Early	9	Photocell dimming control	No prior dimming control	Photocell	$0.1986	10	5,540	0.318	2,770	$550.00	50%	85%	85%	2.5574	1
MiscHIE10	Misc	HID	Early	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1805	10	5,540	0.064	554	$100.00	10%	85%	45%	2.8131	1
LodgiHIE8	Lodging	HID	Early	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1946	10	6,423	0.221	1,927	$375.00	30%	85%	85%	2.6094	1
LodgiHIE9	Lodging	HID	Early	9	Photocell dimming control	No prior dimming control	Photocell	$0.1713	10	6,423	0.369	3,212	$550.00	50%	85%	85%	2.9652	1
LodgiHIE10	Lodging	HID	Early	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1557	10	6,423	0.074	642	$100.00	10%	85%	45%	3.2618	1
LodgiHIT8	Lodging	HID	Turnover	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1427	10	6,423	0.221	1,927	$275.00	30%	85%	85%	3.5583	1
LodgiHIT9	Lodging	HID	Turnover	9	Photocell dimming control	No prior dimming control	Photocell	$0.1713	10	6,423	0.369	3,212	$550.00	50%	85%	85%	2.9652	1
LodgiHIT10	Lodging	HID	Turnover	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1168	10	6,423	0.074	642	$75.00	10%	85%	45%	4.3490	1
GroceHIT8	Grocery	HID	Turnover	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1211	10	7,571	0.261	2,271	$275.00	30%	85%	85%	4.1942	1
GroceHIT9	Grocery	HID	Turnover	9	Photocell dimming control	No prior dimming control	Photocell	$0.1453	10	7,571	0.435	3,786	$550.00	50%	85%	85%	3.4951	1
GroceHIT10	Grocery	HID	Turnover	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.0991	10	7,571	0.087	757	$75.00	10%	85%	45%	5.1262	1
HealtHIT8	Healthcare	HID	Turnover	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1306	10	7,020	0.242	2,106	$275.00	30%	85%	85%	3.8888	1
HealtHIT9	Healthcare	HID	Turnover	9	Photocell dimming control	No prior dimming control	Photocell	$0.1567	10	7,020	0.403	3,510	$550.00	50%	85%	85%	3.2407	1
HealtHIT10	Healthcare	HID	Turnover	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1068	10	7,020	0.081	702	$75.00	10%	85%	45%	4.7530	1
InstiHIT8	Institutional	HID	Turnover	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2671	10	3,432	0.118	1,030	$275.00	30%	85%	85%	1.9012	1
InstiHIT9	Institutional	HID	Turnover	9	Photocell dimming control	No prior dimming control	Photocell	$0.3205	10	3,432	0.197	1,716	$550.00	50%	85%	85%	1.5843	1
InstiHIT10	Institutional	HID	Turnover	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.2185	10	3,432	0.039	343	$75.00	10%	85%	45%	2.3237	1
OfficHIT8	Office	HID	Turnover	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2511	10	3,650	0.126	1,095	$275.00	30%	85%	85%	2.0222	1
OfficHIT9	Office	HID	Turnover	9	Photocell dimming control	No prior dimming control	Photocell	$0.3013	10	3,650	0.210	1,825	$550.00	50%	85%	85%	1.6852	1
OfficHIT10	Office	HID	Turnover	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.2055	10	3,650	0.042	365	$75.00	10%	85%	45%	2.4716	1
MiscHIT8	Misc	HID	Turnover	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1655	10	5,540	0.191	1,662	$275.00	30%	85%	85%	3.0688	1
MiscHIT9	Misc	HID	Turnover	9	Photocell dimming control	No prior dimming control	Photocell	$0.1986	10	5,540	0.318	2,770	$550.00	50%	85%	85%	2.5574	1
MiscHIT10	Misc	HID	Turnover	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1354	10	5,540	0.064	554	$75.00	10%	85%	45%	3.7508	1
RestaHIT8	Restaurant	HID	Turnover	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1614	10	5,678	0.196	1,704	$275.00	30%	85%	85%	3.1456	1
RestaHIT9	Restaurant	HID	Turnover	9	Photocell dimming control	No prior dimming control	Photocell	$0.1937	10	5,678	0.326	2,839	$550.00	50%	85%	85%	2.6214	1
RestaHIT10	Restaurant	HID	Turnover	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1321	10	5,678	0.065	568	$75.00	10%	85%	45%	3.8447	1

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Fla
RetaiHIT8	Retail	HID	Turnover	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1675	10	5,473	0.189	1,642	$275.00	30%	85%	85%	3.0318	1
RetaiHIT9	Retail	HID	Turnover	9	Photocell dimming control	No prior dimming control	Photocell	$0.2010	10	5,473	0.314	2,737	$550.00	50%	85%	85%	2.5265	1
RetaiHIT10	Retail	HID	Turnover	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1370	10	5,473	0.063	547	$75.00	10%	85%	45%	3.7056	1
WarehHIT8	Warehouse	HID	Turnover	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1808	10	5,070	0.175	1,521	$275.00	30%	85%	85%	2.8086	1
WarehHIT9	Warehouse	HID	Turnover	9	Photocell dimming control	No prior dimming control	Photocell	$0.2170	10	5,070	0.291	2,535	$550.00	50%	85%	85%	2.3405	1
WarehHIT10	Warehouse	HID	Turnover	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1479	10	5,070	0.058	507	$75.00	10%	85%	45%	3.4327	1
WarehHIN8	Warehouse	HID	New	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1781	10	4,680	0.161	1,404	$250.00	30%	85%	85%	2.8518	1
WarehHIN9	Warehouse	HID	New	9	Photocell dimming control	No prior dimming control	Photocell	$0.1923	10	4,680	0.269	2,340	$450.00	50%	85%	85%	2.6406	1
WarehHIN10	Warehouse	HID	New	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1389	10	4,680	0.054	468	$65.00	10%	25%	45%	3.6562	1
GroceHIN8	Grocery	HID	New	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1192	10	6,989	0.241	2,097	$250.00	30%	85%	85%	4.2587	1
GroceHIN9	Grocery	HID	New	9	Photocell dimming control	No prior dimming control	Photocell	$0.1288	10	6,989	0.402	3,494	$450.00	50%	85%	85%	3.9432	1
GroceHIN10	Grocery	HID	New	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.0930	10	6,989	0.080	699	$65.00	10%	25%	45%	5.4599	1
HealtHIN8	Healthcare	HID	New	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1286	10	6,480	0.223	1,944	$250.00	30%	85%	85%	3.9487	1
HealtHIN9	Healthcare	HID	New	9	Photocell dimming control	No prior dimming control	Photocell	$0.1389	10	6,480	0.372	3,240	$450.00	50%	85%	85%	3.6562	1
HealtHIN10	Healthcare	HID	New	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1003	10	6,480	0.074	648	$65.00	10%	25%	45%	5.0624	1
InstiHIN8	Institutional	HID	New	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2630	10	3,168	0.109	950	$250.00	30%	85%	85%	1.9305	1
InstiHIN9	Institutional	HID	New	9	Photocell dimming control	No prior dimming control	Photocell	$0.2841	10	3,168	0.182	1,584	$450.00	50%	85%	85%	1.7875	1
InstiHIN10	Institutional	HID	New	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.2052	10	3,168	0.036	317	$65.00	10%	25%	45%	2.4749	1
LodgiHIN8	Lodging	HID	New	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1405	10	5,929	0.204	1,779	$250.00	30%	85%	85%	3.6130	1
LodgiHIN9	Lodging	HID	New	9	Photocell dimming control	No prior dimming control	Photocell	$0.1518	10	5,929	0.341	2,965	$450.00	50%	85%	85%	3.3454	1
LodgiHIN10	Lodging	HID	New	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1096	10	5,929	0.068	593	$65.00	10%	25%	45%	4.6321	1
OfficHIN8	Office	HID	New	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2473	10	3,370	0.116	1,011	$250.00	30%	85%	85%	2.0533	1
OfficHIN9	Office	HID	New	9	Photocell dimming control	No prior dimming control	Photocell	$0.2671	10	3,370	0.194	1,685	$450.00	50%	85%	85%	1.9012	1
OfficHIN10	Office	HID	New	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1929	10	3,370	0.039	337	$65.00	10%	25%	45%	2.6324	1
RestaHIN8	Restaurant	HID	New	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1590	10	5,242	0.181	1,572	$250.00	30%	85%	85%	3.1940	1
RestaHIN9	Restaurant	HID	New	9	Photocell dimming control	No prior dimming control	Photocell	$0.1717	10	5,242	0.301	2,621	$450.00	50%	85%	85%	2.9574	1
RestaHIN10	Restaurant	HID	New	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1240	10	5,242	0.060	524	$65.00	10%	25%	45%	4.0949	1
RetaiHIN8	Retail	HID	New	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1650	10	5,052	0.174	1,516	$250.00	30%	85%	85%	3.0785	1
RetaiHIN9	Retail	HID	New	9	Photocell dimming control	No prior dimming control	Photocell	$0.1781	10	5,052	0.290	2,526	$450.00	50%	85%	85%	2.8505	1
RetaiHIN10	Retail	HID	New	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1287	10	5,052	0.058	505	$65.00	10%	25%	45%	3.9468	1
miscHIN8	misc	HID	New	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1630	10	5,114	0.176	1,534	$250.00	30%	85%	85%	3.1161	1
MiscHIN9	Misc	HID	New	9	Photocell dimming control	No prior dimming control	Photocell	$0.1760	10	5,114	0.294	2,557	$450.00	50%	85%	85%	2.8852	1
MiscHIN10	Misc	HID	New	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1271	10	5,114	0.059	511	$65.00	10%	25%	45%	3.9949	1
OfficInN3	Office	Incandescent	New	3	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0464	14	3,594	0.124	1,078	$50.00	30%	95%	15%	15.4991	1
OfficInN4	Office	Incandescent	New	4	Photocell dimming control	No prior dimming control	Photocell	$0.0835	9	3,594	0.207	1,797	$150.00	50%	95%	95%	5.4078	1
OfficInT2	Office	Incandescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1159	14	3,594	0.124	1,078	$125.00	30%	95%	80%	6.1996	1
OfficInT3	Office	Incandescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.1252	9	3,594	0.207	1,797	$225.00	50%	95%	95%	3.6052	1
GroceInN3	Grocery	Incandescent	New	3	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0224	14	7,455	0.257	2,236	$50.00	30%	95%	15%	32.1462	1
GroceInT2	Grocery	Incandescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0559	14	7,455	0.257	2,236	$125.00	30%	95%	80%	12.8585	1
HealtInT2	Healthcare	Incandescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0603	14	6,912	0.238	2,074	$125.00	30%	95%	80%	11.9224	1
GroceInN4	Grocery	Incandescent	New	4	Photocell dimming control	No prior dimming control	Photocell	$0.0402	9	7,455	0.428	3,727	$150.00	50%	95%	95%	11.2161	1
HealtInN3	Healthcare	Incandescent	New	3	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0241	14	6,912	0.238	2,074	$50.00	30%	95%	15%	29.8059	1
GroceInT3	Grocery	Incandescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.0604	9	7,455	0.428	3,727	$225.00	50%	95%	95%	7.4774	1
HealtInT3	Healthcare	Incandescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.0651	9	6,912	0.397	3,456	$225.00	50%	95%	95%	6.9330	1
HealtInN4	Healthcare	Incandescent	New	4	Photocell dimming control	No prior dimming control	Photocell	$0.0434	9	6,912	0.397	3,456	$150.00	50%	95%	95%	10.3995	1
InstiInN3	Institutional	Incandescent	New	3	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0493	14	3,379	0.117	1,014	$50.00	30%	95%	15%	14.5718	1
InstiInN4	Institutional	Incandescent	New	4	Photocell dimming control	No prior dimming control	Photocell	$0.0888	9	3,379	0.194	1,690	$150.00	50%	95%	95%	5.0842	1
InstiInT2	Institutional	Incandescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1233	14	3,379	0.117	1,014	$125.00	30%	95%	80%	5.8287	1
InstiInT3	Institutional	Incandescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.1332	9	3,379	0.194	1,690	$225.00	50%	95%	95%	3.3895	1
LodgInN3	Lodging	Incandescent	New	3	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0264	14	6,324	0.218	1,897	$50.00	30%	95%	15%	27.2724	1
LodgInN4	Lodging	Incandescent	New	4	Photocell dimming control	No prior dimming control	Photocell	$0.0474	9	6,324	0.363	3,162	$150.00	50%	95%	95%	9.5156	1
LodgInT2	Lodging	Incandescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0659	14	6,324	0.218	1,897	$125.00	30%	95%	80%	10.9090	1
LodgInT3	Lodging	Incandescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.0712	9	6,324	0.363	3,162	$225.00	50%	95%	95%	6.3437	1
RestaInN3	Restaurant	Incandescent	New	3	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0298	14	5,591	0.193	1,677	$50.00	30%	95%	15%	24.1096	1
RestaInN4	Restaurant	Incandescent	New	4	Photocell dimming control	No prior dimming control	Photocell	$0.0537	9	5,591	0.321	2,796	$150.00	50%	95%	95%	8.4121	1
RestaInT2	Restaurant	Incandescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0745	14	5,591	0.193	1,677	$125.00	30%	95%	80%	9.6439	1
RestaInT3	Restaurant	Incandescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.0805	9	5,591	0.321	2,796	$225.00	50%	95%	95%	5.6080	1
RetaiInN3	Retail	Incandescent	New	3	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0309	14	5,389	0.186	1,617	$50.00	30%	95%	15%	23.2375	1
RetaiInN4	Retail	Incandescent	New	4	Photocell dimming control	No prior dimming control	Photocell	$0.0557	9	5,389	0.310	2,694	$150.00	50%	95%	95%	8.1078	1
RetaiInT2	Retail	Incandescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0773	14	5,389	0.186	1,617	$125.00	30%	95%	80%	9.2950	1
RetaiInT3	Retail	Incandescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.0835	9	5,389	0.310	2,694	$225.00	50%	95%	95%	5.4052	1
WarehInN3	Warehouse	Incandescent	New	3	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0334	14	4,992	0.172	1,498	$50.00	30%	95%	15%	21.5265	1
WarehInN4	Warehouse	Incandescent	New	4	Photocell dimming control	No prior dimming control	Photocell	$0.0601	9	4,992	0.287	2,496	$150.00	50%	95%	95%	7.5108	1
WarehInT2	Warehouse	Incandescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0835	14	4,992	0.172	1,498	$125.00	30%	95%	80%	8.6106	1
WarehInT3	Warehouse	Incandescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.0901	9	4,992	0.287	2,496	$225.00	50%	95%	95%	5.0072	1
MiscInN3	Misc	Incandescent	New	3	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0306	14	5,455	0.188	1,636	$50.00	30%	95%	15%	23.5211	1
MiscInN4	Misc	Incandescent	New	4	Photocell dimming control	No prior dimming control	Photocell	$0.0550	9	5,455	0.313	2,727	$150.00	50%	95%	95%	8.2067	1
MiscInT2	Misc	Incandescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0764	14	5,455	0.188	1,636	$125.00	30%	95%	80%	9.4084	1
MiscInT3	Misc	Incandescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.0825	9	5,455	0.313	2,727	$225.00	50%	95%	95%	5.4712	1
GroceInT4	Grocery	Incandescent	Turnover	4	LED Lamp - 12 Watt	EISA - 60 Watt equivalent - 43W	Lamp	$0.1329	5	250	0.021	181	$23.99	72%	75%	50%	1.9160	1
HealtInT4	Healthcare	Incandescent	Turnover	4	LED Lamp - 12 Watt	EISA - 60 Watt equivalent - 43W	Lamp	$0.1433	5	232	0.019	167	$23.99	72%	75%	50%	1.7765	1
GroceInT5	Grocery	Incandescent	Turnover	5	LED Lamp PAR - 12 Watt	Halogen PAR - 45 W	Lamp	$0.1908	5	262	0.021	181	$34.45	69%	75%	90%	1.3343	1
HealtInT5	Healthcare	Incandescent	Turnover	5	LED Lamp PAR - 12 Watt	Halogen PAR - 45 W	Lamp	$0.2058	5	243	0.019	167	$34.45	69%	75%	90%	1.2371	1
InstiInT1	Institutional	Incandescent	Turnover	1	CFL Lamp - 21 Watt	EISA - 75 Watt equivalent - 53W	Lamp	$0.0355	5	140	0.010	84	$3.00	60%	75%	50%	7.1694	1
InstiInT4	Institutional	Incandescent	Turnover	4	LED Lamp - 12 Watt	EISA - 60 Watt equivalent - 43W	Lamp	$0.2931	5	114	0.009	82	$23.99	72%	75%	50%	0.8685	0
InstiInT5	Institutional	Incandescent	Turnover	5	LED Lamp PAR - 12 Watt	Halogen PAR - 45 W	Lamp	$0.4209	5	119	0.009	82	$34.45	69%	75%	90%	0.6048	0
LodgiInT1	Lodging	Incandescent	Turnover	1	CFL Lamp - 21 Watt	EISA - 75 Watt equivalent - 53W	Lamp	$0.0190	5	262	0.018	158	$3.00	60%	75%	50%	13.4182	1
LodgiInT4	Lodging	Incandescent	Turnover	4	LED Lamp - 12 Watt	EISA - 60 Watt equivalent - 43W	Lamp	$0.1566	5	212	0.018	153	$23.99	72%	75%	50%	1.6255	1
LodgiInT5	Lodging	Incandescent	Turnover	5	LED Lamp PAR - 12 Watt	Halogen PAR - 45 W	Lamp	$0.2249	5	222	0.018	153	$34.45	69%	75%	90%	1.1320	1
OfficInT1	Office	Incandescent	Turnover	1	CFL Lamp - 21 Watt	EISA - 75 Watt equivalent - 53W	Lamp	$0.0334	5	149	0.010	90	$3.00	60%	75%	50%	7.6256	1
OfficInT4	Office	Incandescent	Turnover	4	LED Lamp - 12 Watt	EISA - 60 Watt equivalent - 43W	Lamp	$0.2756	5	121	0.010	87	$23.99	72%	75%	50%	0.9238	0
OfficInT5	Office	Incandescent	Turnover	5	LED Lamp PAR - 12 Watt	Halogen PAR - 45 W	Lamp	$0.3958	5	126	0.010	87	$34.45	69%	75%	90%	0.6433	0
RestaInT1	Restaurant	Incandescent	Turnover	1	CFL Lamp - 21 Watt	EISA - 75 Watt equivalent - 53W	Lamp	$0.0215	5	232	0.016	140	$3.00	60%	75%	50%	11.8621	1
RestaInT4	Restaurant	Incandescent	Turnover	4	LED Lamp - 12 Watt	EISA - 60 Watt equivalent - 43W	Lamp	$0.1772	5	188	0.016	135	$23.99	72%	75%	50%	1.4370	1
RestaInT5	Restaurant	Incandescent	Turnover	5	LED Lamp PAR - 12 Watt	Halogen PAR - 45 W	Lamp	$0.2544	5	197	0.016	135	$34.45	69%	75%	90%	1.0007	1
RetaiInT1	Retail	Incandescent	Turnover	1	CFL Lamp - 21 Watt	EISA - 75 Watt equivalent - 53W	Lamp	$0.0223	5	223	0.015	135	$3.00	60%	75%	50%	11.4330	1
RetaiInT4	Retail	Incandescent	Turnover	4	LED Lamp - 12 Watt	EISA - 60 Watt equivalent - 43W	Lamp	$0.1838	5	181	0.015	131	$23.99	72%	75%	50%	1.3850	1
RetaiInT5	Retail	Incandescent	Turnover	5	LED Lamp PAR - 12 Watt	Halogen PAR - 45 W	Lamp	$0.2640	5	189	0.015	131	$34.45	69%	75%	90%	0.9645	0
miscInT1	misc	Incandescent	Turnover	1	CFL Lamp - 21 Watt	EISA - 75 Watt equivalent - 53W	Lamp	$0.0220	5	226	0.016	136	$3.00	60%	75%	50%	11.5725	1
miscInT4	misc	Incandescent	Turnover	4	LED Lamp - 12 Watt	EISA - 60 Watt equivalent - 43W	Lamp	$0.1816	5	183	0.015	132	$23.99	72%	75%	50%	1.4019	1
miscInT5	misc	Incandescent	Turnover	5	LED Lamp PAR - 12 Watt	Halogen PAR - 45 W	Lamp	$0.2608	5	192	0.015	132	$34.45	69%	75%	90%	0.9763	0
WarehInT1	Warehouse	Incandescent	Turnover	1	CFL Lamp - 21 Watt	EISA - 75 Watt equivalent - 53W	Lamp	$0.0240	5	207	0.014	125	$3.00	60%	75%	50%	10.5912	1
WarehInT4	Warehouse	Incandescent	Turnover	4	LED Lamp - 12 Watt	EISA - 60 Watt equivalent - 43W	Lamp	$0.1984	5	168	0.014	121	$23.99	72%	75%	50%	1.2831	1
WarehInT5	Warehouse	Incandescent	Turnover	5	LED Lamp PAR - 12 Watt	Halogen PAR - 45 W	Lamp	$0.2849	5	176	0.014	121	$34.45	69%	75%	90%	0.8935	0

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Fla
LodgInN6	Lodging	Incandescent	New	6	Hotel Occupancy Sensors	No prior control	Per Room	$0.4468	10	240	0.019	168	$75.00	70%	90%	95%	1.1365	1
LodgInT6	Lodging	Incandescent	Turnover	6	Hotel Occupancy Sensors	No prior control	Per Room	$0.5957	10	240	0.019	168	$100.00	70%	90%	95%	0.8524	0
AllSiN1	All	Signage	New	1	Induction Street Lighting	Base HID Streetlighting	Fixture	$0.54	15	2,762	0.101	1,619	$875.00	59%	95%	95%	1.3652	1
AllSiN2	All	Signage	New	2	LED or equivalent sign lighting	Replace fluorescent sign lighting	Exit Sign	$0.58	15	52	0.002	30	$17.36	58%	95%	7%	1.2690	1
AllSiN3	All	Signage	New	3	LED Street Lighting	Std HID Street Lighting	Pole	$0.56	15	3,023	0.047	756	$425.00	25%	95%	95%	1.3117	1
AllSiE1	All	Signage	Early	1	Dusk to Dawn	Time Clock Control	Pole	$0.17	15	3,023	0.076	1,209	$200.00	40%	95%	50%	4.4596	1
OfficMoT22	Office	Motors	Turnover	22	Air Comp Improvements			$0.11	15	56148	1.148	8,928	$990.00	16%	28%	65%	6.9851	1
OfficMoE2	Office	Motors	Early	2	Air Compressor Optimization			$0.16	15	56148	2.174	16,901	$2,750.00	30%	38%	65%	4.7604	1
GroceMoE1	Grocery	Motors	Early	1	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.3257	1
AllOtT1	All	Other	Turnover	1	Motor Improvements Bundle - Industrial Model	No Motor Improvements	Motor	$0.48	14	10000	0.128	1,092	$522.00	11%	90%	95%	1.5053	1
AllOtT2	All	Other	Turnover	2	EE Transformer - CSL 3	NEMA Transformer - 75W	Motor	$0.60	15	4197	0.187	1,595	$950.00	23%	90%	95%	1.2901	1
AllOtN1	All	Other	New	1	EE Transformer - CSL 3	NEMA Transformer - 75W	Motor	$0.60	15	4197	0.187	1,595	$950.00	23%	90%	95%	1.2901	1
AllReN26	All	Refrigeration	New	26	Anti-sweat heat (ASH) controls - Freezer	ASH without controls	Per Door	$0.16	12	2,985	0.029	1,882	$300.00	63%	95%	85%	3.6933	1
AllReN27	All	Refrigeration	New	27	Anti-sweat heat (ASH) controls - Cooler	ASH without controls	Per Door	$0.29	12	1,621	0.028	1,023	$300.00	63%	95%	85%	2.0185	1
GroceMoN1	Grocery	Motors	New	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1015	15	15384	0.0282	139.5	$154	0.91%	74.4%	100%	0.7255	0
GroceMoN2	Grocery	Motors	New	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.1901	15	58940	0.0231	437.7	$521	0.74%	74.4%	100%	0.6295	0
GroceMoN3	Grocery	Motors	New	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0693	15	144688	0.0138	644.1	$689	0.45%	66.3%	100%	0.6908	0
GroceMoN4	Grocery	Motors	New	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4499	15	290922	0.0121	1135.2	$511	0.39%	55.8%	100%	1.6337	1
GroceMoN5	Grocery	Motors	New	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-500 HP	Motor	$0.3775	15	624328	0.0284	5711.1	$2,156	0.91%	55.8%	100%	1.9421	1
GroceMoN6	Grocery	Motors	New	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5635	15	97600	2.511	19,520	$11,000.00	20%	55.0%	100%	1.3745	1
GroceMoN7	Grocery	Motors	New	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4707	15	97600	9.776	27620.7	$13,000.00	28%	70.0%	100%	1.8061	1
GroceMoN8	Grocery	Motors	New	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4791	15	97600	0.000	27132.7	$13,000.00	28%	80.0%	100%	1.5268	1
GroceMoN9	Grocery	Motors	New	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5459	15	97600	9.776	23814.3	$13,000.00	24%	70.0%	100%	1.5919	1
GroceMoN10	Grocery	Motors	New	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4791	15	97600	7.280	27132.7	$13,000.00	28%	55.0%	100%	1.7143	1
GroceMoN11	Grocery	Motors	New	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5459	15	97600	9.776	23814.3	$13,000.00	24%	30.0%	100%	1.5919	1
GroceMoT1	Grocery	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1015	15	15384	0.0282	139.5	$154	0.91%	74.4%	100%	0.7255	0
GroceMoT2	Grocery	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.1901	15	58940	0.0231	437.7	$521	0.74%	74.4%	100%	0.6295	0
GroceMoT3	Grocery	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0693	15	144688	0.0138	644.1	$689	0.45%	66.3%	100%	0.6908	0
GroceMoT4	Grocery	Motors	Turnover	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4499	15	290922	0.0121	1135.2	$511	0.39%	55.8%	100%	1.6337	1
GroceMoT5	Grocery	Motors	Turnover	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-250 HP	Motor	$0.3775	15	624328	0.0284	5711.1	$2,156	0.91%	55.8%	100%	1.9421	1
GroceMoT6	Grocery	Motors	Turnover	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5635	15	97600	2.511	19,520	$11,000.00	20%	55.0%	80%	1.3745	1
GroceMoT7	Grocery	Motors	Turnover	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4707	15	97600	9.776	27620.7	$13,000.00	28%	90.0%	80%	1.8061	1
GroceMoT8	Grocery	Motors	Turnover	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4791	15	97600	0.000	27132.7	$13,000.00	28%	90.0%	80%	1.5268	1
GroceMoT9	Grocery	Motors	Turnover	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5459	15	97600	9.776	23814.3	$13,000.00	24%	90.0%	80%	1.5919	1
GroceMoT10	Grocery	Motors	Turnover	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4791	15	97600	7.280	27132.7	$13,000.00	28%	80.0%	80%	1.7143	1
GroceMoT11	Grocery	Motors	Turnover	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5459	15	97600	9.776	23814.3	$13,000.00	24%	55.0%	80%	1.5919	1
GroceMoT12	Grocery	Motors	Turnover	12	Motors: Rewind 125-200 HP	(E) Motor	Motor	$0.5097	15	292799	0.189	1471.4	$750	0.5%	35.0%	95%	1.5196	1
GroceMoT13	Grocery	Motors	Turnover	13	Motors: Rewind 201-500 HP	(E) Motor	Motor	$0.6274	15	634398	0.410	3187.9	$2,000	0.5%	50.0%	95%	1.2347	1
GroceMoT14	Grocery	Motors	Turnover	14	Motors: Rewind 20-50 HP	(E) Motor	Motor	$0.4704	15	59847	0.068	531.4	$250	0.9%	10.0%	95%	1.6465	1
GroceMoT15	Grocery	Motors	Turnover	15	Motors: Rewind 500+ HP	(E) Motor	Motor	$0.5437	15	1463995	0.946	7356.8	$4,000	0.5%	70.0%	95%	1.4246	1
GroceMoT16	Grocery	Motors	Turnover	16	Motors: Rewind 51-100 HP	(E) Motor	Motor	$0.5841	15	147991	0.110	856.0	$500	0.6%	20.0%	95%	1.3261	1
GroceMoT17	Grocery	Motors	Turnover	17	Downsizing motor during retrofit	Larger hp standard motor	HP Reduction	$0.34	20	186,404	0.190	1,477	$500.00	0.79%	25%	95%	2.9638	1
GroceMoN12	Grocery	Motors	New	12	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.7031	1
GroceMoN13	Grocery	Motors	New	13	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.0317	0
GroceMoN14	Grocery	Motors	New	14	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.6196	1
GroceMoN15	Grocery	Motors	New	15	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.6444	0
GroceMoT18	Grocery	Motors	Turnover	18	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.7031	1
GroceMoT19	Grocery	Motors	Turnover	19	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.0317	0
GroceMoT20	Grocery	Motors	Turnover	20	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.6196	1
GroceMoT21	Grocery	Motors	Turnover	21	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.6444	0
GroceMoT22	Grocery	Motors	Turnover	22	Air Comp Improvements			$0.11	15	56148	1.148	8,928	$990.00	16%	28%	65%	6.9851	1
GroceMoE2	Grocery	Motors	Early	2	Air Compressor Optimization			$0.16	15	56148	2.174	16,901	$2,750.00	30%	38%	65%	4.7604	1
GroceMoT23	Grocery	Motors	Turnover	23	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.3257	1
HealtMoN1	Healthcare	Motors	New	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$0.8576	15	19759	0.0282	179.2	$154	0.91%	74.4%	100%	0.9143	0
HealtMoN2	Healthcare	Motors	New	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$0.9266	15	75700	0.0231	562.2	$521	0.74%	74.4%	100%	0.8043	0
HealtMoN3	Healthcare	Motors	New	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$0.8325	15	185830	0.0138	827.3	$689	0.45%	66.3%	100%	0.8854	0
HealtMoN4	Healthcare	Motors	New	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.3503	15	373646	0.0121	1458.0	$511	0.39%	55.8%	100%	2.0960	1
HealtMoN5	Healthcare	Motors	New	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-500 HP	Motor	$0.2939	15	801855	0.0284	7335.1	$2,156	0.91%	55.8%	100%	2.4931	1
HealtMoN6	Healthcare	Motors	New	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.4388	15	125352	3.225	25,070	$11,000.00	20%	55.0%	100%	1.7654	1
HealtMoN7	Healthcare	Motors	New	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.3958	15	125352	9.776	32842.2	$13,000.00	26%	70.0%	100%	2.0999	1
HealtMoN8	Healthcare	Motors	New	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.3731	15	125352	0.000	34847.9	$13,000.00	28%	80.0%	100%	1.9609	1
HealtMoN9	Healthcare	Motors	New	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.4915	15	125352	7.520	26449.3	$13,000.00	21%	70.0%	100%	1.6820	1
HealtMoN10	Healthcare	Motors	New	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.3973	15	125352	7.280	32716.9	$13,000.00	26%	55.0%	100%	2.0285	1
HealtMoN11	Healthcare	Motors	New	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.4672	15	125352	9.776	27828.2	$13,000.00	22%	30.0%	100%	1.8178	1
HealtMoT1	Healthcare	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$0.8576	15	19759	0.0282	179.2	$154	0.91%	74.4%	100%	0.9143	0
HealtMoT2	Healthcare	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$0.9266	15	75700	0.0231	562.2	$521	0.74%	74.4%	100%	0.8043	0
HealtMoT3	Healthcare	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$0.8325	15	185830	0.0138	827.3	$689	0.45%	66.3%	100%	0.8854	0
HealtMoT4	Healthcare	Motors	Turnover	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.3503	15	373646	0.0121	1458.0	$511	0.39%	55.8%	100%	2.0960	1
HealtMoT5	Healthcare	Motors	Turnover	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-250 HP	Motor	$0.2939	15	801855	0.0284	7335.1	$2,156	0.91%	55.8%	100%	2.4931	1
HealtMoT6	Healthcare	Motors	Turnover	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.4388	15	125352	3.225	25,070	$11,000.00	20%	55.0%	80%	1.7654	1
HealtMoT7	Healthcare	Motors	Turnover	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.3958	15	125352	9.776	32842.2	$13,000.00	26%	90.0%	80%	2.0999	1
HealtMoT8	Healthcare	Motors	Turnover	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.3731	15	125352	0.000	34847.9	$13,000.00	28%	90.0%	80%	1.9609	1
HealtMoT9	Healthcare	Motors	Turnover	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.4915	15	125352	7.520	26449.3	$13,000.00	21%	90.0%	80%	1.6820	1
HealtMoT10	Healthcare	Motors	Turnover	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.3973	15	125352	7.280	32716.9	$13,000.00	26%	80.0%	80%	2.0285	1
HealtMoT11	Healthcare	Motors	Turnover	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.4672	15	125352	9.776	27828.2	$13,000.00	22%	55.0%	80%	1.8178	1
HealtMoT12	Healthcare	Motors	Turnover	12	Motors: Rewind 125-200 HP	(E) Motor	Motor	$0.3969	15	376056	0.243	1889.7	$750	0.5%	35.0%	95%	1.9517	1
HealtMoT13	Healthcare	Motors	Turnover	13	Motors: Rewind 201-500 HP	(E) Motor	Motor	$0.4885	15	814788	0.527	4094.4	$2,000	0.5%	50.0%	95%	1.5858	1
HealtMoT14	Healthcare	Motors	Turnover	14	Motors: Rewind 20-50 HP	(E) Motor	Motor	$0.3663	15	76864	0.088	682.5	$250	0.9%	10.0%	95%	2.1147	1
HealtMoT15	Healthcare	Motors	Turnover	15	Motors: Rewind 500+ HP	(E) Motor	Motor	$0.4233	15	1880281	1.216	9448.6	$4,000	0.5%	70.0%	95%	1.8297	1
HealtMoT16	Healthcare	Motors	Turnover	16	Motors: Rewind 51-100 HP	(E) Motor	Motor	$0.4548	15	190072	0.141	1099.4	$500	0.6%	20.0%	95%	1.7031	1
HealtMoT17	Healthcare	Motors	Turnover	17	Downsizing motor during retrofit	Larger hp standard motor	HP Reduction	$0.34	20	186,404	0.190	1,477	$500.00	0.79%	25%	95%	2.9638	1
HealtMoN12	Healthcare	Motors	New	12	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.7031	1
HealtMoN13	Healthcare	Motors	New	13	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.0317	0
HealtMoN14	Healthcare	Motors	New	14	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.6196	1
HealtMoN15	Healthcare	Motors	New	15	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.6444	0
HealtMoT18	Healthcare	Motors	Turnover	18	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.7031	1
HealtMoT19	Healthcare	Motors	Turnover	19	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.0317	0
HealtMoT20	Healthcare	Motors	Turnover	20	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.6196	1
HealtMoT21	Healthcare	Motors	Turnover	21	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.6444	0
HealtMoT22	Healthcare	Motors	Turnover	22	Air Comp Improvements			$0.11	15	56148	1.148	8,928	$990.00	16%	28%	65%	6.9851	1
HealtMoE2	Healthcare	Motors	Early	2	Air Compressor Optimization			$0.16	15	56148	2.174	16,901	$2,750.00	30%	38%	65%	4.7604	1
HealtMoE1	Healthcare	Motors	Early	1	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.3257	1
InstiMoN1	Institutional	Motors	New	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.2757	15	13284	0.0282	120.5	$154	0.91%	74.4%	100%	0.6348	0
InstiMoN2	Institutional	Motors	New	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.3783	15	50893	0.0231	377.9	$521	0.74%	74.4%	100%	0.5456	0

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Fla
InstiMoN3	Institutional	Motors	New	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.2384	15	124933	0.0138	556.2	$689	0.45%	66.3%	100%	0.5974	0
InstiMoN4	Institutional	Motors	New	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.5211	15	251201	0.0121	980.2	$511	0.39%	55.8%	100%	1.4117	1
InstiMoN5	Institutional	Motors	New	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-500 HP	Motor	$0.4372	15	539086	0.0284	4931.3	$2,156	0.91%	55.8%	100%	1.6776	1
InstiMoN6	Institutional	Motors	New	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.6526	15	84274	2.168	16,855	$11,000.00	20%	55.0%	100%	1.1869	1
InstiMoN7	Institutional	Motors	New	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.5451	15	84274	12.062	23849.5	$13,000.00	28%	70.0%	100%	1.6528	1
InstiMoN8	Institutional	Motors	New	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.5549	15	84274	0.000	23428.2	$13,000.00	28%	80.0%	100%	1.3183	1
InstiMoN9	Institutional	Motors	New	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.6348	15	84274	12.062	20478.6	$13,000.00	24%	70.0%	100%	1.4631	1
InstiMoN10	Institutional	Motors	New	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.5569	15	84274	9.145	23343.9	$13,000.00	28%	55.0%	100%	1.5492	1
InstiMoN11	Institutional	Motors	New	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.6348	15	84274	12.062	20478.6	$13,000.00	24%	30.0%	100%	1.4631	1
InstiMoT1	Institutional	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.2757	15	13284	0.0282	120.5	$154	0.91%	74.4%	100%	0.6348	0
InstiMoT10	Institutional	Motors	Turnover	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.5569	15	84274	9.145	23343.9	$13,000.00	28%	80.0%	80%	1.5492	1
InstiMoT11	Institutional	Motors	Turnover	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.6348	15	84274	12.062	20478.6	$13,000.00	24%	55.0%	80%	1.4631	1
InstiMoT12	Institutional	Motors	Turnover	12	Motors: Rewind 125-200 HP	(E) Motor	Motor	$0.5903	15	252822	0.163	1270.5	$750	0.5%	35.0%	95%	1.3121	1
InstiMoT13	Institutional	Motors	Turnover	13	Motors: Rewind 201-500 HP	(E) Motor	Motor	$0.7266	15	547781	0.354	2752.7	$2,000	0.5%	50.0%	95%	1.0661	1
InstiMoT14	Institutional	Motors	Turnover	14	Motors: Rewind 20-50 HP	(E) Motor	Motor	$0.5448	15	51676	0.059	458.9	$250	0.9%	10.0%	95%	1.4217	1
InstiMoT15	Institutional	Motors	Turnover	15	Motors: Rewind 500+ HP	(E) Motor	Motor	$0.6297	15	1264109	0.817	6352.3	$4,000	0.5%	70.0%	95%	1.2301	1
InstiMoT16	Institutional	Motors	Turnover	16	Motors: Rewind 51-100 HP	(E) Motor	Motor	$0.6765	15	127785	0.095	739.1	$500	0.6%	20.0%	95%	1.1450	1
InstiMoT17	Institutional	Motors	Turnover	17	Downsizing motor during retrofit	Larger hp standard motor	HP Reduction	$0.34	20	186,404	0.190	1,477	$500.00	0.79%	25%	95%	2.9638	1
InstiMoT2	Institutional	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.3783	15	50893	0.0231	377.9	$521	0.74%	74.4%	100%	0.5456	0
HealtMoT23	Healthcare	Motors	Turnover	23	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.3257	1
InstiMoT3	Institutional	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.2384	15	124933	0.0138	556.2	$689	0.45%	66.3%	100%	0.5974	0
InstiMoT4	Institutional	Motors	Turnover	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.5211	15	251201	0.0121	980.2	$511	0.39%	55.8%	100%	1.4117	1
InstiMoT5	Institutional	Motors	Turnover	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-250 HP	Motor	$0.4372	15	539086	0.0284	4931.3	$2,156	0.91%	55.8%	100%	1.6776	1
InstiMoT6	Institutional	Motors	Turnover	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.6526	15	84274	2.168	16,855	$11,000.00	20%	55.0%	80%	1.1869	1
InstiMoT7	Institutional	Motors	Turnover	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.5451	15	84274	12.062	23849.5	$13,000.00	28%	90.0%	80%	1.6528	1
InstiMoT8	Institutional	Motors	Turnover	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.5549	15	84274	0.000	23428.2	$13,000.00	28%	90.0%	80%	1.3183	1
InstiMoN12	Institutional	Motors	New	12	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.7031	1
InstiMoN13	Institutional	Motors	New	13	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.0317	0
InstiMoN14	Institutional	Motors	New	14	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.6196	1
InstiMoN15	Institutional	Motors	New	15	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.6444	0
InstiMoT18	Institutional	Motors	Turnover	18	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.7031	1
InstiMoT19	Institutional	Motors	Turnover	19	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.0317	0
InstiMoT20	Institutional	Motors	Turnover	20	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.6196	1
InstiMoT21	Institutional	Motors	Turnover	21	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.6444	0
InstiMoT22	Institutional	Motors	Turnover	22	Air Comp Improvements			$0.11	15	56148	1.148	8,928	$990.00	16%	28%	65%	6.9851	1
InstiMoE2	Institutional	Motors	Early	2	Air Compressor Optimization			$0.16	15	56148	2.174	16,901	$2,750.00	30%	38%	65%	4.7604	1
InstiMoE1	Institutional	Motors	Early	1	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.3257	1
LodgiMoN1	Lodging	Motors	New	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1114	15	15247	0.0282	138.3	$154	0.91%	74.4%	100%	0.7196	0
LodgiMoN2	Lodging	Motors	New	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.2008	15	58416	0.0231	433.8	$521	0.74%	74.4%	100%	0.6240	0
LodgiMoN3	Lodging	Motors	New	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0789	15	143401	0.0138	638.4	$689	0.45%	66.3%	100%	0.6848	0
LodgiMoN4	Lodging	Motors	New	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4540	15	288334	0.0121	1125.1	$511	0.39%	55.8%	100%	1.6192	1
LodgiMoN5	Lodging	Motors	New	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-500 HP	Motor	$0.3809	15	618773	0.0284	5660.3	$2,156	0.91%	55.8%	100%	1.9249	1
LodgiMoN6	Lodging	Motors	New	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5686	15	96731	2.489	19,346	$11,000.00	20%	55.0%	100%	1.3623	1
LodgiMoN7	Lodging	Motors	New	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4805	15	96731	10.553	27052.5	$13,000.00	28%	70.0%	100%	1.7941	1
LodgiMoN8	Lodging	Motors	New	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4834	15	96731	0.000	26891.3	$13,000.00	28%	80.0%	100%	1.5132	1
LodgiMoN9	Lodging	Motors	New	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5631	15	96731	10.177	23086.5	$13,000.00	24%	70.0%	100%	1.5613	1
LodgiMoN10	Lodging	Motors	New	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4887	15	96731	7.911	26601.1	$13,000.00	28%	55.0%	100%	1.7007	1
LodgiMoN11	Lodging	Motors	New	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5588	15	96731	10.553	23263.9	$13,000.00	24%	30.0%	100%	1.5809	1
LodgiMoT1	Lodging	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1114	15	15247	0.0282	138.3	$154	0.91%	74.4%	100%	0.7196	0
LodgiMoT2	Lodging	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.2008	15	58416	0.0231	433.8	$521	0.74%	74.4%	100%	0.6240	0
LodgiMoT3	Lodging	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0789	15	143401	0.0138	638.4	$689	0.45%	66.3%	100%	0.6848	0
LodgiMoT4	Lodging	Motors	Turnover	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4540	15	288334	0.0121	1125.1	$511	0.39%	55.8%	100%	1.6192	1
LodgiMoT5	Lodging	Motors	Turnover	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-250 HP	Motor	$0.3809	15	618773	0.0284	5660.3	$2,156	0.91%	55.8%	100%	1.9249	1
LodgiMoT6	Lodging	Motors	Turnover	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5686	15	96731	2.489	19,346	$11,000.00	20%	55.0%	80%	1.3623	1
LodgiMoT7	Lodging	Motors	Turnover	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4805	15	96731	10.553	27052.5	$13,000.00	28%	90.0%	80%	1.7941	1
LodgiMoT8	Lodging	Motors	Turnover	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4834	15	96731	0.000	26891.3	$13,000.00	28%	90.0%	80%	1.5132	1
LodgiMoT9	Lodging	Motors	Turnover	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5631	15	96731	10.177	23086.5	$13,000.00	24%	90.0%	80%	1.5613	1
LodgiMoT10	Lodging	Motors	Turnover	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4887	15	96731	7.911	26601.1	$13,000.00	28%	80.0%	80%	1.7007	1
LodgiMoT11	Lodging	Motors	Turnover	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5588	15	96731	10.553	23263.9	$13,000.00	24%	55.0%	80%	1.5809	1
LodgiMoT12	Lodging	Motors	Turnover	12	Motors: Rewind 125-200 HP	(E) Motor	Motor	$0.5143	15	290194	0.188	1458.3	$750	0.5%	35.0%	95%	1.5061	1
LodgiMoT13	Lodging	Motors	Turnover	13	Motors: Rewind 201-500 HP	(E) Motor	Motor	$0.6330	15	628754	0.406	3159.6	$2,000	0.5%	50.0%	95%	1.2237	1
LodgiMoT14	Lodging	Motors	Turnover	14	Motors: Rewind 20-50 HP	(E) Motor	Motor	$0.4747	15	59314	0.068	526.7	$250	0.9%	10.0%	95%	1.6319	1
LodgiMoT15	Lodging	Motors	Turnover	15	Motors: Rewind 500+ HP	(E) Motor	Motor	$0.5486	15	1450970	0.938	7291.3	$4,000	0.5%	70.0%	95%	1.4120	1
LodgiMoT16	Lodging	Motors	Turnover	16	Motors: Rewind 51-100 HP	(E) Motor	Motor	$0.5894	15	146674	0.109	848.4	$500	0.6%	20.0%	95%	1.3143	1
LodgiMoT17	Lodging	Motors	Turnover	17	Downsizing motor during retrofit	Larger hp standard motor	HP Reduction	$0.34	20	186,404	0.190	1,477	$500.00	0.79%	25%	95%	2.9638	1
LodgiMoN12	Lodging	Motors	New	12	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.7031	1
LodgiMoN13	Lodging	Motors	New	13	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.0317	0
LodgiMoN14	Lodging	Motors	New	14	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.6196	1
LodgiMoN15	Lodging	Motors	New	15	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.6444	0
LodgiMoT18	Lodging	Motors	Turnover	18	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.7031	1
LodgiMoT19	Lodging	Motors	Turnover	19	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.0317	0
LodgiMoT20	Lodging	Motors	Turnover	20	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.6196	1
LodgiMoT21	Lodging	Motors	Turnover	21	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.6444	0
LodgiMoT22	Lodging	Motors	Turnover	22	Air Comp Improvements			$0.11	15	56148	1.148	8,928	$990.00	16%	28%	65%	6.9851	1
LodgiMoE2	Lodging	Motors	Early	2	Air Compressor Optimization			$0.16	15	56148	2.174	16,901	$2,750.00	30%	38%	65%	4.7604	1
InstiMoT23	Institutional	Motors	Turnover	23	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.3257	1
miscMoN1	misc	Motors	New	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1114	15	15247	0.0282	138.3	$154	0.91%	74.4%	100%	0.7196	0
miscMoN2	misc	Motors	New	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.2008	15	58416	0.0231	433.8	$521	0.74%	74.4%	100%	0.6240	0
miscMoN3	misc	Motors	New	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0789	15	143401	0.0138	638.4	$689	0.45%	66.3%	100%	0.6848	0
miscMoN4	misc	Motors	New	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4540	15	288334	0.0121	1125.1	$511	0.39%	55.8%	100%	1.6192	1
miscMoN5	misc	Motors	New	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-500 HP	Motor	$0.3809	15	618773	0.0284	5660.3	$2,156	0.91%	55.8%	100%	1.9249	1
miscMoN6	misc	Motors	New	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5686	15	96731	2.489	19,346	$11,000.00	20%	55.0%	100%	1.3623	1
miscMoN7	misc	Motors	New	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4805	15	96731	10.553	27052.5	$13,000.00	28%	70.0%	100%	1.7941	1
miscMoN8	misc	Motors	New	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4834	15	96731	0.000	26891.3	$13,000.00	28%	80.0%	100%	1.5132	1
miscMoN9	misc	Motors	New	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5631	15	96731	10.177	23086.5	$13,000.00	24%	70.0%	100%	1.5613	1
miscMoN10	misc	Motors	New	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4887	15	96731	7.911	26601.1	$13,000.00	28%	55.0%	100%	1.7007	1
miscMoN11	misc	Motors	New	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5588	15	96731	10.553	23263.9	$13,000.00	24%	30.0%	100%	1.5809	1
miscMoT1	misc	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1114	15	15247	0.0282	138.3	$154	0.91%	74.4%	100%	0.7196	0
miscMoT2	misc	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.2008	15	58416	0.0231	433.8	$521	0.74%	74.4%	100%	0.6240	0
miscMoT3	misc	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0789	15	143401	0.0138	638.4	$689	0.45%	66.3%	100%	0.6848	0
miscMoT4	misc	Motors	Turnover	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4540	15	288334	0.0121	1125.1	$511	0.39%	55.8%	100%	1.6192	1
miscMoT5	misc	Motors	Turnover	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-250 HP	Motor	$0.3809	15	618773	0.0284	5660.3	$2,156	0.91%	55.8%	100%	1.9249	1
miscMoT6	misc	Motors	Turnover	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5686	15	96731	2.489	19,346	$11,000.00	20%	55.0%	80%	1.3623	1
miscMoT7	misc	Motors	Turnover	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4805	15	96731	10.553	27052.5	$13,000.00	28%	90.0%	80%	1.7941	1

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Fla
miscMoT8	misc	Motors	Turnover	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4834	15	96731	0.000	26891.3	$13,000.00	28%	90.0%	80%	1.5132	1
miscMoT9	misc	Motors	Turnover	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5631	15	96731	10.177	23086.5	$13,000.00	24%	90.0%	80%	1.5613	1
miscMoT10	misc	Motors	Turnover	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4887	15	96731	7.911	26601.1	$13,000.00	28%	80.0%	80%	1.7007	1
miscMoT11	misc	Motors	Turnover	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5588	15	96731	10.553	23263.9	$13,000.00	24%	55.0%	80%	1.5809	1
miscMoT12	misc	Motors	Turnover	12	Motors: Rewind 125-200 HP	(E) Motor	Motor	$0.5143	15	290194	0.188	1458.3	$750	0.5%	35.0%	95%	1.5061	1
miscMoT13	misc	Motors	Turnover	13	Motors: Rewind 201-500 HP	(E) Motor	Motor	$0.6330	15	628754	0.406	3159.6	$2,000	0.5%	50.0%	95%	1.2237	1
miscMoT14	misc	Motors	Turnover	14	Motors: Rewind 20-50 HP	(E) Motor	Motor	$0.4747	15	59314	0.068	526.7	$250	0.9%	10.0%	95%	1.6319	1
miscMoT15	misc	Motors	Turnover	15	Motors: Rewind 500+ HP	(E) Motor	Motor	$0.5486	15	1450970	0.938	7291.3	$4,000	0.5%	70.0%	95%	1.4120	1
miscMoT16	misc	Motors	Turnover	16	Motors: Rewind 51-100 HP	(E) Motor	Motor	$0.5894	15	146674	0.109	848.4	$500	0.6%	20.0%	95%	1.3143	1
miscMoT17	misc	Motors	Turnover	17	Downsizing motor during retrofit	Larger hp standard motor	HP Reduction	$0.34	20	186,404	0.190	1,477	$500.00	0.79%	25%	95%	2.9638	1
miscMoN12	misc	Motors	New	12	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.7031	1
miscMoN13	misc	Motors	New	13	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.0317	0
miscMoN14	misc	Motors	New	14	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.6196	1
miscMoN15	misc	Motors	New	15	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.6444	0
miscMoT18	misc	Motors	Turnover	18	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.7031	1
miscMoT19	misc	Motors	Turnover	19	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.0317	0
miscMoT20	misc	Motors	Turnover	20	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.6196	1
miscMoT21	misc	Motors	Turnover	21	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.6444	0
miscMoT22	misc	Motors	Turnover	22	Air Comp Improvements			$0.11	15	56148	1.148	8,928	$990.00	16%	28%	65%	6.9851	1
miscMoE2	misc	Motors	Early	2	Air Compressor Optimization			$0.16	15	56148	2.174	16,901	$2,750.00	30%	38%	65%	4.7604	1
LodgiMoE1	Lodging	Motors	Early	1	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.3257	1
RetaiMoN1	Retail	Motors	New	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1015	15	15384	0.0282	139.5	$154	0.91%	74.4%	100%	0.7255	0
RetaiMoN2	Retail	Motors	New	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.1901	15	58940	0.0231	437.7	$521	0.74%	74.4%	100%	0.6295	0
RetaiMoN3	Retail	Motors	New	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0693	15	144688	0.0138	644.1	$689	0.45%	66.3%	100%	0.6908	0
RetaiMoN4	Retail	Motors	New	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4499	15	290922	0.0121	1135.2	$511	0.39%	55.8%	100%	1.6337	1
RetaiMoN5	Retail	Motors	New	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-500 HP	Motor	$0.3775	15	624328	0.0284	5711.1	$2,156	0.91%	55.8%	100%	1.9421	1
RetaiMoN6	Retail	Motors	New	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5635	15	97600	2.511	19,520	$11,000.00	20%	55.0%	100%	1.3745	1
RetaiMoN7	Retail	Motors	New	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4707	15	97600	9.776	27620.7	$13,000.00	28%	70.0%	100%	1.8061	1
RetaiMoN8	Retail	Motors	New	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4791	15	97600	0.000	27132.7	$13,000.00	28%	80.0%	100%	1.5268	1
RetaiMoN9	Retail	Motors	New	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5459	15	97600	9.776	23814.3	$13,000.00	24%	70.0%	100%	1.5919	1
RetaiMoN10	Retail	Motors	New	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4791	15	97600	7.280	27132.7	$13,000.00	28%	55.0%	100%	1.7143	1
RetaiMoN11	Retail	Motors	New	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5459	15	97600	9.776	23814.3	$13,000.00	24%	30.0%	100%	1.5919	1
RetaiMoT1	Retail	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1015	15	15384	0.0282	139.5	$154	0.91%	74.4%	100%	0.7255	0
RetaiMoT2	Retail	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.1901	15	58940	0.0231	437.7	$521	0.74%	74.4%	100%	0.6295	0
RetaiMoT3	Retail	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0693	15	144688	0.0138	644.1	$689	0.45%	66.3%	100%	0.6908	0
RetaiMoT4	Retail	Motors	Turnover	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4499	15	290922	0.0121	1135.2	$511	0.39%	55.8%	100%	1.6337	1
RetaiMoT5	Retail	Motors	Turnover	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-250 HP	Motor	$0.3775	15	624328	0.0284	5711.1	$2,156	0.91%	55.8%	100%	1.9421	1
RetaiMoT6	Retail	Motors	Turnover	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5635	15	97600	2.511	19,520	$11,000.00	20%	55.0%	80%	1.3745	1
RetaiMoT7	Retail	Motors	Turnover	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4707	15	97600	9.776	27620.7	$13,000.00	28%	90.0%	80%	1.8061	1
RetaiMoT8	Retail	Motors	Turnover	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4791	15	97600	0.000	27132.7	$13,000.00	28%	90.0%	80%	1.5268	1
RetaiMoT9	Retail	Motors	Turnover	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5459	15	97600	9.776	23814.3	$13,000.00	24%	90.0%	80%	1.5919	1
RetaiMoT10	Retail	Motors	Turnover	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4791	15	97600	7.280	27132.7	$13,000.00	28%	80.0%	80%	1.7143	1
RetaiMoT11	Retail	Motors	Turnover	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5459	15	97600	9.776	23814.3	$13,000.00	24%	55.0%	80%	1.5919	1
RetaiMoT12	Retail	Motors	Turnover	12	Motors: Rewind 125-200 HP	(E) Motor	Motor	$0.5097	15	292799	0.189	1471.4	$750	0.5%	35.0%	95%	1.5196	1
RetaiMoT13	Retail	Motors	Turnover	13	Motors: Rewind 201-500 HP	(E) Motor	Motor	$0.6274	15	634398	0.410	3187.9	$2,000	0.5%	50.0%	95%	1.2347	1
RetaiMoT14	Retail	Motors	Turnover	14	Motors: Rewind 20-50 HP	(E) Motor	Motor	$0.4704	15	59847	0.068	531.4	$250	0.9%	10.0%	95%	1.6465	1
RetaiMoT15	Retail	Motors	Turnover	15	Motors: Rewind 500+ HP	(E) Motor	Motor	$0.5437	15	1463995	0.946	7356.8	$4,000	0.5%	70.0%	95%	1.4246	1
RetaiMoT16	Retail	Motors	Turnover	16	Motors: Rewind 51-100 HP	(E) Motor	Motor	$0.5841	15	147991	0.110	856.0	$500	0.6%	20.0%	95%	1.3261	1
RetaiMoT17	Retail	Motors	Turnover	17	Downsizing motor during retrofit	Larger hp standard motor	HP Reduction	$0.34	20	186,404	0.190	1,477	$500.00	0.79%	25%	95%	2.9638	1
RetaiMoN12	Retail	Motors	New	12	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.7031	1
RetaiMoN13	Retail	Motors	New	13	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.0317	0
RetaiMoN14	Retail	Motors	New	14	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.6196	1
RetaiMoN15	Retail	Motors	New	15	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.6444	0
RetaiMoT18	Retail	Motors	Turnover	18	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.7031	1
RetaiMoT19	Retail	Motors	Turnover	19	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.0317	0
RetaiMoT20	Retail	Motors	Turnover	20	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.6196	1
RetaiMoT21	Retail	Motors	Turnover	21	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.6444	0
RetaiMoT22	Retail	Motors	Turnover	22	Air Comp Improvements			$0.11	15	56148	1.148	8,928	$990.00	16%	28%	65%	6.9851	1
RetaiMoE2	Retail	Motors	Early	2	Air Compressor Optimization			$0.16	15	56148	2.174	16,901	$2,750.00	30%	38%	65%	4.7604	1
LodgiMoT23	Lodging	Motors	Turnover	23	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.3257	1
RestaMoN1	Restaurant	Motors	New	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1487	15	14753	0.0282	133.8	$154	0.91%	74.4%	100%	0.6982	0
RestaMoN2	Restaurant	Motors	New	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.2410	15	56520	0.0231	419.7	$521	0.74%	74.4%	100%	0.6043	0
RestaMoN3	Restaurant	Motors	New	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.1151	15	138748	0.0138	617.7	$689	0.45%	66.3%	100%	0.6628	0
RestaMoN4	Restaurant	Motors	New	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4692	15	278979	0.0121	1088.6	$511	0.39%	55.8%	100%	1.5670	1
RestaMoN5	Restaurant	Motors	New	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-500 HP	Motor	$0.3937	15	598698	0.0284	5476.7	$2,156	0.91%	55.8%	100%	1.8626	1
RestaMoN6	Restaurant	Motors	New	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5877	15	93593	2.408	18,719	$11,000.00	20%	55.0%	100%	1.3181	1
RestaMoN7	Restaurant	Motors	New	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4891	15	93593	9.776	26580.4	$13,000.00	28%	70.0%	100%	1.7475	1
RestaMoN8	Restaurant	Motors	New	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4996	15	93593	0.000	26018.8	$13,000.00	28%	80.0%	100%	1.4641	1
RestaMoN9	Restaurant	Motors	New	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5646	15	93593	9.776	23023.9	$13,000.00	25%	70.0%	100%	1.5474	1
RestaMoN10	Restaurant	Motors	New	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4996	15	93593	7.280	26018.8	$13,000.00	28%	55.0%	100%	1.6516	1
RestaMoN11	Restaurant	Motors	New	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5646	15	93593	9.776	23023.9	$13,000.00	25%	30.0%	100%	1.5474	1
RestaMoT1	Restaurant	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1487	15	14753	0.0282	133.8	$154	0.91%	74.4%	100%	0.6982	0
RestaMoT2	Restaurant	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.2410	15	56520	0.0231	419.7	$521	0.74%	74.4%	100%	0.6043	0
RestaMoT3	Restaurant	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.1151	15	138748	0.0138	617.7	$689	0.45%	66.3%	100%	0.6628	0
RestaMoT4	Restaurant	Motors	Turnover	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4692	15	278979	0.0121	1088.6	$511	0.39%	55.8%	100%	1.5670	1
RestaMoT5	Restaurant	Motors	Turnover	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-250 HP	Motor	$0.3937	15	598698	0.0284	5476.7	$2,156	0.91%	55.8%	100%	1.8626	1
RestaMoT6	Restaurant	Motors	Turnover	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5877	15	93593	2.408	18,719	$11,000.00	20%	55.0%	80%	1.3181	1
RestaMoT7	Restaurant	Motors	Turnover	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4891	15	93593	9.776	26580.4	$13,000.00	28%	90.0%	80%	1.7475	1
RestaMoT8	Restaurant	Motors	Turnover	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4996	15	93593	0.000	26018.8	$13,000.00	28%	90.0%	80%	1.4641	1
RestaMoT9	Restaurant	Motors	Turnover	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5646	15	93593	9.776	23023.9	$13,000.00	25%	90.0%	80%	1.5474	1
RestaMoT10	Restaurant	Motors	Turnover	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4996	15	93593	7.280	26018.8	$13,000.00	28%	80.0%	80%	1.6516	1
RestaMoT11	Restaurant	Motors	Turnover	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5646	15	93593	9.776	23023.9	$13,000.00	25%	55.0%	80%	1.5474	1
RestaMoT12	Restaurant	Motors	Turnover	12	Motors: Rewind 125-200 HP	(E) Motor	Motor	$0.5316	15	280779	0.182	1410.9	$750	0.5%	35.0%	95%	1.4572	1
RestaMoT13	Restaurant	Motors	Turnover	13	Motors: Rewind 201-500 HP	(E) Motor	Motor	$0.6542	15	608354	0.393	3057.1	$2,000	0.5%	50.0%	95%	1.1840	1
RestaMoT14	Restaurant	Motors	Turnover	14	Motors: Rewind 20-50 HP	(E) Motor	Motor	$0.4906	15	57390	0.066	509.6	$250	0.9%	10.0%	95%	1.5789	1
RestaMoT15	Restaurant	Motors	Turnover	15	Motors: Rewind 500+ HP	(E) Motor	Motor	$0.5670	15	1403894	0.908	7054.7	$4,000	0.5%	70.0%	95%	1.3661	1
RestaMoT16	Restaurant	Motors	Turnover	16	Motors: Rewind 51-100 HP	(E) Motor	Motor	$0.6091	15	141915	0.106	820.8	$500	0.6%	20.0%	95%	1.2716	1
RestaMoT17	Restaurant	Motors	Turnover	17	Downsizing motor during retrofit	Larger hp standard motor	HP Reduction	$0.34	20	186,404	0.190	1,477	$500.00	0.79%	25%	95%	2.9638	1
RestaMoN12	Restaurant	Motors	New	12	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.7031	1
RestaMoN13	Restaurant	Motors	New	13	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.0317	0
RestaMoN14	Restaurant	Motors	New	14	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.6196	1
RestaMoN15	Restaurant	Motors	New	15	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.6444	0
RestaMoT18	Restaurant	Motors	Turnover	18	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.7031	1
RestaMoT19	Restaurant	Motors	Turnover	19	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.0317	0

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Fla
RestaMoT20	Restaurant	Motors	Turnover	20	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.6196	1
RestaMoT21	Restaurant	Motors	Turnover	21	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.6444	0
RestaMoT22	Restaurant	Motors	Turnover	22	Air Comp Improvements			$0.11	15	56148	1.148	8,928	$990.00	16%	28%	65%	6.9851	1
RestaMoE2	Restaurant	Motors	Early	2	Air Compressor Optimization			$0.16	15	56148	2.174	16,901	$2,750.00	30%	38%	65%	4.7604	1
miscMoE1	misc	Motors	Early	1	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.3257	1
WarehMoN1	Warehouse	Motors	New	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1114	15	15247	0.0282	138.3	$154	0.91%	74.4%	100%	0.7196	0
WarehMoN2	Warehouse	Motors	New	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.2008	15	58416	0.0231	433.8	$521	0.74%	74.4%	100%	0.6240	0
WarehMoN3	Warehouse	Motors	New	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0789	15	143401	0.0138	638.4	$689	0.45%	66.3%	100%	0.6848	0
WarehMoN4	Warehouse	Motors	New	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4540	15	288334	0.0121	1125.1	$511	0.39%	55.8%	100%	1.6192	1
WarehMoN5	Warehouse	Motors	New	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-500 HP	Motor	$0.3809	15	618773	0.0284	5660.3	$2,156	0.91%	55.8%	100%	1.9249	1
WarehMoN6	Warehouse	Motors	New	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5686	15	96731	2.489	19,346	$11,000.00	20%	55.0%	100%	1.3623	1
WarehMoN7	Warehouse	Motors	New	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4805	15	96731	10.553	27052.5	$13,000.00	28%	70.0%	100%	1.7941	1
WarehMoN8	Warehouse	Motors	New	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4834	15	96731	0.000	26891.3	$13,000.00	28%	80.0%	100%	1.5132	1
WarehMoN9	Warehouse	Motors	New	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5631	15	96731	10.177	23086.5	$13,000.00	24%	70.0%	100%	1.5613	1
WarehMoN10	Warehouse	Motors	New	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4887	15	96731	7.911	26601.1	$13,000.00	28%	55.0%	100%	1.7007	1
WarehMoN11	Warehouse	Motors	New	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5588	15	96731	10.553	23263.9	$13,000.00	24%	30.0%	100%	1.5809	1
WarehMoT1	Warehouse	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1114	15	15247	0.0282	138.3	$154	0.91%	74.4%	100%	0.7196	0
WarehMoT2	Warehouse	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.2008	15	58416	0.0231	433.8	$521	0.74%	74.4%	100%	0.6240	0
WarehMoT3	Warehouse	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0789	15	143401	0.0138	638.4	$689	0.45%	66.3%	100%	0.6848	0
WarehMoT4	Warehouse	Motors	Turnover	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4540	15	288334	0.0121	1125.1	$511	0.39%	55.8%	100%	1.6192	1
WarehMoT5	Warehouse	Motors	Turnover	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-250 HP	Motor	$0.3809	15	618773	0.0284	5660.3	$2,156	0.91%	55.8%	100%	1.9249	1
WarehMoT6	Warehouse	Motors	Turnover	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5686	15	96731	2.489	19,346	$11,000.00	20%	55.0%	80%	1.3623	1
WarehMoT7	Warehouse	Motors	Turnover	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4805	15	96731	10.553	27052.5	$13,000.00	28%	90.0%	80%	1.7941	1
WarehMoT8	Warehouse	Motors	Turnover	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4834	15	96731	0.000	26891.3	$13,000.00	28%	90.0%	80%	1.5132	1
WarehMoT9	Warehouse	Motors	Turnover	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5631	15	96731	10.177	23086.5	$13,000.00	24%	90.0%	80%	1.5613	1
WarehMoT10	Warehouse	Motors	Turnover	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4887	15	96731	7.911	26601.1	$13,000.00	28%	80.0%	80%	1.7007	1
WarehMoT11	Warehouse	Motors	Turnover	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5588	15	96731	10.553	23263.9	$13,000.00	24%	55.0%	80%	1.5809	1
WarehMoT12	Warehouse	Motors	Turnover	12	Motors: Rewind 125-200 HP	(E) Motor	Motor	$0.5143	15	290194	0.188	1458.3	$750	0.5%	35.0%	95%	1.5061	1
WarehMoT13	Warehouse	Motors	Turnover	13	Motors: Rewind 201-500 HP	(E) Motor	Motor	$0.6330	15	628754	0.406	3159.6	$2,000	0.5%	50.0%	95%	1.2237	1
WarehMoT14	Warehouse	Motors	Turnover	14	Motors: Rewind 20-50 HP	(E) Motor	Motor	$0.4747	15	59314	0.068	526.7	$250	0.9%	10.0%	95%	1.6319	1
WarehMoT15	Warehouse	Motors	Turnover	15	Motors: Rewind 500+ HP	(E) Motor	Motor	$0.5486	15	1450970	0.938	7291.3	$4,000	0.5%	70.0%	95%	1.4120	1
WarehMoT16	Warehouse	Motors	Turnover	16	Motors: Rewind 51-100 HP	(E) Motor	Motor	$0.5894	15	146674	0.109	848.4	$500	0.6%	20.0%	95%	1.3143	1
WarehMoT17	Warehouse	Motors	Turnover	17	Downsizing motor during retrofit	Larger hp standard motor	HP Reduction	$0.34	20	186,404	0.190	1,477	$500.00	0.79%	25%	95%	2.9638	1
WarehMoN12	Warehouse	Motors	New	12	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.7031	1
WarehMoN13	Warehouse	Motors	New	13	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.0317	0
WarehMoN14	Warehouse	Motors	New	14	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.6196	1
WarehMoN15	Warehouse	Motors	New	15	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.6444	0
WarehMoT18	Warehouse	Motors	Turnover	18	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.7031	1
WarehMoT19	Warehouse	Motors	Turnover	19	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.0317	0
WarehMoT20	Warehouse	Motors	Turnover	20	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.6196	1
WarehMoT21	Warehouse	Motors	Turnover	21	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.6444	0
WarehMoT22	Warehouse	Motors	Turnover	22	Air Comp Improvements			$0.11	15	56148	1.148	8,928	$990.00	16%	28%	65%	6.9851	1
WarehMoE2	Warehouse	Motors	Early	2	Air Compressor Optimization			$0.16	15	56148	2.174	16,901	$2,750.00	30%	38%	65%	4.7604	1
MiscMoT23	Misc	Motors	Turnover	23	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.3257	1
HealthHeN2	Healthcare	Heating	New	2	Ground Source HP Open - Water	Air Source Heat Pump	ton	$41.32	15	300	0.23	18	$ 750.0	6%	20%	95%	0.1224	0
HealthHen3	Healthcare	Heating	new	3	Ground Source HP Closed	Air Source Heat Pump	ton	$41.32	15	300	0.000	18	$750.00	6%	100%	95%	0.0178	0
GrocePaE1	Grocery	Packaged DX	Early	1	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$3.13	20	769	0.05	64	$200.00	8%	15%	9%	0.4045	0
GrocePaE2	Grocery	Packaged DX	Early	2	Adding window shade film	No shade film	q ft window are	$7.05	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.0363	0
GrocePaE3	Grocery	Packaged DX	Early	3	Adding window shade screen	No shade screen	q ft window are	$3.90	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.1973	0
GrocePaE4	Grocery	Packaged DX	Early	4	Windows U<0.40, .55 SHGC	Existing window specifications	q ft window are	$1.40	30	2	0.000	0	$0.28	13%	50%	95%	0.9850	0
GrocePaE5	Grocery	Packaged DX	Early	5	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$4.39	20	769	0.05	51	$225.00	7%	95%	95%	0.3061	0
GrocePaE7	Grocery	Packaged DX	Early	7	Automated control system	Baseline DX	ton	$0.62	10	813	0.005	41	$25.00	5%	100%	65%	0.8283	0
GrocePaE8	Grocery	Packaged DX	Early	8	Duct Sealing, down to 15%	Leakage of 29%	ton	$7.92	15	769	0.05	12	$95.00	2%	45%	80%	0.2609	0
GrocePaE9	Grocery	Packaged DX	Early	9	Hotel Keycard Sensors	No prior controls	oom Controlle	$0.29	10	690	0.041	342	$100.00	50%	95%	80%	1.7426	1
GrocePaE10	Grocery	Packaged DX	Early	10	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	ton	$0.55	1	837	0.05	64	$35.00	8%	100%	45%	0.1131	0
GrocePaE11	Grocery	Packaged DX	Early	11	7 day, two stage setback thermostat	Manual Thermostat	ton	$0.44	10	769	0.015	125	$55.00	16%	100%	45%	1.1580	1
GrocePaE13	Grocery	Packaged DX	Early	13	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.45	7	769	0.05	123	$55.15	16%	95%	75%	0.8997	0
GrocePaN1	Grocery	Packaged DX	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	ton	$1.36	20	769	0.05	64	$87.00	8%	100%	95%	0.9299	0
GrocePaN2	Grocery	Packaged DX	New	2	Adding reflective roof treatment	Std color roof	ton	$4.50	20	769	0.05	10	$45.00	1%	100%	95%	0.6621	0
GrocePaN3	Grocery	Packaged DX	New	3	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$2.44	20	769	0.05	51	$125.00	7%	100%	95%	0.5510	0
GrocePaN4	Grocery	Packaged DX	New	4	Green Roof (New construction or roof replacement)	Std Roof	ton	$2.48	20	769	0.05	51	$127.43	7%	45%	95%	0.5405	0
GrocePaN5	Grocery	Packaged DX	New	5	Duct Insulation, Add R8	No Insulation	ton	$10.42	20	769	0.05	12	$125.00	2%	100%	95%	0.2535	0
GrocePaN6	Grocery	Packaged DX	New	6	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$1.91	20	663	0.04	47	$90.40	7%	100%	95%	0.7032	0
GrocePaN7	Grocery	Packaged DX	New	7	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$2.05	20	663	0.08	88	$180.81	13%	100%	95%	0.6563	0
GrocePaN8	Grocery	Packaged DX	New	8	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$2.18	20	663	0.12	124	$271.21	19%	100%	95%	0.6153	0
GrocePaN9	Grocery	Packaged DX	New	9	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.07	20	769	0.05	51	$55.00	7%	100%	95%	1.2522	1
GrocePaN10	Grocery	Packaged DX	New	10	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.07	20	783	0.06	65	$70.00	8%	100%	95%	1.2522	1
GrocePaN11	Grocery	Packaged DX	New	11	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.80	20	862	0.06	64	$115.13	7%	100%	95%	0.7444	0
GrocePaN12	Grocery	Packaged DX	New	12	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$2.26	20	888	0.04	44	$98.39	5%	100%	95%	0.5943	0
GrocePaN13	Grocery	Packaged DX	New	13	Ground Source HP Open - Water	Air Source Heat Pump	ton	$2.98	15	783	0.23	251	$ 750.0	32%	20%	95%	0.3494	0
GrocePaN14	Grocery	Packaged DX	New	14	Ground Source HP Closed	Air Source Heat Pump	ton	$5.35	15	783	0.017	140	$750.00	18%	100%	95%	0.1440	0
GrocePaN15	Grocery	Packaged DX	New	15	Air-side Economizer	No Economizer	ton	$1.47	15	769	0.014	115	$170.00	15%	75%	45%	0.5224	0
GrocePaN16	Grocery	Packaged DX	New	16	Energy Recovery Units	No Energy Recovery	ton	$1.16	15	769	0.018	154	$179.00	20%	100%	95%	0.6615	0
GrocePaN17	Grocery	Packaged DX	New	17	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$3.03	15	813	0.004	37	$110.89	5%	100%	95%	0.2541	0
GrocePaT1	Grocery	Packaged DX	Turnover	1	Duct Insulation, Add R8	No Insulation	ton	$10.42	15	769	0.05	12	$125.00	2%	100%	95%	0.1983	0
GrocePaT2	Grocery	Packaged DX	Turnover	2	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$1.91	20	663	0.04	47	$90.40	7%	100%	95%	0.7032	0
GrocePaT3	Grocery	Packaged DX	Turnover	3	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$2.05	20	663	0.08	88	$180.81	13%	100%	95%	0.6563	0
GrocePaT4	Grocery	Packaged DX	Turnover	4	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$2.18	20	663	0.12	124	$271.21	19%	100%	95%	0.6153	0
GrocePaT5	Grocery	Packaged DX	Turnover	5	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.07	20	769	0.05	51	$55.00	7%	100%	95%	1.2522	1
GrocePaT6	Grocery	Packaged DX	Turnover	6	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.07	20	783	0.06	65	$70.00	8%	100%	95%	1.2522	1
GrocePaT7	Grocery	Packaged DX	Turnover	7	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.80	20	862	0.06	64	$115.13	7%	100%	95%	0.7444	0
GrocePaT8	Grocery	Packaged DX	Turnover	8	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$2.26	20	888	0.04	44	$98.39	5%	100%	95%	0.5943	0
GrocePaT9	Grocery	Packaged DX	Turnover	9	Ground Source HP Open - Water	Air Source Heat Pump	ton	$2.98	15	783	0.23	251	$ 750.0	32%	5%	95%	0.3494	0
GrocePaT10	Grocery	Packaged DX	Turnover	10	Ground Source HP Closed	Air Source Heat Pump	ton	$5.35	15	783	0.017	140	$750.00	18%	100%	95%	0.1440	0
GrocePaT11	Grocery	Packaged DX	Turnover	11	Air-side Economizer	No Economizer	ton	$1.47	15	769	0.014	115	$170.00	15%	75%	45%	0.5224	0
GrocePaT12	Grocery	Packaged DX	Turnover	12	Energy Recovery Units	No Energy Recovery	ton	$1.16	15	769	0.018	154	$179.00	20%	100%	95%	0.6615	0
GrocePaT13	Grocery	Packaged DX	Turnover	13	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$3.03	15	813	0.004	37	$110.89	5%	100%	95%	0.2541	0
GrocePaN18	Grocery	Packaged DX	New	18	Automated control system	Baseline DX	ton	$0.62	10	813	0.005	41	$25.00	5%	100%	65%	0.8283	0
GrocePaN19	Grocery	Packaged DX	New	19	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.14	10	690	0.004	38	$43.00	5%	100%	95%	0.4462	0
GrocePaT15	Grocery	Packaged DX	Turnover	15	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.14	10	690	0.004	38	$43.00	5%	100%	95%	0.4462	0
InstiPaE1	Institutional	Packaged DX	Early	1	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$3.13	20	573	0.05	64	$200.00	11%	15%	9%	0.4045	0
InstiPaE2	Institutional	Packaged DX	Early	2	Adding window shade film	No shade film	q ft window are	$7.05	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.0363	0
InstiPaE3	Institutional	Packaged DX	Early	3	Adding window shade screen	No shade screen	q ft window are	$3.90	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.1973	0
InstiPaE4	Institutional	Packaged DX	Early	4	Windows U<0.40, .55 SHGC	Existing window specifications	q ft window are	$1.40	30	2	0.000	0	$0.28	13%	50%	95%	0.9850	0

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Fla
InstiPaE5	Institutional	Packaged DX	Early	5	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$5.89	20	573	0.05	38	$225.00	7%	95%	95%	0.2511	0
InstiPaE7	Institutional	Packaged DX	Early	7	Automated control system	Baseline DX	ton	$0.83	10	606	0.004	30	$25.00	5%	100%	65%	0.6172	0
InstiPaE8	Institutional	Packaged DX	Early	8	Duct Sealing, down to 15%	Leakage of 29%	ton	$7.92	15	573	0.05	12	$95.00	2%	45%	80%	0.2609	0
InstiPaE9	Institutional	Packaged DX	Early	9	Hotel Keycard Sensors	No prior controls	oom Controlle	$0.29	10	514	0.041	342	$100.00	66%	95%	80%	1.7426	1
InstiPaE10	Institutional	Packaged DX	Early	10	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	ton	$0.55	1	623	0.05	64	$35.00	10%	100%	45%	0.1131	0
InstiPaE11	Institutional	Packaged DX	Early	11	7 day, two stage setback thermostat	Manual Thermostat	ton	$0.44	10	573	0.015	125	$55.00	22%	100%	45%	1.1580	1
InstiPaE13	Institutional	Packaged DX	Early	13	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.60	7	573	0.05	92	$55.15	16%	95%	75%	0.7073	0
InstiPaN1	Institutional	Packaged DX	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	ton	$1.36	20	573	0.05	64	$87.00	11%	100%	95%	0.9299	0
InstiPaN2	Institutional	Packaged DX	New	2	Adding reflective roof treatment	Std color roof	ton	$4.50	20	573	0.05	10	$45.00	2%	100%	95%	0.6621	0
InstiPaN3	Institutional	Packaged DX	New	3	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$3.27	20	573	0.05	38	$125.00	7%	100%	95%	0.4520	0
InstiPaN4	Institutional	Packaged DX	New	4	Green Roof (New construction or roof replacement)	Std Roof	ton	$3.33	20	573	0.05	38	$127.43	7%	45%	95%	0.4434	0
InstiPaN5	Institutional	Packaged DX	New	5	Duct Insulation, Add R8	No Insulation	ton	$10.42	20	573	0.05	12	$125.00	2%	100%	95%	0.2535	0
InstiPaN6	Institutional	Packaged DX	New	6	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$2.56	20	494	0.04	35	$90.40	7%	100%	95%	0.5769	0
InstiPaN7	Institutional	Packaged DX	New	7	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$2.75	20	494	0.08	66	$180.81	13%	100%	95%	0.5384	0
InstiPaN8	Institutional	Packaged DX	New	8	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$2.93	20	494	0.12	93	$271.21	19%	100%	95%	0.5048	0
InstiPaN9	Institutional	Packaged DX	New	9	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.44	20	573	0.05	38	$55.00	7%	100%	95%	1.0273	1
InstiPaN10	Institutional	Packaged DX	New	10	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.44	20	584	0.06	49	$70.00	8%	100%	95%	1.0273	1
InstiPaN11	Institutional	Packaged DX	New	11	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$2.42	20	642	0.06	48	$115.13	7%	100%	95%	0.6107	0
InstiPaN12	Institutional	Packaged DX	New	12	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$3.03	20	662	0.04	32	$98.39	5%	100%	95%	0.4875	0
InstiPaN13	Institutional	Packaged DX	New	13	Ground Source HP Open - Water	Air Source Heat Pump	ton	$4.00	15	584	0.23	187	$ 750.0	32%	20%	95%	0.2870	0
InstiPaN14	Institutional	Packaged DX	New	14	Ground Source HP Closed	Air Source Heat Pump	ton	$7.17	15	584	0.012	105	$750.00	18%	100%	95%	0.1073	0
InstiPaN15	Institutional	Packaged DX	New	15	Air-side Economizer	No Economizer	ton	$1.98	15	573	0.010	86	$170.00	15%	75%	45%	0.3892	0
InstiPaN16	Institutional	Packaged DX	New	16	Energy Recovery Units	No Energy Recovery	ton	$1.56	15	573	0.014	115	$179.00	20%	100%	95%	0.4929	0
InstiPaN17	Institutional	Packaged DX	New	17	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$4.06	15	606	0.003	27	$110.89	5%	100%	95%	0.1893	0
InstiPaT1	Institutional	Packaged DX	Turnover	1	Duct Insulation, Add R8	No Insulation	ton	$10.42	15	573	0.05	12	$125.00	2%	100%	95%	0.1983	0
InstiPaT2	Institutional	Packaged DX	Turnover	2	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$2.56	20	494	0.04	35	$90.40	7%	100%	95%	0.5769	0
InstiPaT3	Institutional	Packaged DX	Turnover	3	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$2.75	20	494	0.08	66	$180.81	13%	100%	95%	0.5384	0
InstiPaT4	Institutional	Packaged DX	Turnover	4	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$2.93	20	494	0.12	93	$271.21	19%	100%	95%	0.5048	0
InstiPaT5	Institutional	Packaged DX	Turnover	5	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.44	20	573	0.05	38	$55.00	7%	100%	95%	1.0273	1
InstiPaT6	Institutional	Packaged DX	Turnover	6	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.44	20	584	0.06	49	$70.00	8%	100%	95%	1.0273	1
InstiPaT7	Institutional	Packaged DX	Turnover	7	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$2.42	20	642	0.06	48	$115.13	7%	100%	95%	0.6107	0
InstiPaT8	Institutional	Packaged DX	Turnover	8	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$3.03	20	662	0.04	32	$98.39	5%	100%	95%	0.4875	0
InstiPaT9	Institutional	Packaged DX	Turnover	9	Ground Source HP Open - Water	Air Source Heat Pump	ton	$4.00	15	584	0.23	187	$ 750.0	32%	5%	95%	0.2870	0
InstiPaT10	Institutional	Packaged DX	Turnover	10	Ground Source HP Closed	Air Source Heat Pump	ton	$7.17	15	584	0.012	105	$750.00	18%	100%	95%	0.1073	0
InstiPaT11	Institutional	Packaged DX	Turnover	11	Air-side Economizer	No Economizer	ton	$1.98	15	573	0.010	86	$170.00	15%	75%	45%	0.3892	0
InstiPaT12	Institutional	Packaged DX	Turnover	12	Energy Recovery Units	No Energy Recovery	ton	$1.56	15	573	0.014	115	$179.00	20%	100%	95%	0.4929	0
InstiPaT13	Institutional	Packaged DX	Turnover	13	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$4.06	15	606	0.003	27	$110.89	5%	100%	95%	0.1893	0
InstiPaN18	Institutional	Packaged DX	New	18	Automated control system	Baseline DX	ton	$0.83	10	606	0.004	30	$25.00	5%	100%	65%	0.6172	0
InstiPaN19	Institutional	Packaged DX	New	19	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.53	10	514	0.003	28	$43.00	5%	100%	95%	0.3325	0
InstiPaT15	Institutional	Packaged DX	Turnover	15	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.53	10	514	0.003	28	$43.00	5%	100%	95%	0.3325	0
LodgiPaE1	Lodging	Packaged DX	Early	1	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$3.13	20	684	0.05	64	$200.00	9%	15%	9%	0.4045	0
LodgiPaE2	Lodging	Packaged DX	Early	2	Adding window shade film	No shade film	q ft window are	$7.05	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.0363	0
LodgiPaE3	Lodging	Packaged DX	Early	3	Adding window shade screen	No shade screen	q ft window are	$3.90	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.1973	0
LodgiPaE4	Lodging	Packaged DX	Early	4	Windows U<0.40, .55 SHGC	Existing window specifications	q ft window are	$1.40	30	2	0.000	0	$0.28	13%	50%	95%	0.9850	0
LodgiPaE5	Lodging	Packaged DX	Early	5	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$4.94	20	684	0.05	46	$225.00	7%	95%	95%	0.2821	0
LodgiPaE7	Lodging	Packaged DX	Early	7	Automated control system	Baseline DX	ton	$0.69	10	722	0.004	36	$25.00	5%	100%	65%	0.7360	0
LodgiPaE8	Lodging	Packaged DX	Early	8	Duct Sealing, down to 15%	Leakage of 29%	ton	$7.92	15	684	0.05	12	$95.00	2%	45%	80%	0.2609	0
LodgiPaE9	Lodging	Packaged DX	Early	9	Hotel Keycard Sensors	No prior controls	oom Controlle	$0.29	10	613	0.041	342	$100.00	56%	95%	80%	1.7426	1
LodgiPaE10	Lodging	Packaged DX	Early	10	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	ton	$0.55	1	743	0.05	64	$35.00	9%	100%	45%	0.1131	0
LodgiPaE11	Lodging	Packaged DX	Early	11	7 day, two stage setback thermostat	Manual Thermostat	ton	$0.44	10	684	0.015	125	$55.00	18%	100%	45%	1.1580	1
LodgiPaE13	Lodging	Packaged DX	Early	13	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.50	7	684	0.05	109	$55.15	16%	95%	75%	0.8156	0
LodgiPaN1	Lodging	Packaged DX	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	ton	$1.36	20	684	0.05	64	$87.00	9%	100%	95%	0.9299	0
LodgiPaN2	Lodging	Packaged DX	New	2	Adding reflective roof treatment	Std color roof	ton	$4.50	20	684	0.05	10	$45.00	1%	100%	95%	0.6621	0
LodgiPaN3	Lodging	Packaged DX	New	3	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$2.74	20	684	0.05	46	$125.00	7%	100%	95%	0.5077	0
LodgiPaN4	Lodging	Packaged DX	New	4	Green Roof (New construction or roof replacement)	Std Roof	ton	$2.80	20	684	0.05	46	$127.43	7%	45%	95%	0.4980	0
LodgiPaN5	Lodging	Packaged DX	New	5	Duct Insulation, Add R8	No Insulation	ton	$10.42	20	684	0.05	12	$125.00	2%	100%	95%	0.2535	0
LodgiPaN6	Lodging	Packaged DX	New	6	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$2.15	20	589	0.04	42	$90.40	7%	100%	95%	0.6480	0
LodgiPaN7	Lodging	Packaged DX	New	7	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$2.30	20	589	0.08	79	$180.81	13%	100%	95%	0.6048	0
LodgiPaN8	Lodging	Packaged DX	New	8	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$2.46	20	589	0.12	110	$271.21	19%	100%	95%	0.5670	0
LodgiPaN9	Lodging	Packaged DX	New	9	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.21	20	684	0.05	46	$55.00	7%	100%	95%	1.1539	1
LodgiPaN10	Lodging	Packaged DX	New	10	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.21	20	696	0.06	58	$70.00	8%	100%	95%	1.1539	1
LodgiPaN11	Lodging	Packaged DX	New	11	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$2.03	20	766	0.06	57	$115.13	7%	100%	95%	0.6860	0
LodgiPaN12	Lodging	Packaged DX	New	12	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$2.54	20	789	0.04	39	$98.39	5%	100%	95%	0.5476	0
LodgiPaN13	Lodging	Packaged DX	New	13	Ground Source HP Open - Water	Air Source Heat Pump	ton	$3.36	15	696	0.23	223	$ 750.0	32%	20%	95%	0.3221	0
LodgiPaN14	Lodging	Packaged DX	New	14	Ground Source HP Closed	Air Source Heat Pump	ton	$6.02	15	696	0.015	125	$750.00	18%	100%	95%	0.1279	0
LodgiPaN15	Lodging	Packaged DX	New	15	Air-side Economizer	No Economizer	ton	$1.66	15	684	0.012	103	$170.00	15%	75%	45%	0.4642	0
LodgiPaN16	Lodging	Packaged DX	New	16	Energy Recovery Units	No Energy Recovery	ton	$1.31	15	684	0.016	137	$179.00	20%	100%	95%	0.5878	0
LodgiPaN17	Lodging	Packaged DX	New	17	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$3.41	15	722	0.004	33	$110.89	5%	100%	95%	0.2258	0
LodgiPaT1	Lodging	Packaged DX	Turnover	1	Duct Insulation, Add R8	No Insulation	ton	$10.42	15	684	0.05	12	$125.00	2%	100%	95%	0.1983	0
LodgiPaT2	Lodging	Packaged DX	Turnover	2	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$2.15	20	589	0.04	42	$90.40	7%	100%	95%	0.6480	0
LodgiPaT3	Lodging	Packaged DX	Turnover	3	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$2.30	20	589	0.08	79	$180.81	13%	100%	95%	0.6048	0
LodgiPaT4	Lodging	Packaged DX	Turnover	4	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$2.46	20	589	0.12	110	$271.21	19%	100%	95%	0.5670	0
LodgiPaT5	Lodging	Packaged DX	Turnover	5	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.21	20	684	0.05	46	$55.00	7%	100%	95%	1.1539	1
LodgiPaT6	Lodging	Packaged DX	Turnover	6	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.21	20	696	0.06	58	$70.00	8%	100%	95%	1.1539	1
LodgiPaT7	Lodging	Packaged DX	Turnover	7	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$2.03	20	766	0.06	57	$115.13	7%	100%	95%	0.6860	0
LodgiPaT8	Lodging	Packaged DX	Turnover	8	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$2.54	20	789	0.04	39	$98.39	5%	100%	95%	0.5476	0
LodgiPaT9	Lodging	Packaged DX	Turnover	9	Ground Source HP Open - Water	Air Source Heat Pump	ton	$3.36	15	696	0.23	223	$ 750.0	32%	5%	95%	0.3221	0
LodgiPaT10	Lodging	Packaged DX	Turnover	10	Ground Source HP Closed	Air Source Heat Pump	ton	$6.02	15	696	0.015	125	$750.00	18%	100%	95%	0.1279	0
LodgiPaT11	Lodging	Packaged DX	Turnover	11	Air-side Economizer	No Economizer	ton	$1.66	15	684	0.012	103	$170.00	15%	75%	45%	0.4642	0
LodgiPaT12	Lodging	Packaged DX	Turnover	12	Energy Recovery Units	No Energy Recovery	ton	$1.31	15	684	0.016	137	$179.00	20%	100%	95%	0.5878	0
LodgiPaT13	Lodging	Packaged DX	Turnover	13	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$3.41	15	722	0.004	33	$110.89	5%	100%	95%	0.2258	0
LodgiPaN18	Lodging	Packaged DX	New	18	Automated control system	Baseline DX	ton	$0.69	10	722	0.004	36	$25.00	5%	100%	65%	0.7360	0
LodgiPaN19	Lodging	Packaged DX	New	19	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.29	10	613	0.004	33	$43.00	5%	100%	95%	0.3965	0
LodgiPaT15	Lodging	Packaged DX	Turnover	15	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.29	10	613	0.004	33	$43.00	5%	100%	95%	0.3965	0
MiscPaE1	Misc	Packaged DX	Early	1	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$3.13	20	789	0.05	64	$200.00	8%	15%	9%	0.4045	0
MiscPaE2	Misc	Packaged DX	Early	2	Adding window shade film	No shade film	q ft window are	$7.05	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.0363	0
MiscPaE3	Misc	Packaged DX	Early	3	Adding window shade screen	No shade screen	q ft window are	$3.90	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.1973	0
MiscPaE4	Misc	Packaged DX	Early	4	Windows U<0.40, .55 SHGC	Existing window specifications	q ft window are	$1.40	30	2	0.000	0	$0.28	13%	50%	95%	0.9850	0
MiscPaE5	Misc	Packaged DX	Early	5	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$4.28	20	789	0.05	53	$225.00	7%	95%	95%	0.3116	0
MiscPaE7	Misc	Packaged DX	Early	7	Automated control system	Baseline DX	ton	$0.60	10	834	0.005	42	$25.00	5%	100%	65%	0.8497	0
MiscPaE8	Misc	Packaged DX	Early	8	Duct Sealing, down to 15%	Leakage of 29%	ton	$7.92	15	789	0.05	12	$95.00	2%	45%	80%	0.2609	0
MiscPaE9	Misc	Packaged DX	Early	9	Hotel Keycard Sensors	No prior controls	oom Controlle	$0.29	10	708	0.041	342	$100.00	48%	95%	80%	1.7426	1
MiscPaE10	Misc	Packaged DX	Early	10	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	ton	$0.55	1	858	0.05	64	$35.00	7%	100%	45%	0.1131	0
MiscPaE11	Misc	Packaged DX	Early	11	7 day, two stage setback thermostat	Manual Thermostat	ton	$0.44	10	789	0.015	125	$55.00	16%	100%	45%	1.1580	1

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Fla
MiscPaE13	Misc	Packaged DX	Early	13	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.44	7	789	0.05	126	$55.15	16%	95%	75%	0.9191	0
MiscPaN1	Misc	Packaged DX	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	ton	$1.36	20	789	0.05	64	$87.00	8%	100%	95%	0.9299	0
MiscPaN2	Misc	Packaged DX	New	2	Adding reflective roof treatment	Std color roof	ton	$4.50	20	789	0.05	10	$45.00	1%	100%	95%	0.6621	0
MiscPaN3	Misc	Packaged DX	New	3	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$2.38	20	789	0.05	53	$125.00	7%	100%	95%	0.5610	0
MiscPaN4	Misc	Packaged DX	New	4	Green Roof (New construction or roof replacement)	Std Roof	ton	$2.42	20	789	0.05	53	$127.43	7%	45%	95%	0.5503	0
MiscPaN5	Misc	Packaged DX	New	5	Duct Insulation, Add R8	No Insulation	ton	$10.42	20	789	0.05	12	$125.00	2%	100%	95%	0.2535	0
MiscPaN6	Misc	Packaged DX	New	6	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$1.86	20	680	0.04	49	$90.40	7%	100%	95%	0.7160	0
MiscPaN7	Misc	Packaged DX	New	7	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$1.99	20	680	0.08	91	$180.81	13%	100%	95%	0.6682	0
MiscPaN8	Misc	Packaged DX	New	8	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$2.13	20	680	0.12	127	$271.21	19%	100%	95%	0.6265	0
MiscPaN9	Misc	Packaged DX	New	9	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.05	20	789	0.05	53	$55.00	7%	100%	95%	1.2749	1
MiscPaN10	Misc	Packaged DX	New	10	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.05	20	803	0.06	67	$70.00	8%	100%	95%	1.2749	1
MiscPaN11	Misc	Packaged DX	New	11	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.76	20	884	0.06	65	$115.13	7%	100%	95%	0.7579	0
MiscPaN12	Misc	Packaged DX	New	12	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$2.20	20	911	0.04	45	$98.39	5%	100%	95%	0.6051	0
MiscPaN13	Misc	Packaged DX	New	13	Ground Source HP Open - Water	Air Source Heat Pump	ton	$2.91	15	803	0.23	258	$ 750.0	32%	20%	95%	0.3557	0
MiscPaN14	Misc	Packaged DX	New	14	Ground Source HP Closed	Air Source Heat Pump	ton	$5.21	15	803	0.017	144	$750.00	18%	100%	95%	0.1477	0
MiscPaN15	Misc	Packaged DX	New	15	Air-side Economizer	No Economizer	ton	$1.44	15	789	0.014	118	$170.00	15%	75%	45%	0.5358	0
MiscPaN16	Misc	Packaged DX	New	16	Energy Recovery Units	No Energy Recovery	ton	$1.13	15	789	0.019	158	$179.00	20%	100%	95%	0.6785	0
MiscPaN17	Misc	Packaged DX	New	17	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$2.95	15	834	0.004	38	$110.89	5%	100%	95%	0.2607	0
MiscPaT1	Misc	Packaged DX	Turnover	1	Duct Insulation, Add R8	No Insulation	ton	$10.42	15	789	0.05	12	$125.00	2%	100%	95%	0.1983	0
MiscPaT2	Misc	Packaged DX	Turnover	2	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$1.86	20	680	0.04	49	$90.40	7%	100%	95%	0.7160	0
MiscPaT3	Misc	Packaged DX	Turnover	3	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$1.99	20	680	0.08	91	$180.81	13%	100%	95%	0.6682	0
MiscPaT4	Misc	Packaged DX	Turnover	4	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$2.13	20	680	0.12	127	$271.21	19%	100%	95%	0.6265	0
MiscPaT5	Misc	Packaged DX	Turnover	5	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.05	20	789	0.05	53	$55.00	7%	100%	95%	1.2749	1
MiscPaT6	Misc	Packaged DX	Turnover	6	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.05	20	803	0.06	67	$70.00	8%	100%	95%	1.2749	1
MiscPaT7	Misc	Packaged DX	Turnover	7	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.76	20	884	0.06	65	$115.13	7%	100%	95%	0.7579	0
MiscPaT8	Misc	Packaged DX	Turnover	8	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$2.20	20	911	0.04	45	$98.39	5%	100%	95%	0.6051	0
MiscPaT9	Misc	Packaged DX	Turnover	9	Ground Source HP Open - Water	Air Source Heat Pump	ton	$2.91	15	803	0.23	258	$ 750.0	32%	5%	95%	0.3557	0
MiscPaT10	Misc	Packaged DX	Turnover	10	Ground Source HP Closed	Air Source Heat Pump	ton	$5.21	15	803	0.017	144	$750.00	18%	100%	95%	0.1477	0
MiscPaT11	Misc	Packaged DX	Turnover	11	Air-side Economizer	No Economizer	ton	$1.44	15	789	0.014	118	$170.00	15%	75%	45%	0.5358	0
MiscPaT12	Misc	Packaged DX	Turnover	12	Energy Recovery Units	No Energy Recovery	ton	$1.13	15	789	0.019	158	$179.00	20%	100%	95%	0.6785	0
MiscPaT13	Misc	Packaged DX	Turnover	13	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$2.95	15	834	0.004	38	$110.89	5%	100%	95%	0.2607	0
MiscPaN18	Misc	Packaged DX	New	18	Automated control system	Baseline DX	ton	$0.60	10	834	0.005	42	$25.00	5%	100%	65%	0.8497	0
MiscPaN19	Misc	Packaged DX	New	19	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.11	10	708	0.005	39	$43.00	5%	100%	95%	0.4577	0
MiscPaT15	Misc	Packaged DX	Turnover	15	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.11	10	708	0.005	39	$43.00	5%	100%	95%	0.4577	0
OfficPaE1	Office	Packaged DX	Early	1	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$3.13	20	769	0.05	64	$200.00	8%	15%	9%	0.4045	0
OfficPaE2	Office	Packaged DX	Early	2	Adding window shade film	No shade film	q ft window are	$7.05	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.0363	0
OfficPaE3	Office	Packaged DX	Early	3	Adding window shade screen	No shade screen	q ft window are	$3.90	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.1973	0
OfficPaE4	Office	Packaged DX	Early	4	Windows U<0.40, .55 SHGC	Existing window specifications	q ft window are	$1.40	30	2	0.000	0	$0.28	13%	50%	95%	0.9850	0
OfficPaE5	Office	Packaged DX	Early	5	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$4.39	20	769	0.05	51	$225.00	7%	95%	95%	0.3061	0
OfficPaE7	Office	Packaged DX	Early	7	Automated control system	Baseline DX	ton	$0.62	10	813	0.005	41	$25.00	5%	100%	65%	0.8283	0
OfficPaE8	Office	Packaged DX	Early	8	Duct Sealing, down to 15%	Leakage of 29%	ton	$7.92	15	769	0.05	12	$95.00	2%	45%	80%	0.2609	0
OfficPaE9	Office	Packaged DX	Early	9	Hotel Keycard Sensors	No prior controls	Room Controlle	$0.29	10	690	0.041	342	$100.00	50%	95%	80%	1.7426	1
OfficPaE10	Office	Packaged DX	Early	10	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	ton	$0.55	1	837	0.05	64	$35.00	8%	100%	45%	0.1131	0
OfficPaE11	Office	Packaged DX	Early	11	7 day, two stage setback thermostat	Manual Thermostat	ton	$0.44	10	769	0.015	125	$55.00	16%	100%	45%	1.1580	1
OfficPaE13	Office	Packaged DX	Early	13	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.45	7	769	0.05	123	$55.15	16%	95%	75%	0.8997	0
OfficPaN1	Office	Packaged DX	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	ton	$1.36	20	769	0.05	64	$87.00	8%	100%	95%	0.9299	0
OfficPaN2	Office	Packaged DX	New	2	Adding reflective roof treatment	Std color roof	ton	$4.50	20	769	0.05	10	$45.00	1%	100%	95%	0.6621	0
OfficPaN3	Office	Packaged DX	New	3	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$2.44	20	769	0.05	51	$125.00	7%	100%	95%	0.5510	0
OfficPaN4	Office	Packaged DX	New	4	Green Roof (New construction or roof replacement)	Std Roof	ton	$2.48	20	769	0.05	51	$127.43	7%	45%	95%	0.5405	0
OfficPaN5	Office	Packaged DX	New	5	Duct Insulation, Add R8	No Insulation	ton	$10.42	20	769	0.05	12	$125.00	2%	100%	95%	0.2535	0
OfficPaN6	Office	Packaged DX	New	6	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$1.91	20	663	0.04	47	$90.40	7%	100%	95%	0.7032	0
OfficPaN7	Office	Packaged DX	New	7	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$2.05	20	663	0.08	88	$180.81	13%	100%	95%	0.6563	0
OfficPaN8	Office	Packaged DX	New	8	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$2.18	20	663	0.12	124	$271.21	19%	100%	95%	0.6153	0
OfficPaN9	Office	Packaged DX	New	9	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.07	20	769	0.05	51	$55.00	7%	100%	95%	1.2522	1
OfficPaN10	Office	Packaged DX	New	10	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.07	20	783	0.06	65	$70.00	8%	100%	95%	1.2522	1
OfficPaN11	Office	Packaged DX	New	11	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.80	20	862	0.06	64	$115.13	7%	100%	95%	0.7444	0
OfficPaN12	Office	Packaged DX	New	12	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$2.26	20	888	0.04	44	$98.39	5%	100%	95%	0.5943	0
OfficPaN13	Office	Packaged DX	New	13	Ground Source HP Open - Water	Air Source Heat Pump	ton	$2.98	15	783	0.23	251	$ 750.0	32%	20%	95%	0.3494	0
OfficPaN14	Office	Packaged DX	New	14	Ground Source HP Closed	Air Source Heat Pump	ton	$5.35	15	783	0.017	140	$750.00	18%	100%	95%	0.1440	0
OfficPaN15	Office	Packaged DX	New	15	Air-side Economizer	No Economizer	ton	$1.47	15	769	0.014	115	$170.00	15%	75%	45%	0.5224	0
OfficPaN16	Office	Packaged DX	New	16	Energy Recovery Units	No Energy Recovery	ton	$1.16	15	769	0.018	154	$179.00	20%	100%	95%	0.6615	0
OfficPaN17	Office	Packaged DX	New	17	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$3.03	15	813	0.004	37	$110.89	5%	100%	95%	0.2541	0
OfficPaT1	Office	Packaged DX	Turnover	1	Duct Insulation, Add R8	No Insulation	ton	$10.42	15	769	0.05	12	$125.00	2%	100%	95%	0.1983	0
OfficPaT2	Office	Packaged DX	Turnover	2	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$1.91	20	663	0.04	47	$90.40	7%	100%	95%	0.7032	0
OfficPaT3	Office	Packaged DX	Turnover	3	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$2.05	20	663	0.08	88	$180.81	13%	100%	95%	0.6563	0
OfficPaT4	Office	Packaged DX	Turnover	4	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$2.18	20	663	0.12	124	$271.21	19%	100%	95%	0.6153	0
OfficPaT5	Office	Packaged DX	Turnover	5	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.07	20	769	0.05	51	$55.00	7%	100%	95%	1.2522	1
OfficPaT6	Office	Packaged DX	Turnover	6	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.07	20	783	0.06	65	$70.00	8%	100%	95%	1.2522	1
OfficPaT7	Office	Packaged DX	Turnover	7	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.80	20	862	0.06	64	$115.13	7%	100%	95%	0.7444	0
OfficPaT8	Office	Packaged DX	Turnover	8	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$2.26	20	888	0.04	44	$98.39	5%	100%	95%	0.5943	0
OfficPaT9	Office	Packaged DX	Turnover	9	Ground Source HP Open - Water	Air Source Heat Pump	ton	$2.98	15	783	0.23	251	$ 750.0	32%	5%	95%	0.3494	0
OfficPaT10	Office	Packaged DX	Turnover	10	Ground Source HP Closed	Air Source Heat Pump	ton	$5.35	15	783	0.017	140	$750.00	18%	100%	95%	0.1440	0
OfficPaT11	Office	Packaged DX	Turnover	11	Air-side Economizer	No Economizer	ton	$1.47	15	769	0.014	115	$170.00	15%	75%	45%	0.5224	0
OfficPaT12	Office	Packaged DX	Turnover	12	Energy Recovery Units	No Energy Recovery	ton	$1.16	15	769	0.018	154	$179.00	20%	100%	95%	0.6615	0
OfficPaT13	Office	Packaged DX	Turnover	13	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$3.03	15	813	0.004	37	$110.89	5%	100%	95%	0.2541	0
OfficPaN18	Office	Packaged DX	New	18	Automated control system	Baseline DX	ton	$0.62	10	813	0.005	41	$25.00	5%	100%	65%	0.8283	0
OfficPaN19	Office	Packaged DX	New	19	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.14	10	690	0.004	38	$43.00	5%	100%	95%	0.4462	0
OfficPaT15	Office	Packaged DX	Turnover	15	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.14	10	690	0.004	38	$43.00	5%	100%	95%	0.4462	0
RestaPaE1	Restaurant	Packaged DX	Early	1	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$3.13	20	824	0.05	64	$200.00	8%	15%	9%	0.4045	0
RestaPaE2	Restaurant	Packaged DX	Early	2	Adding window shade film	No shade film	q ft window are	$7.05	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.0363	0
RestaPaE3	Restaurant	Packaged DX	Early	3	Adding window shade screen	No shade screen	q ft window are	$3.90	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.1973	0
RestaPaE4	Restaurant	Packaged DX	Early	4	Windows U<0.40, .55 SHGC	Existing window specifications	q ft window are	$1.40	30	2	0.000	0	$0.28	13%	50%	95%	0.9850	0
RestaPaE5	Restaurant	Packaged DX	Early	5	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$4.10	20	824	0.05	55	$225.00	7%	95%	95%	0.3214	0
RestaPaE7	Restaurant	Packaged DX	Early	7	Automated control system	Baseline DX	ton	$0.57	10	871	0.005	44	$25.00	5%	100%	65%	0.8871	0
RestaPaE8	Restaurant	Packaged DX	Early	8	Duct Sealing, down to 15%	Leakage of 29%	ton	$7.92	15	824	0.05	12	$95.00	1%	45%	80%	0.2609	0
RestaPaE9	Restaurant	Packaged DX	Early	9	Hotel Keycard Sensors	No prior controls	Room Controlle	$0.29	10	739	0.041	342	$100.00	46%	95%	80%	1.7426	1
RestaPaE10	Restaurant	Packaged DX	Early	10	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	ton	$0.55	1	896	0.05	64	$35.00	7%	100%	45%	0.1131	0
RestaPaE11	Restaurant	Packaged DX	Early	11	7 day, two stage setback thermostat	Manual Thermostat	ton	$0.44	10	824	0.015	125	$55.00	15%	100%	45%	1.1580	1
RestaPaE13	Restaurant	Packaged DX	Early	13	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.42	7	824	0.05	132	$55.15	16%	95%	75%	0.9533	0
RestaPaN1	Restaurant	Packaged DX	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	ton	$1.36	20	824	0.05	64	$87.00	8%	100%	95%	0.9299	0
RestaPaN2	Restaurant	Packaged DX	New	2	Adding reflective roof treatment	Std color roof	ton	$4.50	20	824	0.05	10	$45.00	1%	100%	95%	0.6621	0
RestaPaN3	Restaurant	Packaged DX	New	3	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$2.28	20	824	0.05	55	$125.00	7%	100%	95%	0.5785	0
RestaPaN4	Restaurant	Packaged DX	New	4	Green Roof (New construction or roof replacement)	Std Roof	ton	$2.32	20	824	0.05	55	$127.43	7%	45%	95%	0.5675	0
RestaPaN5	Restaurant	Packaged DX	New	5	Duct Insulation, Add R8	No Insulation	ton	$10.42	20	824	0.05	12	$125.00	1%	100%	95%	0.2535	0

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Fla
RestaPaN6	Restaurant	Packaged DX	New	6	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$1.78	20	710	0.04	51	$90.40	7%	100%	95%	0.7384	0
RestaPaN7	Restaurant	Packaged DX	New	7	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$1.91	20	710	0.08	95	$180.81	13%	100%	95%	0.6892	0
RestaPaN8	Restaurant	Packaged DX	New	8	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$2.04	20	710	0.12	133	$271.21	19%	100%	95%	0.6461	0
RestaPaN9	Restaurant	Packaged DX	New	9	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.00	20	824	0.05	55	$55.00	7%	100%	95%	1.3149	1
RestaPaN10	Restaurant	Packaged DX	New	10	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.00	20	839	0.06	70	$70.00	8%	100%	95%	1.3149	1
RestaPaN11	Restaurant	Packaged DX	New	11	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.68	20	923	0.06	68	$115.13	7%	100%	95%	0.7817	0
RestaPaN12	Restaurant	Packaged DX	New	12	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$2.11	20	951	0.04	47	$98.39	5%	100%	95%	0.6240	0
RestaPaN13	Restaurant	Packaged DX	New	13	Ground Source HP Open - Water	Air Source Heat Pump	ton	$2.79	15	839	0.23	269	$ 750.0	32%	20%	95%	0.3667	0
RestaPaN14	Restaurant	Packaged DX	New	14	Ground Source HP Closed	Air Source Heat Pump	ton	$4.99	15	839	0.018	150	$750.00	18%	100%	95%	0.1542	0
RestaPaN15	Restaurant	Packaged DX	New	15	Air-side Economizer	No Economizer	ton	$1.38	15	824	0.015	124	$170.00	15%	75%	45%	0.5595	0
RestaPaN16	Restaurant	Packaged DX	New	16	Energy Recovery Units	No Energy Recovery	ton	$1.09	15	824	0.020	165	$179.00	20%	100%	95%	0.7085	0
RestaPaN17	Restaurant	Packaged DX	New	17	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$2.83	15	871	0.005	39	$110.89	5%	100%	95%	0.2722	0
RestaPaT1	Restaurant	Packaged DX	Turnover	1	Duct Insulation, Add R8	No Insulation	ton	$10.42	15	824	0.05	12	$125.00	1%	100%	95%	0.1983	0
RestaPaT2	Restaurant	Packaged DX	Turnover	2	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$1.78	20	710	0.04	51	$90.40	7%	100%	95%	0.7384	0
RestaPaT3	Restaurant	Packaged DX	Turnover	3	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$1.91	20	710	0.08	95	$180.81	13%	100%	95%	0.6892	0
RestaPaT4	Restaurant	Packaged DX	Turnover	4	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$2.04	20	710	0.12	133	$271.21	19%	100%	95%	0.6461	0
RestaPaT5	Restaurant	Packaged DX	Turnover	5	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.00	20	824	0.05	55	$55.00	7%	100%	95%	1.3149	1
RestaPaT6	Restaurant	Packaged DX	Turnover	6	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.00	20	839	0.06	70	$70.00	8%	100%	95%	1.3149	1
RestaPaT7	Restaurant	Packaged DX	Turnover	7	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.68	20	923	0.06	68	$115.13	7%	100%	95%	0.7817	0
RestaPaT8	Restaurant	Packaged DX	Turnover	8	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$2.11	20	951	0.04	47	$98.39	5%	100%	95%	0.6240	0
RestaPaT9	Restaurant	Packaged DX	Turnover	9	Ground Source HP Open - Water	Air Source Heat Pump	ton	$2.79	15	839	0.23	269	$ 750.0	32%	5%	95%	0.3667	0
RestaPaT10	Restaurant	Packaged DX	Turnover	10	Ground Source HP Closed	Air Source Heat Pump	ton	$4.99	15	839	0.018	150	$750.00	18%	100%	95%	0.1542	0
RestaPaT11	Restaurant	Packaged DX	Turnover	11	Air-side Economizer	No Economizer	ton	$1.38	15	824	0.015	124	$170.00	15%	75%	45%	0.5595	0
RestaPaT12	Restaurant	Packaged DX	Turnover	12	Energy Recovery Units	No Energy Recovery	ton	$1.09	15	824	0.020	165	$179.00	20%	100%	95%	0.7085	0
RestaPaT13	Restaurant	Packaged DX	Turnover	13	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$2.83	15	871	0.005	39	$110.89	5%	100%	95%	0.2722	0
RestaPaN18	Restaurant	Packaged DX	New	18	Automated control system	Baseline DX	ton	$0.57	10	871	0.005	44	$25.00	5%	100%	65%	0.8871	0
RestaPaN19	Restaurant	Packaged DX	New	19	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.07	10	739	0.005	40	$43.00	5%	100%	95%	0.4779	0
RestaPaT15	Restaurant	Packaged DX	Turnover	15	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.07	10	739	0.005	40	$43.00	5%	100%	95%	0.4779	0
RetaiPaE1	Retail	Packaged DX	Early	1	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$3.13	20	808	0.05	64	$200.00	8%	15%	9%	0.4045	0
RetaiPaE2	Retail	Packaged DX	Early	2	Adding window shade film	No shade film	q ft window are	$7.05	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.0363	0
RetaiPaE3	Retail	Packaged DX	Early	3	Adding window shade screen	No shade screen	q ft window are	$3.90	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.1973	0
RetaiPaE4	Retail	Packaged DX	Early	4	Windows U<0.40, .55 SHGC	Existing window specifications	q ft window are	$1.40	30	2	0.000	0	$0.28	13%	50%	95%	0.9850	0
RetaiPaE5	Retail	Packaged DX	Early	5	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$4.18	20	808	0.05	54	$225.00	7%	95%	95%	0.3169	0
RetaiPaE7	Retail	Packaged DX	Early	7	Automated control system	Baseline DX	ton	$0.59	10	854	0.005	43	$25.00	5%	100%	65%	0.8698	0
RetaiPaE8	Retail	Packaged DX	Early	8	Duct Sealing, down to 15%	Leakage of 29%	ton	$7.92	15	808	0.05	12	$95.00	1%	45%	80%	0.2609	0
RetaiPaE9	Retail	Packaged DX	Early	9	Hotel Keycard Sensors	No prior controls	oom Controlle	$0.29	10	725	0.041	342	$100.00	47%	95%	80%	1.7426	1
RetaiPaE10	Retail	Packaged DX	Early	10	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	ton	$0.55	1	878	0.05	64	$35.00	7%	100%	45%	0.1131	0
RetaiPaE11	Retail	Packaged DX	Early	11	7 day, two stage setback thermostat	Manual Thermostat	ton	$0.44	10	808	0.015	125	$55.00	15%	100%	45%	1.1580	1
RetaiPaE13	Retail	Packaged DX	Early	13	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.43	7	808	0.05	129	$55.15	16%	95%	75%	0.9375	0
RetaiPaN1	Retail	Packaged DX	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	ton	$1.36	20	808	0.05	64	$87.00	8%	100%	95%	0.9299	0
RetaiPaN2	Retail	Packaged DX	New	2	Adding reflective roof treatment	Std color roof	ton	$4.50	20	808	0.05	10	$45.00	1%	100%	95%	0.6621	0
RetaiPaN3	Retail	Packaged DX	New	3	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$2.32	20	808	0.05	54	$125.00	7%	100%	95%	0.5704	0
RetaiPaN4	Retail	Packaged DX	New	4	Green Roof (New construction or roof replacement)	Std Roof	ton	$2.37	20	808	0.05	54	$127.43	7%	45%	95%	0.5596	0
RetaiPaN5	Retail	Packaged DX	New	5	Duct Insulation, Add R8	No Insulation	ton	$10.42	20	808	0.05	12	$125.00	1%	100%	95%	0.2535	0
RetaiPaN6	Retail	Packaged DX	New	6	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$1.82	20	696	0.04	50	$90.40	7%	100%	95%	0.7281	0
RetaiPaN7	Retail	Packaged DX	New	7	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$1.95	20	696	0.08	93	$180.81	13%	100%	95%	0.6795	0
RetaiPaN8	Retail	Packaged DX	New	8	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$2.08	20	696	0.12	131	$271.21	19%	100%	95%	0.6371	0
RetaiPaN9	Retail	Packaged DX	New	9	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.02	20	808	0.05	54	$55.00	7%	100%	95%	1.2964	1
RetaiPaN10	Retail	Packaged DX	New	10	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.02	20	823	0.06	69	$70.00	8%	100%	95%	1.2964	1
RetaiPaN11	Retail	Packaged DX	New	11	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.72	20	905	0.06	67	$115.13	7%	100%	95%	0.7707	0
RetaiPaN12	Retail	Packaged DX	New	12	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$2.15	20	933	0.04	46	$98.39	5%	100%	95%	0.6153	0
RetaiPaN13	Retail	Packaged DX	New	13	Ground Source HP Open - Water	Air Source Heat Pump	ton	$2.84	15	823	0.23	264	$ 750.0	32%	20%	95%	0.3616	0
RetaiPaN14	Retail	Packaged DX	New	14	Ground Source HP Closed	Air Source Heat Pump	ton	$5.09	15	823	0.018	147	$750.00	18%	100%	95%	0.1512	0
RetaiPaN15	Retail	Packaged DX	New	15	Air-side Economizer	No Economizer	ton	$1.40	15	808	0.014	121	$170.00	15%	75%	45%	0.5486	0
RetaiPaN16	Retail	Packaged DX	New	16	Energy Recovery Units	No Energy Recovery	ton	$1.11	15	808	0.019	162	$179.00	20%	100%	95%	0.6947	0
RetaiPaN17	Retail	Packaged DX	New	17	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$2.88	15	854	0.005	38	$110.89	5%	100%	95%	0.2668	0
RetaiPaT1	Retail	Packaged DX	Turnover	1	Duct Insulation, Add R8	No Insulation	ton	$10.42	15	808	0.05	12	$125.00	1%	100%	95%	0.1983	0
RetaiPaT2	Retail	Packaged DX	Turnover	2	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$1.82	20	696	0.04	50	$90.40	7%	100%	95%	0.7281	0
RetaiPaT3	Retail	Packaged DX	Turnover	3	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$1.95	20	696	0.08	93	$180.81	13%	100%	95%	0.6795	0
RetaiPaT4	Retail	Packaged DX	Turnover	4	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$2.08	20	696	0.12	131	$271.21	19%	100%	95%	0.6371	0
RetaiPaT5	Retail	Packaged DX	Turnover	5	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.02	20	808	0.05	54	$55.00	7%	100%	95%	1.2964	1
RetaiPaT6	Retail	Packaged DX	Turnover	6	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.02	20	823	0.06	69	$70.00	8%	100%	95%	1.2964	1
RetaiPaT7	Retail	Packaged DX	Turnover	7	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.72	20	905	0.06	67	$115.13	7%	100%	95%	0.7707	0
RetaiPaT8	Retail	Packaged DX	Turnover	8	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$2.15	20	933	0.04	46	$98.39	5%	100%	95%	0.6153	0
RetaiPaT9	Retail	Packaged DX	Turnover	9	Ground Source HP Open - Water	Air Source Heat Pump	ton	$2.84	15	823	0.23	264	$ 750.0	32%	5%	95%	0.3616	0
RetaiPaT10	Retail	Packaged DX	Turnover	10	Ground Source HP Closed	Air Source Heat Pump	ton	$5.09	15	823	0.018	147	$750.00	18%	100%	95%	0.1512	0
RetaiPaT11	Retail	Packaged DX	Turnover	11	Air-side Economizer	No Economizer	ton	$1.40	15	808	0.014	121	$170.00	15%	75%	45%	0.5486	0
RetaiPaT12	Retail	Packaged DX	Turnover	12	Energy Recovery Units	No Energy Recovery	ton	$1.11	15	808	0.019	162	$179.00	20%	100%	95%	0.6947	0
RetaiPaT13	Retail	Packaged DX	Turnover	13	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$2.88	15	854	0.005	38	$110.89	5%	100%	95%	0.2668	0
RetaiPaN18	Retail	Packaged DX	New	18	Automated control system	Baseline DX	ton	$0.59	10	854	0.005	43	$25.00	5%	100%	65%	0.8698	0
RetaiPaN19	Retail	Packaged DX	New	19	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.09	10	725	0.005	40	$43.00	5%	100%	95%	0.4686	0
RetaiPaT15	Retail	Packaged DX	Turnover	15	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.09	10	725	0.005	40	$43.00	5%	100%	95%	0.4686	0
WarehPaE1	Warehouse	Packaged DX	Early	1	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$3.13	20	625	0.05	64	$200.00	10%	15%	9%	0.4045	0
WarehPaE2	Warehouse	Packaged DX	Early	2	Adding window shade film	No shade film	q ft window are	$7.05	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.0363	0
WarehPaE3	Warehouse	Packaged DX	Early	3	Adding window shade screen	No shade screen	q ft window are	$3.90	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.1973	0
WarehPaE4	Warehouse	Packaged DX	Early	4	Windows U<0.40, .55 SHGC	Existing window specifications	q ft window are	$1.40	30	2	0.000	0	$0.28	13%	50%	95%	0.9850	0
WarehPaE5	Warehouse	Packaged DX	Early	5	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$5.40	20	625	0.05	42	$225.00	7%	95%	95%	0.2655	0
WarehPaE7	Warehouse	Packaged DX	Early	7	Automated control system	Baseline DX	ton	$0.76	10	660	0.004	33	$25.00	5%	100%	65%	0.6726	0
WarehPaE8	Warehouse	Packaged DX	Early	8	Duct Sealing, down to 15%	Leakage of 29%	ton	$7.92	15	625	0.05	12	$95.00	2%	45%	80%	0.2609	0
WarehPaE9	Warehouse	Packaged DX	Early	9	Hotel Keycard Sensors	No prior controls	oom Controlle	$0.29	10	561	0.041	342	$100.00	61%	95%	80%	1.7426	1
WarehPaE10	Warehouse	Packaged DX	Early	10	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	ton	$0.55	1	679	0.05	64	$35.00	9%	100%	45%	0.1131	0
WarehPaE11	Warehouse	Packaged DX	Early	11	7 day, two stage setback thermostat	Manual Thermostat	ton	$0.44	10	625	0.015	125	$55.00	20%	100%	45%	1.1580	1
WarehPaE13	Warehouse	Packaged DX	Early	13	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.55	7	625	0.05	100	$55.15	16%	95%	75%	0.7578	0
WarehPaN1	Warehouse	Packaged DX	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	ton	$1.36	20	625	0.05	64	$87.00	10%	100%	95%	0.9299	0
WarehPaN2	Warehouse	Packaged DX	New	2	Adding reflective roof treatment	Std color roof	ton	$4.50	20	625	0.05	10	$45.00	2%	100%	95%	0.6621	0
WarehPaN3	Warehouse	Packaged DX	New	3	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$3.00	20	625	0.05	42	$125.00	7%	100%	95%	0.4780	0
WarehPaN4	Warehouse	Packaged DX	New	4	Green Roof (New construction or roof replacement)	Std Roof	ton	$3.06	20	625	0.05	42	$127.43	7%	45%	95%	0.4688	0
WarehPaN5	Warehouse	Packaged DX	New	5	Duct Insulation, Add R8	No Insulation	ton	$10.42	20	625	0.05	12	$125.00	2%	100%	95%	0.2535	0
WarehPaN6	Warehouse	Packaged DX	New	6	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$2.35	20	538	0.04	38	$90.40	7%	100%	95%	0.6100	0
WarehPaN7	Warehouse	Packaged DX	New	7	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$2.52	20	538	0.08	72	$180.81	13%	100%	95%	0.5693	0
WarehPaN8	Warehouse	Packaged DX	New	8	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$2.69	20	538	0.12	101	$271.21	19%	100%	95%	0.5338	0
WarehPaN9	Warehouse	Packaged DX	New	9	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.32	20	625	0.05	42	$55.00	7%	100%	95%	1.0863	1
WarehPaN10	Warehouse	Packaged DX	New	10	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.32	20	636	0.06	53	$70.00	8%	100%	95%	1.0863	1
WarehPaN11	Warehouse	Packaged DX	New	11	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$2.22	20	700	0.06	52	$115.13	7%	100%	95%	0.6458	0

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Fla
WarehPaN12	Warehouse	Packaged DX	New	12	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$2.78	20	721	0.04	35	$98.39	5%	100%	95%	0.5155	0
WarehPaN13	Warehouse	Packaged DX	New	13	Ground Source HP Open - Water	Air Source Heat Pump	ton	$3.67	15	636	0.23	204	$ 750.0	32%	20%	95%	0.3034	0
WarehPaN14	Warehouse	Packaged DX	New	14	Ground Source HP Closed	Air Source Heat Pump	ton	$6.58	15	636	0.014	114	$750.00	18%	100%	95%	0.1169	0
WarehPaN15	Warehouse	Packaged DX	New	15	Air-side Economizer	No Economizer	ton	$1.81	15	625	0.011	94	$170.00	15%	75%	45%	0.4242	0
WarehPaN16	Warehouse	Packaged DX	New	16	Energy Recovery Units	No Energy Recovery	ton	$1.43	15	625	0.015	125	$179.00	20%	100%	95%	0.5371	0
WarehPaN17	Warehouse	Packaged DX	New	17	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$3.73	15	660	0.004	30	$110.89	5%	100%	95%	0.2063	0
WarehPaT1	Warehouse	Packaged DX	Turnover	1	Duct Insulation, Add R8	No Insulation	ton	$10.42	15	625	0.05	12	$125.00	2%	100%	95%	0.1983	0
WarehPaT2	Warehouse	Packaged DX	Turnover	2	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$2.35	20	538	0.04	38	$90.40	7%	100%	95%	0.6100	0
WarehPaT3	Warehouse	Packaged DX	Turnover	3	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$2.52	20	538	0.08	72	$180.81	13%	100%	95%	0.5693	0
WarehPaT4	Warehouse	Packaged DX	Turnover	4	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$2.69	20	538	0.12	101	$271.21	19%	100%	95%	0.5338	0
WarehPaT5	Warehouse	Packaged DX	Turnover	5	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.32	20	625	0.05	42	$55.00	7%	100%	95%	1.0863	1
WarehPaT6	Warehouse	Packaged DX	Turnover	6	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.32	20	636	0.06	53	$70.00	8%	100%	95%	1.0863	1
WarehPaT7	Warehouse	Packaged DX	Turnover	7	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$2.22	20	700	0.06	52	$115.13	7%	100%	95%	0.6458	0
WarehPaT8	Warehouse	Packaged DX	Turnover	8	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$2.78	20	721	0.04	35	$98.39	5%	100%	95%	0.5155	0
WarehPaT9	Warehouse	Packaged DX	Turnover	9	Ground Source HP Open - Water	Air Source Heat Pump	ton	$3.67	15	636	0.23	204	$ 750.0	32%	5%	95%	0.3034	0
WarehPaT10	Warehouse	Packaged DX	Turnover	10	Ground Source HP Closed	Air Source Heat Pump	ton	$6.58	15	636	0.014	114	$750.00	18%	100%	95%	0.1169	0
WarehPaT11	Warehouse	Packaged DX	Turnover	11	Air-side Economizer	No Economizer	ton	$1.81	15	625	0.011	94	$170.00	15%	75%	45%	0.4242	0
WarehPaT12	Warehouse	Packaged DX	Turnover	12	Energy Recovery Units	No Energy Recovery	ton	$1.43	15	625	0.015	125	$179.00	20%	100%	95%	0.5371	0
WarehPaT13	Warehouse	Packaged DX	Turnover	13	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$3.73	15	660	0.004	30	$110.89	5%	100%	95%	0.2063	0
WarehPaN18	Warehouse	Packaged DX	New	18	Automated control system	Baseline DX	ton	$0.76	10	660	0.004	33	$25.00	5%	100%	65%	0.6726	0
WarehPaN19	Warehouse	Packaged DX	New	19	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.41	10	561	0.004	31	$43.00	5%	100%	95%	0.3623	0
WarehPaT15	Warehouse	Packaged DX	Turnover	15	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.41	10	561	0.004	31	$43.00	5%	100%	95%	0.3623	0
HealthHeN4	Healthcare	Heating	New	4	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$6.11	15	300	0.000	18	$110.89	6%	100%	95%	0.1202	0
HealthHeT1	Healthcare	Heating	Turnover	1	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$6.11	15	300	0.000	18	$110.89	6%	100%	95%	0.1202	0
GroceHeE1	Grocery	Heating	Early	1	Re-commissioning	Current Controls not working properly, setpoints not optimized,	sq ft	$0.2710	7	125,500	0.297	20,080	$5,441.68	16%	95%	75%	1.2523	1
GroceHeE2	Grocery	Heating	Early	2	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$4.44	20	1,288	0.05	45	$200.00	3%	10%	95%	0.3145	0
GroceHeE3	Grocery	Heating	Early	3	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.67	20	1,288	0.05	75	$125.00	6%	10%	95%	0.7302	0
GroceHeE4	Grocery	Heating	Early	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.75	20	1,288	0.05	34	$127.43	3%	10%	95%	0.4119	0
GroceHeE5	Grocery	Heating	Early	5	Humidification with High pressure, Ultrasonic devices	Electric Resistive Elements	unit	$0.1893	10	2,794	0.039	2,641	$500.00	95%	100%	95%	2.5596	1
GroceHeN1	Grocery	Heating	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5 - Electric Heat	sq ft	$1.93	20	1,288	0.05	45	$87.00	3%	10%	95%	0.7230	0
GroceHeN2	Grocery	Heating	New	2	Ground Source HP Open - Water	Air Source Heat Pump	ton	$9.61	15	1,288	0.23	78	$ 750.0	6%	20%	95%	0.1806	0
GroceHen3	Grocery	Heating	new	3	Ground Source HP Closed	Air Source Heat Pump	ton	$9.61	15	1,288	0.001	78	$750.00	6%	100%	95%	0.0764	0
GroceHeN4	Grocery	Heating	New	4	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.42	15	1,288	0.001	78	$110.89	6%	100%	95%	0.5166	0
GroceHeT1	Grocery	Heating	Turnover	1	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.42	15	1,288	0.001	78	$110.89	6%	100%	95%	0.5166	0
InstiHeE1	Institutional	Heating	Early	1	Re-commissioning	Current Controls not working properly, setpoints not optimized,	sq ft	$0.2710	7	125,500	0.297	20,080	$5,441.68	16%	95%	75%	1.2523	1
InstiHeE2	Institutional	Heating	Early	2	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$4.44	20	917	0.05	45	$200.00	5%	10%	95%	0.3145	0
InstiHeE3	Institutional	Heating	Early	3	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.67	20	917	0.05	75	$125.00	8%	10%	95%	0.7302	0
InstiHeE4	Institutional	Heating	Early	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.75	20	917	0.05	34	$127.43	4%	10%	95%	0.4119	0
InstiHeE5	Institutional	Heating	Early	5	Humidification with High pressure, Ultrasonic devices	Electric Resistive Elements	unit	$0.1893	10	2,794	0.039	2,641	$500.00	95%	100%	95%	2.5596	1
InstiHeN1	Institutional	Heating	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5 - Electric Heat	sq ft	$1.93	20	917	0.05	45	$87.00	5%	10%	95%	0.7230	0
InstiHeN2	Institutional	Heating	New	2	Ground Source HP Open - Water	Air Source Heat Pump	ton	$13.50	15	917	0.23	56	$ 750.0	6%	20%	95%	0.1588	0
InstiHen3	Institutional	Heating	new	3	Ground Source HP Closed	Air Source Heat Pump	ton	$13.50	15	917	0.001	56	$750.00	6%	100%	95%	0.0544	0
InstiHeN4	Institutional	Heating	New	4	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$2.00	15	917	0.001	56	$110.89	6%	100%	95%	0.3678	0
InstiHeT1	Institutional	Heating	Turnover	1	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$2.00	15	917	0.001	56	$110.89	6%	100%	95%	0.3678	0
LodgiHeE1	Lodging	Heating	Early	1	Re-commissioning	Current Controls not working properly, setpoints not optimized,	sq ft	$0.2710	7	125,500	0.297	20,080	$5,441.68	16%	95%	75%	1.2523	1
LodgiHeE2	Lodging	Heating	Early	2	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$4.44	20	1,559	0.05	45	$200.00	3%	10%	95%	0.3145	0
LodgiHeE3	Lodging	Heating	Early	3	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.67	20	1,559	0.05	75	$125.00	5%	10%	95%	0.7302	0
LodgiHeE4	Lodging	Heating	Early	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.75	20	1,559	0.05	34	$127.43	2%	10%	95%	0.4119	0
LodgiHeE5	Lodging	Heating	Early	5	Humidification with High pressure, Ultrasonic devices	Electric Resistive Elements	unit	$0.1893	10	2,794	0.039	2,641	$500.00	95%	100%	95%	2.5596	1
LodgiHeN1	Lodging	Heating	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5 - Electric Heat	sq ft	$1.93	20	1,559	0.05	45	$87.00	3%	10%	95%	0.7230	0
LodgiHeN2	Lodging	Heating	New	2	Ground Source HP Open - Water	Air Source Heat Pump	ton	$7.94	15	1,559	0.23	94	$ 750.0	6%	20%	95%	0.1966	0
LodgiHen3	Lodging	Heating	new	3	Ground Source HP Closed	Air Source Heat Pump	ton	$7.94	15	1,559	0.001	94	$750.00	6%	100%	95%	0.0925	0
LodgiHeN4	Lodging	Heating	New	4	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.17	15	1,559	0.001	94	$110.89	6%	100%	95%	0.6254	0
LodgiHeT1	Lodging	Heating	Turnover	1	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.17	15	1,559	0.001	94	$110.89	6%	100%	95%	0.6254	0
MiscHeE1	Misc	Heating	Early	1	Re-commissioning	Current Controls not working properly, setpoints not optimized,	sq ft	$0.2710	7	125,500	0.297	20,080	$5,441.68	16%	95%	75%	1.2523	1
MiscHeE2	Misc	Heating	Early	2	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$4.44	20	1,066	0.05	45	$200.00	4%	10%	95%	0.3145	0
MiscHeE3	Misc	Heating	Early	3	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.67	20	1,066	0.05	75	$125.00	7%	10%	95%	0.7302	0
MiscHeE4	Misc	Heating	Early	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.75	20	1,066	0.05	34	$127.43	3%	10%	95%	0.4119	0
MiscHeE5	Misc	Heating	Early	5	Humidification with High pressure, Ultrasonic devices	Electric Resistive Elements	unit	$0.1893	10	2,794	0.039	2,641	$500.00	95%	100%	95%	2.5596	1
MiscHeN1	Misc	Heating	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5 - Electric Heat	sq ft	$1.93	20	1,066	0.05	45	$87.00	4%	10%	95%	0.7230	0
MiscHeN2	Misc	Heating	New	2	Ground Source HP Open - Water	Air Source Heat Pump	ton	$11.60	15	1,066	0.23	65	$ 750.0	6%	20%	95%	0.1676	0
MiscHen3	Misc	Heating	new	3	Ground Source HP Closed	Air Source Heat Pump	ton	$11.60	15	1,066	0.001	65	$750.00	6%	100%	95%	0.0633	0
MiscHeN4	Misc	Heating	New	4	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.72	15	1,066	0.001	65	$110.89	6%	100%	95%	0.4278	0
MiscHeT1	Misc	Heating	Turnover	1	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.72	15	1,066	0.001	65	$110.89	6%	100%	95%	0.4278	0
OfficHeE1	Office	Heating	Early	1	Re-commissioning	Current Controls not working properly, setpoints not optimized,	sq ft	$0.2710	7	125,500	0.297	20,080	$5,441.68	16%	95%	75%	1.2523	1
OfficHeE2	Office	Heating	Early	2	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$4.44	20	823	0.05	45	$200.00	5%	10%	95%	0.3145	0
OfficHeE3	Office	Heating	Early	3	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.67	20	823	0.05	75	$125.00	9%	10%	95%	0.7302	0
OfficHeE4	Office	Heating	Early	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.75	20	823	0.05	34	$127.43	4%	10%	95%	0.4119	0
OfficHeE5	Office	Heating	Early	5	Humidification with High pressure, Ultrasonic devices	Electric Resistive Elements	unit	$0.1893	10	2,794	0.039	2,641	$500.00	95%	100%	95%	2.5596	1
OfficHeN1	Office	Heating	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5 - Electric Heat	sq ft	$1.93	20	823	0.05	45	$87.00	5%	10%	95%	0.7230	0
OfficHeN2	Office	Heating	New	2	Ground Source HP Open - Water	Air Source Heat Pump	ton	$15.05	15	823	0.23	50	$ 750.0	6%	20%	95%	0.1532	0
OfficHen3	Office	Heating	new	3	Ground Source HP Closed	Air Source Heat Pump	ton	$15.05	15	823	0.001	50	$750.00	6%	100%	95%	0.0488	0
OfficHeN4	Office	Heating	New	4	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$2.22	15	823	0.001	50	$110.89	6%	100%	95%	0.3300	0
OfficHeT1	Office	Heating	Turnover	1	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$2.22	15	823	0.001	50	$110.89	6%	100%	95%	0.3300	0
RestaHeE1	Restaurant	Heating	Early	1	Re-commissioning	Current Controls not working properly, setpoints not optimized,	sq ft	$0.2710	7	125,500	0.297	20,080	$5,441.68	16%	95%	75%	1.2523	1
RestaHeE2	Restaurant	Heating	Early	2	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$4.44	20	1,253	0.05	45	$200.00	4%	10%	95%	0.3145	0
RestaHeE3	Restaurant	Heating	Early	3	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.67	20	1,253	0.05	75	$125.00	6%	10%	95%	0.7302	0
RestaHeE4	Restaurant	Heating	Early	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.75	20	1,253	0.05	34	$127.43	3%	10%	95%	0.4119	0
RestaHeE5	Restaurant	Heating	Early	5	Humidification with High pressure, Ultrasonic devices	Electric Resistive Elements	unit	$0.1893	10	2,794	0.039	2,641	$500.00	95%	100%	95%	2.5596	1
RestaHeN1	Restaurant	Heating	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5 - Electric Heat	sq ft	$1.93	20	1,253	0.05	45	$87.00	4%	10%	95%	0.7230	0
RestaHeN2	Restaurant	Heating	New	2	Ground Source HP Open - Water	Air Source Heat Pump	ton	$9.88	15	1,253	0.23	76	$ 750.0	6%	20%	95%	0.1786	0
RestaHen3	Restaurant	Heating	new	3	Ground Source HP Closed	Air Source Heat Pump	ton	$9.88	15	1,253	0.001	76	$750.00	6%	100%	95%	0.0743	0
RestaHeN4	Restaurant	Heating	New	4	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.46	15	1,253	0.001	76	$110.89	6%	100%	95%	0.5025	0
RestaHeT1	Restaurant	Heating	Turnover	1	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.46	15	1,253	0.001	76	$110.89	6%	100%	95%	0.5025	0
RetaiHeE1	Retail	Heating	Early	1	Re-commissioning	Current Controls not working properly, setpoints not optimized,	sq ft	$0.2710	7	125,500	0.297	20,080	$5,441.68	16%	95%	75%	1.2523	1
RetaiHeE2	Retail	Heating	Early	2	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$4.44	20	1,288	0.05	45	$200.00	3%	10%	95%	0.3145	0
RetaiHeE3	Retail	Heating	Early	3	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.67	20	1,288	0.05	75	$125.00	6%	10%	95%	0.7302	0
RetaiHeE4	Retail	Heating	Early	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.75	20	1,288	0.05	34	$127.43	3%	10%	95%	0.4119	0
RetaiHeE5	Retail	Heating	Early	5	Humidification with High pressure, Ultrasonic devices	Electric Resistive Elements	unit	$0.1893	10	2,794	0.039	2,641	$500.00	95%	100%	95%	2.5596	1
RetaiHeN1	Retail	Heating	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5 - Electric Heat	sq ft	$1.93	20	1,288	0.05	45	$87.00	3%	10%	95%	0.7230	0
RetaiHeN2	Retail	Heating	New	2	Ground Source HP Open - Water	Air Source Heat Pump	ton	$9.61	15	1,288	0.23	78	$ 750.0	6%	20%	95%	0.1806	0
RetaiHen3	Retail	Heating	new	3	Ground Source HP Closed	Air Source Heat Pump	ton	$9.61	15	1,288	0.001	78	$750.00	6%	100%	95%	0.0764	0
RetaiHeN4	Retail	Heating	New	4	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.42	15	1,288	0.001	78	$110.89	6%	100%	95%	0.5166	0
RetaiHeT1	Retail	Heating	Turnover	1	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.42	15	1,288	0.001	78	$110.89	6%	100%	95%	0.5166	0

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Fla
WarehHeE1	Warehouse	Heating	Early	1	Re-commissioning	Current Controls not working properly, setpoints not optimized,	sq ft	$0.2710	7	125,500	0.297	20,080	$5,441.68	16%	95%	75%	1.2523	1
WarehHeE2	Warehouse	Heating	Early	2	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$4.44	20	1,106	0.05	45	$200.00	4%	10%	95%	0.3145	0
WarehHeE3	Warehouse	Heating	Early	3	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.67	20	1,106	0.05	75	$125.00	7%	10%	95%	0.7302	0
WarehHeE4	Warehouse	Heating	Early	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.75	20	1,106	0.05	34	$127.43	3%	10%	95%	0.4119	0
WarehHeE5	Warehouse	Heating	Early	5	Humidification with High pressure, Ultrasonic devices	Electric Resistive Elements	unit	$0.1893	10	2,794	0.039	2,641	$500.00	95%	100%	95%	2.5596	1
WarehHeN1	Warehouse	Heating	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5 - Electric Heat	sq ft	$1.93	20	1,106	0.05	45	$87.00	4%	10%	95%	0.7230	0
WarehHeN2	Warehouse	Heating	New	2	Ground Source HP Open - Water	Air Source Heat Pump	ton	$11.19	15	1,106	0.23	67	$ 750.0	6%	20%	95%	0.1699	0
WarehHen3	Warehouse	Heating	new	3	Ground Source HP Closed	Air Source Heat Pump	ton	$11.19	15	1,106	0.001	67	$750.00	6%	100%	95%	0.0656	0
WarehHeN4	Warehouse	Heating	New	4	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.65	15	1,106	0.001	67	$110.89	6%	100%	95%	0.4438	0
WarehHeT1	Warehouse	Heating	Turnover	1	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.65	15	1,106	0.001	67	$110.89	6%	100%	95%	0.4438	0
GroceChE1	Grocery	Chiller	Early	1	Duct Sealing, down to 15%	Leakage of 29%	ton	$1.8103	15	5,248	0.010	52.4784	$95.00	1%	40%	$0.90	0.4369	0
GroceChE2	Grocery	Chiller	Early	2	Duct Insulation, Add R8	No Insulation	ton	$2.3819	15	5,248	0.010	52.4784	$125.00	1%	50%	95%	0.3320	0
GroceChE3	Grocery	Chiller	Early	3	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton	ton	$0.4764	15	5,248	0.052	262.3920	$125.00	5%	75%	75%	1.6600	1
GroceChE4	Grocery	Chiller	Early	4	Energy Recovery Units	No Energy Recovery	ton	$0.4287	15	5,248	0.207	1,049.6	$450.00	20%	75%	75%	1.8445	1
GroceChE5	Grocery	Chiller	Early	5	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.4343	7	5,248	0.166	840	$364.67	16%	75%	75%	0.8453	0
GroceChE6	Grocery	Chiller	Early	6	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$0.82	15	5,248	0.05	245	$200.00	5%	15%	95%	0.9679	0
GroceChE7	Grocery	Chiller	Early	7	Adding window shade film	No shade film	q ft window are	$7.0453	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.0371	0
GroceChE8	Grocery	Chiller	Early	8	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.2028	0
GroceChE9	Grocery	Chiller	Early	9	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.43	20	5,248	0.05	157	$225.00	3%	75%	95%	0.7492	0
GroceChN1	Grocery	Chiller	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	sq ft	$0.47	20	5,248	0.05	184	$87.00	4%	15%	95%	2.2215	1
GroceChN2	Grocery	Chiller	New	2	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.2028	0
GroceChN3	Grocery	Chiller	New	3	Adding reflective roof treatment	Std color roof	sq ft roof area	$4.50	20	5,248	0.05	10	$45.00	0%	100%	95%	0.6610	0
GroceChN4	Grocery	Chiller	New	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$2.48	20	5,248	0.05	51	$127.43	1%	45%	95%	0.5385	0
GroceChN5	Grocery	Chiller	New	5	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.4026	15	5,248	0.76	633	$255.00	12%	95%	95%	2.7930	1
GroceChN6	Grocery	Chiller	New	6	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2226	15	5,248	1.944	1,629	$362.50	31%	95%	95%	5.0521	1
GroceChN7	Grocery	Chiller	New	7	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1154	15	12,577	1.728	1,448	$167.00	12%	95%	95%	9.7479	1
GroceChN8	Grocery	Chiller	New	8	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.4383	15	5,248	0.052	262.3920	$115.00	5%	95%	75%	1.8044	1
GroceChN9	Grocery	Chiller	New	9	Energy Recovery Units	No Energy Recovery	ton	$0.2382	15	5,248	0.207	1,049.6	$250.00	20%	95%	75%	3.3201	1
GroceChN10	Grocery	Chiller	New	10	Duct Insulation, Add R8	No Insulation	ton	$2.3819	15	5,248	0.010	52.4784	$125.00	1%	100%	95%	0.3320	0
GroceChT1	Grocery	Chiller	Turnover	1	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.4658	15	5,248	0.76	633	$295.00	12%	95%	95%	2.4143	1
GroceChT2	Grocery	Chiller	Turnover	2	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2840	15	5,248	1.944	1,629	$462.50	31%	95%	95%	3.9598	1
GroceChT3	Grocery	Chiller	Turnover	3	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.4530	15	5,248	1.944	918	$416.00	18%	95%	95%	3.1650	1
GroceChN11	Grocery	Chiller	New	11	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.4530	15	5,248	1.944	918	$416.00	18%	95%	95%	3.1650	1
GroceChT5	Grocery	Chiller	Turnover	5	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.4840	15	5,248	0.052	262.3920	$127.00	5%	95%	75%	1.6339	1
GroceChT4	Grocery	Chiller	Turnover	4	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1430	15	12,577	1.728	1,448	$207.00	12%	95%	95%	7.8643	1
InstiChE1	Institutional	Chiller	Early	1	Duct Sealing, down to 15%	Leakage of 29%	ton	$2.5513	15	3,724	0.007	37.2360	$95.00	1%	40%	$0.90	0.3100	0
InstiChE2	Institutional	Chiller	Early	2	Duct Insulation, Add R8	No Insulation	ton	$3.3570	15	3,724	0.007	37.2360	$125.00	1%	50%	95%	0.2356	0
InstiChE3	Institutional	Chiller	Early	3	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton	ton	$0.6714	15	3,724	0.037	186.1800	$125.00	5%	75%	75%	1.1779	1
InstiChE4	Institutional	Chiller	Early	4	Energy Recovery Units	No Energy Recovery	ton	$0.6043	15	3,724	0.147	744.7	$450.00	20%	75%	75%	1.3088	1
InstiChE5	Institutional	Chiller	Early	5	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.6121	7	3,724	0.118	596	$364.67	16%	75%	75%	0.5998	0
InstiChE6	Institutional	Chiller	Early	6	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$0.82	15	3,724	0.05	245	$200.00	7%	15%	95%	0.9679	0
InstiChE7	Institutional	Chiller	Early	7	Adding window shade film	No shade film	q ft window are	$7.0453	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.0371	0
InstiChE8	Institutional	Chiller	Early	8	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.2028	0
InstiChE9	Institutional	Chiller	Early	9	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$2.01	20	3,724	0.05	112	$225.00	3%	75%	95%	0.5578	0
InstiChN1	Institutional	Chiller	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	sq ft	$0.67	20	3,724	0.05	130	$87.00	4%	15%	95%	1.6441	1
InstiChN2	Institutional	Chiller	New	2	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.2028	0
InstiChN3	Institutional	Chiller	New	3	Adding reflective roof treatment	Std color roof	sq ft roof area	$4.50	20	3,724	0.05	10	$45.00	0%	100%	95%	0.6610	0
InstiChN4	Institutional	Chiller	New	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.33	20	3,724	0.05	38	$127.43	1%	45%	95%	0.4419	0
InstiChN5	Institutional	Chiller	New	5	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.5674	15	3,724	0.76	449	$255.00	12%	95%	95%	2.2702	1
InstiChN6	Institutional	Chiller	New	6	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.3137	15	3,724	1.944	1,156	$362.50	31%	95%	95%	4.1064	1
InstiChN7	Institutional	Chiller	New	7	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1626	15	8,924	1.728	1,027	$167.00	12%	95%	95%	7.9232	1
InstiChN8	Institutional	Chiller	New	8	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.6177	15	3,724	0.037	186.1800	$115.00	5%	95%	75%	1.2803	1
InstiChN9	Institutional	Chiller	New	9	Energy Recovery Units	No Energy Recovery	ton	$0.3357	15	3,724	0.147	744.7	$250.00	20%	95%	75%	2.3558	1
InstiChN10	Institutional	Chiller	New	10	Duct Insulation, Add R8	No Insulation	ton	$3.3570	15	3,724	0.007	37.2360	$125.00	1%	100%	95%	0.2356	0
InstiChT1	Institutional	Chiller	Turnover	1	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.6564	15	3,724	0.76	449	$295.00	12%	95%	95%	1.9623	1
InstiChT2	Institutional	Chiller	Turnover	2	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.4002	15	3,724	1.944	1,156	$462.50	31%	95%	95%	3.2185	1
InstiChT3	Institutional	Chiller	Turnover	3	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.6384	15	3,724	1.944	652	$416.00	18%	95%	95%	2.7003	1
InstiChN11	Institutional	Chiller	New	11	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.6384	15	3,724	1.944	652	$416.00	18%	95%	95%	2.7003	1
InstiChT5	Institutional	Chiller	Turnover	5	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.6821	15	3,724	0.037	186.1800	$127.00	5%	95%	75%	1.1593	1
InstiChT4	Institutional	Chiller	Turnover	4	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.2015	15	8,924	1.728	1,027	$207.00	12%	95%	95%	6.3921	1
LodgiChE1	Lodging	Chiller	Early	1	Duct Sealing, down to 15%	Leakage of 29%	ton	$2.1394	15	4,440	0.009	44.4048	$95.00	1%	40%	$0.90	0.3696	0
LodgiChE2	Lodging	Chiller	Early	2	Duct Insulation, Add R8	No Insulation	ton	$2.8150	15	4,440	0.009	44.4048	$125.00	1%	50%	95%	0.2809	0
LodgiChE3	Lodging	Chiller	Early	3	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton	ton	$0.5630	15	4,440	0.044	222.0240	$125.00	5%	75%	75%	1.4047	1
LodgiChE4	Lodging	Chiller	Early	4	Energy Recovery Units	No Energy Recovery	ton	$0.5067	15	4,440	0.175	888.1	$450.00	20%	75%	75%	1.5607	1
LodgiChE5	Lodging	Chiller	Early	5	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.5133	7	4,440	0.140	710	$364.67	16%	75%	75%	0.7153	0
LodgiChE6	Lodging	Chiller	Early	6	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$0.82	15	4,440	0.05	245	$200.00	6%	15%	95%	0.9679	0
LodgiChE7	Lodging	Chiller	Early	7	Adding window shade film	No shade film	q ft window are	$7.0453	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.0371	0
LodgiChE8	Lodging	Chiller	Early	8	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.2028	0
LodgiChE9	Lodging	Chiller	Early	9	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.69	20	4,440	0.05	133	$225.00	3%	75%	95%	0.6478	0
LodgiChN1	Lodging	Chiller	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	sq ft	$0.56	20	4,440	0.05	155	$87.00	4%	15%	95%	1.9157	1
LodgiChN2	Lodging	Chiller	New	2	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.2028	0
LodgiChN3	Lodging	Chiller	New	3	Adding reflective roof treatment	Std color roof	sq ft roof area	$4.50	20	4,440	0.05	10	$45.00	0%	100%	95%	0.6610	0
LodgiChN4	Lodging	Chiller	New	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$2.80	20	4,440	0.05	46	$127.43	1%	45%	95%	0.4963	0
LodgiChN5	Lodging	Chiller	New	5	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.4758	15	4,440	0.76	536	$255.00	12%	95%	95%	2.5160	1
LodgiChN6	Lodging	Chiller	New	6	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2630	15	4,440	1.944	1,378	$362.50	31%	95%	95%	4.5512	1
LodgiChN7	Lodging	Chiller	New	7	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1363	15	10,642	1.728	1,225	$167.00	12%	95%	95%	8.7814	1
LodgiChN8	Lodging	Chiller	New	8	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.5180	15	4,440	0.044	222.0240	$115.00	5%	95%	75%	1.5268	1
LodgiChN9	Lodging	Chiller	New	9	Energy Recovery Units	No Energy Recovery	ton	$0.2815	15	4,440	0.175	888.1	$250.00	20%	95%	75%	2.8093	1
LodgiChN10	Lodging	Chiller	New	10	Duct Insulation, Add R8	No Insulation	ton	$2.8150	15	4,440	0.009	44.4048	$125.00	1%	100%	95%	0.2809	0
LodgiChT1	Lodging	Chiller	Turnover	1	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.5505	15	4,440	0.76	536	$295.00	12%	95%	95%	2.1749	1
LodgiChT2	Lodging	Chiller	Turnover	2	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.3356	15	4,440	1.944	1,378	$462.50	31%	95%	95%	3.5671	1
LodgiChT3	Lodging	Chiller	Turnover	3	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.5353	15	4,440	1.944	777	$416.00	18%	95%	95%	2.9189	1
LodgiChN11	Lodging	Chiller	New	11	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.5353	15	4,440	1.944	777	$416.00	18%	95%	95%	2.9189	1
LodgiChT5	Lodging	Chiller	Turnover	5	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.5720	15	4,440	0.044	222.0240	$127.00	5%	95%	75%	1.3825	1
LodgiChT4	Lodging	Chiller	Turnover	4	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1690	15	10,642	1.728	1,225	$207.00	12%	95%	95%	7.0845	1
MiscChE1	Misc	Chiller	Early	1	Duct Sealing, down to 15%	Leakage of 29%	ton	$1.8420	15	5,157	0.010	51.5736	$95.00	1%	40%	$0.90	0.4293	0
MiscChE2	Misc	Chiller	Early	2	Duct Insulation, Add R8	No Insulation	ton	$2.4237	15	5,157	0.010	51.5736	$125.00	1%	50%	95%	0.3263	0
MiscChE3	Misc	Chiller	Early	3	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton	ton	$0.4847	15	5,157	0.051	257.8680	$125.00	5%	75%	75%	1.6314	1
MiscChE4	Misc	Chiller	Early	4	Energy Recovery Units	No Energy Recovery	ton	$0.4363	15	5,157	0.204	1,031.5	$450.00	20%	75%	75%	1.8127	1
MiscChE5	Misc	Chiller	Early	5	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.4419	7	5,157	0.163	825	$364.67	16%	75%	75%	0.8307	0
MiscChE6	Misc	Chiller	Early	6	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$0.82	15	5,157	0.05	245	$200.00	5%	15%	95%	0.9679	0
MiscChE7	Misc	Chiller	Early	7	Adding window shade film	No shade film	q ft window are	$7.0453	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.0371	0
MiscChE8	Misc	Chiller	Early	8	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.2028	0
MiscChE9	Misc	Chiller	Early	9	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.45	20	5,157	0.05	155	$225.00	3%	75%	95%	0.7378	0

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Fla
MiscChN1	Misc	Chiller	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	sq ft	$0.48	20	5,157	0.05	181	$87.00	4%	15%	95%	2.1872	1
MiscChN2	Misc	Chiller	New	2	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.2028	0
MiscChN3	Misc	Chiller	New	3	Adding reflective roof treatment	Std color roof	sq ft roof area	$4.50	20	5,157	0.05	10	$45.00	0%	100%	95%	0.6610	0
MiscChN4	Misc	Chiller	New	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$2.42	20	5,157	0.05	53	$127.43	1%	45%	95%	0.5482	0
MiscChN5	Misc	Chiller	New	5	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.4097	15	5,157	0.76	622	$255.00	12%	95%	95%	2.7619	1
MiscChN6	Misc	Chiller	New	6	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2265	15	5,157	1.944	1,601	$362.50	31%	95%	95%	4.9960	1
MiscChN7	Misc	Chiller	New	7	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1174	15	12,360	1.728	1,423	$167.00	12%	95%	95%	9.6396	1
MiscChN8	Misc	Chiller	New	8	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.4460	15	5,157	0.051	257.8680	$115.00	5%	95%	75%	1.7733	1
MiscChN9	Misc	Chiller	New	9	Energy Recovery Units	No Energy Recovery	ton	$0.2424	15	5,157	0.204	1,031.5	$250.00	20%	95%	75%	3.2628	1
MiscChN10	Misc	Chiller	New	10	Duct Insulation, Add R8	No Insulation	ton	$2.4237	15	5,157	0.010	51.5736	$125.00	1%	100%	95%	0.3263	0
MiscChT1	Misc	Chiller	Turnover	1	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.4739	15	5,157	0.76	622	$295.00	12%	95%	95%	2.3874	1
MiscChT2	Misc	Chiller	Turnover	2	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2890	15	5,157	1.944	1,601	$462.50	31%	95%	95%	3.9158	1
MiscChT3	Misc	Chiller	Turnover	3	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.4609	15	5,157	1.944	903	$416.00	18%	95%	95%	3.1374	1
MiscChN11	Misc	Chiller	New	11	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.4609	15	5,157	1.944	903	$416.00	18%	95%	95%	3.1374	1
MiscChT5	Misc	Chiller	Turnover	5	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.4925	15	5,157	0.051	257.8680	$127.00	5%	95%	75%	1.6057	1
MiscChT4	Misc	Chiller	Turnover	4	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1455	15	12,360	1.728	1,423	$207.00	12%	95%	95%	7.7769	1
OfficChE1	Office	Chiller	Early	1	Duct Sealing, down to 15%	Leakage of 29%	ton	$1.9010	15	4,997	0.010	49.9728	$95.00	1%	40%	$0.90	0.4160	0
OfficChE2	Office	Chiller	Early	2	Duct Insulation, Add R8	No Insulation	ton	$2.5014	15	4,997	0.010	49.9728	$125.00	1%	50%	95%	0.3162	0
OfficChE3	Office	Chiller	Early	3	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton	ton	$0.5003	15	4,997	0.049	249.8640	$125.00	5%	75%	75%	1.5808	1
OfficChE4	Office	Chiller	Early	4	Energy Recovery Units	No Energy Recovery	ton	$0.4502	15	4,997	0.197	999.5	$450.00	20%	75%	75%	1.7564	1
OfficChE5	Office	Chiller	Early	5	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.4561	7	4,997	0.158	800	$364.67	16%	75%	75%	0.8049	0
OfficChE6	Office	Chiller	Early	6	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$0.82	15	4,997	0.05	245	$200.00	5%	15%	95%	0.9679	0
OfficChE7	Office	Chiller	Early	7	Adding window shade film	No shade film	q ft window are	$7.0453	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.0371	0
OfficChE8	Office	Chiller	Early	8	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.2028	0
OfficChE9	Office	Chiller	Early	9	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.50	20	4,997	0.05	150	$225.00	3%	75%	95%	0.7177	0
OfficChN1	Office	Chiller	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	sq ft	$0.50	20	4,997	0.05	175	$87.00	4%	15%	95%	2.1266	1
OfficChN2	Office	Chiller	New	2	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.2028	0
OfficChN3	Office	Chiller	New	3	Adding reflective roof treatment	Std color roof	sq ft roof area	$4.50	20	4,997	0.05	10	$45.00	0%	100%	95%	0.6610	0
OfficChN4	Office	Chiller	New	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$2.48	20	4,997	0.05	51	$127.43	1%	45%	95%	0.5385	0
OfficChN5	Office	Chiller	New	5	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.4228	15	4,997	0.76	603	$255.00	12%	95%	95%	2.7070	1
OfficChN6	Office	Chiller	New	6	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2337	15	4,997	1.944	1,551	$362.50	31%	95%	95%	4.8966	1
OfficChN7	Office	Chiller	New	7	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1211	15	11,976	1.728	1,379	$167.00	12%	95%	95%	9.4480	1
OfficChN8	Office	Chiller	New	8	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.4603	15	4,997	0.049	249.8640	$115.00	5%	95%	75%	1.7182	1
OfficChN9	Office	Chiller	New	9	Energy Recovery Units	No Energy Recovery	ton	$0.2501	15	4,997	0.197	999.5	$250.00	20%	95%	75%	3.1616	1
OfficChN10	Office	Chiller	New	10	Duct Insulation, Add R8	No Insulation	ton	$2.5014	15	4,997	0.010	49.9728	$125.00	1%	100%	95%	0.3162	0
OfficChT1	Office	Chiller	Turnover	1	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.4891	15	4,997	0.76	603	$295.00	12%	95%	95%	2.3400	1
OfficChT2	Office	Chiller	Turnover	2	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2982	15	4,997	1.944	1,551	$462.50	31%	95%	95%	3.8379	1
OfficChT3	Office	Chiller	Turnover	3	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.4757	15	4,997	1.944	875	$416.00	18%	95%	95%	3.0886	1
OfficChN11	Office	Chiller	New	11	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.4757	15	4,997	1.944	875	$416.00	18%	95%	95%	3.0886	1
OfficChT5	Office	Chiller	Turnover	5	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.5083	15	4,997	0.049	249.8640	$127.00	5%	95%	75%	1.5559	1
OfficChT4	Office	Chiller	Turnover	4	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1502	15	11,976	1.728	1,379	$207.00	12%	95%	95%	7.6223	1
RestaChE1	Restaurant	Chiller	Early	1	Duct Sealing, down to 15%	Leakage of 29%	ton	$1.7750	15	5,352	0.011	53.5224	$95.00	1%	40%	$0.90	0.4455	0
RestaChE2	Restaurant	Chiller	Early	2	Duct Insulation, Add R8	No Insulation	ton	$2.3355	15	5,352	0.011	53.5224	$125.00	1%	50%	95%	0.3386	0
RestaChE3	Restaurant	Chiller	Early	3	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton	ton	$0.4671	15	5,352	0.053	267.6120	$125.00	5%	75%	75%	1.6931	1
RestaChE4	Restaurant	Chiller	Early	4	Energy Recovery Units	No Energy Recovery	ton	$0.4204	15	5,352	0.211	1,070.4	$450.00	20%	75%	75%	1.8812	1
RestaChE5	Restaurant	Chiller	Early	5	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.4258	7	5,352	0.169	856	$364.67	16%	75%	75%	0.8621	0
RestaChE6	Restaurant	Chiller	Early	6	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$0.82	15	5,352	0.05	245	$200.00	5%	15%	95%	0.9679	0
RestaChE7	Restaurant	Chiller	Early	7	Adding window shade film	No shade film	q ft window are	$7.0453	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.0371	0
RestaChE8	Restaurant	Chiller	Early	8	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.2028	0
RestaChE9	Restaurant	Chiller	Early	9	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.40	20	5,352	0.05	161	$225.00	3%	75%	95%	0.7623	0
RestaChN1	Restaurant	Chiller	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	sq ft	$0.46	20	5,352	0.05	187	$87.00	4%	15%	95%	2.2610	1
RestaChN2	Restaurant	Chiller	New	2	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.2028	0
RestaChN3	Restaurant	Chiller	New	3	Adding reflective roof treatment	Std color roof	sq ft roof area	$4.50	20	5,352	0.05	10	$45.00	0%	100%	95%	0.6610	0
RestaChN4	Restaurant	Chiller	New	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$2.32	20	5,352	0.05	55	$127.43	1%	45%	95%	0.5654	0
RestaChN5	Restaurant	Chiller	New	5	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.3948	15	5,352	0.76	646	$255.00	12%	95%	95%	2.8288	1
RestaChN6	Restaurant	Chiller	New	6	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2182	15	5,352	1.944	1,661	$362.50	31%	95%	95%	5.1169	1
RestaChN7	Restaurant	Chiller	New	7	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1131	15	12,827	1.728	1,476	$167.00	12%	95%	95%	9.8729	1
RestaChN8	Restaurant	Chiller	New	8	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.4297	15	5,352	0.053	267.6120	$115.00	5%	95%	75%	1.8403	1
RestaChN9	Restaurant	Chiller	New	9	Energy Recovery Units	No Energy Recovery	ton	$0.2335	15	5,352	0.211	1,070.4	$250.00	20%	95%	75%	3.3861	1
RestaChN10	Restaurant	Chiller	New	10	Duct Insulation, Add R8	No Insulation	ton	$2.3355	15	5,352	0.011	53.5224	$125.00	1%	100%	95%	0.3386	0
RestaChT1	Restaurant	Chiller	Turnover	1	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.4567	15	5,352	0.76	646	$295.00	12%	95%	95%	2.4452	1
RestaChT2	Restaurant	Chiller	Turnover	2	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2784	15	5,352	1.944	1,661	$462.50	31%	95%	95%	4.0105	1
RestaChT3	Restaurant	Chiller	Turnover	3	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.4441	15	5,352	1.944	937	$416.00	18%	95%	95%	3.1968	1
RestaChN11	Restaurant	Chiller	New	11	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.4441	15	5,352	1.944	937	$416.00	18%	95%	95%	3.1968	1
RestaChT5	Restaurant	Chiller	Turnover	5	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.4746	15	5,352	0.053	267.6120	$127.00	5%	95%	75%	1.6664	1
RestaChT4	Restaurant	Chiller	Turnover	4	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1402	15	12,827	1.728	1,476	$207.00	12%	95%	95%	7.9651	1
RetaiChE1	Retail	Chiller	Early	1	Duct Sealing, down to 15%	Leakage of 29%	ton	$1.8103	15	5,248	0.010	52.4784	$95.00	1%	40%	$0.90	0.4369	0
RetaiChE2	Retail	Chiller	Early	2	Duct Insulation, Add R8	No Insulation	ton	$2.3819	15	5,248	0.010	52.4784	$125.00	1%	50%	95%	0.3320	0
RetaiChE3	Retail	Chiller	Early	3	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton	ton	$0.4764	15	5,248	0.052	262.3920	$125.00	5%	75%	75%	1.6600	1
RetaiChE4	Retail	Chiller	Early	4	Energy Recovery Units	No Energy Recovery	ton	$0.4287	15	5,248	0.207	1,049.6	$450.00	20%	75%	75%	1.8445	1
RetaiChE5	Retail	Chiller	Early	5	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.4343	7	5,248	0.166	840	$364.67	16%	75%	75%	0.8453	0
RetaiChE6	Retail	Chiller	Early	6	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$0.82	15	5,248	0.05	245	$200.00	5%	15%	95%	0.9679	0
RetaiChE7	Retail	Chiller	Early	7	Adding window shade film	No shade film	q ft window are	$7.0453	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.0371	0
RetaiChE8	Retail	Chiller	Early	8	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.2028	0
RetaiChE9	Retail	Chiller	Early	9	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.43	20	5,248	0.05	157	$225.00	3%	75%	95%	0.7492	0
RetaiChN1	Retail	Chiller	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	sq ft	$0.47	20	5,248	0.05	184	$87.00	4%	15%	95%	2.2215	1
RetaiChN2	Retail	Chiller	New	2	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.2028	0
RetaiChN3	Retail	Chiller	New	3	Adding reflective roof treatment	Std color roof	sq ft roof area	$4.50	20	5,248	0.05	10	$45.00	0%	100%	95%	0.6610	0
RetaiChN4	Retail	Chiller	New	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$2.37	20	5,248	0.05	54	$127.43	1%	45%	95%	0.5575	0
RetaiChN5	Retail	Chiller	New	5	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.4026	15	5,248	0.76	633	$255.00	12%	95%	95%	2.7930	1
RetaiChN6	Retail	Chiller	New	6	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2226	15	5,248	1.944	1,629	$362.50	31%	95%	95%	5.0521	1
RetaiChN7	Retail	Chiller	New	7	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1154	15	12,577	1.728	1,448	$167.00	12%	95%	95%	9.7479	1
RetaiChN8	Retail	Chiller	New	8	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.4383	15	5,248	0.052	262.3920	$115.00	5%	95%	75%	1.8044	1
RetaiChN9	Retail	Chiller	New	9	Energy Recovery Units	No Energy Recovery	ton	$0.2382	15	5,248	0.207	1,049.6	$250.00	20%	95%	75%	3.3201	1
RetaiChN10	Retail	Chiller	New	10	Duct Insulation, Add R8	No Insulation	ton	$2.3819	15	5,248	0.010	52.4784	$125.00	1%	100%	95%	0.3320	0
RetaiChT1	Retail	Chiller	Turnover	1	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.4658	15	5,248	0.76	633	$295.00	12%	95%	95%	2.4143	1
RetaiChT2	Retail	Chiller	Turnover	2	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2840	15	5,248	1.944	1,629	$462.50	31%	95%	95%	3.9598	1
RetaiChT3	Retail	Chiller	Turnover	3	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.4530	15	5,248	1.944	918	$416.00	18%	95%	95%	3.1650	1
RetaiChN11	Retail	Chiller	New	11	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.4530	15	5,248	1.944	918	$416.00	18%	95%	95%	3.1650	1
RetaiChT5	Retail	Chiller	Turnover	5	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.4840	15	5,248	0.052	262.3920	$127.00	5%	95%	75%	1.6339	1
RetaiChT4	Retail	Chiller	Turnover	4	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1430	15	12,577	1.728	1,448	$207.00	12%	95%	95%	7.8643	1
WarehChE1	Warehouse	Chiller	Early	1	Duct Sealing, down to 15%	Leakage of 29%	ton	$2.3412	15	4,058	0.008	40.5768	$95.00	1%	40%	$0.90	0.3378	0
WarehChE2	Warehouse	Chiller	Early	2	Duct Insulation, Add R8	No Insulation	ton	$3.0806	15	4,058	0.008	40.5768	$125.00	1%	50%	95%	0.2567	0
WarehChE3	Warehouse	Chiller	Early	3	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton	ton	$0.6161	15	4,058	0.040	202.8840	$125.00	5%	75%	75%	1.2836	1

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Fla
WarehChE4	Warehouse	Chiller	Early	4	Energy Recovery Units	No Energy Recovery	ton	$0.5545	15	4,058	0.160	811.5	$450.00	20%	75%	75%	1.4262	1
WarehChE5	Warehouse	Chiller	Early	5	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.5617	7	4,058	0.128	649	$364.67	16%	75%	75%	0.6536	0
WarehChE6	Warehouse	Chiller	Early	6	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$0.82	15	4,058	0.05	245	$200.00	6%	15%	95%	0.9679	0
WarehChE7	Warehouse	Chiller	Early	7	Adding window shade film	No shade film	q ft window are	$7.0453	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.0371	0
WarehChE8	Warehouse	Chiller	Early	8	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.2028	0
WarehChE9	Warehouse	Chiller	Early	9	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.85	20	4,058	0.05	122	$225.00	3%	75%	95%	0.5998	0
WarehChN1	Warehouse	Chiller	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	sq ft	$0.61	20	4,058	0.05	142	$87.00	4%	15%	95%	1.7707	1
WarehChN2	Warehouse	Chiller	New	2	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.2028	0
WarehChN3	Warehouse	Chiller	New	3	Adding reflective roof treatment	Std color roof	sq ft roof area	$4.50	20	4,058	0.05	10	$45.00	0%	100%	95%	0.6610	0
WarehChN4	Warehouse	Chiller	New	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.06	20	4,058	0.05	42	$127.43	1%	45%	95%	0.4672	0
WarehChN5	Warehouse	Chiller	New	5	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.5207	15	4,058	0.76	490	$255.00	12%	95%	95%	2.3847	1
WarehChN6	Warehouse	Chiller	New	6	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2879	15	4,058	1.944	1,259	$362.50	31%	95%	95%	4.3137	1
WarehChN7	Warehouse	Chiller	New	7	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1492	15	9,724	1.728	1,119	$167.00	12%	95%	95%	8.3231	1
WarehChN8	Warehouse	Chiller	New	8	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.5668	15	4,058	0.040	202.8840	$115.00	5%	95%	75%	1.3952	1
WarehChN9	Warehouse	Chiller	New	9	Energy Recovery Units	No Energy Recovery	ton	$0.3081	15	4,058	0.160	811.5	$250.00	20%	95%	75%	2.5671	1
WarehChN10	Warehouse	Chiller	New	10	Duct Insulation, Add R8	No Insulation	ton	$3.0806	15	4,058	0.008	40.5768	$125.00	1%	100%	95%	0.2567	0
WarehChT1	Warehouse	Chiller	Turnover	1	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.6024	15	4,058	0.76	490	$295.00	12%	95%	95%	2.0614	1
WarehChT2	Warehouse	Chiller	Turnover	2	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.3673	15	4,058	1.944	1,259	$462.50	31%	95%	95%	3.3810	1
WarehChT3	Warehouse	Chiller	Turnover	3	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.5858	15	4,058	1.944	710	$416.00	18%	95%	95%	2.8022	1
WarehChN11	Warehouse	Chiller	New	11	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.5858	15	4,058	1.944	710	$416.00	18%	95%	95%	2.8022	1
WarehChT5	Warehouse	Chiller	Turnover	5	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.6260	15	4,058	0.040	202.8840	$127.00	5%	95%	75%	1.2633	1
WarehChT4	Warehouse	Chiller	Turnover	4	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1849	15	9,724	1.728	1,119	$207.00	12%	95%	95%	6.7148	1
WarehHeT2	Warehouse	Heating	Turnover	2	7 day, two stage setback thermostat	Manual Thermostat - hp	ton	$0.10	10	3,774	0.008	566	$55.00	15%	100%	45%	4.9878	1
GroceHeT2	Grocery	Heating	Turnover	2	7 day, two stage setback thermostat	Manual Thermostat - hp	ton	$0.08	10	4,394	0.010	659	$55.00	15%	100%	45%	5.8063	1
HealtHeT2	Healthcare	Heating	Turnover	2	7 day, two stage setback thermostat	Manual Thermostat - hp	ton	$0.36	10	1,022	0.002	153	$55.00	15%	100%	45%	1.3505	1
InstiHeT2	Institutional	Heating	Turnover	2	7 day, two stage setback thermostat	Manual Thermostat - hp	ton	$0.12	10	3,128	0.007	469	$55.00	15%	100%	45%	4.1335	1
MiscHeT2	Misc	Heating	Turnover	2	7 day, two stage setback thermostat	Manual Thermostat - hp	ton	$0.10	10	3,639	0.008	546	$55.00	15%	100%	45%	4.8087	1
OfficHeT2	Office	Heating	Turnover	2	7 day, two stage setback thermostat	Manual Thermostat - hp	ton	$0.13	10	2,806	0.006	421	$55.00	15%	100%	45%	3.7089	1
RestaHeT2	Restaurant	Heating	Turnover	2	7 day, two stage setback thermostat	Manual Thermostat - hp	ton	$0.09	10	4,274	0.009	641	$55.00	15%	100%	45%	5.6477	1
RetaiHeT2	Retail	Heating	Turnover	2	7 day, two stage setback thermostat	Manual Thermostat - hp	ton	$0.08	10	4,394	0.010	659	$55.00	15%	100%	45%	5.8063	1
LodgiHeT2	Lodging	Heating	Turnover	2	7 day, two stage setback thermostat	Manual Thermostat - hp	ton	$0.07	10	5,319	0.012	798	$55.00	15%	100%	45%	7.0289	1
OfficMoE1	Office	Motors	Early	1	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.3257	1
OfficMoT23	Office	Motors	Turnover	23	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.3257	1
RestaMoE1	Restaurant	Motors	Early	1	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.3257	1
InstiMoT9	Institutional	Motors	Turnover	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.6348	15	84274	12.062	20478.6	$13,000.00	24%	90.0%	80%	1.4631	1
RestaMoT23	Restaurant	Motors	Turnover	23	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.3257	1
RetaiMoE1	Retail	Motors	Early	1	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.3257	1
RetaiMoT23	Retail	Motors	Turnover	23	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.3257	1
WarehMoE1	Warehouse	Motors	Early	1	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.3257	1
WarehMoT23	Warehouse	Motors	Turnover	23	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.3257	1

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
HealtChE1	Healthcare	Chiller	Early	1	Duct Sealing, down to 15%	Leakage of 29%	ton	$0.9204	15	10,322	0.020	103.2168	$95.00	1%	40%	$0.90	0.89	0
HealtChE2	Healthcare	Chiller	Early	2	Duct Insulation, Add R8	No Insulation	ton	$1.2110	15	10,322	0.020	103.2168	$125.00	1%	50%	95%	0.68	0
HealtChE3	Healthcare	Chiller	Early	3	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton	ton	$0.2422	15	10,322	0.102	516.0840	$125.00	5%	75%	75%	3.40	1
HealtChE4	Healthcare	Chiller	Early	4	Energy Recovery Units	No Energy Recovery	ton	$0.2180	15	10,322	0.407	2,064.3	$450.00	20%	75%	75%	3.78	1
HealtChE5	Healthcare	Chiller	Early	5	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.2208	7	10,322	0.326	1,651	$364.67	16%	75%	75%	1.57	1
HealtChE6	Healthcare	Chiller	Early	6	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$0.82	15	10,322	0.05	245	$200.00	2%	15%	95%	1.01	1
HealtChE7	Healthcare	Chiller	Early	7	Adding window shade film	No shade film	q ft window are	$7.0453	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.04	0
HealtChE8	Healthcare	Chiller	Early	8	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.21	0
HealtChE9	Healthcare	Chiller	Early	9	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$0.73	20	10,322	0.05	310	$225.00	3%	75%	95%	1.41	1
HealtChN1	Healthcare	Chiller	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	sq ft	$0.24	20	10,322	0.05	361	$87.00	4%	15%	95%	4.19	1
HealtChN2	Healthcare	Chiller	New	2	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.21	0
HealtChN3	Healthcare	Chiller	New	3	Adding reflective roof treatment	Std color roof	sq ft roof area	$4.50	20	10,322	0.05	10	$45.00	0%	100%	95%	0.95	0
HealtChN4	Healthcare	Chiller	New	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$1.20	20	10,322	0.05	106	$127.43	1%	45%	95%	1.02	1
HealtChN5	Healthcare	Chiller	New	5	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2047	15	10,322	0.76	1,246	$255.00	12%	95%	95%	5.21	1
HealtChN6	Healthcare	Chiller	New	6	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.1132	15	10,322	1.944	3,203	$362.50	31%	95%	95%	9.43	1
HealtChN7	Healthcare	Chiller	New	7	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.0587	15	24,736	1.728	2,847	$167.00	12%	95%	95%	18.19	1
HealtChN8	Healthcare	Chiller	New	8	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.2228	15	10,322	0.102	516.0840	$115.00	5%	95%	75%	3.69	1
HealtChN9	Healthcare	Chiller	New	9	Energy Recovery Units	No Energy Recovery	ton	$0.1211	15	10,322	0.407	2,064.3	$250.00	20%	95%	75%	6.80	1
HealtChN10	Healthcare	Chiller	New	10	Duct Insulation, Add R8	No Insulation	ton	$1.2110	15	10,322	0.020	103.2168	$125.00	1%	100%	95%	0.68	0
HealtChT1	Healthcare	Chiller	Turnover	1	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2368	15	10,322	0.76	1,246	$295.00	12%	95%	95%	4.51	1
HealtChT2	Healthcare	Chiller	Turnover	2	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.1444	15	10,322	1.944	3,203	$462.50	31%	95%	95%	7.39	1
HealtChT3	Healthcare	Chiller	Turnover	3	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.2303	15	10,322	1.944	1,806	$416.00	18%	95%	95%	5.85	1
HealtChN11	Healthcare	Chiller	New	11	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.2303	15	10,322	1.944	1,806	$416.00	18%	95%	95%	5.85	1
HealtChT5	Healthcare	Chiller	Turnover	5	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.2461	15	10,322	0.102	516.0840	$127.00	5%	95%	75%	3.35	1
HealtChT4	Healthcare	Chiller	Turnover	4	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.0727	15	24,736	1.728	2,847	$207.00	12%	95%	95%	14.68	1
OfficFlE1	Office	Fluorescent	Early	1	Premium Efficiency T8 Lighting Replacement (32W lamps with low	Replace (E) T12 Lamp - Bundle	Fixture	$0.5712	14	394	0.011	97	$55.58	25%	95%	41%	1.27	1
GroceFlT6	Grocery	Fluorescent	Turnover	6	LED Retrofit Tube	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$1.0146	6	163	0.007	64	$65.00	39%	40%	95%	0.27	0
OfficFlE2	Office	Fluorescent	Early	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2641	14	1,578	0.054	473	$125.00	30%	95%	80%	2.75	1
OfficFlE3	Office	Fluorescent	Early	3	Photocell dimming control	No prior dimming control	Photocell	$0.2852	9	1,578	0.091	789	$225.00	50%	95%	95%	1.43	1
LodgiInE6	Lodging	Incandescent	Early	6	Hotel Occupancy Sensors	No prior control	Per Room	$0.7447	10	240	0.019	168	$125.00	70%	90%	95%	0.64	0
OfficFlN1	Office	Fluorescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1781	15	20,340	0.234	2,034	$362.18	10%	95%	100%	4.38	1
OfficFlN2	Office	Fluorescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.3561	15	20,340	0.584	5,085	$1,810.90	25%	75%	100%	2.19	1
HealtHeE1	Healthcare	Heating	Early	1	Re-commissioning	Current Controls not working properly, setpoints not optimized,	sq ft	$0.2710	7	125,500	0.297	20,080	$5,441.68	16%	95%	75%	1.05	1
HealtHeE2	Healthcare	Heating	Early	2	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$4.44	20	298	0.05	45	$200.00	15%	10%	95%	0.38	0
HealtHeE3	Healthcare	Heating	Early	3	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.67	20	298	0.05	75	$125.00	25%	10%	95%	0.82	0
HealtHeE4	Healthcare	Heating	Early	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.75	20	298	0.05	34	$127.43	11%	10%	95%	0.51	0
HealtHeE5	Healthcare	Heating	Early	5	Humidification with High pressure, Ultrasonic devices	Electric Resistive Elements	unit	$0.1893	10	2,794	0.039	2,641	$500.00	95%	100%	95%	2.30	1
HealtHeN1	Healthcare	Heating	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5 - Electric Heat	sq ft	$1.93	20	298	0.05	45	$87.00	15%	10%	95%	0.86	0
WarehHIE1	Warehouse	HID	Early	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.5670	10	1,268	0.043	378	$214.50	30%	85%	80%	0.85	0
WarehHIE2	Warehouse	HID	Early	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.4472	10	1,856	0.077	671	$300.00	36%	85%	80%	1.07	1
WarehHIE3	Warehouse	HID	Early	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.5150	10	1,268	0.052	456	$235.00	36%	85%	80%	0.93	0
WarehHIE4	Warehouse	HID	Early	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.5081	10	1,856	0.074	640	$325.00	34%	85%	80%	0.94	0
WarehHIT5	Warehouse	HID	Turnover	5	Ceramic Metal Halide lamp	Replace non-ceramic lamp lamp 400 W	Lamp	$0.1282	4	1,560	0.031	273	$35.00	18%	85%	55%	1.40	1
WarehHIE8	Warehouse	HID	Early	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2465	10	5,070	0.175	1,521	$375.00	30%	85%	85%	1.94	1
WarehHIE9	Warehouse	HID	Early	9	Photocell dimming control	No prior dimming control	Photocell	$0.2170	10	5,070	0.291	2,535	$550.00	50%	85%	85%	2.21	1
WarehHIE10	Warehouse	HID	Early	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1972	10	5,070	0.058	507	$100.00	10%	85%	45%	2.43	1
WarehHIE7	Warehouse	HID	Early	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$1.2166	15	1,268	0.065	566	$688.00	45%	85%	80%	0.64	0
WarehHIT1	Warehouse	HID	Turnover	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.2921	10	1,268	0.043	378	$110.50	30%	85%	80%	1.64	1
WarehHIT2	Warehouse	HID	Turnover	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.3354	10	1,856	0.077	671	$225.00	36%	85%	80%	1.43	1
WarehHIT3	Warehouse	HID	Turnover	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.3178	10	1,268	0.052	456	$145.00	36%	85%	80%	1.51	1
WarehHIT4	Warehouse	HID	Turnover	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.4065	10	1,856	0.074	640	$260.00	34%	85%	80%	1.18	1
WarehHIT6	Warehouse	HID	Turnover	6	Multi Lamp Hard Wired CFL	Replace HID Fixure Drawing 400 W	Fixture	$0.5140	10	1,856	0.095	827	$425.00	45%	85%	55%	0.93	0
WarehHIT7	Warehouse	HID	Turnover	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.6631	15	1,268	0.065	566	$375.00	45%	85%	80%	1.18	1
OfficInE2	Office	Incandescent	Early	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1159	14	3,594	0.124	1,078	$125.00	30%	95%	80%	6.27	1
OfficInE3	Office	Incandescent	Early	3	Photocell dimming control	No prior dimming control	Photocell	$0.1252	9	3,594	0.207	1,797	$225.00	50%	95%	95%	3.26	1
GroceInN1	Grocery	Incandescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0572	15	9,629	0.111	963	$55.11	10%	95%	100%	13.64	1
HealtInN1	Healthcare	Incandescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0842	15	49,948	0.574	4,995	$420.44	10%	95%	100%	9.27	1
AlllLaN1	All	arge Appliance	New	1	EnergyStar vending machine	Standard vending machine	machine	$0.2672	15	3,619	0.140	1,310	$350.00	36%	100%	50%	2.89	1
AlllLaN2	All	arge Appliance	New	2	Beverage machine control	Vending machine with no sensor	machine	$0.1021	5	3,619	0.178	1,665	$170.00	46%	100%	50%	2.19	1
AlllLaN3	All	arge Appliance	New	3	Other cold product control	Vending machine with no sensor	machine	$0.1111	5	3,504	0.172	1,612	$179.00	46%	100%	50%	2.01	1
AlllLaN4	All	arge Appliance	New	4	Non-cooled snack control	Vending machine with no sensor	machine	$0.4671	5	745	0.037	343	$160.00	46%	100%	50%	0.48	0
AlllLaN5	All	arge Appliance	New	5	EnergyStar dishwasher	Std Dishwasher	dishwasher	$0.4015	12	250	0.015	137	$55.00	55%	100%	50%	1.50	1
AlllLaN6	All	arge Appliance	New	6	EnergyStar refrigerator	Std Refrigerator	refrigerator	$0.3000	12	750	0.011	100	$30.00	13%	100%	50%	2.01	1
AlllLaN7	All	arge Appliance	New	7	Low-temperature dish machine	High temp dish machine with booster heater	removed kW	$0.0634	15	17,451	0.894	8,362	$530.00	48%	100%	50%	12.20	1
AlllLaN8	All	arge Appliance	New	8	High-efficiency washer	Standard washer, electric hot water	washer	$0.4380	10	2,262	0.102	959	$420.00	42%	100%	50%	1.08	1
AlllLaN9	All	arge Appliance	New	9	High-efficiency coin-op washer w/o Electric Water Heat	Coin-op wash, w/out electric hot water	washer	$1.7872	10	1,180	0.025	235	$420.00	20%	100%	50%	0.26	0
AlllLaN10	All	arge Appliance	New	10	High-efficiency coin-op washer w/ Electric water heat	Coin-op wash, electric hot water	washer	$0.4380	10	2,262	0.102	959	$420.00	42%	100%	50%	1.08	1
AlllLaT1	All	arge Appliance	Turnover	1	EnergyStar vending machine	Standard vending machine	machine	$0.2672	15	3,619	0.140	1,310	$350.00	36%	100%	50%	2.89	1
AlllLaT2	All	arge Appliance	Turnover	2	Beverage machine control	Vending machine with no sensor	machine	$0.1021	5	3,619	0.178	1,665	$170.00	46%	100%	50%	2.19	1
AlllLaT3	All	arge Appliance	Turnover	3	Other cold product control	Vending machine with no sensor	machine	$0.1111	5	3,504	0.172	1,612	$179.00	46%	100%	50%	2.01	1
AlllLaT4	All	arge Appliance	Turnover	4	Non-cooled snack control	Vending machine with no sensor	machine	$0.4671	5	745	0.037	343	$160.00	46%	100%	50%	0.48	0
AlllLaT5	All	arge Appliance	Turnover	5	EnergyStar dishwasher	Std Dishwasher	dishwasher	$0.4015	12	250	0.015	137	$55.00	55%	100%	50%	1.50	1
AlllLaT6	All	arge Appliance	Turnover	6	EnergyStar refrigerator	Std Refrigerator	refrigerator	$0.3000	12	750	0.011	100	$30.00	13%	100%	50%	2.01	1
AlllLaT7	All	arge Appliance	Turnover	7	Low-temperature dish machine	High temp dish machine with booster heater	removed kW	$0.0634	15	17,451	0.894	8,362	$530.00	48%	100%	50%	12.20	1
AlllLaT8	All	arge Appliance	Turnover	8	High-efficiency washer	Standard washer, electric hot water	washer	$0.4380	10	2,262	0.102	959	$420.00	42%	100%	50%	1.08	1
AlllLaT9	All	arge Appliance	Turnover	9	High-efficiency coin-op washer w/o Electric Water Heat	Coin-op wash, w/out electric hot water	washer	$1.7872	10	1,180	0.025	235	$420.00	20%	100%	50%	0.26	0
AlllLaT10	All	arge Appliance	Turnover	10	High-efficiency coin-op washer w/ Electric water heat	Coin-op wash, electric hot water	washer	$0.4380	10	2,262	0.102	959	$420.00	42%	100%	50%	1.08	1
OfficMoN1	Office	Motors	New	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.3115	15	12921	0.0282	117.2	$154	0.91%	74.4%	100%	0.65	0
OfficMoN2	Office	Motors	New	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.4170	15	49501	0.0231	367.6	$521	0.74%	74.4%	100%	0.53	0
OfficMoN3	Office	Motors	New	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.2732	15	121517	0.0138	541.0	$689	0.45%	66.3%	100%	0.57	0
OfficMoN4	Office	Motors	New	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.5357	15	244333	0.0121	953.4	$511	0.39%	55.8%	100%	1.35	1
OfficMoN5	Office	Motors	New	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-500 HP	Motor	$0.4495	15	524346	0.0284	4796.5	$2,156	0.91%	55.8%	100%	1.60	1
OfficMoN6	Office	Motors	New	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.6710	15	81970	2.109	16,394	$11,000.00	20%	55.0%	100%	1.18	1
OfficMoN7	Office	Motors	New	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.5200	15	81970	6.257	25000.8	$13,000.00	31%	70.0%	100%	1.66	1
OfficMoN8	Office	Motors	New	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4941	15	81970	0.000	26312.3	$13,000.00	32%	80.0%	100%	1.45	1
OfficMoN9	Office	Motors	New	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5874	15	81970	6.257	22131.8	$13,000.00	27%	70.0%	100%	1.50	1
OfficMoN10	Office	Motors	New	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.5413	15	81970	4.542	24017.1	$13,000.00	29%	55.0%	100%	1.53	1
OfficMoN11	Office	Motors	New	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5874	15	81970	6.257	22131.8	$13,000.00	27%	30.0%	100%	1.50	1
OfficMoT1	Office	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.3115	15	12921	0.0282	117.2	$154	0.91%	74.4%	100%	0.65	0
OfficMoT2	Office	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.4170	15	49501	0.0231	367.6	$521	0.74%	74.4%	100%	0.53	0
OfficMoT3	Office	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.2732	15	121517	0.0138	541.0	$689	0.45%	66.3%	100%	0.57	0
OfficMoT4	Office	Motors	Turnover	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.5357	15	244333	0.0121	953.4	$511	0.39%	55.8%	100%	1.35	1
OfficMoT5	Office	Motors	Turnover	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-250 HP	Motor	$0.4495	15	524346	0.0284	4796.5	$2,156	0.91%	55.8%	100%	1.60	1
OfficMoT6	Office	Motors	Turnover	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.6710	15	81970	2.109	16,394	$11,000.00	20%	55.0%	80%	1.18	1
OfficMoT7	Office	Motors	Turnover	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.5200	15	81970	6.257	25000.8	$13,000.00	31%	90.0%	80%	1.66	1
OfficMoT8	Office	Motors	Turnover	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4941	15	81970	0.000	26312.3	$13,000.00	32%	90.0%	80%	1.45	1
OfficMoT9	Office	Motors	Turnover	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5874	15	81970	6.257	22131.8	$13,000.00	27%	90.0%	80%	1.50	1

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
OfficMoT10	Office	Motors	Turnover	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.5413	15	81970	4.542	24017.1	$13,000.00	29%	80.0%	80%	1.53	1
OfficMoT11	Office	Motors	Turnover	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5874	15	81970	6.257	22131.8	$13,000.00	27%	55.0%	80%	1.50	1
OfficMoT12	Office	Motors	Turnover	12	Motors: Rewind 125-200 HP	(E) Motor	Motor	$0.6069	15	245909	0.159	1235.7	$750	0.5%	35.0%	95%	1.30	1
OfficMoT13	Office	Motors	Turnover	13	Motors: Rewind 201-500 HP	(E) Motor	Motor	$0.7470	15	532803	0.344	2677.4	$2,000	0.5%	50.0%	95%	1.06	1
OfficMoT14	Office	Motors	Turnover	14	Motors: Rewind 20-50 HP	(E) Motor	Motor	$0.5601	15	50263	0.057	446.3	$250	0.9%	10.0%	95%	1.41	1
OfficMoT15	Office	Motors	Turnover	15	Motors: Rewind 500+ HP	(E) Motor	Motor	$0.6474	15	1229546	0.795	6178.6	$4,000	0.5%	70.0%	95%	1.22	1
OfficMoT16	Office	Motors	Turnover	16	Motors: Rewind 51-100 HP	(E) Motor	Motor	$0.6955	15	124291	0.092	718.9	$500	0.6%	20.0%	95%	1.14	1
OfficMoT17	Office	Motors	Turnover	17	Downsizing motor during retrofit	Larger hp standard motor	HP Reduction	$0.34	20	186,404	0.190	1,477	$500.00	0.79%	25%	95%	3.00	1
OfficMoN12	Office	Motors	New	12	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.57	1
OfficMoN13	Office	Motors	New	13	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.03	0
OfficMoN14	Office	Motors	New	14	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.70	1
OfficMoN15	Office	Motors	New	15	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.61	0
OfficMoT18	Office	Motors	Turnover	18	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.57	1
OfficMoT19	Office	Motors	Turnover	19	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.03	0
OfficMoT20	Office	Motors	Turnover	20	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.70	1
OfficMoT21	Office	Motors	Turnover	21	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.61	0
AllOfE1	All	ffice Equipmer	Early	1	PC network power management	No central control	PC	$0.14	5	410	0.023	215	$30.00	52.44%	75%	80%	1.60	1
AllOfE2	All	ffice Equipmer	Early	2	Occupancy sensor controls/Smart Strip	Computers, other plug loads	sensor	$0.60	5	413	0.010	124	$75.00	30.02%	55%	95%	0.36	0
AllOfN1	All	ffice Equipmer	New	1	ENERGY STAR® Office Equipment	Std Office Equipment	PC	$1.09	5	4,000	0.021	200	$218.00	5.00%	90%	80%	0.21	0
AllOfN2	All	ffice Equipmer	New	2	Energy Star - Water Cooler	Std Water Cooler	unit	$1.06	5	453	0.022	204	$215.67	45.08%	35%	80%	0.21	0
AllOfN3	All	ffice Equipmer	New	3	80 Plus® PC-desktop	Standard personal computer, desktop	PC	$0.19	5	410	0.014	130	$25.00	31.71%	100%	55%	1.16	1
AllOfN6	All	ffice Equipmer	New	6	Data Center - Server/Storage Virtualization	No Virtualization	unit	$1.76	5	4,818	0.452	4,227	$7,434	87.73%	70%	80%	0.13	0
AllOfT1	All	ffice Equipmer	Turnover	1	ENERGY STAR® Office Equipment	Std Office Equipment	PC	$1.09	5	4,000	0.021	200	$218.00	5.00%	90%	80%	0.21	0
AllOfT2	All	ffice Equipmer	Turnover	2	Energy Star - Water Cooler	Std Water Cooler	unit	$1.06	5	453	0.022	204	$215.67	45.08%	35%	80%	0.21	0
AllOfT3	All	ffice Equipmer	Turnover	3	80 Plus® PC-desktop	Standard personal computer, desktop	PC	$0.19	5	410	0.014	130	$25.00	31.71%	100%	55%	1.16	1
AllOfT6	All	ffice Equipmer	Turnover	6	Data Center - Server/Storage Virtualization	No Virtualization	unit	$1.76	5	4,818	0.452	4,227	$7,434	87.73%	70%	80%	0.13	0
HealtPaE1	Healthcare	Packaged DX	Early	1	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$3.13	20	1,589	0.05	64	$200.00	4%	15%	95%	0.46	0
HealtPaE2	Healthcare	Packaged DX	Early	2	Adding window shade film	No shade film	q ft window are	$7.05	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.03	0
HealtPaE3	Healthcare	Packaged DX	Early	3	Adding window shade screen	No shade screen	q ft window are	$3.90	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.20	0
HealtPaE4	Healthcare	Packaged DX	Early	4	Windows U<0.40, .55 SHGC	Existing window specifications	q ft window are	$1.40	30	2	0.000	0	$0.28	13%	50%	95%	0.93	0
HealtPaE5	Healthcare	Packaged DX	Early	5	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$2.12	20	1,589	0.05	106	$225.00	7%	95%	95%	0.58	0
HealtPaE7	Healthcare	Packaged DX	Early	7	Automated control system	Baseline DX	ton	$0.30	10	1,679	0.010	84	$25.00	5%	100%	65%	1.62	1
HealtPaE8	Healthcare	Packaged DX	Early	8	Duct Sealing, down to 15%	Leakage of 29%	ton	$7.92	15	1,589	0.05	12	$95.00	1%	45%	80%	0.39	0
HealtPaE9	Healthcare	Packaged DX	Early	9	Hotel Keycard Sensors	No prior controls	oom Controlle	$0.29	10	1,426	0.041	342	$100.00	24%	95%	80%	1.65	1
HealtPaE10	Healthcare	Packaged DX	Early	10	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	ton	$0.55	1	1,728	0.05	64	$35.00	4%	100%	45%	0.20	0
HealtPaE11	Healthcare	Packaged DX	Early	11	7 day, two stage setback thermostat	Manual Thermostat	ton	$0.44	10	1,589	0.015	125	$55.00	8%	100%	45%	1.10	1
HealtPaE13	Healthcare	Packaged DX	Early	13	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.22	7	1,589	0.05	254	$55.15	16%	95%	75%	1.60	1
HealtPaN1	Healthcare	Packaged DX	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	ton	$1.36	20	1,589	0.05	64	$87.00	4%	100%	95%	1.06	1
HealtPaN2	Healthcare	Packaged DX	New	2	Adding reflective roof treatment	Std color roof	ton	$4.50	20	1,589	0.05	10	$45.00	1%	100%	95%	0.95	0
HealtPaN3	Healthcare	Packaged DX	New	3	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$1.18	20	1,589	0.05	106	$125.00	7%	100%	95%	1.05	1
HealtPaN4	Healthcare	Packaged DX	New	4	Green Roof (New construction or roof replacement)	Std Roof	ton	$1.20	20	1,589	0.05	106	$127.43	7%	45%	95%	1.03	1
HealtPaN5	Healthcare	Packaged DX	New	5	Duct Insulation, Add R8	No Insulation	ton	$10.42	20	1,589	0.05	12	$125.00	1%	100%	95%	0.36	0
HealtPaN6	Healthcare	Packaged DX	New	6	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$0.92	20	1,369	0.04	98	$90.40	7%	100%	95%	1.34	1
HealtPaN7	Healthcare	Packaged DX	New	7	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$0.99	20	1,369	0.08	183	$180.81	13%	100%	95%	1.25	1
HealtPaN8	Healthcare	Packaged DX	New	8	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$1.06	20	1,369	0.12	257	$271.21	19%	100%	95%	1.17	1
HealtPaN9	Healthcare	Packaged DX	New	9	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$0.52	20	1,589	0.05	106	$55.00	7%	100%	95%	2.39	1
HealtPaN10	Healthcare	Packaged DX	New	10	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$0.52	20	1,618	0.06	135	$70.00	8%	100%	95%	2.39	1
HealtPaN11	Healthcare	Packaged DX	New	11	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$0.87	20	1,780	0.06	132	$115.13	7%	100%	95%	1.42	1
HealtPaN12	Healthcare	Packaged DX	New	12	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$1.09	20	1,835	0.04	90	$98.39	5%	100%	95%	1.13	1
HealtPaN13	Healthcare	Packaged DX	New	13	Ground Source HP Open - Water	Air Source Heat Pump	ton	$1.44	15	1,618	0.23	519	$ 750.0	32%	20%	95%	0.68	0
HealtPaN14	Healthcare	Packaged DX	New	14	Ground Source HP Closed	Air Source Heat Pump	ton	$2.59	15	1,618	0.035	290	$750.00	18%	100%	95%	0.30	0
HealtPaN15	Healthcare	Packaged DX	New	15	Air-side Economizer	No Economizer	ton	$0.71	15	1,589	0.028	238	$170.00	15%	75%	45%	1.10	1
HealtPaN16	Healthcare	Packaged DX	New	16	Energy Recovery Units	No Energy Recovery	ton	$0.56	15	1,589	0.038	318	$179.00	20%	100%	95%	1.39	1
HealtPaN17	Healthcare	Packaged DX	New	17	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$1.47	15	1,679	0.009	76	$110.89	5%	100%	95%	0.53	0
HealtPaT1	Healthcare	Packaged DX	Turnover	1	Duct Insulation, Add R8	No Insulation	ton	$10.42	15	1,589	0.05	12	$125.00	1%	100%	95%	0.30	0
HealtPaT2	Healthcare	Packaged DX	Turnover	2	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$0.92	20	1,369	0.04	98	$90.40	7%	100%	95%	1.34	1
HealtPaT3	Healthcare	Packaged DX	Turnover	3	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$0.99	20	1,369	0.08	183	$180.81	13%	100%	95%	1.25	1
HealtPaT4	Healthcare	Packaged DX	Turnover	4	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$1.06	20	1,369	0.12	257	$271.21	19%	100%	95%	1.17	1
HealtPaT5	Healthcare	Packaged DX	Turnover	5	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$0.52	20	1,589	0.05	106	$55.00	7%	100%	95%	2.39	1
HealtPaT6	Healthcare	Packaged DX	Turnover	6	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$0.52	20	1,618	0.06	135	$70.00	8%	100%	95%	2.39	1
HealtPaT7	Healthcare	Packaged DX	Turnover	7	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$0.87	20	1,780	0.06	132	$115.13	7%	100%	95%	1.42	1
HealtPaT8	Healthcare	Packaged DX	Turnover	8	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$1.09	20	1,835	0.04	90	$98.39	5%	100%	95%	1.13	1
HealtPaT9	Healthcare	Packaged DX	Turnover	9	Ground Source HP Open - Water	Air Source Heat Pump	ton	$1.44	15	1,618	0.23	519	$ 750.0	32%	5%	95%	0.68	0
HealtPaT10	Healthcare	Packaged DX	Turnover	10	Ground Source HP Closed	Air Source Heat Pump	ton	$2.59	15	1,618	0.035	290	$750.00	18%	100%	95%	0.30	0
HealtPaT11	Healthcare	Packaged DX	Turnover	11	Air-side Economizer	No Economizer	ton	$0.71	15	1,589	0.028	238	$170.00	15%	75%	45%	1.10	1
HealtPaT12	Healthcare	Packaged DX	Turnover	12	Energy Recovery Units	No Energy Recovery	ton	$0.56	15	1,589	0.038	318	$179.00	20%	100%	95%	1.39	1
HealtPaT13	Healthcare	Packaged DX	Turnover	13	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$1.47	15	1,679	0.009	76	$110.89	5%	100%	95%	0.53	0
AllReT1	All	Refrigeration	Turnover	1	Vertical night covers	No covers present	linear ft	$0.34	5	4,380	0.006	44	$15.00	1.00%	50%	95%	0.68	0
AllReT2	All	Refrigeration	Turnover	2	eCube	No eCube	unit	$0.33	9	5,431	0.162	1,222	$399.00	22.50%	95%	95%	1.27	1
AllReT3	All	Refrigeration	Turnover	3	Anti-sweat heat (ASH) controls - Freezer	ASH without controls	Per Door	$0.16	12	2,985	0.029	1,882	$300.00	63%	95%	85%	3.50	1
AllReT4	All	Refrigeration	Turnover	4	Anti-sweat heat (ASH) controls - Cooler	ASH without controls	Per Door	$0.29	12	1,621	0.028	1,023	$300.00	63%	95%	85%	1.92	1
AllReT5	All	Refrigeration	Turnover	5	Floating head pressure controller	Standard head pressure control	ton	$0.46	14	18,314	0.085	641	$296.00	4%	50%	95%	1.59	1
AllReN1	All	Refrigeration	New	1	Efficient, low-temp reach-in	Standard low-temp reach-in	unit	$0.07	12	5,431	0.222	1,671	$123.33	30.77%	95%	95%	8.38	1
AllReN2	All	Refrigeration	New	2	No-heat glass doors	Standard low-temp reach-in	door	$0.67	10	3,986	0.106	797	$537.50	20.00%	95%	95%	0.72	0
AllReN3	All	Refrigeration	New	3	High Efficiency Ice Makers	Standard Ice Maker	Each	$0.16	10	11,815	0.042	318	$50.00	3%	85%	85%	3.10	1
AllReN4	All	Refrigeration	New	4	Compressor VSD	Base Refrigeration System - Grocery		$0.35	13	5,436	0.101	761	$267.00	14%	75%	86%	1.94	1
AllReN5	All	Refrigeration	New	5	VFD on cooling tower fans	Base single-speed fan		$0.29	15	7158	0.681	5,132	$1,507.40	72%	25%	95%	2.69	1
AllReN6	All	Refrigeration	New	6	Reach-in Cooler: Shaded Pole to PSC: 1-37 Watt			$0.60	15	832	0.047	352	$212.50	42%	75%	49%	1.31	1
AllReN7	All	Refrigeration	New	7	Reach-in Cooler: PSC to ECM: 1-37 Watt			$0.54	15	467	0.022	169	$91.25	36%	75%	49%	1.46	1
AllReN8	All	Refrigeration	New	8	Reach-in Cooler: Shaded Pole to ECM: 1-37 Watt			$0.59	15	832	0.069	521	$306.25	63%	75%	49%	1.34	1
AllReN9	All	Refrigeration	New	9	Reach-in Freezer: Shaded Pole to ECM: 1-14 Watt			$0.49	15	832	0.082	622	$306.25	75%	75%	49%	1.60	1
AllReN10	All	Refrigeration	New	10	Reach-in Shaded Pole to PSC Evaporator Fan Motor			$0.55	15	832	0.051	386	$212.50	46%	75%	49%	1.44	1
AllReN11	All	Refrigeration	New	11	Reach-in PSC to ECM Evaporator Fan Motor			$0.49	15	467	0.025	185	$91.25	40%	75%	49%	1.60	1
AllReN12	All	Refrigeration	New	12	Reach-in Shaded Pole to ECM Evaporator Fan Motor			$0.54	15	832	0.076	571	$306.25	69%	75%	49%	1.47	1
AllReN13	All	Refrigeration	New	13	Walk-in Cooler: PSC to ECM: 16-49 Watt			$0.35	15	711	0.034	258	$91.25	36%	75%	49%	2.23	1
AllReN14	All	Refrigeration	New	14	Walk-in Freezer: PSC to ECM: 16-49 Watt			$0.30	15	711	0.041	309	$91.25	43%	75%	49%	2.68	1
AllReN15	All	Refrigeration	New	15	Walk-in Cooler: Shaded Pole to ECM: 16-49 Watt			$0.44	15	1,175	0.093	704	$306.25	60%	75%	49%	1.82	1
AllReN16	All	Refrigeration	New	16	Walk-in Freezer: Shaded Pole to ECM: 16-49 Watt			$0.36	15	1,175	0.112	842	$306.25	72%	75%	49%	2.17	1
AllReN17	All	Refrigeration	New	17	Walk-in PSC to ECM			$0.32	15	711	0.038	283	$91.25	40%	75%	49%	2.45	1
AllReN18	All	Refrigeration	New	18	Walk-in Shaded Pole to ECM			$0.40	15	1175	0.103	773	$306.25	66%	75%	49%	1.99	1
AllReT6	All	Refrigeration	Turnover	6	High Efficiency Ice Makers	Standard Ice Making		$0.12	10	11,815	0.159	1,197	$140.00	10%	85%	85%	4.16	1
AllReN19	All	Refrigeration	New	19	High Efficiency Ice Machine Self Contained	Standard Ice Machine Self Contained		$0.31	10	4,341	0.042	318	$100.00	7%	85%	85%	1.55	1
AllReT7	All	Refrigeration	Turnover	7	Fluorescent walk-in light fixture	Incandescent walk-in light fixture	fixture	$0.42	15	792	0.065	491	$206.00	62.00%	85%	45%	1.88	1
AllReT8	All	Refrigeration	Turnover	8	LED Case Lighting	T12 or T10 fluorescent lighting	Light Bar	$0.43	15	677	0.070	526	$225.00	77.78%	95%	75%	1.85	1
AllReT9	All	Refrigeration	Turnover	9	LED Case Lighting - Occupancy Sensor	No Occupancy Sensor	Light Bar	$0.15	8	667	0.003	20	$3.00	3.00%	15%	95%	2.48	1
AllReT10	All	Refrigeration	Turnover	10	Efficient, low-temp reach-in	Standard low-temp reach-in	unit	$0.07	12	5,431	0.222	1,671	$123.33	30.77%	85%	85%	8.38	1
AllReT11	All	Refrigeration	Turnover	11	High R-Value Glass Doors		door	$0.67	10	3,986	0.106	797	$537.50	20.00%	85%	85%	0.72	0

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
AllReT12	All	Refrigeration	Turnover	12	Compressor VSD retrofit	Base Refrigeration System - Grocery		$0.35	13	5,436	0.101	761	$267.00	14%	75%	86%	1.94	1
AllReT13	All	Refrigeration	Turnover	13	Quick acting freezer doors			$0.62	10	38,544	4.461	33,637	$20,966.00	87%	75%	86%	0.78	0
AllReT14	All	Refrigeration	Turnover	14	VFD on cooling tower fans	Base single-speed fan		$0.29	15	7158	0.681	5,132	$1,507.40	72%	35%	85%	2.69	1
AllReT15	All	Refrigeration	Turnover	15	Reach-in Cooler: Shaded Pole to PSC: 1-37 Watt			$0.60	15	832	0.047	352	$212.50	42%	75%	49%	1.31	1
AllReT16	All	Refrigeration	Turnover	16	Reach-in Cooler: PSC to ECM: 1-37 Watt			$0.54	15	467	0.022	169	$91.25	36%	75%	49%	1.46	1
AllReT17	All	Refrigeration	Turnover	17	Reach-in Cooler: Shaded Pole to ECM: 1-37 Watt			$0.59	15	832	0.069	521	$306.25	63%	75%	49%	1.34	1
AllReT18	All	Refrigeration	Turnover	18	Reach-in Freezer: Shaded Pole to ECM: 1-14 Watt			$0.49	15	832	0.082	622	$306.25	75%	75%	49%	1.60	1
AllReT19	All	Refrigeration	Turnover	19	Reach-in Shaded Pole to PSC Evaporator Fan Motor			$0.55	15	832	0.051	386	$212.50	46%	75%	49%	1.44	1
AllReT18	All	Refrigeration	Turnover	18	Reach-in PSC to ECM Evaporator Fan Motor			$0.49	15	467	0.025	185	$91.25	40%	75%	49%	1.60	1
AllReT20	All	Refrigeration	Turnover	20	Reach-in Shaded Pole to ECM Evaporator Fan Motor			$0.54	15	832	0.076	571	$306.25	69%	75%	49%	1.47	1
AllReT21	All	Refrigeration	Turnover	21	Walk-in Cooler: PSC to ECM: 16-49 Watt			$0.35	15	711	0.034	258	$91.25	36%	75%	49%	2.23	1
AllReT22	All	Refrigeration	Turnover	22	Walk-in Freezer: PSC to ECM: 16-49 Watt			$0.30	15	711	0.041	309	$91.25	43%	75%	49%	2.68	1
AllReT23	All	Refrigeration	Turnover	23	Walk-in Cooler: Shaded Pole to ECM: 16-49 Watt			$0.44	15	1,175	0.093	704	$306.25	60%	75%	49%	1.82	1
AllReT24	All	Refrigeration	Turnover	24	Walk-in Freezer: Shaded Pole to ECM: 16-49 Watt			$0.36	15	1,175	0.112	842	$306.25	72%	75%	49%	2.17	1
AllReT25	All	Refrigeration	Turnover	25	Walk-in PSC to ECM			$0.32	15	711	0.038	283	$91.25	40%	75%	49%	2.45	1
AllReT26	All	Refrigeration	Turnover	26	Walk-in Shaded Pole to ECM			$0.40	15	1175	0.103	773	$306.25	66%	75%	49%	1.99	1
AllSiT1	All	Signage	Turnover	1	Induction Street Lighting	Base HID Streetlighting	Fixture	$0.57	15	2,762	0.101	1,619	$925.00	59%	95%	95%	1.29	1
AllSiT2	All	Signage	Turnover	2	LED exit sign - 1 sided	Incandescent exit sign	Exit Sign	$0.15	15	175	0.024	158	$23.50	90%	65%	70%	5.30	1
AllSiT3	All	Signage	Turnover	3	LED exit sign -2 sided	Incandescent exit sign	Exit Sign	$0.16	15	350	0.048	228	$37.50	65%	65%	70%	5.01	1
AllSiT4	All	Signage	Turnover	4	Photoluminescent Exit Sign	Incandescent exit sign	Exit Sign	$0.17	15	175	0.011	175	$30.00	100%	50%	70%	4.30	1
AllSiT5	All	Signage	Turnover	5	LED or equivalent sign lighting -1 sided	Replace fluorescent sign lighting	Exit Sign	$0.28	15	79	0.009	61	$17.36	78%	48%	7%	2.78	1
AllSiT6	All	Signage	Turnover	6	LED or equivalent sign lighting -2 sided	Replace fluorescent sign lighting	Exit Sign	$0.12	15	175	0.002	140	$17.36	80%	48%	7%	5.72	1
AllSiT7	All	Signage	Turnover	7	LED Street Lighting	Std HID Street Lighting	Pole	$0.63	15	2,762	0.047	756	$475.00	27%	95%	95%	1.17	1
AllSiT8	All	Signage	Turnover	8	Red LED Traffic Light	Red Traffic Light	Signal	$0.37	10	332	0.019	299	$112.00	90%	95%	75%	1.18	1
AllSiT9	All	Signage	Turnover	9	Yellow LED Traffic Light	Yellow Standard Traffic Light	Lamp	$12.10	10	12	0.001	10	$121.00	83%	95%	75%	0.04	0
AllSiT10	All	Signage	Turnover	10	Green LED Traffic Light	Green Standard Traffic Light	Lamp	$0.77	10	260	0.014	226	$174.00	87%	95%	75%	0.58	0
AllSiT11	All	Signage	Turnover	11	Hand/Man LED	Pedestrian Standard	Lamp	$0.19	10	1,016	0.059	946	$182.00	93%	95%	75%	2.30	1
AllWaT1	All	Water Heating	Turnover	1	Ultrasonic Faucet Control	Manual Faucet Control	unit	$1.000	10	1,750	0.010	125	$125	7%	75%	75%	0.46	0
AllWaT2	All	Water Heating	Turnover	2	Faucet Aerators	Std Flow faucet	unit	$0.246	12	4,122	0.006	61	$15	6%	75%	75%	2.42	1
AllWaT3	All	Water Heating	Turnover	3	Hot Water (DHW) Pipe Insulation	No insulation present	10 ln ft	$0.292	14	4,122	0.011	124.00	$36.23	3%	75%	75%	2.43	1
AllWaT4	All	Water Heating	Turnover	4	Low-Flow Showerheads	Std Flow showerhead	unit	$0.108	9	4,122	0.042	461	$50	11%	75%	75%	3.64	1
AllWaT5	All	Water Heating	Turnover	5	Water Heater Thermostat Setback	Constant setpoint	unit	$0.029	2	4,122	0.053	577.09	$17	14%	75%	75%	3.14	1
AllWaN1	All	Water Heating	New	1	Ultrasonic Faucet Control	Manual Faucet Control	unit	$0.400	10	4,122	0.011	125	$50	3%	75%	75%	1.16	1
AllWaN2	All	Water Heating	New	2	Faucet Aerators	Std Flow faucet	unit	$0.082	12	4,122	0.006	61	$5	6%	75%	75%	7.26	1
AllWaN3	All	Water Heating	New	3	Hot Water (DHW) Pipe Insulation	No insulation present	10 ln ft	$0.292	14	4,122	0.011	124.00	$36.23	3%	75%	75%	2.43	1
AllWaN4	All	Water Heating	New	4	Low-Flow Showerheads	Std Flow showerhead	unit	$0.108	9	4,122	0.042	461	$50	11%	75%	75%	3.64	1
AllWaN5	All	Water Heating	New	5	Water Heater Thermostat Setback	Constant setpoint	unit	$0.029	2	4,122	0.053	577.09	$17	14%	75%	75%	3.14	1
AllWaN6	All	Water Heating	New	6	High Efficiency Water Heater (Electric) EF .93, 28-50 Gal	Std Efficiency water heater	unit	$0.541	14	4,122	0.012	133	$72	3%	75%	100%	1.31	1
AllWaN7	All	Water Heating	New	7	Heat Pump Water Heater (air source)	Base Water Heating	unit	$0.516	14	4,122	0.176	1,914.00	$988	46%	75%	100%	1.38	1
AllWaN8	All	Water Heating	New	8	Heat Recovery Unit	Base Water Heating	unit	$0.362	14	4,122	0.190	2,073	$750	50.3%	50%	95%	1.96	1
AllWaN9	All	Water Heating	New	9	Solar Water Heater	Base Water Heating	unit	$1.206	14	4,122	0.193	2,106	$2,540	82.0%	65%	95%	0.59	0
AllWaT6	All	Water Heating	Turnover	6	High Efficiency Water Heater (Electric) EF .93, 28-50 Gal	Std Efficiency water heater	unit	$0.541	14	4,122	0.012	133	$72	8.0%	100%	75%	1.31	1
AllWaT7	All	Water Heating	Turnover	7	Heat Pump Water Heater (air source)	Base Water Heating	unit	$0.516	14	4,122	0.176	1,914.00	$988	46%	75%	100%	1.38	1
AllWaT8	All	Water Heating	Turnover	8	Heat Recovery Unit	Base Water Heating	unit	$0.458	14	4,122	0.190	2,073	$950	50.3%	50%	95%	1.55	1
AllWaT9	All	Water Heating	Turnover	9	Solar Water Heater	Base Water Heating	unit	$1.401	14	4,122	0.193	2,106	$2,950	82.0%	65%	95%	0.51	0
GroceReN1	All	Refrigeration	New	20	Demand Defrost Electric	Base Refrigeration System - Grocery		$0.91	15	4	0.000	0	$0.05	1%	95%	92%	0.87	0
AllReT27	All	Refrigeration	Turnover	27	Demand Defrost Electric	Base Refrigeration System - Grocery		$0.91	15	4	0.000	0	$0.05	1%	95%	92%	0.87	0
GroceReN3	All	Refrigeration	New	21	Demand Hot Gas Defrost	Base Refrigeration System - Grocery		$0.35	15	4	0.000	0	$0.05	3%	95%	92%	2.23	1
AllReT28	All	Refrigeration	Turnover	28	Demand Hot Gas Defrost	Base Refrigeration System - Grocery		$0.35	15	4	0.000	0	$0.05	3%	95%	92%	2.23	1
GroceReN4	All	Refrigeration	New	22	Efficient compressor motor - scroll	Base Refrigeration System - Grocery		$0.09	15	15,825	0.084	633	$60.00	4%	95%	92%	8.34	1
AllReT29	All	Refrigeration	Turnover	29	Efficient compressor motor - scroll	Base Refrigeration System - Grocery		$0.09	15	15,825	0.084	633	$60.00	4%	95%	92%	8.34	1
GroceReN6	All	Refrigeration	New	23	High R-Value Glass Doors	Base Refrigeration System - Grocery	Door	$0.67	10	3,986	0.106	797	$537.50	20.00%	95%	92%	0.72	0
GroceReN7	All	Refrigeration	New	24	Refrigeration Commissioning	Base Refrigeration System - Grocery	Per refigerator	$0.31	7	8,800	0.187	1,408	$440.00	16%	95%	92%	1.05	1
AllReE1	All	Refrigeration	Early	1	Refrigeration Commissioning	Base Refrigeration System - Grocery	Per refigerator	$0.25	7	8,800	0.117	880	$220.00	10%	95%	92%	1.31	1
GroceReN8	All	Refrigeration	New	25	Strip curtains for walk-ins	Base Refrigeration System - Grocery		$0.50	15	29,900	0.079	598	$300.00	2%	45%	78%	1.57	1
AllReT30	All	Refrigeration	Turnover	30	Strip curtains for walk-ins	Base Refrigeration System - Grocery		$0.50	15	29,900	0.079	598	$300.00	2%	45%	78%	1.57	1
HealtPaN18	Healthcare	Packaged DX	New	18	Automated control system	Baseline DX	ton	$0.30	10	1,679	0.010	84	$25.00	5%	100%	65%	1.62	1
HealtPaN19	Healthcare	Packaged DX	New	19	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$0.55	10	1,426	0.009	78	$43.00	5%	100%	95%	0.87	0
HealtPaT15	Healthcare	Packaged DX	Turnover	15	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$0.55	10	1,426	0.009	78	$43.00	5%	100%	95%	0.87	0
AllCoN1	All	Cooking	New	1	Commercial Hot Food Holding Cabinets (Energy Star)	Standard Cabinet	Each	$0.94	12	23,411	0.187	1,592	$1,500.00	7%	40%	95%	0.65	0
AllCoN2	All	Cooking	New	2	High Efficiency Fryers (Energy Star)	Standard Fryer	Each	$5.45	12	18,196	0.027	233	$1,271.00	1%	40%	95%	0.11	0
AllCoN3	All	Cooking	New	3	High Efficiency Griddle	Standard Griddle	Each	$0.66	12	17,056	0.304	2,595	$1,700.00	15%	40%	95%	0.93	0
AllCoN4	All	Cooking	New	4	High Efficiency Induction Cooking	Standard Cooking	Each	$1.04	12	29,376	0.248	2,118	$2,213.00	7%	40%	95%	0.59	0
AllCoN5	All	Cooking	New	5	Electric Steam cooker	Standard Cooker	Each	$0.40	12	46,813	0.439	3,745	$1,500.00	8%	40%	95%	1.53	1
AllCoN6	All	Cooking	New	6	Electric convection oven	Standard Oven	Each	$1.20	15	12,193	0.265	2,262	$2,713.00	19%	40%	95%	0.65	0
AllCoN7	All	Cooking	New	7	Electric combination oven	Standard Oven	Each	$1.12	12	39,353	1.769	15,095	$16,884.00	38%	40%	95%	0.55	0
AllCoT1	All	Cooking	Turnover	1	Commercial Hot Food Holding Cabinets (Energy Star)	Standard Cabinet	Each	$0.94	12	23,411	0.187	1,592	$1,500.00	7%	40%	95%	0.65	0
AllCoT2	All	Cooking	Turnover	2	High Efficiency Fryers (Energy Star)	Standard Fryer	Each	$5.45	12	18,196	0.027	233	$1,271.00	1%	40%	95%	0.11	0
AllCoT3	All	Cooking	Turnover	3	High Efficiency Griddle	Standard Griddle	Each	$0.66	12	17,056	0.304	2,595	$1,700.00	15%	40%	95%	0.93	0
AllCoT4	All	Cooking	Turnover	4	High Efficiency Induction Cooking	Standard Cooking	Each	$1.04	12	29,376	0.248	2,118	$2,213.00	7%	40%	95%	0.59	0
AllCoT5	All	Cooking	Turnover	5	Electric Steam cooker	Standard Cooker	Each	$0.40	12	46,813	0.439	3,745	$1,500.00	8%	40%	95%	1.53	1
AllCoT6	All	Cooking	Turnover	6	Electric convection oven	Standard Oven	Each	$1.20	15	12,193	0.265	2,262	$2,713.00	19%	40%	95%	0.65	0
AllCoT7	All	Cooking	Turnover	7	Electric combination oven	Standard Oven	Each	$1.12	12	39,353	1.769	15,095	$16,884.00	38%	40%	95%	0.55	0
InstiFlE1	Institutional	Fluorescent	Early	1	Premium Efficiency T8 Lighting Replacement (32W lamps with low	Replace (E) T12 Lamp - Bundle	Fixture	$0.6076	15	371	0.010	91	$55.38	25%	95%	11%	1.28	1
InstiFlE2	Institutional	Fluorescent	Early	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2809	14	1,483	0.051	445	$125.00	30%	95%	80%	2.59	1
InstiFlE3	Institutional	Fluorescent	Early	3	Photocell dimming control	No prior dimming control	Photocell	$0.3034	9	1,483	0.085	742	$225.00	50%	95%	95%	1.35	1
GroceFlE1	Grocery	Fluorescent	Early	1	Premium Efficiency T8 Lighting Replacement (32W lamps with low	Replace (E) T12 Lamp - Bundle	Fixture	$0.2754	11	818	0.023	201	$55.38	25%	95%	55%	1.99	1
GroceFlE2	Grocery	Fluorescent	Early	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1273	14	3,272	0.113	982	$125.00	30%	95%	80%	5.71	1
GroceFlE3	Grocery	Fluorescent	Early	3	Photocell dimming control	No prior dimming control	Photocell	$0.1375	9	3,272	0.188	1,636	$225.00	50%	95%	95%	2.97	1
LodgiFlE1	Lodging	Fluorescent	Early	1	Premium Efficiency T8 Lighting Replacement (32W lamps with low	Replace (E) T12 Lamp - Bundle	Fixture	$0.3246	10	694	0.020	171	$55.38	25%	95%	55%	1.48	1
LodgiFlE2	Lodging	Fluorescent	Early	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1501	14	2,776	0.096	833	$125.00	30%	95%	80%	4.84	1
LodgiFlE3	Lodging	Fluorescent	Early	3	Photocell dimming control	No prior dimming control	Photocell	$0.1621	9	2,776	0.160	1,388	$225.00	50%	95%	95%	2.52	1
HealtFlE1	Healthcare	Fluorescent	Early	1	Premium Efficiency T8 Lighting Replacement (32W lamps with low	Replace (E) T12 Lamp - Bundle	Fixture	$0.2970	11	759	0.021	186	$55.38	25%	95%	44%	1.84	1
HealtFlE2	Healthcare	Fluorescent	Early	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1373	14	3,034	0.105	910	$125.00	30%	95%	80%	5.29	1
HealtFlE3	Healthcare	Fluorescent	Early	3	Photocell dimming control	No prior dimming control	Photocell	$0.1483	9	3,034	0.174	1,517	$225.00	50%	95%	95%	2.75	1
RestaFlE1	Restaurant	Fluorescent	Early	1	Premium Efficiency T8 Lighting Replacement (32W lamps with low	Replace (E) T12 Lamp - Bundle	Fixture	$0.3672	11	614	0.017	151	$55.38	25%	95%	49%	1.49	1
RestaFlE2	Restaurant	Fluorescent	Early	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1698	14	2,454	0.085	736	$125.00	30%	95%	80%	4.28	1
RestaFlE3	Restaurant	Fluorescent	Early	3	Photocell dimming control	No prior dimming control	Photocell	$0.1834	9	2,454	0.141	1,227	$225.00	50%	95%	95%	2.23	1
RetaiFlE1	Retail	Fluorescent	Early	1	Premium Efficiency T8 Lighting Replacement (32W lamps with low	Replace (E) T12 Lamp - Bundle	Fixture	$0.3810	11	591	0.017	145	$55.38	25%	95%	55%	1.44	1
RetaiFlE2	Retail	Fluorescent	Early	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1761	14	2,365	0.082	710	$125.00	30%	95%	80%	4.13	1
RetaiFlE3	Retail	Fluorescent	Early	3	Photocell dimming control	No prior dimming control	Photocell	$0.1902	9	2,365	0.136	1,183	$225.00	50%	95%	95%	2.15	1
WarehFlE1	Warehouse	Fluorescent	Early	1	Premium Efficiency T8 Lighting Replacement (32W lamps with low	Replace (E) T12 Lamp - Bundle	Fixture	$0.4113	12	548	0.015	135	$55.38	25%	95%	35%	1.48	1
WarehFlE2	Warehouse	Fluorescent	Early	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1901	14	2,191	0.076	657	$125.00	30%	95%	80%	3.82	1
WarehFlE3	Warehouse	Fluorescent	Early	3	Photocell dimming control	No prior dimming control	Photocell	$0.2054	9	2,191	0.126	1,096	$225.00	50%	95%	95%	1.99	1
MiscFlE1	Misc	Fluorescent	Early	1	Premium Efficiency T8 Lighting Replacement (32W lamps with low	Replace (E) T12 Lamp - Bundle	Fixture	$0.3764	11	599	0.017	147	$55.38	25%	95%	44%	1.45	1
OffieHIN1	Office	HID	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1781	15	621	0.007	62	$11.06	10%	95%	100%	4.38	1
OffieHIN2	Office	HID	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.3561	15	621	0.018	155	$55.32	25%	85%	100%	2.19	1

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
OfficInN1	Office	Incandescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1781	15	2,727	0.031	273	$48.56	10%	95%	100%	4.38	1
OfficInN2	Office	Incandescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.3561	15	2,727	0.078	682	$242.78	25%	75%	100%	2.19	1
InstiFlN1	Institutional	Fluorescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1722	15	62,741	0.721	6,274	$1,080.26	10%	95%	100%	4.53	1
InstiFlN2	Institutional	Fluorescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.3444	15	62,741	1.803	15,685	$5,401.30	25%	75%	100%	2.27	1
HealtFlN1	Healthcare	Fluorescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0842	15	441,728	5.077	44,173	$3,718.25	10%	95%	100%	9.27	1
HealtFlN2	Healthcare	Fluorescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1684	15	441,728	12.691	110,432	$18,591.24	25%	75%	100%	4.64	1
GroceFlN1	Grocery	Fluorescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0572	15	60,020	0.690	6,002	$343.52	10%	95%	100%	13.64	1
GroceFlN2	Grocery	Fluorescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1145	15	60,020	1.724	15,005	$1,717.60	25%	75%	100%	6.82	1
LodgiFlN1	Lodging	Fluorescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1012	15	303,563	3.489	30,356	$3,071.87	10%	95%	100%	7.71	1
LodgiFlN2	Lodging	Fluorescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.2024	15	303,563	8.722	75,891	$15,359.37	25%	75%	100%	3.86	1
RestaFlN1	Restaurant	Fluorescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0763	15	13,140	0.151	1,314	$100.27	10%	95%	100%	10.23	1
RestaFlN2	Restaurant	Fluorescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1526	15	13,140	0.378	3,285	$501.37	25%	75%	100%	5.11	1
RetaiFlN1	Retail	Fluorescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0792	15	60,011	0.690	6,001	$475.15	10%	95%	100%	9.86	1
RetaiFlN2	Retail	Fluorescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1584	15	60,011	1.724	15,003	$2,375.74	25%	75%	100%	4.93	1
WarehFlN1	Warehouse	Fluorescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1603	15	44,747	0.514	4,475	$717.11	10%	95%	100%	4.87	1
WarehFlN2	Warehouse	Fluorescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.3205	15	44,747	1.286	11,187	$3,585.53	25%	75%	100%	2.43	1
GroceHIN1	Grocery	HID	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0572	15	3,937	0.045	394	$22.53	10%	95%	100%	13.64	1
GroceHIN2	Grocery	HID	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1145	15	3,937	0.113	984	$112.66	25%	85%	100%	6.82	1
InstiHIN1	Institutional	HID	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1722	15	2,159	0.025	216	$37.18	10%	95%	100%	4.53	1
InstiHIN2	Institutional	HID	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.3444	15	2,159	0.062	540	$185.89	25%	85%	100%	2.27	1
HealtHIN1	Healthcare	HID	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0842	15	15,203	0.175	1,520	$127.97	10%	95%	100%	9.27	1
HealtHIN2	Healthcare	HID	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1684	15	15,203	0.437	3,801	$639.84	25%	85%	100%	4.64	1
LodgiHIN1	Lodging	HID	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1012	15	10,539	0.121	1,054	$106.65	10%	95%	100%	7.71	1
LodgiHIN2	Lodging	HID	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.2024	15	10,539	0.303	2,635	$533.27	25%	85%	100%	3.86	1
RestaHIN1	Restaurant	HID	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0763	15	459	0.005	46	$3.51	10%	95%	100%	10.23	1
RestaHIN2	Restaurant	HID	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1526	15	459	0.013	115	$17.53	25%	85%	100%	5.11	1
RetaiHIN1	Retail	HID	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0792	15	10,313	0.119	1,031	$81.65	10%	95%	100%	9.86	1
RetaiHIN2	Retail	HID	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1584	15	10,313	0.296	2,578	$408.25	25%	85%	100%	4.93	1
WarehHIN1	Warehouse	HID	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1603	15	7,843	0.090	784	$125.69	10%	95%	100%	4.87	1
WarehHIN2	Warehouse	HID	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.3205	15	7,843	0.225	1,961	$628.45	25%	85%	100%	2.43	1
MiscHIN1	Misc	HID	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0988	15	4,211	0.048	421	$41.61	10%	95%	100%	7.90	1
MiscHIN2	Misc	HID	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1976	15	4,211	0.121	1,053	$208.03	25%	85%	100%	3.95	1
MiscFlN1	Misc	Fluorescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0988	15	121,285	1.394	12,128	$1,198.38	10%	95%	100%	7.90	1
MiscFlN2	Misc	Fluorescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1976	15	121,285	3.485	30,321	$5,991.88	25%	75%	100%	3.95	1
InstiInN1	Institutional	Incandescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1722	15	7,094	0.082	709	$122.15	10%	95%	100%	4.53	1
InstiInN2	Institutional	Incandescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.3444	15	7,094	0.204	1,774	$610.75	25%	75%	100%	2.27	1
GroceInT1	Grocery	Incandescent	Turnover	1	CFL Lamp - 21 Watt	EISA - 75 Watt equivalent - 53W	Lamp	$0.0161	5	309	0.021	186	$3.00	60%	75%	50%	14.17	1
HealtInT1	Healthcare	Incandescent	Turnover	1	CFL Lamp - 21 Watt	EISA - 75 Watt equivalent - 53W	Lamp	$0.0174	5	286	0.020	173	$3.00	60%	75%	50%	13.14	1
GroceInN2	Grocery	Incandescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1145	15	9,629	0.277	2,407	$275.57	25%	75%	100%	6.82	1
HealtInN2	Healthcare	Incandescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1684	15	49,948	1.435	12,487	$2,102.19	25%	75%	100%	4.64	1
LodgiInN1	Lodging	Incandescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1012	15	72,424	0.832	7,242	$732.89	10%	95%	100%	7.71	1
LodgiInN2	Lodging	Incandescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.2024	15	72,424	2.081	18,106	$3,664.46	25%	75%	100%	3.86	1
RestaInN1	Restaurant	Incandescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0763	15	8,649	0.099	865	$66.01	10%	95%	100%	10.23	1
RestaInN2	Restaurant	Incandescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1526	15	8,649	0.249	2,162	$330.03	25%	75%	100%	5.11	1
RetaiInN1	Retail	Incandescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0792	15	9,628	0.111	963	$76.23	10%	95%	100%	9.86	1
RetaiInN2	Retail	Incandescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1584	15	9,628	0.277	2,407	$381.16	25%	75%	100%	4.93	1
WarehInN1	Warehouse	Incandescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1603	15	5,975	0.069	598	$95.76	10%	95%	100%	4.87	1
WarehInN2	Warehouse	Incandescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.3205	15	5,975	0.172	1,494	$478.78	25%	75%	100%	2.43	1
MiscInN1	Misc	Incandescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0988	15	28,936	0.333	2,894	$285.91	10%	95%	100%	7.90	1
MiscInN2	Misc	Incandescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1976	15	28,936	0.831	7,234	$1,429.55	25%	75%	100%	3.95	1
MiscFlE2	Misc	Fluorescent	Early	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1740	14	2,394	0.083	718	$125.00	30%	95%	80%	4.18	1
MiscFlE3	Misc	Fluorescent	Early	3	Photocell dimming control	No prior dimming control	Photocell	$0.1879	9	2,394	0.138	1,197	$225.00	50%	95%	95%	2.17	1
MiscFlN4	Misc	Fluorescent	New	4	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0696	14	2,394	0.083	718	$50.00	30%	95%	15%	10.44	1
MiscFlN3	Misc	Fluorescent	New	3	Photocell dimming control	No prior dimming control	Photocell	$0.1253	9	2,394	0.138	1,197	$150.00	50%	95%	75%	3.26	1
InstiFlN4	Institutional	Fluorescent	New	4	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1124	14	1,483	0.051	445	$50.00	30%	95%	15%	6.47	1
InstiFlN3	Institutional	Fluorescent	New	3	Photocell dimming control	No prior dimming control	Photocell	$0.2022	9	1,483	0.085	742	$150.00	50%	95%	75%	2.02	1
GroceFlN4	Grocery	Fluorescent	New	4	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0509	14	3,272	0.113	982	$50.00	30%	95%	15%	14.27	1
GroceFlN3	Grocery	Fluorescent	New	3	Photocell dimming control	No prior dimming control	Photocell	$0.0917	9	3,272	0.188	1,636	$150.00	50%	95%	75%	4.45	1
HealtFlN4	Healthcare	Fluorescent	New	4	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0549	14	3,034	0.105	910	$50.00	30%	95%	15%	13.24	1
HealtFlN3	Healthcare	Fluorescent	New	3	Photocell dimming control	No prior dimming control	Photocell	$0.0989	9	3,034	0.174	1,517	$150.00	50%	95%	75%	4.13	1
LodgiFlN4	Lodging	Fluorescent	New	4	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0600	14	2,776	0.096	833	$50.00	30%	95%	15%	12.11	1
LodgiFlN3	Lodging	Fluorescent	New	3	Photocell dimming control	No prior dimming control	Photocell	$0.1081	9	2,776	0.160	1,388	$150.00	50%	95%	75%	3.78	1
OfficFlN4	Office	Fluorescent	New	4	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1056	14	1,578	0.054	473	$50.00	30%	95%	15%	6.88	1
OfficFlN3	Office	Fluorescent	New	3	Photocell dimming control	No prior dimming control	Photocell	$0.1901	9	1,578	0.091	789	$150.00	50%	95%	75%	2.15	1
RestaFlN4	Restaurant	Fluorescent	New	4	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0679	14	2,454	0.085	736	$50.00	30%	95%	15%	10.71	1
RestaFlN3	Restaurant	Fluorescent	New	3	Photocell dimming control	No prior dimming control	Photocell	$0.1222	9	2,454	0.141	1,227	$150.00	50%	95%	75%	3.34	1
RetaiFlN4	Retail	Fluorescent	New	4	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0705	14	2,365	0.082	710	$50.00	30%	95%	15%	10.32	1
RetaiFlN3	Retail	Fluorescent	New	3	Photocell dimming control	No prior dimming control	Photocell	$0.1268	9	2,365	0.136	1,183	$150.00	50%	95%	75%	3.22	1
WarehFlN4	Warehouse	Fluorescent	New	4	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0761	14	2,191	0.076	657	$50.00	30%	95%	15%	9.56	1
WarehFlN3	Warehouse	Fluorescent	New	3	Photocell dimming control	No prior dimming control	Photocell	$0.1369	9	2,191	0.126	1,096	$150.00	50%	95%	75%	2.98	1
MiscFlT2	Misc	Fluorescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0696	14	2,394	0.083	718	$50.00	30%	95%	80%	10.44	1
MiscFlT3	Misc	Fluorescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.1253	9	2,394	0.138	1,197	$150.00	50%	95%	95%	3.26	1
InstiFlT2	Institutional	Fluorescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1124	14	1,483	0.051	445	$50.00	30%	95%	80%	6.47	1
InstiFlT3	Institutional	Fluorescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.2022	9	1,483	0.085	742	$150.00	50%	95%	95%	2.02	1
GroceFlT2	Grocery	Fluorescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0509	14	3,272	0.113	982	$50.00	30%	95%	80%	14.27	1
GroceFlT3	Grocery	Fluorescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.0917	9	3,272	0.188	1,636	$150.00	50%	95%	95%	4.45	1
HealtFlT2	Healthcare	Fluorescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0549	14	3,034	0.105	910	$50.00	30%	95%	80%	13.24	1
HealtFlT3	Healthcare	Fluorescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.0989	9	3,034	0.174	1,517	$150.00	50%	95%	95%	4.13	1
LodgiFlT2	Lodging	Fluorescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0600	14	2,776	0.096	833	$50.00	30%	95%	80%	12.11	1
LodgiFlT3	Lodging	Fluorescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.1081	9	2,776	0.160	1,388	$150.00	50%	95%	95%	3.78	1
OfficFlT2	Office	Fluorescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1056	14	1,578	0.054	473	$50.00	30%	95%	80%	6.88	1
OfficFlT3	Office	Fluorescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.1901	9	1,578	0.091	789	$150.00	50%	95%	95%	2.15	1
RestaFlT2	Restaurant	Fluorescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0679	14	2,454	0.085	736	$50.00	30%	95%	80%	10.71	1
RestaFlT3	Restaurant	Fluorescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.1222	9	2,454	0.141	1,227	$150.00	50%	95%	95%	3.34	1
RetaiFlT2	Retail	Fluorescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0705	14	2,365	0.082	710	$50.00	30%	95%	80%	10.32	1
RetaiFlT3	Retail	Fluorescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.1268	9	2,365	0.136	1,183	$150.00	50%	95%	95%	3.22	1
WarehFlT2	Warehouse	Fluorescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0761	14	2,191	0.076	657	$50.00	30%	95%	80%	9.56	1
WarehFlT3	Warehouse	Fluorescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.1369	9	2,191	0.126	1,096	$150.00	50%	95%	95%	2.98	1
GroceFlT1	Grocery	Fluorescent	Turnover	1	Premium Efficiency T8 Lighting Replacement (28W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.0650	6	163	0.004	36	$2.32	22%	90%	95%	4.24	1
GroceFlT4	Grocery	Fluorescent	Turnover	4	Premium Efficiency T8 Lighting Replacement (25W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.0990	6	163	0.002	20	$2.02	13%	60%	95%	2.78	1
GroceFlT5	Grocery	Fluorescent	Turnover	5	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.0307	11	582	0.010	83	$2.55	14%	75%	95%	17.81	1
GroceFlE4	Grocery	Fluorescent	Early	4	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.7257	11	582	0.010	83	$60.38	14%	75%	95%	0.75	0
HealtFlT6	Healthcare	Fluorescent	Turnover	6	LED Retrofit Tube	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$1.0943	7	151	0.007	59	$65.00	39%	40%	95%	0.29	0
HealtFlT1	Healthcare	Fluorescent	Turnover	1	Premium Efficiency T8 Lighting Replacement (28W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.0701	7	151	0.004	33	$2.32	22%	90%	95%	4.58	1
HealtFlT4	Healthcare	Fluorescent	Turnover	4	Premium Efficiency T8 Lighting Replacement (25W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.1068	7	151	0.002	19	$2.02	13%	60%	95%	3.01	1
HealtFlT5	Healthcare	Fluorescent	Turnover	5	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.0331	11	540	0.009	77	$2.55	14%	75%	95%	16.51	1
HealtFlE4	Healthcare	Fluorescent	Early	4	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.7769	11	540	0.009	77	$59.93	14%	75%	95%	0.70	0

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
InstlFIT6	Institutional	Fluorescent	Turnover	6	LED Retrofit Tube	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$2.2383	15	74	0.003	29	$65.00	39%	40%	95%	0.35	0
InstlFIT1	Institutional	Fluorescent	Turnover	1	Premium Efficiency T8 Lighting Replacement (28W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.1433	15	74	0.002	16	$2.32	22%	90%	95%	5.44	1
InstlFIT4	Institutional	Fluorescent	Turnover	4	Premium Efficiency T8 Lighting Replacement (25W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.2184	15	74	0.001	9	$2.02	13%	60%	95%	3.57	1
InstlFIT5	Institutional	Fluorescent	Turnover	5	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.0677	11	264	0.004	38	$2.55	14%	75%	95%	8.07	1
InstlFIE4	Institutional	Fluorescent	Early	4	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.9281	11	264	0.004	38	$35.00	14%	75%	95%	0.59	0
LodgiFIT6	Lodging	Fluorescent	Turnover	6	LED Retrofit Tube	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$1.1959	8	138	0.006	54	$65.00	39%	40%	95%	0.31	0
LodgiFIT1	Lodging	Fluorescent	Turnover	1	Premium Efficiency T8 Lighting Replacement (28W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.0766	8	138	0.003	30	$2.32	22%	90%	95%	4.77	1
LodgiFIT4	Lodging	Fluorescent	Turnover	4	Premium Efficiency T8 Lighting Replacement (25W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.1167	8	138	0.002	17	$2.02	13%	60%	95%	3.13	1
LodgiFIT5	Lodging	Fluorescent	Turnover	5	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.0362	11	494	0.008	71	$2.55	14%	75%	95%	15.11	1
LodgiFIE4	Lodging	Fluorescent	Early	4	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.4959	11	494	0.008	71	$35.00	14%	75%	95%	1.10	1
MiscFIT6	Misc	Fluorescent	Turnover	6	LED Retrofit Tube	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$1.3867	9	119	0.005	47	$65.00	39%	40%	95%	0.29	0
MiscFIT1	Misc	Fluorescent	Turnover	1	Premium Efficiency T8 Lighting Replacement (28W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.0888	9	119	0.003	26	$2.32	22%	90%	95%	4.60	1
MiscFIT4	Misc	Fluorescent	Turnover	4	Premium Efficiency T8 Lighting Replacement (25W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.1353	9	119	0.002	15	$2.02	13%	60%	95%	3.02	1
MiscFIT5	Misc	Fluorescent	Turnover	5	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.0420	11	426	0.007	61	$2.55	14%	75%	95%	13.03	1
MiscFIE4	Misc	Fluorescent	Early	4	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.5750	11	426	0.007	61	$35.00	14%	75%	95%	0.95	0
OfficFIT6	Office	Fluorescent	Turnover	6	LED Retrofit Tube	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$2.1044	14	79	0.004	31	$65.00	39%	40%	95%	0.35	0
OfficFIT1	Office	Fluorescent	Turnover	1	Premium Efficiency T8 Lighting Replacement (28W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.1348	14	79	0.002	17	$2.32	22%	90%	95%	5.39	1
OfficFIT4	Office	Fluorescent	Turnover	4	Premium Efficiency T8 Lighting Replacement (25W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.2053	14	79	0.001	10	$2.02	13%	60%	95%	3.54	1
OfficFIT5	Office	Fluorescent	Turnover	5	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.0637	11	281	0.005	40	$2.55	14%	75%	95%	8.59	1
OfficFIE4	Office	Fluorescent	Early	4	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.8726	11	281	0.005	40	$35.00	14%	75%	95%	0.63	0
RestaFIT6	Restaurant	Fluorescent	Turnover	6	LED Retrofit Tube	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$1.3528	9	122	0.006	48	$65.00	39%	40%	95%	0.30	0
RestaFIT1	Restaurant	Fluorescent	Turnover	1	Premium Efficiency T8 Lighting Replacement (28W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.0866	9	122	0.003	27	$2.32	22%	90%	95%	4.71	1
RestaFIT4	Restaurant	Fluorescent	Turnover	4	Premium Efficiency T8 Lighting Replacement (25W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.1320	9	122	0.002	15	$2.02	13%	60%	95%	3.09	1
RestaFIT5	Restaurant	Fluorescent	Turnover	5	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.0409	11	437	0.007	62	$2.55	14%	75%	95%	13.36	1
RestaFIE4	Restaurant	Fluorescent	Early	4	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.5610	11	437	0.007	62	$35.00	14%	75%	95%	0.97	0
RetaiFIT6	Retail	Fluorescent	Turnover	6	LED Retrofit Tube	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$1.4036	9	118	0.005	46	$65.00	39%	40%	95%	0.29	0
RetaiFIT1	Retail	Fluorescent	Turnover	1	Premium Efficiency T8 Lighting Replacement (28W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.0899	9	118	0.003	26	$2.32	22%	90%	95%	4.54	1
RetaiFIT4	Retail	Fluorescent	Turnover	4	Premium Efficiency T8 Lighting Replacement (25W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.1369	9	118	0.002	15	$2.02	13%	60%	95%	2.98	1
RetaiFIT5	Retail	Fluorescent	Turnover	5	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.0425	11	421	0.007	60	$2.55	14%	75%	95%	12.87	1
RetaiFIE4	Retail	Fluorescent	Early	4	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.5820	11	421	0.007	60	$35.00	14%	75%	95%	0.94	0
WarehFIT6	Warehouse	Fluorescent	Turnover	6	LED Retrofit Tube	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$1.5152	10	109	0.005	43	$65.00	39%	40%	95%	0.32	0
WarehFIT1	Warehouse	Fluorescent	Turnover	1	Premium Efficiency T8 Lighting Replacement (28W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.0970	10	109	0.003	24	$2.32	22%	90%	95%	4.94	1
WarehFIT4	Warehouse	Fluorescent	Turnover	4	Premium Efficiency T8 Lighting Replacement (25W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.1478	10	109	0.002	14	$2.02	13%	60%	95%	3.24	1
WarehFIT5	Warehouse	Fluorescent	Turnover	5	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.0459	11	390	0.006	56	$2.55	14%	75%	95%	11.93	1
WarehFIE4	Warehouse	Fluorescent	Early	4	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.6283	11	390	0.006	56	$35.00	14%	75%	95%	0.87	0
GroceHIE1	Grocery	HID	Early	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.3797	10	1,893	0.065	565	$214.50	30%	85%	80%	1.26	1
GroceHIE2	Grocery	HID	Early	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.2995	10	2,772	0.115	1,002	$300.00	36%	85%	80%	1.60	1
GroceHIE3	Grocery	HID	Early	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.3449	10	1,893	0.078	681	$235.00	36%	85%	80%	1.39	1
GroceHIE4	Grocery	HID	Early	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.3403	10	2,772	0.110	955	$325.00	34%	85%	80%	1.41	1
GroceHIT5	Grocery	HID	Turnover	5	Ceramic Metal Halide lamp	Replace non-ceramic lamp lamp 400 W	Lamp	$0.0859	3	2,330	0.047	408	$35.00	18%	85%	55%	1.66	1
GroceHIE7	Grocery	HID	Early	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.8147	15	1,893	0.097	844	$688.00	45%	85%	80%	0.96	0
GroceHIT1	Grocery	HID	Turnover	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.1956	10	1,893	0.065	565	$110.50	30%	85%	80%	2.45	1
GroceHIT2	Grocery	HID	Turnover	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.2246	10	2,772	0.115	1,002	$225.00	36%	85%	80%	2.13	1
GroceHIT3	Grocery	HID	Turnover	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.2128	10	1,893	0.078	681	$145.00	36%	85%	80%	2.25	1
GroceHIT4	Grocery	HID	Turnover	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.2722	10	2,772	0.110	955	$260.00	34%	85%	80%	1.76	1
GroceHIT6	Grocery	HID	Turnover	6	Multi Lamp Hard Wired CFL	Replace HID Fixure Drawing 400 W	Fixture	$0.3442	10	2,772	0.142	1,235	$425.00	45%	85%	55%	1.39	1
GroceHIT7	Grocery	HID	Turnover	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.4441	15	1,893	0.097	844	$375.00	45%	85%	80%	1.76	1
HealtHIE1	Healthcare	HID	Early	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.4095	10	1,755	0.060	524	$214.50	30%	85%	80%	1.17	1
HealtHIE2	Healthcare	HID	Early	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.3230	10	2,570	0.107	929	$300.00	36%	85%	80%	1.48	1
HealtHIE3	Healthcare	HID	Early	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.3720	10	1,755	0.073	632	$235.00	36%	85%	80%	1.29	1
HealtHIE4	Healthcare	HID	Early	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.3670	10	2,570	0.102	886	$325.00	34%	85%	80%	1.31	1
HealtHIT5	Healthcare	HID	Turnover	5	Ceramic Metal Halide lamp	Replace non-ceramic lamp lamp 400 W	Lamp	$0.0926	3	2,160	0.043	378	$35.00	18%	85%	55%	1.54	1
HealtHIE7	Healthcare	HID	Early	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.8787	15	1,755	0.090	783	$688.00	45%	85%	80%	0.89	0
HealtHIT1	Healthcare	HID	Turnover	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.2110	10	1,755	0.060	524	$110.50	30%	85%	80%	2.27	1
HealtHIT2	Healthcare	HID	Turnover	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.2422	10	2,570	0.107	929	$225.00	36%	85%	80%	1.98	1
HealtHIT3	Healthcare	HID	Turnover	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.2295	10	1,755	0.073	632	$145.00	36%	85%	80%	2.09	1
HealtHIT4	Healthcare	HID	Turnover	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.2936	10	2,570	0.102	886	$260.00	34%	85%	80%	1.63	1
HealtHIT6	Healthcare	HID	Turnover	6	Multi Lamp Hard Wired CFL	Replace HID Fixure Drawing 400 W	Fixture	$0.3712	10	2,570	0.132	1,145	$425.00	45%	85%	55%	1.29	1
HealtHIT7	Healthcare	HID	Turnover	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.4789	15	1,755	0.090	783	$375.00	45%	85%	80%	1.63	1
InstiHIE1	Institutional	HID	Early	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.8376	10	858	0.029	256	$214.50	30%	85%	80%	0.57	0
InstiHIE2	Institutional	HID	Early	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.6607	10	1,257	0.052	454	$300.00	36%	85%	80%	0.73	0
InstiHIE3	Institutional	HID	Early	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.7608	10	858	0.035	309	$235.00	36%	85%	80%	0.63	0
InstiHIE4	Institutional	HID	Early	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.7506	10	1,257	0.050	433	$325.00	34%	85%	80%	0.64	0
InstiHIT5	Institutional	HID	Turnover	5	Ceramic Metal Halide lamp	Replace non-ceramic lamp lamp 400 W	Lamp	$0.1894	6	1,056	0.021	185	$35.00	18%	85%	55%	1.45	1
InstiHIE7	Institutional	HID	Early	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$1.7973	15	858	0.044	383	$688.00	45%	85%	80%	0.43	0
InstiHIT1	Institutional	HID	Turnover	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.4315	10	858	0.029	256	$110.50	30%	85%	80%	1.11	1
InstiHIT2	Institutional	HID	Turnover	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.4955	10	1,257	0.052	454	$225.00	36%	85%	80%	0.97	0
InstiHIT3	Institutional	HID	Turnover	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.4694	10	858	0.035	309	$145.00	36%	85%	80%	1.02	1
InstiHIT4	Institutional	HID	Turnover	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.6005	10	1,257	0.050	433	$260.00	34%	85%	80%	0.80	0
InstiHIT6	Institutional	HID	Turnover	6	Multi Lamp Hard Wired CFL	Replace HID Fixure Drawing 400 W	Fixture	$0.7594	10	1,257	0.064	560	$425.00	45%	85%	55%	0.63	0
InstiHIT7	Institutional	HID	Turnover	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.9796	15	858	0.044	383	$375.00	45%	85%	80%	0.80	0
LodgiHIE1	Lodging	HID	Early	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.4475	10	1,606	0.055	479	$214.50	30%	85%	80%	1.07	1
LodgiHIE2	Lodging	HID	Early	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.3530	10	2,352	0.098	850	$300.00	36%	85%	80%	1.36	1
LodgiHIE3	Lodging	HID	Early	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.4065	10	1,606	0.066	578	$235.00	36%	85%	80%	1.18	1
LodgiHIE4	Lodging	HID	Early	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.4011	10	2,352	0.093	810	$325.00	34%	85%	80%	1.20	1
LodgiHIT5	Lodging	HID	Turnover	5	Ceramic Metal Halide lamp	Replace non-ceramic lamp lamp 400 W	Lamp	$0.1012	3	1,976	0.040	346	$35.00	18%	85%	55%	1.41	1
LodgiHIE7	Lodging	HID	Early	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.9603	15	1,606	0.082	716	$688.00	45%	85%	80%	0.81	0
LodgiHIT1	Lodging	HID	Turnover	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.2306	10	1,606	0.055	479	$110.50	30%	85%	80%	2.08	1
LodgiHIT2	Lodging	HID	Turnover	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.2648	10	2,352	0.098	850	$225.00	36%	85%	80%	1.81	1
LodgiHIT3	Lodging	HID	Turnover	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.2508	10	1,606	0.066	578	$145.00	36%	85%	80%	1.91	1
LodgiHIT4	Lodging	HID	Turnover	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.3209	10	2,352	0.093	810	$260.00	34%	85%	80%	1.49	1
LodgiHIT6	Lodging	HID	Turnover	6	Multi Lamp Hard Wired CFL	Replace HID Fixure Drawing 400 W	Fixture	$0.4057	10	2,352	0.120	1,047	$425.00	45%	85%	55%	1.18	1
LodgiHIT7	Lodging	HID	Turnover	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.5234	15	1,606	0.082	716	$375.00	45%	85%	80%	1.49	1
OfficHIE1	Office	HID	Early	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.7875	10	913	0.031	272	$214.50	30%	85%	80%	0.61	0
OfficHIE2	Office	HID	Early	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.6211	10	1,337	0.056	483	$300.00	36%	85%	80%	0.77	0
OfficHIE3	Office	HID	Early	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.7153	10	913	0.038	329	$235.00	36%	85%	80%	0.67	0
OfficHIE4	Office	HID	Early	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.7057	10	1,337	0.053	461	$325.00	34%	85%	80%	0.68	0
OfficHIT5	Office	HID	Turnover	5	Ceramic Metal Halide lamp	Replace non-ceramic lamp lamp 400 W	Lamp	$0.1781	5	1,123	0.023	197	$35.00	18%	85%	55%	1.28	1
OfficHIE7	Office	HID	Early	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$1.6898	15	913	0.047	407	$688.00	45%	85%	80%	0.46	0
OfficHIT1	Office	HID	Turnover	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.4057	10	913	0.031	272	$110.50	30%	85%	80%	1.18	1
OfficHIT2	Office	HID	Turnover	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.4659	10	1,337	0.056	483	$225.00	36%	85%	80%	1.03	1
OfficHIT3	Office	HID	Turnover	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.4414	10	913	0.038	329	$145.00	36%	85%	80%	1.09	1
OfficHIT4	Office	HID	Turnover	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.5646	10	1,337	0.053	461	$260.00	34%	85%	80%	0.85	0
OfficHIT6	Office	HID	Turnover	6	Multi Lamp Hard Wired CFL	Replace HID Fixure Drawing 400 W	Fixture	$0.7139	10	1,337	0.068	595	$425.00	45%	85%	55%	0.67	0
OfficHIT7	Office	HID	Turnover	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.9210	15	913	0.047	407	$375.00	45%	85%	80%	0.85	0
RestaHIE1	Restaurant	HID	Early	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.5063	10	1,420	0.049	424	$214.50	30%	85%	80%	0.95	0
RestaHIE2	Restaurant	HID	Early	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.3993	10	2,079	0.086	751	$300.00	36%	85%	80%	1.20	1

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
RestaHIE3	Restaurant	HID	Early	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.4598	10	1,420	0.059	511	$235.00	36%	85%	80%	1.04	1
RestaHIE4	Restaurant	HID	Early	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.4537	10	2,079	0.082	716	$325.00	34%	85%	80%	1.06	1
RestaHIT5	Restaurant	HID	Turnover	5	Ceramic Metal Halide lamp	Replace non-ceramic lamp lamp 400 W	Lamp	$0.1145	3	1,747	0.035	306	$35.00	18%	85%	55%	1.24	1
RestaHIE7	Restaurant	HID	Early	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$1.0863	15	1,420	0.073	633	$688.00	45%	85%	80%	0.72	0
RestaHIT1	Restaurant	HID	Turnover	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.2608	10	1,420	0.049	424	$110.50	30%	85%	80%	1.84	1
RestaHIT2	Restaurant	HID	Turnover	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.2995	10	2,079	0.086	751	$225.00	36%	85%	80%	1.60	1
RestaHIT3	Restaurant	HID	Turnover	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.2837	10	1,420	0.059	511	$145.00	36%	85%	80%	1.69	1
RestaHIT4	Restaurant	HID	Turnover	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.3630	10	2,079	0.082	716	$260.00	34%	85%	80%	1.32	1
RestaHIT6	Restaurant	HID	Turnover	6	Multi Lamp Hard Wired CFL	Replace HID Fixure Drawing 400 W	Fixture	$0.4590	10	2,079	0.106	926	$425.00	45%	85%	55%	1.04	1
RestaHIT7	Restaurant	HID	Turnover	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.5921	15	1,420	0.073	633	$375.00	45%	85%	80%	1.32	1
RetaiHIE1	Retail	HID	Early	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.5253	10	1,368	0.047	408	$214.50	30%	85%	80%	0.91	0
RetaiHIE2	Retail	HID	Early	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.4143	10	2,004	0.083	724	$300.00	36%	85%	80%	1.16	1
RetaiHIE3	Retail	HID	Early	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.4771	10	1,368	0.057	493	$235.00	36%	85%	80%	1.01	1
RetaiHIE4	Retail	HID	Early	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.4707	10	2,004	0.079	690	$325.00	34%	85%	80%	1.02	1
RetaiHIT5	Retail	HID	Turnover	5	Ceramic Metal Halide lamp	Replace non-ceramic lamp lamp 400 W	Lamp	$0.1188	4	1,684	0.034	295	$35.00	18%	85%	55%	1.51	1
RetaiHIE7	Retail	HID	Early	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$1.1270	15	1,368	0.070	610	$688.00	45%	85%	80%	0.69	0
RetaiHIT1	Retail	HID	Turnover	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.2706	10	1,368	0.047	408	$110.50	30%	85%	80%	1.77	1
RetaiHIT2	Retail	HID	Turnover	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.3107	10	2,004	0.083	724	$225.00	36%	85%	80%	1.54	1
RetaiHIT3	Retail	HID	Turnover	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.2944	10	1,368	0.057	493	$145.00	36%	85%	80%	1.63	1
RetaiHIT4	Retail	HID	Turnover	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.3766	10	2,004	0.079	690	$260.00	34%	85%	80%	1.27	1
RetaiHIT6	Retail	HID	Turnover	6	Multi Lamp Hard Wired CFL	Replace HID Fixure Drawing 400 W	Fixture	$0.4762	10	2,004	0.103	893	$425.00	45%	85%	55%	1.01	1
RetaiHIT7	Retail	HID	Turnover	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.6143	15	1,368	0.070	610	$375.00	45%	85%	80%	1.27	1
MiscHIE1	Misc	HID	Early	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.5189	10	1,385	0.048	413	$214.50	30%	85%	80%	0.92	0
MiscHIE2	Misc	HID	Early	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.4093	10	2,028	0.084	733	$300.00	36%	85%	80%	1.17	1
MiscHIE3	Misc	HID	Early	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.4713	10	1,385	0.057	499	$235.00	36%	85%	80%	1.02	1
MiscHIE4	Misc	HID	Early	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.4650	10	2,028	0.080	699	$325.00	34%	85%	80%	1.03	1
MiscHIT5	Misc	HID	Turnover	5	Ceramic Metal Halide lamp	Replace non-ceramic lamp lamp 400 W	Lamp	$0.1173	4	1,705	0.034	298	$35.00	18%	85%	55%	1.53	1
MiscHIE7	Misc	HID	Early	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$1.1134	15	1,385	0.071	618	$688.00	45%	85%	80%	0.70	0
MiscHIT1	Misc	HID	Turnover	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.2673	10	1,385	0.048	413	$110.50	30%	85%	80%	1.79	1
MiscHIT2	Misc	HID	Turnover	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.3070	10	2,028	0.084	733	$225.00	36%	85%	80%	1.56	1
MiscHIT3	Misc	HID	Turnover	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.2908	10	1,385	0.057	499	$145.00	36%	85%	80%	1.65	1
MiscHIT4	Misc	HID	Turnover	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.3720	10	2,028	0.080	699	$260.00	34%	85%	80%	1.29	1
MiscHIT6	Misc	HID	Turnover	6	Multi Lamp Hard Wired CFL	Replace HID Fixure Drawing 400 W	Fixture	$0.4704	10	2,028	0.104	903	$425.00	45%	85%	55%	1.02	1
MiscHIT7	Misc	HID	Turnover	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.6069	15	1,385	0.071	618	$375.00	45%	85%	80%	1.29	1
GroceHIE8	Grocery	HID	Early	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1651	10	7,571	0.261	2,271	$375.00	30%	85%	85%	2.90	1
GroceHIE9	Grocery	HID	Early	9	Photocell dimming control	No prior dimming control	Photocell	$0.1453	10	7,571	0.435	3,786	$550.00	50%	85%	85%	3.30	1
GroceHIE10	Grocery	HID	Early	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1321	10	7,571	0.087	757	$100.00	10%	85%	45%	3.63	1
HealtHIE8	Healthcare	HID	Early	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1781	10	7,020	0.242	2,106	$375.00	30%	85%	85%	2.69	1
HealtHIE9	Healthcare	HID	Early	9	Photocell dimming control	No prior dimming control	Photocell	$0.1567	10	7,020	0.403	3,510	$550.00	50%	85%	85%	3.06	1
HealtHIE10	Healthcare	HID	Early	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1425	10	7,020	0.081	702	$100.00	10%	85%	45%	3.37	1
InstiHIE8	Institutional	HID	Early	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.3642	10	3,432	0.118	1,030	$375.00	30%	85%	85%	1.32	1
InstiHIE9	Institutional	HID	Early	9	Photocell dimming control	No prior dimming control	Photocell	$0.3205	10	3,432	0.197	1,716	$550.00	50%	85%	85%	1.50	1
InstiHIE10	Institutional	HID	Early	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.2914	10	3,432	0.039	343	$100.00	10%	85%	45%	1.65	1
OfficHIE8	Office	HID	Early	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.3424	10	3,650	0.126	1,095	$375.00	30%	85%	85%	1.40	1
OfficHIE9	Office	HID	Early	9	Photocell dimming control	No prior dimming control	Photocell	$0.3013	10	3,650	0.210	1,825	$550.00	50%	85%	85%	1.59	1
OfficHIE10	Office	HID	Early	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.2739	10	3,650	0.042	365	$100.00	10%	85%	45%	1.75	1
RestaHIE8	Restaurant	HID	Early	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2201	10	5,678	0.196	1,704	$375.00	30%	85%	85%	2.18	1
RestaHIE9	Restaurant	HID	Early	9	Photocell dimming control	No prior dimming control	Photocell	$0.1937	10	5,678	0.326	2,839	$550.00	50%	85%	85%	2.48	1
RestaHIE10	Restaurant	HID	Early	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1761	10	5,678	0.065	568	$100.00	10%	85%	45%	2.72	1
RetaiHIE8	Retail	HID	Early	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2284	10	5,473	0.189	1,642	$375.00	30%	85%	85%	2.10	1
RetaiHIE9	Retail	HID	Early	9	Photocell dimming control	No prior dimming control	Photocell	$0.2010	10	5,473	0.314	2,737	$550.00	50%	85%	85%	2.39	1
RetaiHIE10	Retail	HID	Early	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1827	10	5,473	0.063	547	$100.00	10%	85%	45%	2.62	1
MiscHIE8	Misc	HID	Early	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2256	10	5,540	0.191	1,662	$375.00	30%	85%	85%	2.13	1
MiscHIE9	Misc	HID	Early	9	Photocell dimming control	No prior dimming control	Photocell	$0.1986	10	5,540	0.318	2,770	$550.00	50%	85%	85%	2.41	1
MiscHIE10	Misc	HID	Early	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1805	10	5,540	0.064	554	$100.00	10%	85%	45%	2.66	1
LodgiHIE8	Lodging	HID	Early	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1946	10	6,423	0.221	1,927	$375.00	30%	85%	85%	2.46	1
LodgiHIE9	Lodging	HID	Early	9	Photocell dimming control	No prior dimming control	Photocell	$0.1713	10	6,423	0.369	3,212	$550.00	50%	85%	85%	2.80	1
LodgiHIE10	Lodging	HID	Early	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1557	10	6,423	0.074	642	$100.00	10%	85%	45%	3.08	1
LodgiHIT8	Lodging	HID	Turnover	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1427	10	6,423	0.221	1,927	$275.00	30%	85%	85%	3.36	1
LodgiHIT9	Lodging	HID	Turnover	9	Photocell dimming control	No prior dimming control	Photocell	$0.1713	10	6,423	0.369	3,212	$550.00	50%	85%	85%	2.80	1
LodgiHIT10	Lodging	HID	Turnover	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1168	10	6,423	0.074	642	$75.00	10%	85%	45%	4.11	1
GroceHIT8	Grocery	HID	Turnover	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1211	10	7,571	0.261	2,271	$275.00	30%	85%	85%	3.96	1
GroceHIT9	Grocery	HID	Turnover	9	Photocell dimming control	No prior dimming control	Photocell	$0.1453	10	7,571	0.435	3,786	$550.00	50%	85%	85%	3.30	1
GroceHIT10	Grocery	HID	Turnover	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.0991	10	7,571	0.087	757	$75.00	10%	85%	45%	4.84	1
HealtHIT8	Healthcare	HID	Turnover	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1306	10	7,020	0.242	2,106	$275.00	30%	85%	85%	3.67	1
HealtHIT9	Healthcare	HID	Turnover	9	Photocell dimming control	No prior dimming control	Photocell	$0.1567	10	7,020	0.403	3,510	$550.00	50%	85%	85%	3.06	1
HealtHIT10	Healthcare	HID	Turnover	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1068	10	7,020	0.081	702	$75.00	10%	85%	45%	4.49	1
InstiHIT8	Institutional	HID	Turnover	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2671	10	3,432	0.118	1,030	$275.00	30%	85%	85%	1.80	1
InstiHIT9	Institutional	HID	Turnover	9	Photocell dimming control	No prior dimming control	Photocell	$0.3205	10	3,432	0.197	1,716	$550.00	50%	85%	85%	1.50	1
InstiHIT10	Institutional	HID	Turnover	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.2185	10	3,432	0.039	343	$75.00	10%	85%	45%	2.19	1
OfficHIT8	Office	HID	Turnover	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2511	10	3,650	0.126	1,095	$275.00	30%	85%	85%	1.91	1
OfficHIT9	Office	HID	Turnover	9	Photocell dimming control	No prior dimming control	Photocell	$0.3013	10	3,650	0.210	1,825	$550.00	50%	85%	85%	1.59	1
OfficHIT10	Office	HID	Turnover	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.2055	10	3,650	0.042	365	$75.00	10%	85%	45%	2.33	1
MiscHIT8	Misc	HID	Turnover	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1655	10	5,540	0.191	1,662	$275.00	30%	85%	85%	2.90	1
MiscHIT9	Misc	HID	Turnover	9	Photocell dimming control	No prior dimming control	Photocell	$0.1986	10	5,540	0.318	2,770	$550.00	50%	85%	85%	2.41	1
MiscHIT10	Misc	HID	Turnover	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1354	10	5,540	0.064	554	$75.00	10%	85%	45%	3.54	1
RestaHIT8	Restaurant	HID	Turnover	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1614	10	5,678	0.196	1,704	$275.00	30%	85%	85%	2.97	1
RestaHIT9	Restaurant	HID	Turnover	9	Photocell dimming control	No prior dimming control	Photocell	$0.1937	10	5,678	0.326	2,839	$550.00	50%	85%	85%	2.48	1
RestaHIT10	Restaurant	HID	Turnover	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1321	10	5,678	0.065	568	$75.00	10%	85%	45%	3.63	1
RetaiHIT8	Retail	HID	Turnover	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1675	10	5,473	0.189	1,642	$275.00	30%	85%	85%	2.86	1
RetaiHIT9	Retail	HID	Turnover	9	Photocell dimming control	No prior dimming control	Photocell	$0.2010	10	5,473	0.314	2,737	$550.00	50%	85%	85%	2.39	1
RetaiHIT10	Retail	HID	Turnover	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1370	10	5,473	0.063	547	$75.00	10%	85%	45%	3.50	1
WarehHIT8	Warehouse	HID	Turnover	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1808	10	5,070	0.175	1,521	$275.00	30%	85%	85%	2.65	1
WarehHIT9	Warehouse	HID	Turnover	9	Photocell dimming control	No prior dimming control	Photocell	$0.2170	10	5,070	0.291	2,535	$550.00	50%	85%	85%	2.21	1
WarehHIT10	Warehouse	HID	Turnover	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1479	10	5,070	0.058	507	$75.00	10%	85%	45%	3.24	1
WarehHIN8	Warehouse	HID	New	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1781	10	4,680	0.161	1,404	$250.00	30%	85%	85%	2.69	1
WarehHIN9	Warehouse	HID	New	9	Photocell dimming control	No prior dimming control	Photocell	$0.1923	10	4,680	0.269	2,340	$450.00	50%	85%	85%	2.49	1
WarehHIN10	Warehouse	HID	New	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1389	10	4,680	0.054	468	$65.00	10%	25%	45%	3.45	1
GroceHIN8	Grocery	HID	New	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1192	10	6,989	0.241	2,097	$250.00	30%	85%	85%	4.02	1
GroceHIN9	Grocery	HID	New	9	Photocell dimming control	No prior dimming control	Photocell	$0.1288	10	6,989	0.402	3,494	$450.00	50%	85%	85%	3.72	1
GroceHIN10	Grocery	HID	New	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.0930	10	6,989	0.080	699	$65.00	10%	25%	45%	5.16	1
HealtHIN8	Healthcare	HID	New	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1286	10	6,480	0.223	1,944	$250.00	30%	85%	85%	3.73	1
HealtHIN9	Healthcare	HID	New	9	Photocell dimming control	No prior dimming control	Photocell	$0.1389	10	6,480	0.372	3,240	$450.00	50%	85%	85%	3.45	1
HealtHIN10	Healthcare	HID	New	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1003	10	6,480	0.074	648	$65.00	10%	25%	45%	4.78	1
InstiHIN8	Institutional	HID	New	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2630	10	3,168	0.109	950	$250.00	30%	85%	85%	1.82	1
InstiHIN9	Institutional	HID	New	9	Photocell dimming control	No prior dimming control	Photocell	$0.2841	10	3,168	0.182	1,584	$450.00	50%	85%	85%	1.69	1
InstiHIN10	Institutional	HID	New	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.2052	10	3,168	0.036	317	$65.00	10%	25%	45%	2.34	1

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
LodgiHIN8	Lodging	HID	New	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1405	10	5,929	0.204	1,779	$250.00	30%	85%	85%	3.41	1
LodgiHIN9	Lodging	HID	New	9	Photocell dimming control	No prior dimming control	Photocell	$0.1518	10	5,929	0.341	2,965	$450.00	50%	85%	85%	3.16	1
LodgiHIN10	Lodging	HID	New	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1096	10	5,929	0.068	593	$65.00	10%	25%	45%	4.37	1
OfficHIN8	Office	HID	New	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2473	10	3,370	0.116	1,011	$250.00	30%	85%	85%	1.94	1
OfficHIN9	Office	HID	New	9	Photocell dimming control	No prior dimming control	Photocell	$0.2671	10	3,370	0.194	1,685	$450.00	50%	85%	85%	1.80	1
OfficHIN10	Office	HID	New	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1929	10	3,370	0.039	337	$65.00	10%	25%	45%	2.49	1
RestaHIN8	Restaurant	HID	New	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1590	10	5,242	0.181	1,572	$250.00	30%	85%	85%	3.02	1
RestaHIN9	Restaurant	HID	New	9	Photocell dimming control	No prior dimming control	Photocell	$0.1717	10	5,242	0.301	2,621	$450.00	50%	85%	85%	2.79	1
RestaHIN10	Restaurant	HID	New	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1240	10	5,242	0.060	524	$65.00	10%	25%	45%	3.87	1
RetaiHIN8	Retail	HID	New	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1650	10	5,052	0.174	1,516	$250.00	30%	85%	85%	2.91	1
RetaiHIN9	Retail	HID	New	9	Photocell dimming control	No prior dimming control	Photocell	$0.1781	10	5,052	0.290	2,526	$450.00	50%	85%	85%	2.69	1
RetaiHIN10	Retail	HID	New	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1287	10	5,052	0.058	505	$65.00	10%	25%	45%	3.73	1
miscHIN8	misc	HID	New	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1630	10	5,114	0.176	1,534	$250.00	30%	85%	85%	2.94	1
MiscHIN9	Misc	HID	New	9	Photocell dimming control	No prior dimming control	Photocell	$0.1760	10	5,114	0.294	2,557	$450.00	50%	85%	85%	2.72	1
MiscHIN10	Misc	HID	New	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1271	10	5,114	0.059	511	$65.00	10%	25%	45%	3.77	1
OfficInN3	Office	Incandescent	New	3	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0464	14	3,594	0.124	1,078	$50.00	30%	95%	15%	15.68	1
OfficInN4	Office	Incandescent	New	4	Photocell dimming control	No prior dimming control	Photocell	$0.0835	9	3,594	0.207	1,797	$150.00	50%	95%	95%	4.89	1
OfficInT2	Office	Incandescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1159	14	3,594	0.124	1,078	$125.00	30%	95%	80%	6.27	1
OfficInT3	Office	Incandescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.1252	9	3,594	0.207	1,797	$225.00	50%	95%	95%	3.26	1
GroceInN3	Grocery	Incandescent	New	3	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0224	14	7,455	0.257	2,236	$50.00	30%	95%	15%	32.52	1
GroceInT2	Grocery	Incandescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0559	14	7,455	0.257	2,236	$125.00	30%	95%	80%	13.01	1
HealtInT2	Healthcare	Incandescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0603	14	6,912	0.238	2,074	$125.00	30%	95%	80%	12.06	1
GroceInN4	Grocery	Incandescent	New	4	Photocell dimming control	No prior dimming control	Photocell	$0.0402	9	7,455	0.428	3,727	$150.00	50%	95%	95%	10.14	1
HealtInN3	Healthcare	Incandescent	New	3	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0241	14	6,912	0.238	2,074	$50.00	30%	95%	15%	30.15	1
GroceInT3	Grocery	Incandescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.0604	9	7,455	0.428	3,727	$225.00	50%	95%	95%	6.76	1
HealtInT3	Healthcare	Incandescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.0651	9	6,912	0.397	3,456	$225.00	50%	95%	95%	6.27	1
HealtInN4	Healthcare	Incandescent	New	4	Photocell dimming control	No prior dimming control	Photocell	$0.0434	9	6,912	0.397	3,456	$150.00	50%	95%	95%	9.40	1
InstiInN3	Institutional	Incandescent	New	3	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0493	14	3,379	0.117	1,014	$50.00	30%	95%	15%	14.74	1
InstiInN4	Institutional	Incandescent	New	4	Photocell dimming control	No prior dimming control	Photocell	$0.0888	9	3,379	0.194	1,690	$150.00	50%	95%	95%	4.60	1
InstiInT2	Institutional	Incandescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1233	14	3,379	0.117	1,014	$125.00	30%	95%	80%	5.90	1
InstiInT3	Institutional	Incandescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.1332	9	3,379	0.194	1,690	$225.00	50%	95%	95%	3.06	1
LodgiInN3	Lodging	Incandescent	New	3	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0264	14	6,324	0.218	1,897	$50.00	30%	95%	15%	27.59	1
LodgiInN4	Lodging	Incandescent	New	4	Photocell dimming control	No prior dimming control	Photocell	$0.0474	9	6,324	0.363	3,162	$150.00	50%	95%	95%	8.60	1
LodgiInT2	Lodging	Incandescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0659	14	6,324	0.218	1,897	$125.00	30%	95%	80%	11.04	1
LodgiInT3	Lodging	Incandescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.0712	9	6,324	0.363	3,162	$225.00	50%	95%	95%	5.74	1
RestaInN3	Restaurant	Incandescent	New	3	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0298	14	5,591	0.193	1,677	$50.00	30%	95%	15%	24.39	1
RestaInN4	Restaurant	Incandescent	New	4	Photocell dimming control	No prior dimming control	Photocell	$0.0537	9	5,591	0.321	2,796	$150.00	50%	95%	95%	7.61	1
RestaInT2	Restaurant	Incandescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0745	14	5,591	0.193	1,677	$125.00	30%	95%	80%	9.76	1
RestaInT3	Restaurant	Incandescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.0805	9	5,591	0.321	2,796	$225.00	50%	95%	95%	5.07	1
RetaiInN3	Retail	Incandescent	New	3	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0309	14	5,389	0.186	1,617	$50.00	30%	95%	15%	23.51	1
RetaiInN4	Retail	Incandescent	New	4	Photocell dimming control	No prior dimming control	Photocell	$0.0557	9	5,389	0.310	2,694	$150.00	50%	95%	95%	7.33	1
RetaiInT2	Retail	Incandescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0773	14	5,389	0.186	1,617	$125.00	30%	95%	80%	9.40	1
RetaiInT3	Retail	Incandescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.0835	9	5,389	0.310	2,694	$225.00	50%	95%	95%	4.89	1
WarehInN3	Warehouse	Incandescent	New	3	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0334	14	4,992	0.172	1,498	$50.00	30%	95%	15%	21.78	1
WarehInN4	Warehouse	Incandescent	New	4	Photocell dimming control	No prior dimming control	Photocell	$0.0601	9	4,992	0.287	2,496	$150.00	50%	95%	95%	6.79	1
WarehInT2	Warehouse	Incandescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0835	14	4,992	0.172	1,498	$125.00	30%	95%	80%	8.71	1
WarehInT3	Warehouse	Incandescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.0901	9	4,992	0.287	2,496	$225.00	50%	95%	95%	4.53	1
MiscInN3	Misc	Incandescent	New	3	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0306	14	5,455	0.188	1,636	$50.00	30%	95%	15%	23.79	1
MiscInN4	Misc	Incandescent	New	4	Photocell dimming control	No prior dimming control	Photocell	$0.0550	9	5,455	0.313	2,727	$150.00	50%	95%	95%	7.42	1
MiscInT2	Misc	Incandescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0764	14	5,455	0.188	1,636	$125.00	30%	95%	80%	9.52	1
MiscInT3	Misc	Incandescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.0825	9	5,455	0.313	2,727	$225.00	50%	95%	95%	4.95	1
GroceInT4	Grocery	Incandescent	Turnover	4	LED Lamp - 12 Watt	EISA - 60 Watt equivalent - 43W	Lamp	$0.1329	5	250	0.021	181	$23.99	72%	75%	50%	1.72	1
HealtInT4	Healthcare	Incandescent	Turnover	4	LED Lamp - 12 Watt	EISA - 60 Watt equivalent - 43W	Lamp	$0.1433	5	232	0.019	167	$23.99	72%	75%	50%	1.59	1
GroceInT5	Grocery	Incandescent	Turnover	5	LED Lamp PAR - 12 Watt	Halogen PAR - 45 W	Lamp	$0.1908	5	262	0.021	181	$34.45	69%	75%	90%	1.20	1
HealtInT5	Healthcare	Incandescent	Turnover	5	LED Lamp PAR - 12 Watt	Halogen PAR - 45 W	Lamp	$0.2058	5	243	0.019	167	$34.45	69%	75%	90%	1.11	1
InstiInT1	Institutional	Incandescent	Turnover	1	CFL Lamp - 21 Watt	EISA - 75 Watt equivalent - 53W	Lamp	$0.0355	5	140	0.010	84	$3.00	60%	75%	50%	6.42	1
InstiInT4	Institutional	Incandescent	Turnover	4	LED Lamp - 12 Watt	EISA - 60 Watt equivalent - 43W	Lamp	$0.2931	5	114	0.009	82	$23.99	72%	75%	50%	0.78	0
InstiInT5	Institutional	Incandescent	Turnover	5	LED Lamp PAR - 12 Watt	Halogen PAR - 45 W	Lamp	$0.4209	5	119	0.009	82	$34.45	69%	75%	90%	0.54	0
LodgiInT1	Lodging	Incandescent	Turnover	1	CFL Lamp - 21 Watt	EISA - 75 Watt equivalent - 53W	Lamp	$0.0190	5	262	0.018	158	$3.00	60%	75%	50%	12.02	1
LodgiInT4	Lodging	Incandescent	Turnover	4	LED Lamp - 12 Watt	EISA - 60 Watt equivalent - 43W	Lamp	$0.1566	5	212	0.018	153	$23.99	72%	75%	50%	1.46	1
LodgiInT5	Lodging	Incandescent	Turnover	5	LED Lamp PAR - 12 Watt	Halogen PAR - 45 W	Lamp	$0.2249	5	222	0.018	153	$34.45	69%	75%	90%	1.01	1
OfficInT1	Office	Incandescent	Turnover	1	CFL Lamp - 21 Watt	EISA - 75 Watt equivalent - 53W	Lamp	$0.0334	5	149	0.010	90	$3.00	60%	75%	50%	6.83	1
OfficInT4	Office	Incandescent	Turnover	4	LED Lamp - 12 Watt	EISA - 60 Watt equivalent - 43W	Lamp	$0.2756	5	121	0.010	87	$23.99	72%	75%	50%	0.83	0
OfficInT5	Office	Incandescent	Turnover	5	LED Lamp PAR - 12 Watt	Halogen PAR - 45 W	Lamp	$0.3958	5	126	0.010	87	$34.45	69%	75%	90%	0.58	0
RestaInT1	Restaurant	Incandescent	Turnover	1	CFL Lamp - 21 Watt	EISA - 75 Watt equivalent - 53W	Lamp	$0.0215	5	232	0.016	140	$3.00	60%	75%	50%	10.63	1
RestaInT4	Restaurant	Incandescent	Turnover	4	LED Lamp - 12 Watt	EISA - 60 Watt equivalent - 43W	Lamp	$0.1772	5	188	0.016	135	$23.99	72%	75%	50%	1.29	1
RestaInT5	Restaurant	Incandescent	Turnover	5	LED Lamp PAR - 12 Watt	Halogen PAR - 45 W	Lamp	$0.2544	5	197	0.016	135	$34.45	69%	75%	90%	0.90	0
RetaiInT1	Retail	Incandescent	Turnover	1	CFL Lamp - 21 Watt	EISA - 75 Watt equivalent - 53W	Lamp	$0.0223	5	223	0.015	135	$3.00	60%	75%	50%	10.25	1
RetaiInT4	Retail	Incandescent	Turnover	4	LED Lamp - 12 Watt	EISA - 60 Watt equivalent - 43W	Lamp	$0.1838	5	181	0.015	131	$23.99	72%	75%	50%	1.24	1
RetaiInT5	Retail	Incandescent	Turnover	5	LED Lamp PAR - 12 Watt	Halogen PAR - 45 W	Lamp	$0.2640	5	189	0.015	131	$34.45	69%	75%	90%	0.86	0
miscInT1	misc	Incandescent	Turnover	1	CFL Lamp - 21 Watt	EISA - 75 Watt equivalent - 53W	Lamp	$0.0220	5	226	0.016	136	$3.00	60%	75%	50%	10.37	1
miscInT4	misc	Incandescent	Turnover	4	LED Lamp - 12 Watt	EISA - 60 Watt equivalent - 43W	Lamp	$0.1816	5	183	0.015	132	$23.99	72%	75%	50%	1.26	1
miscInT5	misc	Incandescent	Turnover	5	LED Lamp PAR - 12 Watt	Halogen PAR - 45 W	Lamp	$0.2608	5	192	0.015	132	$34.45	69%	75%	90%	0.87	0
WarehInT1	Warehouse	Incandescent	Turnover	1	CFL Lamp - 21 Watt	EISA - 75 Watt equivalent - 53W	Lamp	$0.0240	5	207	0.014	125	$3.00	60%	75%	50%	9.49	1
WarehInT4	Warehouse	Incandescent	Turnover	4	LED Lamp - 12 Watt	EISA - 60 Watt equivalent - 43W	Lamp	$0.1984	5	168	0.014	121	$23.99	72%	75%	50%	1.15	1
WarehInT5	Warehouse	Incandescent	Turnover	5	LED Lamp PAR - 12 Watt	Halogen PAR - 45 W	Lamp	$0.2849	5	176	0.014	121	$34.45	69%	75%	90%	0.80	0
LodgiInN6	Lodging	Incandescent	New	6	Hotel Occupancy Sensors	No prior control	Per Room	$0.4468	10	240	0.019	168	$75.00	70%	90%	95%	1.07	1
LodgiInT6	Lodging	Incandescent	Turnover	6	Hotel Occupancy Sensors	No prior control	Per Room	$0.5957	10	240	0.019	168	$100.00	70%	90%	95%	0.80	0
AllSiN1	All	Signage	New	1	Induction Street Lighting	Base HID Streetlighting	Fixture	$0.54	15	2,762	0.101	1,619	$875.00	59%	95%	95%	1.36	1
AllSiN2	All	Signage	New	2	LED or equivalent sign lighting	Replace fluorescent sign lighting	Exit Sign	$0.58	15	52	0.002	30	$17.36	58%	95%	7%	1.27	1
AllSiN3	All	Signage	New	3	LED Street Lighting	Std HID Street Lighting	Pole	$0.56	15	3,023	0.047	756	$425.00	25%	95%	95%	1.31	1
AllSiE1	All	Signage	Early	1	Dusk to Dawn	Time Clock Control	Pole	$0.17	15	3,023	0.076	1,209	$200.00	40%	95%	50%	4.45	1
OfficMoT22	Office	Motors	Turnover	22	Air Comp Improvements			$0.11	15	56148	1.148	8,928	$990.00	16%	28%	65%	7.13	1
OfficMoE2	Office	Motors	Early	2	Air Compressor Optimization			$0.16	15	56148	2.174	16,901	$2,750.00	30%	38%	65%	4.86	1
GroceMoE1	Grocery	Motors	Early	1	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.20	1
AllOtT1	All	Other	Turnover	1	Motor Improvements Bundle - Industrial Model	No Motor Improvements	Motor	$0.48	14	10000	0.128	1,092	$522.00	11%	90%	95%	1.52	1
AllOtT2	All	Other	Turnover	2	EE Transformer - CSL 3	NEMA Transformer - 75W	Motor	$0.60	15	4197	0.187	1,595	$950.00	23%	90%	95%	1.31	1
AllOtN1	All	Other	New	1	EE Transformer - CSL 3	NEMA Transformer - 75W	Motor	$0.60	15	4197	0.187	1,595	$950.00	23%	90%	95%	1.31	1
AllReN26	All	Refrigeration	New	26	Anti-sweat heat (ASH) controls - Freezer	ASH without controls	Per Door	$0.16	12	2,985	0.029	1,882	$300.00	63%	95%	85%	3.50	1
AllReN27	All	Refrigeration	New	27	Anti-sweat heat (ASH) controls - Cooler	ASH without controls	Per Door	$0.29	12	1,621	0.028	1,023	$300.00	63%	95%	85%	1.92	1
GroceMoN1	Grocery	Motors	New	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1015	15	15384	0.0282	139.5	$154	0.91%	74.4%	100%	0.76	0
GroceMoN2	Grocery	Motors	New	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.1901	15	58940	0.0231	437.7	$521	0.74%	74.4%	100%	0.63	0
GroceMoN3	Grocery	Motors	New	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0693	15	144688	0.0138	644.1	$689	0.45%	66.3%	100%	0.68	0
GroceMoN4	Grocery	Motors	New	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4499	15	290922	0.0121	1135.2	$511	0.39%	55.8%	100%	1.60	1
GroceMoN5	Grocery	Motors	New	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-500 HP	Motor	$0.3775	15	624328	0.0284	5711.1	$2,156	0.91%	55.8%	100%	1.90	1
GroceMoN6	Grocery	Motors	New	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5635	15	97600	2.511	19,520	$11,000.00	20%	55.0%	100%	1.40	1
GroceMoN7	Grocery	Motors	New	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4367	15	97600	3.941	29767.9	$13,000.00	31%	70.0%	100%	1.82	1

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
GroceMoN8	Grocery	Motors	New	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4149	15	97600	0.000	31329.5	$13,000.00	32%	80.0%	100%	1.72	1
GroceMoN9	Grocery	Motors	New	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.4915	15	97600	3.941	26449.5	$13,000.00	27%	70.0%	100%	1.63	1
GroceMoN10	Grocery	Motors	New	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4515	15	97600	2.798	28791.9	$13,000.00	30%	55.0%	100%	1.71	1
GroceMoN11	Grocery	Motors	New	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.4915	15	97600	3.941	26449.5	$13,000.00	27%	30.0%	100%	1.63	1
GroceMoT1	Grocery	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1015	15	15384	0.0282	139.5	$154	0.91%	74.4%	100%	0.76	0
GroceMoT2	Grocery	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.1901	15	58940	0.0231	437.7	$521	0.74%	74.4%	100%	0.63	0
GroceMoT3	Grocery	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0693	15	144688	0.0138	644.1	$689	0.45%	66.3%	100%	0.68	0
GroceMoT4	Grocery	Motors	Turnover	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4499	15	290922	0.0121	1135.2	$511	0.39%	55.8%	100%	1.60	1
GroceMoT5	Grocery	Motors	Turnover	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-250 HP	Motor	$0.3775	15	624328	0.0284	5711.1	$2,156	0.91%	55.8%	100%	1.90	1
GroceMoT6	Grocery	Motors	Turnover	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5635	15	97600	2.511	19,520	$11,000.00	20%	55.0%	80%	1.40	1
GroceMoT7	Grocery	Motors	Turnover	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4367	15	97600	3.941	29767.9	$13,000.00	31%	90.0%	80%	1.82	1
GroceMoT8	Grocery	Motors	Turnover	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4149	15	97600	0.000	31329.5	$13,000.00	32%	90.0%	80%	1.72	1
GroceMoT9	Grocery	Motors	Turnover	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.4915	15	97600	3.941	26449.5	$13,000.00	27%	90.0%	80%	1.63	1
GroceMoT10	Grocery	Motors	Turnover	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4515	15	97600	2.798	28791.9	$13,000.00	30%	80.0%	80%	1.71	1
GroceMoT11	Grocery	Motors	Turnover	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.4915	15	97600	3.941	26449.5	$13,000.00	27%	55.0%	80%	1.63	1
GroceMoT12	Grocery	Motors	Turnover	12	Motors: Rewind 125-200 HP	(E) Motor	Motor	$0.5097	15	292799	0.189	1471.4	$750	0.5%	35.0%	95%	1.55	1
GroceMoT13	Grocery	Motors	Turnover	13	Motors: Rewind 201-500 HP	(E) Motor	Motor	$0.6274	15	634398	0.410	3187.9	$2,000	0.5%	50.0%	95%	1.26	1
GroceMoT14	Grocery	Motors	Turnover	14	Motors: Rewind 20-50 HP	(E) Motor	Motor	$0.4704	15	59847	0.068	531.4	$250	0.9%	10.0%	95%	1.68	1
GroceMoT15	Grocery	Motors	Turnover	15	Motors: Rewind 500+ HP	(E) Motor	Motor	$0.5437	15	1463995	0.946	7356.8	$4,000	0.5%	70.0%	95%	1.45	1
GroceMoT16	Grocery	Motors	Turnover	16	Motors: Rewind 51-100 HP	(E) Motor	Motor	$0.5841	15	147991	0.110	856.0	$500	0.6%	20.0%	95%	1.35	1
GroceMoT17	Grocery	Motors	Turnover	17	Downsizing motor during retrofit	Larger hp standard motor	HP Reduction	$0.34	20	186,404	0.190	1,477	$500.00	0.79%	25%	95%	3.00	1
GroceMoN12	Grocery	Motors	New	12	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.57	1
GroceMoN13	Grocery	Motors	New	13	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.03	0
GroceMoN14	Grocery	Motors	New	14	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.70	1
GroceMoN15	Grocery	Motors	New	15	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.61	0
GroceMoT18	Grocery	Motors	Turnover	18	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.57	1
GroceMoT19	Grocery	Motors	Turnover	19	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.03	0
GroceMoT20	Grocery	Motors	Turnover	20	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.70	1
GroceMoT21	Grocery	Motors	Turnover	21	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.61	0
GroceMoT22	Grocery	Motors	Turnover	22	Air Comp Improvements			$0.11	15	56148	1.148	8,928	$990.00	16%	28%	65%	7.13	1
GroceMoE2	Grocery	Motors	Early	2	Air Compressor Optimization			$0.16	15	56148	2.174	16,901	$2,750.00	30%	38%	65%	4.86	1
GroceMoT23	Grocery	Motors	Turnover	23	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.20	1
HealtMoN1	Healthcare	Motors	New	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$0.8576	15	19759	0.0282	179.2	$154	0.91%	74.4%	100%	0.94	0
HealtMoN2	Healthcare	Motors	New	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$0.9266	15	75700	0.0231	562.2	$521	0.74%	74.4%	100%	0.80	0
HealtMoN3	Healthcare	Motors	New	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$0.8325	15	185830	0.0138	827.3	$689	0.45%	66.3%	100%	0.87	0
HealtMoN4	Healthcare	Motors	New	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.3503	15	373646	0.0121	1458.0	$511	0.39%	55.8%	100%	2.05	1
HealtMoN5	Healthcare	Motors	New	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-500 HP	Motor	$0.2939	15	801855	0.0284	7335.1	$2,156	0.91%	55.8%	100%	2.44	1
HealtMoN6	Healthcare	Motors	New	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.4388	15	125352	3.225	25,070	$11,000.00	20%	55.0%	100%	1.80	1
HealtMoN7	Healthcare	Motors	New	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.3771	15	125352	3.941	34471.8	$13,000.00	28%	70.0%	100%	2.08	1
HealtMoN8	Healthcare	Motors	New	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.3231	15	125352	0.000	40238.0	$13,000.00	32%	80.0%	100%	2.21	1
HealtMoN9	Healthcare	Motors	New	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.4490	15	125352	3.941	28956.3	$13,000.00	23%	70.0%	100%	1.77	1
HealtMoN10	Healthcare	Motors	New	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.3758	15	125352	2.798	34597.2	$13,000.00	28%	55.0%	100%	2.03	1
HealtMoN11	Healthcare	Motors	New	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.4233	15	125352	3.941	30711.3	$13,000.00	25%	30.0%	100%	1.87	1
HealtMoT1	Healthcare	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$0.8576	15	19759	0.0282	179.2	$154	0.91%	74.4%	100%	0.94	0
HealtMoT2	Healthcare	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$0.9266	15	75700	0.0231	562.2	$521	0.74%	74.4%	100%	0.80	0
HealtMoT3	Healthcare	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$0.8325	15	185830	0.0138	827.3	$689	0.45%	66.3%	100%	0.87	0
HealtMoT4	Healthcare	Motors	Turnover	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.3503	15	373646	0.0121	1458.0	$511	0.39%	55.8%	100%	2.05	1
HealtMoT5	Healthcare	Motors	Turnover	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-250 HP	Motor	$0.2939	15	801855	0.0284	7335.1	$2,156	0.91%	55.8%	100%	2.44	1
HealtMoT6	Healthcare	Motors	Turnover	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.4388	15	125352	3.225	25,070	$11,000.00	20%	55.0%	80%	1.80	1
HealtMoT7	Healthcare	Motors	Turnover	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.3771	15	125352	3.941	34471.8	$13,000.00	28%	90.0%	80%	2.08	1
HealtMoT8	Healthcare	Motors	Turnover	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.3231	15	125352	0.000	40238.0	$13,000.00	32%	90.0%	80%	2.21	1
HealtMoT9	Healthcare	Motors	Turnover	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.4490	15	125352	3.941	28956.3	$13,000.00	23%	90.0%	80%	1.77	1
HealtMoT10	Healthcare	Motors	Turnover	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.3758	15	125352	2.798	34597.2	$13,000.00	28%	80.0%	80%	2.03	1
HealtMoT11	Healthcare	Motors	Turnover	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.4233	15	125352	3.941	30711.3	$13,000.00	25%	55.0%	80%	1.87	1
HealtMoT12	Healthcare	Motors	Turnover	12	Motors: Rewind 125-200 HP	(E) Motor	Motor	$0.3969	15	376056	0.243	1889.7	$750	0.5%	35.0%	95%	1.99	1
HealtMoT13	Healthcare	Motors	Turnover	13	Motors: Rewind 201-500 HP	(E) Motor	Motor	$0.4885	15	814788	0.527	4094.4	$2,000	0.5%	50.0%	95%	1.62	1
HealtMoT14	Healthcare	Motors	Turnover	14	Motors: Rewind 20-50 HP	(E) Motor	Motor	$0.3663	15	76864	0.088	682.5	$250	0.9%	10.0%	95%	2.16	1
HealtMoT15	Healthcare	Motors	Turnover	15	Motors: Rewind 500+ HP	(E) Motor	Motor	$0.4233	15	1880281	1.216	9448.6	$4,000	0.5%	70.0%	95%	1.87	1
HealtMoT16	Healthcare	Motors	Turnover	16	Motors: Rewind 51-100 HP	(E) Motor	Motor	$0.4548	15	190072	0.141	1099.4	$500	0.6%	20.0%	95%	1.74	1
HealtMoT17	Healthcare	Motors	Turnover	17	Downsizing motor during retrofit	Larger hp standard motor	HP Reduction	$0.34	20	186,404	0.190	1,477	$500.00	0.79%	25%	95%	3.00	1
HealtMoN12	Healthcare	Motors	New	12	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.57	1
HealtMoN13	Healthcare	Motors	New	13	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.03	0
HealtMoN14	Healthcare	Motors	New	14	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.70	1
HealtMoN15	Healthcare	Motors	New	15	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.61	0
HealtMoT18	Healthcare	Motors	Turnover	18	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.57	1
HealtMoT19	Healthcare	Motors	Turnover	19	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.03	0
HealtMoT20	Healthcare	Motors	Turnover	20	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.70	1
HealtMoT21	Healthcare	Motors	Turnover	21	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.61	0
HealtMoT22	Healthcare	Motors	Turnover	22	Air Comp Improvements			$0.11	15	56148	1.148	8,928	$990.00	16%	28%	65%	7.13	1
HealtMoE2	Healthcare	Motors	Early	2	Air Compressor Optimization			$0.16	15	56148	2.174	16,901	$2,750.00	30%	38%	65%	4.86	1
HealtMoE1	Healthcare	Motors	Early	1	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.20	1
InstiMoN1	Institutional	Motors	New	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.2757	15	13284	0.0282	120.5	$154	0.91%	74.4%	100%	0.67	0
InstiMoN2	Institutional	Motors	New	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.3783	15	50893	0.0231	377.9	$521	0.74%	74.4%	100%	0.54	0
InstiMoN3	Institutional	Motors	New	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.2384	15	124933	0.0138	556.2	$689	0.45%	66.3%	100%	0.59	0
InstiMoN4	Institutional	Motors	New	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.5211	15	251201	0.0121	980.2	$511	0.39%	55.8%	100%	1.39	1
InstiMoN5	Institutional	Motors	New	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-500 HP	Motor	$0.4372	15	539086	0.0284	4931.3	$2,156	0.91%	55.8%	100%	1.64	1
InstiMoN6	Institutional	Motors	New	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.6526	15	84274	2.168	16,855	$11,000.00	20%	55.0%	100%	1.21	1
InstiMoN7	Institutional	Motors	New	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.5074	15	84274	6.136	25619.3	$13,000.00	30%	70.0%	100%	1.69	1
InstiMoN8	Institutional	Motors	New	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4806	15	84274	0.000	27051.9	$13,000.00	32%	80.0%	100%	1.49	1
InstiMoN9	Institutional	Motors	New	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5713	15	84274	6.136	22754.0	$13,000.00	27%	70.0%	100%	1.53	1
InstiMoN10	Institutional	Motors	New	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.5265	15	84274	4.452	24692.3	$13,000.00	29%	55.0%	100%	1.56	1
InstiMoN11	Institutional	Motors	New	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5713	15	84274	6.136	22754.0	$13,000.00	27%	30.0%	100%	1.53	1
InstiMoT1	Institutional	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.2757	15	13284	0.0282	120.5	$154	0.91%	74.4%	100%	0.67	0
InstiMoT10	Institutional	Motors	Turnover	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.5265	15	84274	4.452	24692.3	$13,000.00	29%	80.0%	80%	1.56	1
InstiMoT11	Institutional	Motors	Turnover	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5713	15	84274	6.136	22754.0	$13,000.00	27%	55.0%	80%	1.53	1
InstiMoT12	Institutional	Motors	Turnover	12	Motors: Rewind 125-200 HP	(E) Motor	Motor	$0.5903	15	252822	0.163	1270.5	$750	0.5%	35.0%	95%	1.34	1
InstiMoT13	Institutional	Motors	Turnover	13	Motors: Rewind 201-500 HP	(E) Motor	Motor	$0.7266	15	547781	0.354	2752.7	$2,000	0.5%	50.0%	95%	1.09	1
InstiMoT14	Institutional	Motors	Turnover	14	Motors: Rewind 20-50 HP	(E) Motor	Motor	$0.5448	15	51676	0.059	458.9	$250	0.9%	10.0%	95%	1.45	1
InstiMoT15	Institutional	Motors	Turnover	15	Motors: Rewind 500+ HP	(E) Motor	Motor	$0.6297	15	1264109	0.817	6352.3	$4,000	0.5%	70.0%	95%	1.26	1
InstiMoT16	Institutional	Motors	Turnover	16	Motors: Rewind 51-100 HP	(E) Motor	Motor	$0.6765	15	127785	0.095	739.1	$500	0.6%	20.0%	95%	1.17	1
InstiMoT17	Institutional	Motors	Turnover	17	Downsizing motor during retrofit	Larger hp standard motor	HP Reduction	$0.34	20	186,404	0.190	1,477	$500.00	0.79%	25%	95%	3.00	1
InstiMoT2	Institutional	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.3783	15	50893	0.0231	377.9	$521	0.74%	74.4%	100%	0.54	0
HealtMoT23	Healthcare	Motors	Turnover	23	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.20	1
InstiMoT3	Institutional	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.2384	15	124933	0.0138	556.2	$689	0.45%	66.3%	100%	0.59	0
InstiMoT4	Institutional	Motors	Turnover	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.5211	15	251201	0.0121	980.2	$511	0.39%	55.8%	100%	1.39	1
InstiMoT5	Institutional	Motors	Turnover	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-250 HP	Motor	$0.4372	15	539086	0.0284	4931.3	$2,156	0.91%	55.8%	100%	1.64	1
InstiMoT6	Institutional	Motors	Turnover	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.6526	15	84274	2.168	16,855	$11,000.00	20%	55.0%	80%	1.21	1

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
InstiMoT7	Institutional	Motors	Turnover	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.5074	15	84274	6.136	25619.3	$13,000.00	30%	90.0%	80%	1.69	1
InstiMoT8	Institutional	Motors	Turnover	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4806	15	84274	0.000	27051.9	$13,000.00	32%	90.0%	80%	1.49	1
InstiMoN12	Institutional	Motors	New	12	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.57	1
InstiMoN13	Institutional	Motors	New	13	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.03	0
InstiMoN14	Institutional	Motors	New	14	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.70	1
InstiMoN15	Institutional	Motors	New	15	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.61	0
InstiMoT18	Institutional	Motors	Turnover	18	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.57	1
InstiMoT19	Institutional	Motors	Turnover	19	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.03	0
InstiMoT20	Institutional	Motors	Turnover	20	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.70	1
InstiMoT21	Institutional	Motors	Turnover	21	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.61	0
InstiMoT22	Institutional	Motors	Turnover	22	Air Comp Improvements			$0.11	15	56148	1.148	8,928	$990.00	16%	28%	65%	7.13	1
InstiMoE2	Institutional	Motors	Early	2	Air Compressor Optimization			$0.16	15	56148	2.174	16,901	$2,750.00	30%	38%	65%	4.86	1
InstiMoE1	Institutional	Motors	Early	1	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.20	1
LodgiMoN1	Lodging	Motors	New	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1114	15	15247	0.0282	138.3	$154	0.91%	74.4%	100%	0.75	0
LodgiMoN2	Lodging	Motors	New	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.2008	15	58416	0.0231	433.8	$521	0.74%	74.4%	100%	0.62	0
LodgiMoN3	Lodging	Motors	New	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0789	15	143401	0.0138	638.4	$689	0.45%	66.3%	100%	0.67	0
LodgiMoN4	Lodging	Motors	New	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4540	15	288334	0.0121	1125.1	$511	0.39%	55.8%	100%	1.59	1
LodgiMoN5	Lodging	Motors	New	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-500 HP	Motor	$0.3809	15	618773	0.0284	5660.3	$2,156	0.91%	55.8%	100%	1.88	1
LodgiMoN6	Lodging	Motors	New	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5686	15	96731	2.489	19,346	$11,000.00	20%	55.0%	100%	1.39	1
LodgiMoN7	Lodging	Motors	New	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4477	15	96731	4.693	29035.5	$13,000.00	30%	70.0%	100%	1.81	1
LodgiMoN8	Lodging	Motors	New	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4187	15	96731	0.000	31050.8	$13,000.00	32%	80.0%	100%	1.71	1
LodgiMoN9	Lodging	Motors	New	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5087	15	96731	4.693	25553.2	$13,000.00	26%	70.0%	100%	1.62	1
LodgiMoN10	Lodging	Motors	New	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4616	15	96731	3.364	28164.9	$13,000.00	29%	55.0%	100%	1.70	1
LodgiMoN11	Lodging	Motors	New	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5043	15	96731	4.693	25778.9	$13,000.00	27%	30.0%	100%	1.63	1
LodgiMoT1	Lodging	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1114	15	15247	0.0282	138.3	$154	0.91%	74.4%	100%	0.75	0
LodgiMoT2	Lodging	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.2008	15	58416	0.0231	433.8	$521	0.74%	74.4%	100%	0.62	0
LodgiMoT3	Lodging	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0789	15	143401	0.0138	638.4	$689	0.45%	66.3%	100%	0.67	0
LodgiMoT4	Lodging	Motors	Turnover	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4540	15	288334	0.0121	1125.1	$511	0.39%	55.8%	100%	1.59	1
LodgiMoT5	Lodging	Motors	Turnover	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-250 HP	Motor	$0.3809	15	618773	0.0284	5660.3	$2,156	0.91%	55.8%	100%	1.88	1
LodgiMoT6	Lodging	Motors	Turnover	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5686	15	96731	2.489	19,346	$11,000.00	20%	55.0%	80%	1.39	1
LodgiMoT7	Lodging	Motors	Turnover	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4477	15	96731	4.693	29035.5	$13,000.00	30%	90.0%	80%	1.81	1
LodgiMoT8	Lodging	Motors	Turnover	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4187	15	96731	0.000	31050.8	$13,000.00	32%	90.0%	80%	1.71	1
LodgiMoT9	Lodging	Motors	Turnover	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5087	15	96731	4.693	25553.2	$13,000.00	26%	90.0%	80%	1.62	1
LodgiMoT10	Lodging	Motors	Turnover	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4616	15	96731	3.364	28164.9	$13,000.00	29%	80.0%	80%	1.70	1
LodgiMoT11	Lodging	Motors	Turnover	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5043	15	96731	4.693	25778.9	$13,000.00	27%	55.0%	80%	1.63	1
LodgiMoT12	Lodging	Motors	Turnover	12	Motors: Rewind 125-200 HP	(E) Motor	Motor	$0.5143	15	290194	0.188	1458.3	$750	0.5%	35.0%	95%	1.54	1
LodgiMoT13	Lodging	Motors	Turnover	13	Motors: Rewind 201-500 HP	(E) Motor	Motor	$0.6330	15	628754	0.406	3159.6	$2,000	0.5%	50.0%	95%	1.25	1
LodgiMoT14	Lodging	Motors	Turnover	14	Motors: Rewind 20-50 HP	(E) Motor	Motor	$0.4747	15	59314	0.068	526.7	$250	0.9%	10.0%	95%	1.67	1
LodgiMoT15	Lodging	Motors	Turnover	15	Motors: Rewind 500+ HP	(E) Motor	Motor	$0.5486	15	1450970	0.938	7291.3	$4,000	0.5%	70.0%	95%	1.44	1
LodgiMoT16	Lodging	Motors	Turnover	16	Motors: Rewind 51-100 HP	(E) Motor	Motor	$0.5894	15	146674	0.109	848.4	$500	0.6%	20.0%	95%	1.34	1
LodgiMoT17	Lodging	Motors	Turnover	17	Downsizing motor during retrofit	Larger hp standard motor	HP Reduction	$0.34	20	186,404	0.190	1,477	$500.00	0.79%	25%	95%	3.00	1
LodgiMoN12	Lodging	Motors	New	12	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.57	1
LodgiMoN13	Lodging	Motors	New	13	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.03	0
LodgiMoN14	Lodging	Motors	New	14	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.70	1
LodgiMoN15	Lodging	Motors	New	15	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.61	0
LodgiMoT18	Lodging	Motors	Turnover	18	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.57	1
LodgiMoT19	Lodging	Motors	Turnover	19	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.03	0
LodgiMoT20	Lodging	Motors	Turnover	20	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.70	1
LodgiMoT21	Lodging	Motors	Turnover	21	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.61	0
LodgiMoT22	Lodging	Motors	Turnover	22	Air Comp Improvements			$0.11	15	56148	1.148	8,928	$990.00	16%	28%	65%	7.13	1
LodgiMoE2	Lodging	Motors	Early	2	Air Compressor Optimization			$0.16	15	56148	2.174	16,901	$2,750.00	30%	38%	65%	4.86	1
InstiMoT23	Institutional	Motors	Turnover	23	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.20	1
miscMoN1	misc	Motors	New	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1114	15	15247	0.0282	138.3	$154	0.91%	74.4%	100%	0.75	0
miscMoN2	misc	Motors	New	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.2008	15	58416	0.0231	433.8	$521	0.74%	74.4%	100%	0.62	0
miscMoN3	misc	Motors	New	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0789	15	143401	0.0138	638.4	$689	0.45%	66.3%	100%	0.67	0
miscMoN4	misc	Motors	New	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4540	15	288334	0.0121	1125.1	$511	0.39%	55.8%	100%	1.59	1
miscMoN5	misc	Motors	New	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-500 HP	Motor	$0.3809	15	618773	0.0284	5660.3	$2,156	0.91%	55.8%	100%	1.88	1
miscMoN6	misc	Motors	New	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5686	15	96731	2.489	19,346	$11,000.00	20%	55.0%	100%	1.39	1
miscMoN7	misc	Motors	New	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4477	15	96731	4.693	29035.5	$13,000.00	30%	70.0%	100%	1.81	1
miscMoN8	misc	Motors	New	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4187	15	96731	0.000	31050.8	$13,000.00	32%	80.0%	100%	1.71	1
miscMoN9	misc	Motors	New	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5087	15	96731	4.693	25553.2	$13,000.00	26%	70.0%	100%	1.62	1
miscMoN10	misc	Motors	New	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4616	15	96731	3.364	28164.9	$13,000.00	29%	55.0%	100%	1.70	1
miscMoN11	misc	Motors	New	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5043	15	96731	4.693	25778.9	$13,000.00	27%	30.0%	100%	1.63	1
miscMoT1	misc	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1114	15	15247	0.0282	138.3	$154	0.91%	74.4%	100%	0.75	0
miscMoT2	misc	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.2008	15	58416	0.0231	433.8	$521	0.74%	74.4%	100%	0.62	0
miscMoT3	misc	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0789	15	143401	0.0138	638.4	$689	0.45%	66.3%	100%	0.67	0
miscMoT4	misc	Motors	Turnover	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4540	15	288334	0.0121	1125.1	$511	0.39%	55.8%	100%	1.59	1
miscMoT5	misc	Motors	Turnover	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-250 HP	Motor	$0.3809	15	618773	0.0284	5660.3	$2,156	0.91%	55.8%	100%	1.88	1
miscMoT6	misc	Motors	Turnover	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5686	15	96731	2.489	19,346	$11,000.00	20%	55.0%	80%	1.39	1
miscMoT7	misc	Motors	Turnover	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4477	15	96731	4.693	29035.5	$13,000.00	30%	90.0%	80%	1.81	1
miscMoT8	misc	Motors	Turnover	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4187	15	96731	0.000	31050.8	$13,000.00	32%	90.0%	80%	1.71	1
miscMoT9	misc	Motors	Turnover	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5087	15	96731	4.693	25553.2	$13,000.00	26%	90.0%	80%	1.62	1
miscMoT10	misc	Motors	Turnover	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4616	15	96731	3.364	28164.9	$13,000.00	29%	80.0%	80%	1.70	1
miscMoT11	misc	Motors	Turnover	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5043	15	96731	4.693	25778.9	$13,000.00	27%	55.0%	80%	1.63	1
miscMoT12	misc	Motors	Turnover	12	Motors: Rewind 125-200 HP	(E) Motor	Motor	$0.5143	15	290194	0.188	1458.3	$750	0.5%	35.0%	95%	1.54	1
miscMoT13	misc	Motors	Turnover	13	Motors: Rewind 201-500 HP	(E) Motor	Motor	$0.6330	15	628754	0.406	3159.6	$2,000	0.5%	50.0%	95%	1.25	1
miscMoT14	misc	Motors	Turnover	14	Motors: Rewind 20-50 HP	(E) Motor	Motor	$0.4747	15	59314	0.068	526.7	$250	0.9%	10.0%	95%	1.67	1
miscMoT15	misc	Motors	Turnover	15	Motors: Rewind 500+ HP	(E) Motor	Motor	$0.5486	15	1450970	0.938	7291.3	$4,000	0.5%	70.0%	95%	1.44	1
miscMoT16	misc	Motors	Turnover	16	Motors: Rewind 51-100 HP	(E) Motor	Motor	$0.5894	15	146674	0.109	848.4	$500	0.6%	20.0%	95%	1.34	1
miscMoT17	misc	Motors	Turnover	17	Downsizing motor during retrofit	Larger hp standard motor	HP Reduction	$0.34	20	186,404	0.190	1,477	$500.00	0.79%	25%	95%	3.00	1
miscMoN12	misc	Motors	New	12	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.57	1
miscMoN13	misc	Motors	New	13	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.03	0
miscMoN14	misc	Motors	New	14	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.70	1
miscMoN15	misc	Motors	New	15	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.61	0
miscMoT18	misc	Motors	Turnover	18	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.57	1
miscMoT19	misc	Motors	Turnover	19	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.03	0
miscMoT20	misc	Motors	Turnover	20	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.70	1
miscMoT21	misc	Motors	Turnover	21	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.61	0
miscMoT22	misc	Motors	Turnover	22	Air Comp Improvements			$0.11	15	56148	1.148	8,928	$990.00	16%	28%	65%	7.13	1
miscMoE2	misc	Motors	Early	2	Air Compressor Optimization			$0.16	15	56148	2.174	16,901	$2,750.00	30%	38%	65%	4.86	1
LodgiMoE1	Lodging	Motors	Early	1	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.20	1
RetaiMoN1	Retail	Motors	New	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1015	15	15384	0.0282	139.5	$154	0.91%	74.4%	100%	0.76	0
RetaiMoN2	Retail	Motors	New	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.1901	15	58940	0.0231	437.7	$521	0.74%	74.4%	100%	0.63	0
RetaiMoN3	Retail	Motors	New	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0693	15	144688	0.0138	644.1	$689	0.45%	66.3%	100%	0.68	0
RetaiMoN4	Retail	Motors	New	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4499	15	290922	0.0121	1135.2	$511	0.39%	55.8%	100%	1.60	1
RetaiMoN5	Retail	Motors	New	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-500 HP	Motor	$0.3775	15	624328	0.0284	5711.1	$2,156	0.91%	55.8%	100%	1.90	1
RetaiMoN6	Retail	Motors	New	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5635	15	97600	2.511	19,520	$11,000.00	20%	55.0%	100%	1.40	1

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
RetaiMoN7	Retail	Motors	New	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4367	15	97600	3.941	29767.9	$13,000.00	31%	70.0%	100%	1.82	1
RetaiMoN8	Retail	Motors	New	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4149	15	97600	0.000	31329.5	$13,000.00	32%	80.0%	100%	1.72	1
RetaiMoN9	Retail	Motors	New	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.4915	15	97600	3.941	26449.5	$13,000.00	27%	70.0%	100%	1.63	1
RetaiMoN10	Retail	Motors	New	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4515	15	97600	2.798	28791.9	$13,000.00	30%	55.0%	100%	1.71	1
RetaiMoN11	Retail	Motors	New	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.4915	15	97600	3.941	26449.5	$13,000.00	27%	30.0%	100%	1.63	1
RetaiMoT1	Retail	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1015	15	15384	0.0282	139.5	$154	0.91%	74.4%	100%	0.76	0
RetaiMoT2	Retail	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.1901	15	58940	0.0231	437.7	$521	0.74%	74.4%	100%	0.63	0
RetaiMoT3	Retail	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0693	15	144688	0.0138	644.1	$689	0.45%	66.3%	100%	0.68	0
RetaiMoT4	Retail	Motors	Turnover	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4499	15	290922	0.0121	1135.2	$511	0.39%	55.8%	100%	1.60	1
RetaiMoT5	Retail	Motors	Turnover	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-250 HP	Motor	$0.3775	15	624328	0.0284	5711.1	$2,156	0.91%	55.8%	100%	1.90	1
RetaiMoT6	Retail	Motors	Turnover	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5635	15	97600	2.511	19,520	$11,000.00	20%	55.0%	80%	1.40	1
RetaiMoT7	Retail	Motors	Turnover	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4367	15	97600	3.941	29767.9	$13,000.00	31%	90.0%	80%	1.82	1
RetaiMoT8	Retail	Motors	Turnover	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4149	15	97600	0.000	31329.5	$13,000.00	32%	90.0%	80%	1.72	1
RetaiMoT9	Retail	Motors	Turnover	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.4915	15	97600	3.941	26449.5	$13,000.00	27%	90.0%	80%	1.63	1
RetaiMoT10	Retail	Motors	Turnover	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4515	15	97600	2.798	28791.9	$13,000.00	30%	80.0%	80%	1.71	1
RetaiMoT11	Retail	Motors	Turnover	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.4915	15	97600	3.941	26449.5	$13,000.00	27%	55.0%	80%	1.63	1
RetaiMoT12	Retail	Motors	Turnover	12	Motors: Rewind 125-200 HP	(E) Motor	Motor	$0.5097	15	292799	0.189	1471.4	$750	0.5%	35.0%	95%	1.55	1
RetaiMoT13	Retail	Motors	Turnover	13	Motors: Rewind 201-500 HP	(E) Motor	Motor	$0.6274	15	634398	0.410	3187.9	$2,000	0.5%	50.0%	95%	1.26	1
RetaiMoT14	Retail	Motors	Turnover	14	Motors: Rewind 20-50 HP	(E) Motor	Motor	$0.4704	15	59847	0.068	531.4	$250	0.9%	10.0%	95%	1.68	1
RetaiMoT15	Retail	Motors	Turnover	15	Motors: Rewind 500+ HP	(E) Motor	Motor	$0.5437	15	1463995	0.946	7356.8	$4,000	0.5%	70.0%	95%	1.45	1
RetaiMoT16	Retail	Motors	Turnover	16	Motors: Rewind 51-100 HP	(E) Motor	Motor	$0.5841	15	147991	0.110	856.0	$500	0.6%	20.0%	95%	1.35	1
RetaiMoT17	Retail	Motors	Turnover	17	Downsizing motor during retrofit	Larger hp standard motor	HP Reduction	$0.34	20	186,404	0.190	1,477	$500.00	0.79%	25%	95%	3.00	1
RetaiMoN12	Retail	Motors	New	12	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.57	1
RetaiMoN13	Retail	Motors	New	13	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.03	0
RetaiMoN14	Retail	Motors	New	14	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.70	1
RetaiMoN15	Retail	Motors	New	15	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.61	0
RetaiMoT18	Retail	Motors	Turnover	18	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.57	1
RetaiMoT19	Retail	Motors	Turnover	19	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.03	0
RetaiMoT20	Retail	Motors	Turnover	20	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.70	1
RetaiMoT21	Retail	Motors	Turnover	21	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.61	0
RetaiMoT22	Retail	Motors	Turnover	22	Air Comp Improvements			$0.11	15	56148	1.148	8,928	$990.00	16%	28%	65%	7.13	1
RetaiMoE2	Retail	Motors	Early	2	Air Compressor Optimization			$0.16	15	56148	2.174	16,901	$2,750.00	30%	38%	65%	4.86	1
LodgiMoT23	Lodging	Motors	Turnover	23	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.20	1
RestaMoN1	Restaurant	Motors	New	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1487	15	14753	0.0282	133.8	$154	0.91%	74.4%	100%	0.73	0
RestaMoN2	Restaurant	Motors	New	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.2410	15	56520	0.0231	419.7	$521	0.74%	74.4%	100%	0.60	0
RestaMoN3	Restaurant	Motors	New	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.1151	15	138748	0.0138	617.7	$689	0.45%	66.3%	100%	0.65	0
RestaMoN4	Restaurant	Motors	New	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4692	15	278979	0.0121	1088.6	$511	0.39%	55.8%	100%	1.54	1
RestaMoN5	Restaurant	Motors	New	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-500 HP	Motor	$0.3937	15	598698	0.0284	5476.7	$2,156	0.91%	55.8%	100%	1.82	1
RestaMoN6	Restaurant	Motors	New	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5877	15	93593	2.408	18,719	$11,000.00	20%	55.0%	100%	1.35	1
RestaMoN7	Restaurant	Motors	New	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4524	15	93593	3.941	28733.0	$13,000.00	31%	70.0%	100%	1.76	1
RestaMoN8	Restaurant	Motors	New	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4327	15	93593	0.000	30043.3	$13,000.00	32%	80.0%	100%	1.65	1
RestaMoN9	Restaurant	Motors	New	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5107	15	93593	3.941	25457.3	$13,000.00	27%	70.0%	100%	1.58	1
RestaMoN10	Restaurant	Motors	New	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4708	15	93593	2.798	27609.9	$13,000.00	30%	55.0%	100%	1.65	1
RestaMoN11	Restaurant	Motors	New	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5107	15	93593	3.941	25457.3	$13,000.00	27%	30.0%	100%	1.58	1
RestaMoT1	Restaurant	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1487	15	14753	0.0282	133.8	$154	0.91%	74.4%	100%	0.73	0
RestaMoT2	Restaurant	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.2410	15	56520	0.0231	419.7	$521	0.74%	74.4%	100%	0.60	0
RestaMoT3	Restaurant	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.1151	15	138748	0.0138	617.7	$689	0.45%	66.3%	100%	0.65	0
RestaMoT4	Restaurant	Motors	Turnover	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4692	15	278979	0.0121	1088.6	$511	0.39%	55.8%	100%	1.54	1
RestaMoT5	Restaurant	Motors	Turnover	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-250 HP	Motor	$0.3937	15	598698	0.0284	5476.7	$2,156	0.91%	55.8%	100%	1.82	1
RestaMoT6	Restaurant	Motors	Turnover	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5877	15	93593	2.408	18,719	$11,000.00	20%	55.0%	80%	1.35	1
RestaMoT7	Restaurant	Motors	Turnover	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4524	15	93593	3.941	28733.0	$13,000.00	31%	90.0%	80%	1.76	1
RestaMoT8	Restaurant	Motors	Turnover	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4327	15	93593	0.000	30043.3	$13,000.00	32%	90.0%	80%	1.65	1
RestaMoT9	Restaurant	Motors	Turnover	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5107	15	93593	3.941	25457.3	$13,000.00	27%	90.0%	80%	1.58	1
RestaMoT10	Restaurant	Motors	Turnover	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4708	15	93593	2.798	27609.9	$13,000.00	30%	80.0%	80%	1.65	1
RestaMoT11	Restaurant	Motors	Turnover	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5107	15	93593	3.941	25457.3	$13,000.00	27%	55.0%	80%	1.58	1
RestaMoT12	Restaurant	Motors	Turnover	12	Motors: Rewind 125-200 HP	(E) Motor	Motor	$0.5316	15	280779	0.182	1410.9	$750	0.5%	35.0%	95%	1.49	1
RestaMoT13	Restaurant	Motors	Turnover	13	Motors: Rewind 201-500 HP	(E) Motor	Motor	$0.6542	15	608354	0.393	3057.1	$2,000	0.5%	50.0%	95%	1.21	1
RestaMoT14	Restaurant	Motors	Turnover	14	Motors: Rewind 20-50 HP	(E) Motor	Motor	$0.4906	15	57390	0.066	509.6	$250	0.9%	10.0%	95%	1.61	1
RestaMoT15	Restaurant	Motors	Turnover	15	Motors: Rewind 500+ HP	(E) Motor	Motor	$0.5670	15	1403894	0.908	7054.7	$4,000	0.5%	70.0%	95%	1.40	1
RestaMoT16	Restaurant	Motors	Turnover	16	Motors: Rewind 51-100 HP	(E) Motor	Motor	$0.6091	15	141915	0.106	820.8	$500	0.6%	20.0%	95%	1.30	1
RestaMoT17	Restaurant	Motors	Turnover	17	Downsizing motor during retrofit	Larger hp standard motor	HP Reduction	$0.34	20	186,404	0.190	1,477	$500.00	0.79%	25%	95%	3.00	1
RestaMoN12	Restaurant	Motors	New	12	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.57	1
RestaMoN13	Restaurant	Motors	New	13	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.03	0
RestaMoN14	Restaurant	Motors	New	14	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.70	1
RestaMoN15	Restaurant	Motors	New	15	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.61	0
RestaMoT18	Restaurant	Motors	Turnover	18	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.57	1
RestaMoT19	Restaurant	Motors	Turnover	19	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.03	0
RestaMoT20	Restaurant	Motors	Turnover	20	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.70	1
RestaMoT21	Restaurant	Motors	Turnover	21	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.61	0
RestaMoT22	Restaurant	Motors	Turnover	22	Air Comp Improvements			$0.11	15	56148	1.148	8,928	$990.00	16%	28%	65%	7.13	1
RestaMoE2	Restaurant	Motors	Early	2	Air Compressor Optimization			$0.16	15	56148	2.174	16,901	$2,750.00	30%	38%	65%	4.86	1
miscMoE1	misc	Motors	Early	1	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.20	1
WarehMoN1	Warehouse	Motors	New	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1114	15	15247	0.0282	138.3	$154	0.91%	74.4%	100%	0.75	0
WarehMoN2	Warehouse	Motors	New	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.2008	15	58416	0.0231	433.8	$521	0.74%	74.4%	100%	0.62	0
WarehMoN3	Warehouse	Motors	New	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0789	15	143401	0.0138	638.4	$689	0.45%	66.3%	100%	0.67	0
WarehMoN4	Warehouse	Motors	New	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4540	15	288334	0.0121	1125.1	$511	0.39%	55.8%	100%	1.59	1
WarehMoN5	Warehouse	Motors	New	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-500 HP	Motor	$0.3809	15	618773	0.0284	5660.3	$2,156	0.91%	55.8%	100%	1.88	1
WarehMoN6	Warehouse	Motors	New	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5686	15	96731	2.489	19,346	$11,000.00	20%	55.0%	100%	1.39	1
WarehMoN7	Warehouse	Motors	New	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4477	15	96731	4.693	29035.5	$13,000.00	30%	70.0%	100%	1.81	1
WarehMoN8	Warehouse	Motors	New	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4187	15	96731	0.000	31050.8	$13,000.00	32%	80.0%	100%	1.71	1
WarehMoN9	Warehouse	Motors	New	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5087	15	96731	4.693	25553.2	$13,000.00	26%	70.0%	100%	1.62	1
WarehMoN1	Warehouse	Motors	New	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4616	15	96731	3.364	28164.9	$13,000.00	29%	55.0%	100%	1.70	1
WarehMoN1	Warehouse	Motors	New	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5043	15	96731	4.693	25778.9	$13,000.00	27%	30.0%	100%	1.63	1
WarehMoT1	Warehouse	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1114	15	15247	0.0282	138.3	$154	0.91%	74.4%	100%	0.75	0
WarehMoT2	Warehouse	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.2008	15	58416	0.0231	433.8	$521	0.74%	74.4%	100%	0.62	0
WarehMoT3	Warehouse	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0789	15	143401	0.0138	638.4	$689	0.45%	66.3%	100%	0.67	0
WarehMoT4	Warehouse	Motors	Turnover	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4540	15	288334	0.0121	1125.1	$511	0.39%	55.8%	100%	1.59	1
WarehMoT5	Warehouse	Motors	Turnover	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-250 HP	Motor	$0.3809	15	618773	0.0284	5660.3	$2,156	0.91%	55.8%	100%	1.88	1
WarehMoT6	Warehouse	Motors	Turnover	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5686	15	96731	2.489	19,346	$11,000.00	20%	55.0%	80%	1.39	1
WarehMoT7	Warehouse	Motors	Turnover	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4477	15	96731	4.693	29035.5	$13,000.00	30%	90.0%	80%	1.81	1
WarehMoT8	Warehouse	Motors	Turnover	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4187	15	96731	0.000	31050.8	$13,000.00	32%	90.0%	80%	1.71	1
WarehMoT9	Warehouse	Motors	Turnover	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5087	15	96731	4.693	25553.2	$13,000.00	26%	90.0%	80%	1.62	1
WarehMoT10	Warehouse	Motors	Turnover	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4616	15	96731	3.364	28164.9	$13,000.00	29%	80.0%	80%	1.70	1
WarehMoT11	Warehouse	Motors	Turnover	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5043	15	96731	4.693	25778.9	$13,000.00	27%	55.0%	80%	1.63	1
WarehMoT12	Warehouse	Motors	Turnover	12	Motors: Rewind 125-200 HP	(E) Motor	Motor	$0.5143	15	290194	0.188	1458.3	$750	0.5%	35.0%	95%	1.54	1
WarehMoT13	Warehouse	Motors	Turnover	13	Motors: Rewind 201-500 HP	(E) Motor	Motor	$0.6330	15	628754	0.406	3159.6	$2,000	0.5%	50.0%	95%	1.25	1
WarehMoT14	Warehouse	Motors	Turnover	14	Motors: Rewind 20-50 HP	(E) Motor	Motor	$0.4747	15	59314	0.068	526.7	$250	0.9%	10.0%	95%	1.67	1

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
WarehMoT15	Warehouse	Motors	Turnover	15	Motors: Rewind 500+ HP	(E) Motor	Motor	$0.5486	15	1450970	0.938	7291.3	$4,000	0.5%	70.0%	95%	1.44	1
WarehMoT16	Warehouse	Motors	Turnover	16	Motors: Rewind 51-100 HP	(E) Motor	Motor	$0.5894	15	146674	0.109	848.4	$500	0.6%	20.0%	95%	1.34	1
WarehMoT17	Warehouse	Motors	Turnover	17	Downsizing motor during retrofit	Larger hp standard motor	HP Reduction	$0.34	20	186,404	0.190	1,477	$500.00	0.79%	25%	95%	3.00	1
WarehMoN1	Warehouse	Motors	New	12	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.57	1
WarehMoN1	Warehouse	Motors	New	13	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.03	0
WarehMoN1	Warehouse	Motors	New	14	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.70	1
WarehMoN1	Warehouse	Motors	New	15	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.61	0
WarehMoT18	Warehouse	Motors	Turnover	18	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.57	1
WarehMoT19	Warehouse	Motors	Turnover	19	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.03	0
WarehMoT20	Warehouse	Motors	Turnover	20	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.70	1
WarehMoT21	Warehouse	Motors	Turnover	21	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.61	0
WarehMoT22	Warehouse	Motors	Turnover	22	Air Comp Improvements			$0.11	15	56148	1.148	8,928	$990.00	16%	28%	65%	7.13	1
WarehMoE2	Warehouse	Motors	Early	2	Air Compressor Optimization			$0.16	15	56148	2.174	16,901	$2,750.00	30%	38%	65%	4.86	1
MiscMoT23	Misc	Motors	Turnover	23	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.20	1
HealtHeN2	Healthcare	Heating	New	2	Ground Source HP Open - Water	Air Source Heat Pump	ton	$41.47	15	298	0.23	18	$ 750.0	6%	20%	95%	0.20	0
HealtHen3	Healthcare	Heating	new	3	Ground Source HP Closed	Air Source Heat Pump	ton	$41.47	15	298	0.000	18	$750.00	6%	100%	95%	0.02	0
GrocePaE1	Grocery	Packaged DX	Early	1	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$3.13	20	970	0.05	64	$200.00	7%	15%	9%	0.46	0
GrocePaE2	Grocery	Packaged DX	Early	2	Adding window shade film	No shade film	q ft window are	$7.05	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.03	0
GrocePaE3	Grocery	Packaged DX	Early	3	Adding window shade screen	No shade screen	q ft window are	$3.90	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.20	0
GrocePaE4	Grocery	Packaged DX	Early	4	Windows U<0.40, .55 SHGC	Existing window specifications	q ft window are	$1.40	30	2	0.000	0	$0.28	13%	50%	95%	0.93	0
GrocePaE5	Grocery	Packaged DX	Early	5	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$3.48	20	970	0.05	65	$225.00	7%	95%	95%	0.41	0
GrocePaE7	Grocery	Packaged DX	Early	7	Automated control system	Baseline DX	ton	$0.49	10	1,025	0.006	51	$25.00	5%	100%	65%	0.99	0
GrocePaE8	Grocery	Packaged DX	Early	8	Duct Sealing, down to 15%	Leakage of 29%	ton	$7.92	15	970	0.05	12	$95.00	1%	45%	80%	0.39	0
GrocePaE9	Grocery	Packaged DX	Early	9	Hotel Keycard Sensors	No prior controls	oom Controlle	$0.29	10	870	0.041	342	$100.00	39%	95%	80%	1.65	1
GrocePaE10	Grocery	Packaged DX	Early	10	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	ton	$0.55	1	1,054	0.05	64	$35.00	6%	100%	45%	0.20	0
GrocePaE11	Grocery	Packaged DX	Early	11	7 day, two stage setback thermostat	Manual Thermostat	ton	$0.44	10	970	0.015	125	$55.00	13%	100%	45%	1.10	1
GrocePaE13	Grocery	Packaged DX	Early	13	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.36	7	970	0.05	155	$55.15	16%	95%	75%	1.10	1
GrocePaN1	Grocery	Packaged DX	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	ton	$1.36	20	970	0.05	64	$87.00	7%	100%	95%	1.06	1
GrocePaN2	Grocery	Packaged DX	New	2	Adding reflective roof treatment	Std color roof	ton	$4.50	20	970	0.05	10	$45.00	1%	100%	95%	0.95	0
GrocePaN3	Grocery	Packaged DX	New	3	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$1.93	20	970	0.05	65	$125.00	7%	100%	95%	0.75	0
GrocePaN4	Grocery	Packaged DX	New	4	Green Roof (New construction or roof replacement)	Std Roof	ton	$1.97	20	970	0.05	65	$127.43	7%	45%	95%	0.73	0
GrocePaN5	Grocery	Packaged DX	New	5	Duct Insulation, Add R8	No Insulation	ton	$10.42	20	970	0.05	12	$125.00	1%	100%	95%	0.36	0
GrocePaN6	Grocery	Packaged DX	New	6	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$1.51	20	835	0.04	60	$90.40	7%	100%	95%	0.95	0
GrocePaN7	Grocery	Packaged DX	New	7	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$1.62	20	835	0.08	111	$180.81	13%	100%	95%	0.89	0
GrocePaN8	Grocery	Packaged DX	New	8	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$1.73	20	835	0.12	157	$271.21	19%	100%	95%	0.83	0
GrocePaN9	Grocery	Packaged DX	New	9	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$0.85	20	970	0.05	65	$55.00	7%	100%	95%	1.69	1
GrocePaN10	Grocery	Packaged DX	New	10	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$0.85	20	987	0.06	82	$70.00	8%	100%	95%	1.69	1
GrocePaN11	Grocery	Packaged DX	New	11	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.43	20	1,086	0.06	80	$115.13	7%	100%	95%	1.01	1
GrocePaN12	Grocery	Packaged DX	New	12	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$1.79	20	1,120	0.04	55	$98.39	5%	100%	95%	0.80	0
GrocePaN13	Grocery	Packaged DX	New	13	Ground Source HP Open - Water	Air Source Heat Pump	ton	$2.37	15	987	0.23	317	$ 750.0	32%	20%	95%	0.49	0
GrocePaN14	Grocery	Packaged DX	New	14	Ground Source HP Closed	Air Source Heat Pump	ton	$4.24	15	987	0.021	177	$750.00	18%	100%	95%	0.18	0
GrocePaN15	Grocery	Packaged DX	New	15	Air-side Economizer	No Economizer	ton	$1.17	15	970	0.017	145	$170.00	15%	75%	45%	0.67	0
GrocePaN16	Grocery	Packaged DX	New	16	Energy Recovery Units	No Energy Recovery	ton	$0.92	15	970	0.023	194	$179.00	20%	100%	95%	0.85	0
GrocePaN17	Grocery	Packaged DX	New	17	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$2.40	15	1,025	0.006	46	$110.89	5%	100%	95%	0.33	0
GrocePaT1	Grocery	Packaged DX	Turnover	1	Duct Insulation, Add R8	No Insulation	ton	$10.42	15	970	0.05	12	$125.00	1%	100%	95%	0.30	0
GrocePaT2	Grocery	Packaged DX	Turnover	2	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$1.51	20	835	0.04	60	$90.40	7%	100%	95%	0.95	0
GrocePaT3	Grocery	Packaged DX	Turnover	3	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$1.62	20	835	0.08	111	$180.81	13%	100%	95%	0.89	0
GrocePaT4	Grocery	Packaged DX	Turnover	4	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$1.73	20	835	0.12	157	$271.21	19%	100%	95%	0.83	0
GrocePaT5	Grocery	Packaged DX	Turnover	5	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$0.85	20	970	0.05	65	$55.00	7%	100%	95%	1.69	1
GrocePaT6	Grocery	Packaged DX	Turnover	6	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$0.85	20	987	0.06	82	$70.00	8%	100%	95%	1.69	1
GrocePaT7	Grocery	Packaged DX	Turnover	7	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.43	20	1,086	0.06	80	$115.13	7%	100%	95%	1.01	1
GrocePaT8	Grocery	Packaged DX	Turnover	8	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$1.79	20	1,120	0.04	55	$98.39	5%	100%	95%	0.80	0
GrocePaT9	Grocery	Packaged DX	Turnover	9	Ground Source HP Open - Water	Air Source Heat Pump	ton	$2.37	15	987	0.23	317	$ 750.0	32%	5%	95%	0.49	0
GrocePaT10	Grocery	Packaged DX	Turnover	10	Ground Source HP Closed	Air Source Heat Pump	ton	$4.24	15	987	0.021	177	$750.00	18%	100%	95%	0.18	0
GrocePaT11	Grocery	Packaged DX	Turnover	11	Air-side Economizer	No Economizer	ton	$1.17	15	970	0.017	145	$170.00	15%	75%	45%	0.67	0
GrocePaT12	Grocery	Packaged DX	Turnover	12	Energy Recovery Units	No Energy Recovery	ton	$0.92	15	970	0.023	194	$179.00	20%	100%	95%	0.85	0
GrocePaT13	Grocery	Packaged DX	Turnover	13	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$2.40	15	1,025	0.006	46	$110.89	5%	100%	95%	0.33	0
GrocePaN18	Grocery	Packaged DX	New	18	Automated control system	Baseline DX	ton	$0.49	10	1,025	0.006	51	$25.00	5%	100%	65%	0.99	0
GrocePaN19	Grocery	Packaged DX	New	19	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$0.91	10	870	0.006	47	$43.00	5%	100%	95%	0.53	0
GrocePaT15	Grocery	Packaged DX	Turnover	15	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$0.91	10	870	0.006	47	$43.00	5%	100%	95%	0.53	0
InstiPaE1	Institutional	Packaged DX	Early	1	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$3.13	20	722	0.05	64	$200.00	9%	15%	9%	0.46	0
InstiPaE2	Institutional	Packaged DX	Early	2	Adding window shade film	No shade film	q ft window are	$7.05	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.03	0
InstiPaE3	Institutional	Packaged DX	Early	3	Adding window shade screen	No shade screen	q ft window are	$3.90	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.20	0
InstiPaE4	Institutional	Packaged DX	Early	4	Windows U<0.40, .55 SHGC	Existing window specifications	q ft window are	$1.40	30	2	0.000	0	$0.28	13%	50%	95%	0.93	0
InstiPaE5	Institutional	Packaged DX	Early	5	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$4.67	20	722	0.05	48	$225.00	7%	95%	95%	0.35	0
InstiPaE7	Institutional	Packaged DX	Early	7	Automated control system	Baseline DX	ton	$0.66	10	763	0.005	38	$25.00	5%	100%	65%	0.74	0
InstiPaE8	Institutional	Packaged DX	Early	8	Duct Sealing, down to 15%	Leakage of 29%	ton	$7.92	15	722	0.05	12	$95.00	2%	45%	80%	0.39	0
InstiPaE9	Institutional	Packaged DX	Early	9	Hotel Keycard Sensors	No prior controls	oom Controlle	$0.29	10	648	0.041	342	$100.00	53%	95%	80%	1.65	1
InstiPaE10	Institutional	Packaged DX	Early	10	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	ton	$0.55	1	785	0.05	64	$35.00	8%	100%	45%	0.20	0
InstiPaE11	Institutional	Packaged DX	Early	11	7 day, two stage setback thermostat	Manual Thermostat	ton	$0.44	10	722	0.015	125	$55.00	17%	100%	45%	1.10	1
InstiPaE13	Institutional	Packaged DX	Early	13	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.48	7	722	0.05	116	$55.15	16%	95%	75%	0.90	0
InstiPaN1	Institutional	Packaged DX	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	ton	$1.36	20	722	0.05	64	$87.00	9%	100%	95%	1.06	1
InstiPaN2	Institutional	Packaged DX	New	2	Adding reflective roof treatment	Std color roof	ton	$4.50	20	722	0.05	10	$45.00	1%	100%	95%	0.95	0
InstiPaN3	Institutional	Packaged DX	New	3	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$2.60	20	722	0.05	48	$125.00	7%	100%	95%	0.62	0
InstiPaN4	Institutional	Packaged DX	New	4	Green Roof (New construction or roof replacement)	Std Roof	ton	$2.65	20	722	0.05	48	$127.43	7%	45%	95%	0.61	0
InstiPaN5	Institutional	Packaged DX	New	5	Duct Insulation, Add R8	No Insulation	ton	$10.42	20	722	0.05	12	$125.00	2%	100%	95%	0.36	0
InstiPaN6	Institutional	Packaged DX	New	6	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$2.03	20	622	0.04	44	$90.40	7%	100%	95%	0.80	0
InstiPaN7	Institutional	Packaged DX	New	7	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$2.18	20	622	0.08	83	$180.81	13%	100%	95%	0.74	0
InstiPaN8	Institutional	Packaged DX	New	8	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$2.32	20	622	0.12	117	$271.21	19%	100%	95%	0.70	0
InstiPaN9	Institutional	Packaged DX	New	9	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.14	20	722	0.05	48	$55.00	7%	100%	95%	1.42	1
InstiPaN10	Institutional	Packaged DX	New	10	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.14	20	735	0.06	61	$70.00	8%	100%	95%	1.42	1
InstiPaN11	Institutional	Packaged DX	New	11	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.92	20	809	0.06	60	$115.13	7%	100%	95%	0.84	0
InstiPaN12	Institutional	Packaged DX	New	12	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$2.41	20	834	0.04	41	$98.39	5%	100%	95%	0.67	0
InstiPaN13	Institutional	Packaged DX	New	13	Ground Source HP Open - Water	Air Source Heat Pump	ton	$3.18	15	735	0.23	236	$ 750.0	32%	20%	95%	0.41	0
InstiPaN14	Institutional	Packaged DX	New	14	Ground Source HP Closed	Air Source Heat Pump	ton	$5.70	15	735	0.016	132	$750.00	18%	100%	95%	0.14	0
InstiPaN15	Institutional	Packaged DX	New	15	Air-side Economizer	No Economizer	ton	$1.57	15	722	0.013	108	$170.00	15%	75%	45%	0.50	0
InstiPaN16	Institutional	Packaged DX	New	16	Energy Recovery Units	No Energy Recovery	ton	$1.24	15	722	0.017	144	$179.00	20%	100%	95%	0.63	0
InstiPaN17	Institutional	Packaged DX	New	17	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$3.23	15	763	0.004	34	$110.89	5%	100%	95%	0.24	0
InstiPaT1	Institutional	Packaged DX	Turnover	1	Duct Insulation, Add R8	No Insulation	ton	$10.42	15	722	0.05	12	$125.00	2%	100%	95%	0.30	0
InstiPaT2	Institutional	Packaged DX	Turnover	2	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$2.03	20	622	0.04	44	$90.40	7%	100%	95%	0.80	0
InstiPaT3	Institutional	Packaged DX	Turnover	3	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$2.18	20	622	0.08	83	$180.81	13%	100%	95%	0.74	0
InstiPaT4	Institutional	Packaged DX	Turnover	4	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$2.32	20	622	0.12	117	$271.21	19%	100%	95%	0.70	0
InstiPaT5	Institutional	Packaged DX	Turnover	5	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.14	20	722	0.05	48	$55.00	7%	100%	95%	1.42	1
InstiPaT6	Institutional	Packaged DX	Turnover	6	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.14	20	735	0.06	61	$70.00	8%	100%	95%	1.42	1
InstiPaT7	Institutional	Packaged DX	Turnover	7	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.92	20	809	0.06	60	$115.13	7%	100%	95%	0.84	0
InstiPaT8	Institutional	Packaged DX	Turnover	8	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$2.41	20	834	0.04	41	$98.39	5%	100%	95%	0.67	0
InstiPaT9	Institutional	Packaged DX	Turnover	9	Ground Source HP Open - Water	Air Source Heat Pump	ton	$3.18	15	735	0.23	236	$ 750.0	32%	5%	95%	0.41	0

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
InstiPaT10	Institutional	Packaged DX	Turnover	10	Ground Source HP Closed	Air Source Heat Pump	ton	$5.70	15	735	0.016	132	$750.00	18%	100%	95%	0.14	0
InstiPaT11	Institutional	Packaged DX	Turnover	11	Air-side Economizer	No Economizer	ton	$1.57	15	722	0.013	108	$170.00	15%	75%	45%	0.50	0
InstiPaT12	Institutional	Packaged DX	Turnover	12	Energy Recovery Units	No Energy Recovery	ton	$1.24	15	722	0.017	144	$179.00	20%	100%	95%	0.63	0
InstiPaT13	Institutional	Packaged DX	Turnover	13	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$3.23	15	763	0.004	34	$110.89	5%	100%	95%	0.24	0
InstiPaN18	Institutional	Packaged DX	New	18	Automated control system	Baseline DX	ton	$0.66	10	763	0.005	38	$25.00	5%	100%	65%	0.74	0
InstiPaN19	Institutional	Packaged DX	New	19	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.22	10	648	0.004	35	$43.00	5%	100%	95%	0.40	0
InstiPaT15	Institutional	Packaged DX	Turnover	15	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.22	10	648	0.004	35	$43.00	5%	100%	95%	0.40	0
LodgiPaE1	Lodging	Packaged DX	Early	1	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$3.13	20	863	0.05	64	$200.00	7%	15%	9%	0.46	0
LodgiPaE2	Lodging	Packaged DX	Early	2	Adding window shade film	No shade film	q ft window are	$7.05	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.03	0
LodgiPaE3	Lodging	Packaged DX	Early	3	Adding window shade screen	No shade screen	q ft window are	$3.90	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.20	0
LodgiPaE4	Lodging	Packaged DX	Early	4	Windows U<0.40, .55 SHGC	Existing window specifications	q ft window are	$1.40	30	2	0.000	0	$0.28	13%	50%	95%	0.93	0
LodgiPaE5	Lodging	Packaged DX	Early	5	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$3.91	20	863	0.05	58	$225.00	7%	95%	95%	0.38	0
LodgiPaE7	Lodging	Packaged DX	Early	7	Automated control system	Baseline DX	ton	$0.55	10	911	0.005	46	$25.00	5%	100%	65%	0.88	0
LodgiPaE8	Lodging	Packaged DX	Early	8	Duct Sealing, down to 15%	Leakage of 29%	ton	$7.92	15	863	0.05	12	$95.00	1%	45%	80%	0.39	0
LodgiPaE9	Lodging	Packaged DX	Early	9	Hotel Keycard Sensors	No prior controls	oom Controlle	$0.29	10	774	0.041	342	$100.00	44%	95%	80%	1.65	1
LodgiPaE10	Lodging	Packaged DX	Early	10	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	ton	$0.55	1	938	0.05	64	$35.00	7%	100%	45%	0.20	0
LodgiPaE11	Lodging	Packaged DX	Early	11	7 day, two stage setback thermostat	Manual Thermostat	ton	$0.44	10	863	0.015	125	$55.00	14%	100%	45%	1.10	1
LodgiPaE13	Lodging	Packaged DX	Early	13	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.40	7	863	0.05	138	$55.15	16%	95%	75%	1.01	1
LodgiPaN1	Lodging	Packaged DX	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	ton	$1.36	20	863	0.05	64	$87.00	7%	100%	95%	1.06	1
LodgiPaN2	Lodging	Packaged DX	New	2	Adding reflective roof treatment	Std color roof	ton	$4.50	20	863	0.05	10	$45.00	1%	100%	95%	0.95	0
LodgiPaN3	Lodging	Packaged DX	New	3	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$2.17	20	863	0.05	58	$125.00	7%	100%	95%	0.69	0
LodgiPaN4	Lodging	Packaged DX	New	4	Green Roof (New construction or roof replacement)	Std Roof	ton	$2.22	20	863	0.05	58	$127.43	7%	45%	95%	0.68	0
LodgiPaN5	Lodging	Packaged DX	New	5	Duct Insulation, Add R8	No Insulation	ton	$10.42	20	863	0.05	12	$125.00	1%	100%	95%	0.36	0
LodgiPaN6	Lodging	Packaged DX	New	6	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$1.70	20	743	0.04	53	$90.40	7%	100%	95%	0.88	0
LodgiPaN7	Lodging	Packaged DX	New	7	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$1.82	20	743	0.08	99	$180.81	13%	100%	95%	0.83	0
LodgiPaN8	Lodging	Packaged DX	New	8	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$1.95	20	743	0.12	139	$271.21	19%	100%	95%	0.77	0
LodgiPaN9	Lodging	Packaged DX	New	9	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$0.96	20	863	0.05	58	$55.00	7%	100%	95%	1.57	1
LodgiPaN10	Lodging	Packaged DX	New	10	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$0.96	20	878	0.06	73	$70.00	8%	100%	95%	1.57	1
LodgiPaN11	Lodging	Packaged DX	New	11	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.61	20	966	0.06	72	$115.13	7%	100%	95%	0.94	0
LodgiPaN12	Lodging	Packaged DX	New	12	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$2.02	20	996	0.04	49	$98.39	5%	100%	95%	0.75	0
LodgiPaN13	Lodging	Packaged DX	New	13	Ground Source HP Open - Water	Air Source Heat Pump	ton	$2.66	15	878	0.23	282	$ 750.0	32%	20%	95%	0.45	0
LodgiPaN14	Lodging	Packaged DX	New	14	Ground Source HP Closed	Air Source Heat Pump	ton	$4.77	15	878	0.019	157	$750.00	18%	100%	95%	0.16	0
LodgiPaN15	Lodging	Packaged DX	New	15	Air-side Economizer	No Economizer	ton	$1.31	15	863	0.015	129	$170.00	15%	75%	45%	0.60	0
LodgiPaN16	Lodging	Packaged DX	New	16	Energy Recovery Units	No Energy Recovery	ton	$1.04	15	863	0.021	173	$179.00	20%	100%	95%	0.76	0
LodgiPaN17	Lodging	Packaged DX	New	17	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$2.70	15	911	0.005	41	$110.89	5%	100%	95%	0.29	0
LodgiPaT1	Lodging	Packaged DX	Turnover	1	Duct Insulation, Add R8	No Insulation	ton	$10.42	15	863	0.05	12	$125.00	1%	100%	95%	0.30	0
LodgiPaT2	Lodging	Packaged DX	Turnover	2	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$1.70	20	743	0.04	53	$90.40	7%	100%	95%	0.88	0
LodgiPaT3	Lodging	Packaged DX	Turnover	3	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$1.82	20	743	0.08	99	$180.81	13%	100%	95%	0.83	0
LodgiPaT4	Lodging	Packaged DX	Turnover	4	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$1.95	20	743	0.12	139	$271.21	19%	100%	95%	0.77	0
LodgiPaT5	Lodging	Packaged DX	Turnover	5	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$0.96	20	863	0.05	58	$55.00	7%	100%	95%	1.57	1
LodgiPaT6	Lodging	Packaged DX	Turnover	6	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$0.96	20	878	0.06	73	$70.00	8%	100%	95%	1.57	1
LodgiPaT7	Lodging	Packaged DX	Turnover	7	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.61	20	966	0.06	72	$115.13	7%	100%	95%	0.94	0
LodgiPaT8	Lodging	Packaged DX	Turnover	8	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$2.02	20	996	0.04	49	$98.39	5%	100%	95%	0.75	0
LodgiPaT9	Lodging	Packaged DX	Turnover	9	Ground Source HP Open - Water	Air Source Heat Pump	ton	$2.66	15	878	0.23	282	$ 750.0	32%	5%	95%	0.45	0
LodgiPaT10	Lodging	Packaged DX	Turnover	10	Ground Source HP Closed	Air Source Heat Pump	ton	$4.77	15	878	0.019	157	$750.00	18%	100%	95%	0.16	0
LodgiPaT11	Lodging	Packaged DX	Turnover	11	Air-side Economizer	No Economizer	ton	$1.31	15	863	0.015	129	$170.00	15%	75%	45%	0.60	0
LodgiPaT12	Lodging	Packaged DX	Turnover	12	Energy Recovery Units	No Energy Recovery	ton	$1.04	15	863	0.021	173	$179.00	20%	100%	95%	0.76	0
LodgiPaT13	Lodging	Packaged DX	Turnover	13	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$2.70	15	911	0.005	41	$110.89	5%	100%	95%	0.29	0
LodgiPaN18	Lodging	Packaged DX	New	18	Automated control system	Baseline DX	ton	$0.55	10	911	0.005	46	$25.00	5%	100%	65%	0.88	0
LodgiPaN19	Lodging	Packaged DX	New	19	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.02	10	774	0.005	42	$43.00	5%	100%	95%	0.47	0
LodgiPaT15	Lodging	Packaged DX	Turnover	15	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.02	10	774	0.005	42	$43.00	5%	100%	95%	0.47	0
MiscPaE1	Misc	Packaged DX	Early	1	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$3.13	20	995	0.05	64	$200.00	6%	15%	9%	0.46	0
MiscPaE2	Misc	Packaged DX	Early	2	Adding window shade film	No shade film	q ft window are	$7.05	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.03	0
MiscPaE3	Misc	Packaged DX	Early	3	Adding window shade screen	No shade screen	q ft window are	$3.90	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.20	0
MiscPaE4	Misc	Packaged DX	Early	4	Windows U<0.40, .55 SHGC	Existing window specifications	q ft window are	$1.40	30	2	0.000	0	$0.28	13%	50%	95%	0.93	0
MiscPaE5	Misc	Packaged DX	Early	5	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$3.39	20	995	0.05	66	$225.00	7%	95%	95%	0.42	0
MiscPaE7	Misc	Packaged DX	Early	7	Automated control system	Baseline DX	ton	$0.48	10	1,051	0.006	53	$25.00	5%	100%	65%	1.01	1
MiscPaE8	Misc	Packaged DX	Early	8	Duct Sealing, down to 15%	Leakage of 29%	ton	$7.92	15	995	0.05	12	$95.00	1%	45%	80%	0.39	0
MiscPaE9	Misc	Packaged DX	Early	9	Hotel Keycard Sensors	No prior controls	oom Controlle	$0.29	10	893	0.041	342	$100.00	38%	95%	80%	1.65	1
MiscPaE10	Misc	Packaged DX	Early	10	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	ton	$0.55	1	1,081	0.05	64	$35.00	6%	100%	45%	0.20	0
MiscPaE11	Misc	Packaged DX	Early	11	7 day, two stage setback thermostat	Manual Thermostat	ton	$0.44	10	995	0.015	125	$55.00	13%	100%	45%	1.10	1
MiscPaE13	Misc	Packaged DX	Early	13	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.35	7	995	0.05	159	$55.15	16%	95%	75%	1.12	1
MiscPaN1	Misc	Packaged DX	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	ton	$1.36	20	995	0.05	64	$87.00	6%	100%	95%	1.06	1
MiscPaN2	Misc	Packaged DX	New	2	Adding reflective roof treatment	Std color roof	ton	$4.50	20	995	0.05	10	$45.00	1%	100%	95%	0.95	0
MiscPaN3	Misc	Packaged DX	New	3	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$1.89	20	995	0.05	66	$125.00	7%	100%	95%	0.76	0
MiscPaN4	Misc	Packaged DX	New	4	Green Roof (New construction or roof replacement)	Std Roof	ton	$1.92	20	995	0.05	66	$127.43	7%	45%	95%	0.74	0
MiscPaN5	Misc	Packaged DX	New	5	Duct Insulation, Add R8	No Insulation	ton	$10.42	20	995	0.05	12	$125.00	1%	100%	95%	0.36	0
MiscPaN6	Misc	Packaged DX	New	6	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$1.48	20	857	0.04	61	$90.40	7%	100%	95%	0.97	0
MiscPaN7	Misc	Packaged DX	New	7	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$1.58	20	857	0.08	114	$180.81	13%	100%	95%	0.90	0
MiscPaN8	Misc	Packaged DX	New	8	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$1.69	20	857	0.12	161	$271.21	19%	100%	95%	0.85	0
MiscPaN9	Misc	Packaged DX	New	9	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$0.83	20	995	0.05	66	$55.00	7%	100%	95%	1.72	1
MiscPaN10	Misc	Packaged DX	New	10	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$0.83	20	1,013	0.06	84	$70.00	8%	100%	95%	1.72	1
MiscPaN11	Misc	Packaged DX	New	11	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.40	20	1,114	0.06	83	$115.13	7%	100%	95%	1.02	1
MiscPaN12	Misc	Packaged DX	New	12	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$1.75	20	1,148	0.04	56	$98.39	5%	100%	95%	0.82	0
MiscPaN13	Misc	Packaged DX	New	13	Ground Source HP Open - Water	Air Source Heat Pump	ton	$2.31	15	1,013	0.23	325	$ 750.0	32%	20%	95%	0.50	0
MiscPaN14	Misc	Packaged DX	New	14	Ground Source HP Closed	Air Source Heat Pump	ton	$4.14	15	1,013	0.022	181	$750.00	18%	100%	95%	0.19	0
MiscPaN15	Misc	Packaged DX	New	15	Air-side Economizer	No Economizer	ton	$1.14	15	995	0.018	149	$170.00	15%	75%	45%	0.69	0
MiscPaN16	Misc	Packaged DX	New	16	Energy Recovery Units	No Energy Recovery	ton	$0.90	15	995	0.024	199	$179.00	20%	100%	95%	0.87	0
MiscPaN17	Misc	Packaged DX	New	17	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$2.34	15	1,051	0.006	47	$110.89	5%	100%	95%	0.33	0
MiscPaT1	Misc	Packaged DX	Turnover	1	Duct Insulation, Add R8	No Insulation	ton	$10.42	15	995	0.05	12	$125.00	1%	100%	95%	0.30	0
MiscPaT2	Misc	Packaged DX	Turnover	2	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$1.48	20	857	0.04	61	$90.40	7%	100%	95%	0.97	0
MiscPaT3	Misc	Packaged DX	Turnover	3	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$1.58	20	857	0.08	114	$180.81	13%	100%	95%	0.90	0
MiscPaT4	Misc	Packaged DX	Turnover	4	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$1.69	20	857	0.12	161	$271.21	19%	100%	95%	0.85	0
MiscPaT5	Misc	Packaged DX	Turnover	5	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$0.83	20	995	0.05	66	$55.00	7%	100%	95%	1.72	1
MiscPaT6	Misc	Packaged DX	Turnover	6	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$0.83	20	1,013	0.06	84	$70.00	8%	100%	95%	1.72	1
MiscPaT7	Misc	Packaged DX	Turnover	7	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.40	20	1,114	0.06	83	$115.13	7%	100%	95%	1.02	1
MiscPaT8	Misc	Packaged DX	Turnover	8	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$1.75	20	1,148	0.04	56	$98.39	5%	100%	95%	0.82	0
MiscPaT9	Misc	Packaged DX	Turnover	9	Ground Source HP Open - Water	Air Source Heat Pump	ton	$2.31	15	1,013	0.23	325	$ 750.0	32%	5%	95%	0.50	0
MiscPaT10	Misc	Packaged DX	Turnover	10	Ground Source HP Closed	Air Source Heat Pump	ton	$4.14	15	1,013	0.022	181	$750.00	18%	100%	95%	0.19	0
MiscPaT11	Misc	Packaged DX	Turnover	11	Air-side Economizer	No Economizer	ton	$1.14	15	995	0.018	149	$170.00	15%	75%	45%	0.69	0
MiscPaT12	Misc	Packaged DX	Turnover	12	Energy Recovery Units	No Energy Recovery	ton	$0.90	15	995	0.024	199	$179.00	20%	100%	95%	0.87	0
MiscPaT13	Misc	Packaged DX	Turnover	13	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$2.34	15	1,051	0.006	47	$110.89	5%	100%	95%	0.33	0
MiscPaN18	Misc	Packaged DX	New	18	Automated control system	Baseline DX	ton	$0.48	10	1,051	0.006	53	$25.00	5%	100%	65%	1.01	1
MiscPaN19	Misc	Packaged DX	New	19	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$0.88	10	893	0.006	49	$43.00	5%	100%	95%	0.55	0
MiscPaT15	Misc	Packaged DX	Turnover	15	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$0.88	10	893	0.006	49	$43.00	5%	100%	95%	0.55	0
OfficPaE1	Office	Packaged DX	Early	1	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$3.13	20	970	0.05	64	$200.00	7%	15%	9%	0.46	0
OfficPaE2	Office	Packaged DX	Early	2	Adding window shade film	No shade film	q ft window are	$7.05	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.03	0

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
OfficPaE3	Office	Packaged DX	Early	3	Adding window shade screen	No shade screen	q ft window are	$3.90	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.20	0
OfficPaE4	Office	Packaged DX	Early	4	Windows U<0.40, .55 SHGC	Existing window specifications	q ft window are	$1.40	30	2	0.000	0	$0.28	13%	50%	95%	0.93	0
OfficPaE5	Office	Packaged DX	Early	5	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$3.48	20	970	0.05	65	$225.00	7%	95%	95%	0.41	0
OfficPaE7	Office	Packaged DX	Early	7	Automated control system	Baseline DX	ton	$0.49	10	1,025	0.006	51	$25.00	5%	100%	65%	0.99	0
OfficPaE8	Office	Packaged DX	Early	8	Duct Sealing, down to 15%	Leakage of 29%	ton	$7.92	15	970	0.05	12	$95.00	1%	45%	80%	0.39	0
OfficPaE9	Office	Packaged DX	Early	9	Hotel Keycard Sensors	No prior controls	Room Controlle	$0.29	10	870	0.041	342	$100.00	39%	95%	80%	1.65	1
OfficPaE10	Office	Packaged DX	Early	10	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	ton	$0.55	1	1,054	0.05	64	$35.00	6%	100%	45%	0.20	0
OfficPaE11	Office	Packaged DX	Early	11	7 day, two stage setback thermostat	Manual Thermostat	ton	$0.44	10	970	0.015	125	$55.00	13%	100%	45%	1.10	1
OfficPaE13	Office	Packaged DX	Early	13	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.36	7	970	0.05	155	$55.15	16%	95%	75%	1.10	1
OfficPaN1	Office	Packaged DX	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	ton	$1.36	20	970	0.05	64	$87.00	7%	100%	95%	1.06	1
OfficPaN2	Office	Packaged DX	New	2	Adding reflective roof treatment	Std color roof	ton	$4.50	20	970	0.05	10	$45.00	1%	100%	95%	0.95	0
OfficPaN3	Office	Packaged DX	New	3	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$1.93	20	970	0.05	65	$125.00	7%	100%	95%	0.75	0
OfficPaN4	Office	Packaged DX	New	4	Green Roof (New construction or roof replacement)	Std Roof	ton	$1.97	20	970	0.05	65	$127.43	7%	45%	95%	0.73	0
OfficPaN5	Office	Packaged DX	New	5	Duct Insulation, Add R8	No Insulation	ton	$10.42	20	970	0.05	12	$125.00	1%	100%	95%	0.36	0
OfficPaN6	Office	Packaged DX	New	6	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$1.51	20	835	0.04	60	$90.40	7%	100%	95%	0.95	0
OfficPaN7	Office	Packaged DX	New	7	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$1.62	20	835	0.08	111	$180.81	13%	100%	95%	0.89	0
OfficPaN8	Office	Packaged DX	New	8	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$1.73	20	835	0.12	157	$271.21	19%	100%	95%	0.83	0
OfficPaN9	Office	Packaged DX	New	9	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$0.85	20	970	0.05	65	$55.00	7%	100%	95%	1.69	1
OfficPaN10	Office	Packaged DX	New	10	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$0.85	20	987	0.06	82	$70.00	8%	100%	95%	1.69	1
OfficPaN11	Office	Packaged DX	New	11	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.43	20	1,086	0.06	80	$115.13	7%	100%	95%	1.01	1
OfficPaN12	Office	Packaged DX	New	12	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$1.79	20	1,120	0.04	55	$98.39	5%	100%	95%	0.80	0
OfficPaN13	Office	Packaged DX	New	13	Ground Source HP Open - Water	Air Source Heat Pump	ton	$2.37	15	987	0.23	317	$ 750.0	32%	20%	95%	0.49	0
OfficPaN14	Office	Packaged DX	New	14	Ground Source HP Closed	Air Source Heat Pump	ton	$4.24	15	987	0.021	177	$750.00	18%	100%	95%	0.18	0
OfficPaN15	Office	Packaged DX	New	15	Air-side Economizer	No Economizer	ton	$1.17	15	970	0.017	145	$170.00	15%	75%	45%	0.67	0
OfficPaN16	Office	Packaged DX	New	16	Energy Recovery Units	No Energy Recovery	ton	$0.92	15	970	0.023	194	$179.00	20%	100%	95%	0.85	0
OfficPaN17	Office	Packaged DX	New	17	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$2.40	15	1,025	0.006	46	$110.89	5%	100%	95%	0.33	0
OfficPaT1	Office	Packaged DX	Turnover	1	Duct Insulation, Add R8	No Insulation	ton	$10.42	15	970	0.05	12	$125.00	1%	100%	95%	0.30	0
OfficPaT2	Office	Packaged DX	Turnover	2	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$1.51	20	835	0.04	60	$90.40	7%	100%	95%	0.95	0
OfficPaT3	Office	Packaged DX	Turnover	3	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$1.62	20	835	0.08	111	$180.81	13%	100%	95%	0.89	0
OfficPaT4	Office	Packaged DX	Turnover	4	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$1.73	20	835	0.12	157	$271.21	19%	100%	95%	0.83	0
OfficPaT5	Office	Packaged DX	Turnover	5	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$0.85	20	970	0.05	65	$55.00	7%	100%	95%	1.69	1
OfficPaT6	Office	Packaged DX	Turnover	6	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$0.85	20	987	0.06	82	$70.00	8%	100%	95%	1.69	1
OfficPaT7	Office	Packaged DX	Turnover	7	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.43	20	1,086	0.06	80	$115.13	7%	100%	95%	1.01	1
OfficPaT8	Office	Packaged DX	Turnover	8	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$1.79	20	1,120	0.04	55	$98.39	5%	100%	95%	0.80	0
OfficPaT9	Office	Packaged DX	Turnover	9	Ground Source HP Open - Water	Air Source Heat Pump	ton	$2.37	15	987	0.23	317	$ 750.0	32%	5%	95%	0.49	0
OfficPaT10	Office	Packaged DX	Turnover	10	Ground Source HP Closed	Air Source Heat Pump	ton	$4.24	15	987	0.021	177	$750.00	18%	100%	95%	0.18	0
OfficPaT11	Office	Packaged DX	Turnover	11	Air-side Economizer	No Economizer	ton	$1.17	15	970	0.017	145	$170.00	15%	75%	45%	0.67	0
OfficPaT12	Office	Packaged DX	Turnover	12	Energy Recovery Units	No Energy Recovery	ton	$0.92	15	970	0.023	194	$179.00	20%	100%	95%	0.85	0
OfficPaT13	Office	Packaged DX	Turnover	13	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$2.40	15	1,025	0.006	46	$110.89	5%	100%	95%	0.33	0
OfficPaN18	Office	Packaged DX	New	18	Automated control system	Baseline DX	ton	$0.49	10	1,025	0.006	51	$25.00	5%	100%	65%	0.99	0
OfficPaN19	Office	Packaged DX	New	19	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$0.91	10	870	0.006	47	$43.00	5%	100%	95%	0.53	0
OfficPaT15	Office	Packaged DX	Turnover	15	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$0.91	10	870	0.006	47	$43.00	5%	100%	95%	0.53	0
RestaPaE1	Restaurant	Packaged DX	Early	1	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$3.13	20	1,038	0.05	64	$200.00	6%	15%	9%	0.46	0
RestaPaE2	Restaurant	Packaged DX	Early	2	Adding window shade film	No shade film	q ft window are	$7.05	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.03	0
RestaPaE3	Restaurant	Packaged DX	Early	3	Adding window shade screen	No shade screen	q ft window are	$3.90	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.20	0
RestaPaE4	Restaurant	Packaged DX	Early	4	Windows U<0.40, .55 SHGC	Existing window specifications	q ft window are	$1.40	30	2	0.000	0	$0.28	13%	50%	95%	0.93	0
RestaPaE5	Restaurant	Packaged DX	Early	5	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$3.25	20	1,038	0.05	69	$225.00	7%	95%	95%	0.43	0
RestaPaE7	Restaurant	Packaged DX	Early	7	Automated control system	Baseline DX	ton	$0.46	10	1,097	0.007	55	$25.00	5%	100%	65%	1.06	1
RestaPaE8	Restaurant	Packaged DX	Early	8	Duct Sealing, down to 15%	Leakage of 29%	ton	$7.92	15	1,038	0.05	12	$95.00	1%	45%	80%	0.39	0
RestaPaE9	Restaurant	Packaged DX	Early	9	Hotel Keycard Sensors	No prior controls	Room Controlle	$0.29	10	932	0.041	342	$100.00	37%	95%	80%	1.65	1
RestaPaE10	Restaurant	Packaged DX	Early	10	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	ton	$0.55	1	1,129	0.05	64	$35.00	6%	100%	45%	0.20	0
RestaPaE11	Restaurant	Packaged DX	Early	11	7 day, two stage setback thermostat	Manual Thermostat	ton	$0.44	10	1,038	0.015	125	$55.00	12%	100%	45%	1.10	1
RestaPaE13	Restaurant	Packaged DX	Early	13	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.33	7	1,038	0.05	166	$55.15	16%	95%	75%	1.15	1
RestaPaN1	Restaurant	Packaged DX	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	ton	$1.36	20	1,038	0.05	64	$87.00	6%	100%	95%	1.06	1
RestaPaN2	Restaurant	Packaged DX	New	2	Adding reflective roof treatment	Std color roof	ton	$4.50	20	1,038	0.05	10	$45.00	1%	100%	95%	0.95	0
RestaPaN3	Restaurant	Packaged DX	New	3	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$1.81	20	1,038	0.05	69	$125.00	7%	100%	95%	0.78	0
RestaPaN4	Restaurant	Packaged DX	New	4	Green Roof (New construction or roof replacement)	Std Roof	ton	$1.84	20	1,038	0.05	69	$127.43	7%	45%	95%	0.76	0
RestaPaN5	Restaurant	Packaged DX	New	5	Duct Insulation, Add R8	No Insulation	ton	$10.42	20	1,038	0.05	12	$125.00	1%	100%	95%	0.36	0
RestaPaN6	Restaurant	Packaged DX	New	6	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$1.41	20	894	0.04	64	$90.40	7%	100%	95%	0.99	0
RestaPaN7	Restaurant	Packaged DX	New	7	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$1.52	20	894	0.08	119	$180.81	13%	100%	95%	0.93	0
RestaPaN8	Restaurant	Packaged DX	New	8	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$1.62	20	894	0.12	168	$271.21	19%	100%	95%	0.87	0
RestaPaN9	Restaurant	Packaged DX	New	9	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$0.79	20	1,038	0.05	69	$55.00	7%	100%	95%	1.77	1
RestaPaN10	Restaurant	Packaged DX	New	10	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$0.79	20	1,057	0.06	88	$70.00	8%	100%	95%	1.77	1
RestaPaN11	Restaurant	Packaged DX	New	11	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.34	20	1,163	0.06	86	$115.13	7%	100%	95%	1.05	1
RestaPaN12	Restaurant	Packaged DX	New	12	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$1.67	20	1,199	0.04	59	$98.39	5%	100%	95%	0.84	0
RestaPaN13	Restaurant	Packaged DX	New	13	Ground Source HP Open - Water	Air Source Heat Pump	ton	$2.21	15	1,057	0.23	339	$ 750.0	32%	20%	95%	0.51	0
RestaPaN14	Restaurant	Packaged DX	New	14	Ground Source HP Closed	Air Source Heat Pump	ton	$3.96	15	1,057	0.023	189	$750.00	18%	100%	95%	0.20	0
RestaPaN15	Restaurant	Packaged DX	New	15	Air-side Economizer	No Economizer	ton	$1.09	15	1,038	0.019	156	$170.00	15%	75%	45%	0.72	0
RestaPaN16	Restaurant	Packaged DX	New	16	Energy Recovery Units	No Energy Recovery	ton	$0.86	15	1,038	0.025	208	$179.00	20%	100%	95%	0.91	0
RestaPaN17	Restaurant	Packaged DX	New	17	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$2.24	15	1,097	0.006	49	$110.89	5%	100%	95%	0.35	0
RestaPaT1	Restaurant	Packaged DX	Turnover	1	Duct Insulation, Add R8	No Insulation	ton	$10.42	15	1,038	0.05	12	$125.00	1%	100%	95%	0.30	0
RestaPaT2	Restaurant	Packaged DX	Turnover	2	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$1.41	20	894	0.04	64	$90.40	7%	100%	95%	0.99	0
RestaPaT3	Restaurant	Packaged DX	Turnover	3	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$1.52	20	894	0.08	119	$180.81	13%	100%	95%	0.93	0
RestaPaT4	Restaurant	Packaged DX	Turnover	4	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$1.62	20	894	0.12	168	$271.21	19%	100%	95%	0.87	0
RestaPaT5	Restaurant	Packaged DX	Turnover	5	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$0.79	20	1,038	0.05	69	$55.00	7%	100%	95%	1.77	1
RestaPaT6	Restaurant	Packaged DX	Turnover	6	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$0.79	20	1,057	0.06	88	$70.00	8%	100%	95%	1.77	1
RestaPaT7	Restaurant	Packaged DX	Turnover	7	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.34	20	1,163	0.06	86	$115.13	7%	100%	95%	1.05	1
RestaPaT8	Restaurant	Packaged DX	Turnover	8	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$1.67	20	1,199	0.04	59	$98.39	5%	100%	95%	0.84	0
RestaPaT9	Restaurant	Packaged DX	Turnover	9	Ground Source HP Open - Water	Air Source Heat Pump	ton	$2.21	15	1,057	0.23	339	$ 750.0	32%	5%	95%	0.51	0
RestaPaT10	Restaurant	Packaged DX	Turnover	10	Ground Source HP Closed	Air Source Heat Pump	ton	$3.96	15	1,057	0.023	189	$750.00	18%	100%	95%	0.20	0
RestaPaT11	Restaurant	Packaged DX	Turnover	11	Air-side Economizer	No Economizer	ton	$1.09	15	1,038	0.019	156	$170.00	15%	75%	45%	0.72	0
RestaPaT12	Restaurant	Packaged DX	Turnover	12	Energy Recovery Units	No Energy Recovery	ton	$0.86	15	1,038	0.025	208	$179.00	20%	100%	95%	0.91	0
RestaPaT13	Restaurant	Packaged DX	Turnover	13	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$2.24	15	1,097	0.006	49	$110.89	5%	100%	95%	0.35	0
RestaPaN18	Restaurant	Packaged DX	New	18	Automated control system	Baseline DX	ton	$0.46	10	1,097	0.007	55	$25.00	5%	100%	65%	1.06	1
RestaPaN19	Restaurant	Packaged DX	New	19	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$0.85	10	932	0.006	51	$43.00	5%	100%	95%	0.57	0
RestaPaT15	Restaurant	Packaged DX	Turnover	15	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$0.85	10	932	0.006	51	$43.00	5%	100%	95%	0.57	0
RetaiPaE1	Retail	Packaged DX	Early	1	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$3.13	20	1,018	0.05	64	$200.00	6%	15%	9%	0.46	0
RetaiPaE2	Retail	Packaged DX	Early	2	Adding window shade film	No shade film	q ft window are	$7.05	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.03	0
RetaiPaE3	Retail	Packaged DX	Early	3	Adding window shade screen	No shade screen	q ft window are	$3.90	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.20	0
RetaiPaE4	Retail	Packaged DX	Early	4	Windows U<0.40, .55 SHGC	Existing window specifications	q ft window are	$1.40	30	2	0.000	0	$0.28	13%	50%	95%	0.93	0
RetaiPaE5	Retail	Packaged DX	Early	5	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$3.32	20	1,018	0.05	68	$225.00	7%	95%	95%	0.43	0
RetaiPaE7	Retail	Packaged DX	Early	7	Automated control system	Baseline DX	ton	$0.46	10	1,075	0.006	54	$25.00	5%	100%	65%	1.04	1
RetaiPaE8	Retail	Packaged DX	Early	8	Duct Sealing, down to 15%	Leakage of 29%	ton	$7.92	15	1,018	0.05	12	$95.00	1%	45%	80%	0.39	0
RetaiPaE9	Retail	Packaged DX	Early	9	Hotel Keycard Sensors	No prior controls	Room Controlle	$0.29	10	913	0.041	342	$100.00	37%	95%	80%	1.65	1
RetaiPaE10	Retail	Packaged DX	Early	10	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	ton	$0.55	1	1,107	0.05	64	$35.00	6%	100%	45%	0.20	0
RetaiPaE11	Retail	Packaged DX	Early	11	7 day, two stage setback thermostat	Manual Thermostat	ton	$0.44	10	1,018	0.015	125	$55.00	12%	100%	45%	1.10	1
RetaiPaE13	Retail	Packaged DX	Early	13	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.34	7	1,018	0.05	163	$55.15	16%	95%	75%	1.14	1

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
RetaiPaN1	Retail	Packaged DX	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	ton	$1.36	20	1,018	0.05	64	$87.00	6%	100%	95%	1.06	1
RetaiPaN2	Retail	Packaged DX	New	2	Adding reflective roof treatment	Std color roof	ton	$4.50	20	1,018	0.05	10	$45.00	1%	100%	95%	0.95	0
RetaiPaN3	Retail	Packaged DX	New	3	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$1.84	20	1,018	0.05	68	$125.00	7%	100%	95%	0.77	0
RetaiPaN4	Retail	Packaged DX	New	4	Green Roof (New construction or roof replacement)	Std Roof	ton	$1.88	20	1,018	0.05	68	$127.43	7%	45%	95%	0.75	0
RetaiPaN5	Retail	Packaged DX	New	5	Duct Insulation, Add R8	No Insulation	ton	$10.42	20	1,018	0.05	12	$125.00	1%	100%	95%	0.36	0
RetaiPaN6	Retail	Packaged DX	New	6	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$1.44	20	877	0.04	63	$90.40	7%	100%	95%	0.98	0
RetaiPaN7	Retail	Packaged DX	New	7	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$1.55	20	877	0.08	117	$180.81	13%	100%	95%	0.92	0
RetaiPaN8	Retail	Packaged DX	New	8	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$1.65	20	877	0.12	164	$271.21	19%	100%	95%	0.86	0
RetaiPaN9	Retail	Packaged DX	New	9	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$0.81	20	1,018	0.05	68	$55.00	7%	100%	95%	1.75	1
RetaiPaN10	Retail	Packaged DX	New	10	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$0.81	20	1,036	0.06	86	$70.00	8%	100%	95%	1.75	1
RetaiPaN11	Retail	Packaged DX	New	11	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.36	20	1,140	0.06	84	$115.13	7%	100%	95%	1.04	1
RetaiPaN12	Retail	Packaged DX	New	12	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$1.71	20	1,175	0.04	58	$98.39	5%	100%	95%	0.83	0
RetaiPaN13	Retail	Packaged DX	New	13	Ground Source HP Open - Water	Air Source Heat Pump	ton	$2.25	15	1,036	0.23	333	$ 750.0	32%	20%	95%	0.50	0
RetaiPaN14	Retail	Packaged DX	New	14	Ground Source HP Closed	Air Source Heat Pump	ton	$4.04	15	1,036	0.022	186	$750.00	18%	100%	95%	0.19	0
RetaiPaN15	Retail	Packaged DX	New	15	Air-side Economizer	No Economizer	ton	$1.11	15	1,018	0.018	153	$170.00	15%	75%	45%	0.70	0
RetaiPaN16	Retail	Packaged DX	New	16	Energy Recovery Units	No Energy Recovery	ton	$0.88	15	1,018	0.024	204	$179.00	20%	100%	95%	0.89	0
RetaiPaN17	Retail	Packaged DX	New	17	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$2.29	15	1,075	0.006	48	$110.89	5%	100%	95%	0.34	0
RetaiPaT1	Retail	Packaged DX	Turnover	1	Duct Insulation, Add R8	No Insulation	ton	$10.42	15	1,018	0.05	12	$125.00	1%	100%	95%	0.30	0
RetaiPaT2	Retail	Packaged DX	Turnover	2	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$1.44	20	877	0.04	63	$90.40	7%	100%	95%	0.98	0
RetaiPaT3	Retail	Packaged DX	Turnover	3	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$1.55	20	877	0.08	117	$180.81	13%	100%	95%	0.92	0
RetaiPaT4	Retail	Packaged DX	Turnover	4	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$1.65	20	877	0.12	164	$271.21	19%	100%	95%	0.86	0
RetaiPaT5	Retail	Packaged DX	Turnover	5	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$0.81	20	1,018	0.05	68	$55.00	7%	100%	95%	1.75	1
RetaiPaT6	Retail	Packaged DX	Turnover	6	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$0.81	20	1,036	0.06	86	$70.00	8%	100%	95%	1.75	1
RetaiPaT7	Retail	Packaged DX	Turnover	7	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.36	20	1,140	0.06	84	$115.13	7%	100%	95%	1.04	1
RetaiPaT8	Retail	Packaged DX	Turnover	8	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$1.71	20	1,175	0.04	58	$98.39	5%	100%	95%	0.83	0
RetaiPaT9	Retail	Packaged DX	Turnover	9	Ground Source HP Open - Water	Air Source Heat Pump	ton	$2.25	15	1,036	0.23	333	$ 750.0	32%	5%	95%	0.50	0
RetaiPaT10	Retail	Packaged DX	Turnover	10	Ground Source HP Closed	Air Source Heat Pump	ton	$4.04	15	1,036	0.022	186	$750.00	18%	100%	95%	0.19	0
RetaiPaT11	Retail	Packaged DX	Turnover	11	Air-side Economizer	No Economizer	ton	$1.11	15	1,018	0.018	153	$170.00	15%	75%	45%	0.70	0
RetaiPaT12	Retail	Packaged DX	Turnover	12	Energy Recovery Units	No Energy Recovery	ton	$0.88	15	1,018	0.024	204	$179.00	20%	100%	95%	0.89	0
RetaiPaT13	Retail	Packaged DX	Turnover	13	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$2.29	15	1,075	0.006	48	$110.89	5%	100%	95%	0.34	0
RetaiPaN18	Retail	Packaged DX	New	18	Automated control system	Baseline DX	ton	$0.46	10	1,075	0.006	54	$25.00	5%	100%	65%	1.04	1
RetaiPaN19	Retail	Packaged DX	New	19	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$0.86	10	913	0.006	50	$43.00	5%	100%	95%	0.56	0
RetaiPaT15	Retail	Packaged DX	Turnover	15	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$0.86	10	913	0.006	50	$43.00	5%	100%	95%	0.56	0
WarehPaE1	Warehouse	Packaged DX	Early	1	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$3.13	20	788	0.05	64	$200.00	8%	15%	9%	0.46	0
WarehPaE2	Warehouse	Packaged DX	Early	2	Adding window shade film	No shade film	q ft window are	$7.05	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.03	0
WarehPaE3	Warehouse	Packaged DX	Early	3	Adding window shade screen	No shade screen	q ft window are	$3.90	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.20	0
WarehPaE4	Warehouse	Packaged DX	Early	4	Windows U<0.40, .55 SHGC	Existing window specifications	q ft window are	$1.40	30	2	0.000	0	$0.28	13%	50%	95%	0.93	0
WarehPaE5	Warehouse	Packaged DX	Early	5	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$4.29	20	788	0.05	53	$225.00	7%	95%	95%	0.36	0
WarehPaE7	Warehouse	Packaged DX	Early	7	Automated control system	Baseline DX	ton	$0.60	10	832	0.005	42	$25.00	5%	100%	65%	0.80	0
WarehPaE8	Warehouse	Packaged DX	Early	8	Duct Sealing, down to 15%	Leakage of 29%	ton	$7.92	15	788	0.05	12	$95.00	2%	45%	80%	0.39	0
WarehPaE9	Warehouse	Packaged DX	Early	9	Hotel Keycard Sensors	No prior controls	oom Controlle	$0.29	10	707	0.041	342	$100.00	48%	95%	80%	1.65	1
WarehPaE10	Warehouse	Packaged DX	Early	10	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	ton	$0.55	1	856	0.05	64	$35.00	7%	100%	45%	0.20	0
WarehPaE11	Warehouse	Packaged DX	Early	11	7 day, two stage setback thermostat	Manual Thermostat	ton	$0.44	10	788	0.015	125	$55.00	16%	100%	45%	1.10	1
WarehPaE13	Warehouse	Packaged DX	Early	13	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.44	7	788	0.05	126	$55.15	16%	95%	75%	0.95	0
WarehPaN1	Warehouse	Packaged DX	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	ton	$1.36	20	788	0.05	64	$87.00	8%	100%	95%	1.06	1
WarehPaN2	Warehouse	Packaged DX	New	2	Adding reflective roof treatment	Std color roof	ton	$4.50	20	788	0.05	10	$45.00	1%	100%	95%	0.95	0
WarehPaN3	Warehouse	Packaged DX	New	3	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$2.38	20	788	0.05	53	$125.00	7%	100%	95%	0.66	0
WarehPaN4	Warehouse	Packaged DX	New	4	Green Roof (New construction or roof replacement)	Std Roof	ton	$2.43	20	788	0.05	53	$127.43	7%	45%	95%	0.64	0
WarehPaN5	Warehouse	Packaged DX	New	5	Duct Insulation, Add R8	No Insulation	ton	$10.42	20	788	0.05	12	$125.00	2%	100%	95%	0.36	0
WarehPaN6	Warehouse	Packaged DX	New	6	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$1.87	20	678	0.04	48	$90.40	7%	100%	95%	0.84	0
WarehPaN7	Warehouse	Packaged DX	New	7	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$2.00	20	678	0.08	90	$180.81	13%	100%	95%	0.78	0
WarehPaN8	Warehouse	Packaged DX	New	8	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$2.13	20	678	0.12	127	$271.21	19%	100%	95%	0.73	0
WarehPaN9	Warehouse	Packaged DX	New	9	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.05	20	788	0.05	53	$55.00	7%	100%	95%	1.49	1
WarehPaN10	Warehouse	Packaged DX	New	10	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.05	20	802	0.06	67	$70.00	8%	100%	95%	1.49	1
WarehPaN11	Warehouse	Packaged DX	New	11	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.76	20	882	0.06	65	$115.13	7%	100%	95%	0.89	0
WarehPaN12	Warehouse	Packaged DX	New	12	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$2.21	20	909	0.04	45	$98.39	5%	100%	95%	0.71	0
WarehPaN13	Warehouse	Packaged DX	New	13	Ground Source HP Open - Water	Air Source Heat Pump	ton	$2.91	15	802	0.23	257	$ 750.0	32%	20%	95%	0.43	0
WarehPaN14	Warehouse	Packaged DX	New	14	Ground Source HP Closed	Air Source Heat Pump	ton	$5.22	15	802	0.017	144	$750.00	18%	100%	95%	0.15	0
WarehPaN15	Warehouse	Packaged DX	New	15	Air-side Economizer	No Economizer	ton	$1.44	15	788	0.014	118	$170.00	15%	75%	45%	0.54	0
WarehPaN16	Warehouse	Packaged DX	New	16	Energy Recovery Units	No Energy Recovery	ton	$1.14	15	788	0.019	158	$179.00	20%	100%	95%	0.69	0
WarehPaN17	Warehouse	Packaged DX	New	17	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$2.96	15	832	0.004	37	$110.89	5%	100%	95%	0.26	0
WarehPaT1	Warehouse	Packaged DX	Turnover	1	Duct Insulation, Add R8	No Insulation	ton	$10.42	15	788	0.05	12	$125.00	2%	100%	95%	0.30	0
WarehPaT2	Warehouse	Packaged DX	Turnover	2	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$1.87	20	678	0.04	48	$90.40	7%	100%	95%	0.84	0
WarehPaT3	Warehouse	Packaged DX	Turnover	3	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$2.00	20	678	0.08	90	$180.81	13%	100%	95%	0.78	0
WarehPaT4	Warehouse	Packaged DX	Turnover	4	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$2.13	20	678	0.12	127	$271.21	19%	100%	95%	0.73	0
WarehPaT5	Warehouse	Packaged DX	Turnover	5	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.05	20	788	0.05	53	$55.00	7%	100%	95%	1.49	1
WarehPaT6	Warehouse	Packaged DX	Turnover	6	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.05	20	802	0.06	67	$70.00	8%	100%	95%	1.49	1
WarehPaT7	Warehouse	Packaged DX	Turnover	7	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.76	20	882	0.06	65	$115.13	7%	100%	95%	0.89	0
WarehPaT8	Warehouse	Packaged DX	Turnover	8	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$2.21	20	909	0.04	45	$98.39	5%	100%	95%	0.71	0
WarehPaT9	Warehouse	Packaged DX	Turnover	9	Ground Source HP Open - Water	Air Source Heat Pump	ton	$2.91	15	802	0.23	257	$ 750.0	32%	5%	95%	0.43	0
WarehPaT10	Warehouse	Packaged DX	Turnover	10	Ground Source HP Closed	Air Source Heat Pump	ton	$5.22	15	802	0.017	144	$750.00	18%	100%	95%	0.15	0
WarehPaT11	Warehouse	Packaged DX	Turnover	11	Air-side Economizer	No Economizer	ton	$1.44	15	788	0.014	118	$170.00	15%	75%	45%	0.54	0
WarehPaT12	Warehouse	Packaged DX	Turnover	12	Energy Recovery Units	No Energy Recovery	ton	$1.14	15	788	0.019	158	$179.00	20%	100%	95%	0.69	0
WarehPaT13	Warehouse	Packaged DX	Turnover	13	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$2.96	15	832	0.004	37	$110.89	5%	100%	95%	0.26	0
WarehPaN18	Warehouse	Packaged DX	New	18	Automated control system	Baseline DX	ton	$0.60	10	832	0.005	42	$25.00	5%	100%	65%	0.80	0
WarehPaN19	Warehouse	Packaged DX	New	19	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.12	10	707	0.005	39	$43.00	5%	100%	95%	0.43	0
WarehPaT15	Warehouse	Packaged DX	Turnover	15	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.12	10	707	0.005	39	$43.00	5%	100%	95%	0.43	0
HealthHeN4	Healthcare	Heating	New	4	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$6.13	15	298	0.000	18	$110.89	6%	100%	95%	0.12	0
HealtHeT1	Healthcare	Heating	Turnover	1	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$6.13	15	298	0.000	18	$110.89	6%	100%	95%	0.12	0
GroceHeE1	Grocery	Heating	Early	1	Re-commissioning	Current Controls not working properly, setpoints not optimized,	sq ft	$0.2710	7	125,500	0.297	20,080	$5,441.68	16%	95%	75%	1.05	1
GroceHeE2	Grocery	Heating	Early	2	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$4.44	20	1,282	0.05	45	$200.00	4%	10%	95%	0.38	0
GroceHeE3	Grocery	Heating	Early	3	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.67	20	1,282	0.05	75	$125.00	6%	10%	95%	0.82	0
GroceHeE4	Grocery	Heating	Early	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.75	20	1,282	0.05	34	$127.43	3%	10%	95%	0.51	0
GroceHeE5	Grocery	Heating	Early	5	Humidification with High pressure, Ultrasonic devices	Electric Resistive Elements	unit	$0.1893	10	2,794	0.039	2,641	$500.00	95%	100%	95%	2.30	1
GroceHeN1	Grocery	Heating	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5 - Electric Heat	sq ft	$1.93	20	1,282	0.05	45	$87.00	4%	10%	95%	0.86	0
GroceHeN2	Grocery	Heating	New	2	Ground Source HP Open - Water	Air Source Heat Pump	ton	$9.65	15	1,282	0.23	78	$ 750.0	6%	20%	95%	0.26	0
GroceHen3	Grocery	Heating	new	3	Ground Source HP Closed	Air Source Heat Pump	ton	$9.65	15	1,282	0.001	78	$750.00	6%	100%	95%	0.07	0
GroceHeN4	Grocery	Heating	New	4	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.43	15	1,282	0.001	78	$110.89	6%	100%	95%	0.51	0
GroceHeT1	Grocery	Heating	Turnover	1	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.43	15	1,282	0.001	78	$110.89	6%	100%	95%	0.51	0
InstiHeE1	Institutional	Heating	Early	1	Re-commissioning	Current Controls not working properly, setpoints not optimized,	sq ft	$0.2710	7	125,500	0.297	20,080	$5,441.68	16%	95%	75%	1.05	1
InstiHeE2	Institutional	Heating	Early	2	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$4.44	20	913	0.05	45	$200.00	5%	10%	95%	0.38	0
InstiHeE3	Institutional	Heating	Early	3	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.67	20	913	0.05	75	$125.00	8%	10%	95%	0.82	0
InstiHeE4	Institutional	Heating	Early	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.75	20	913	0.05	34	$127.43	4%	10%	95%	0.51	0
InstiHeE5	Institutional	Heating	Early	5	Humidification with High pressure, Ultrasonic devices	Electric Resistive Elements	unit	$0.1893	10	2,794	0.039	2,641	$500.00	95%	100%	95%	2.30	1
InstiHeN1	Institutional	Heating	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5 - Electric Heat	sq ft	$1.93	20	913	0.05	45	$87.00	5%	10%	95%	0.86	0
InstiHeN2	Institutional	Heating	New	2	Ground Source HP Open - Water	Air Source Heat Pump	ton	$13.55	15	913	0.23	55	$ 750.0	6%	20%	95%	0.24	0
InstiHen3	Institutional	Heating	new	3	Ground Source HP Closed	Air Source Heat Pump	ton	$13.55	15	913	0.001	55	$750.00	6%	100%	95%	0.05	0

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
InstiHeN4	Institutional	Heating	New	4	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$2.00	15	913	0.001	55	$110.89	6%	100%	95%	0.36	0
InstiHeT1	Institutional	Heating	Turnover	1	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$2.00	15	913	0.001	55	$110.89	6%	100%	95%	0.36	0
LodgiHeE1	Lodging	Heating	Early	1	Re-commissioning	Current Controls not working properly, setpoints not optimized,	sq ft	$0.2710	7	125,500	0.297	20,080	$5,441.68	16%	95%	75%	1.05	1
LodgiHeE2	Lodging	Heating	Early	2	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$4.44	20	1,553	0.05	45	$200.00	3%	10%	95%	0.38	0
LodgiHeE3	Lodging	Heating	Early	3	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.67	20	1,553	0.05	75	$125.00	5%	10%	95%	0.82	0
LodgiHeE4	Lodging	Heating	Early	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.75	20	1,553	0.05	34	$127.43	2%	10%	95%	0.51	0
LodgiHeE5	Lodging	Heating	Early	5	Humidification with High pressure, Ultrasonic devices	Electric Resistive Elements	unit	$0.1893	10	2,794	0.039	2,641	$500.00	95%	100%	95%	2.30	1
LodgiHeN1	Lodging	Heating	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5 - Electric Heat	sq ft	$1.93	20	1,553	0.05	45	$87.00	3%	10%	95%	0.86	0
LodgiHeN2	Lodging	Heating	New	2	Ground Source HP Open - Water	Air Source Heat Pump	ton	$7.97	15	1,553	0.23	94	$ 750.0	6%	20%	95%	0.28	0
LodgiHen3	Lodging	Heating	new	3	Ground Source HP Closed	Air Source Heat Pump	ton	$7.97	15	1,553	0.001	94	$750.00	6%	100%	95%	0.09	0
LodgiHeN4	Lodging	Heating	New	4	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.18	15	1,553	0.001	94	$110.89	6%	100%	95%	0.61	0
LodgiHeT1	Lodging	Heating	Turnover	1	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.18	15	1,553	0.001	94	$110.89	6%	100%	95%	0.61	0
MiscHeE1	Misc	Heating	Early	1	Re-commissioning	Current Controls not working properly, setpoints not optimized,	sq ft	$0.2710	7	125,500	0.297	20,080	$5,441.68	16%	95%	75%	1.05	1
MiscHeE2	Misc	Heating	Early	2	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$4.44	20	1,062	0.05	45	$200.00	4%	10%	95%	0.38	0
MiscHeE3	Misc	Heating	Early	3	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.67	20	1,062	0.05	75	$125.00	7%	10%	95%	0.82	0
MiscHeE4	Misc	Heating	Early	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.75	20	1,062	0.05	34	$127.43	3%	10%	95%	0.51	0
MiscHeE5	Misc	Heating	Early	5	Humidification with High pressure, Ultrasonic devices	Electric Resistive Elements	unit	$0.1893	10	2,794	0.039	2,641	$500.00	95%	100%	95%	2.30	1
MiscHeN1	Misc	Heating	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5 - Electric Heat	sq ft	$1.93	20	1,062	0.05	45	$87.00	4%	10%	95%	0.86	0
MiscHeN2	Misc	Heating	New	2	Ground Source HP Open - Water	Air Source Heat Pump	ton	$11.65	15	1,062	0.23	64	$ 750.0	6%	20%	95%	0.25	0
MiscHen3	Misc	Heating	new	3	Ground Source HP Closed	Air Source Heat Pump	ton	$11.65	15	1,062	0.001	64	$750.00	6%	100%	95%	0.06	0
MiscHeN4	Misc	Heating	New	4	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.72	15	1,062	0.001	64	$110.89	6%	100%	95%	0.42	0
MiscHeT1	Misc	Heating	Turnover	1	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.72	15	1,062	0.001	64	$110.89	6%	100%	95%	0.42	0
OfficHeE1	Office	Heating	Early	1	Re-commissioning	Current Controls not working properly, setpoints not optimized,	sq ft	$0.2710	7	125,500	0.297	20,080	$5,441.68	16%	95%	75%	1.05	1
OfficHeE2	Office	Heating	Early	2	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$4.44	20	819	0.05	45	$200.00	5%	10%	95%	0.38	0
OfficHeE3	Office	Heating	Early	3	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.67	20	819	0.05	75	$125.00	9%	10%	95%	0.82	0
OfficHeE4	Office	Heating	Early	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.75	20	819	0.05	34	$127.43	4%	10%	95%	0.51	0
OfficHeE5	Office	Heating	Early	5	Humidification with High pressure, Ultrasonic devices	Electric Resistive Elements	unit	$0.1893	10	2,794	0.039	2,641	$500.00	95%	100%	95%	2.30	1
OfficHeN1	Office	Heating	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5 - Electric Heat	sq ft	$1.93	20	819	0.05	45	$87.00	5%	10%	95%	0.86	0
OfficHeN2	Office	Heating	New	2	Ground Source HP Open - Water	Air Source Heat Pump	ton	$15.11	15	819	0.23	50	$ 750.0	6%	20%	95%	0.23	0
OfficHen3	Office	Heating	new	3	Ground Source HP Closed	Air Source Heat Pump	ton	$15.11	15	819	0.001	50	$750.00	6%	100%	95%	0.05	0
OfficHeN4	Office	Heating	New	4	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$2.23	15	819	0.001	50	$110.89	6%	100%	95%	0.32	0
OfficHeT1	Office	Heating	Turnover	1	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$2.23	15	819	0.001	50	$110.89	6%	100%	95%	0.32	0
RestaHeE1	Restaurant	Heating	Early	1	Re-commissioning	Current Controls not working properly, setpoints not optimized,	sq ft	$0.2710	7	125,500	0.297	20,080	$5,441.68	16%	95%	75%	1.05	1
RestaHeE2	Restaurant	Heating	Early	2	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$4.44	20	1,248	0.05	45	$200.00	4%	10%	95%	0.38	0
RestaHeE3	Restaurant	Heating	Early	3	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.67	20	1,248	0.05	75	$125.00	6%	10%	95%	0.82	0
RestaHeE4	Restaurant	Heating	Early	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.75	20	1,248	0.05	34	$127.43	3%	10%	95%	0.51	0
RestaHeE5	Restaurant	Heating	Early	5	Humidification with High pressure, Ultrasonic devices	Electric Resistive Elements	unit	$0.1893	10	2,794	0.039	2,641	$500.00	95%	100%	95%	2.30	1
RestaHeN1	Restaurant	Heating	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5 - Electric Heat	sq ft	$1.93	20	1,248	0.05	45	$87.00	4%	10%	95%	0.86	0
RestaHeN2	Restaurant	Heating	New	2	Ground Source HP Open - Water	Air Source Heat Pump	ton	$9.92	15	1,248	0.23	76	$ 750.0	6%	20%	95%	0.26	0
RestaHen3	Restaurant	Heating	new	3	Ground Source HP Closed	Air Source Heat Pump	ton	$9.92	15	1,248	0.001	76	$750.00	6%	100%	95%	0.07	0
RestaHeN4	Restaurant	Heating	New	4	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.47	15	1,248	0.001	76	$110.89	6%	100%	95%	0.49	0
RestaHeT1	Restaurant	Heating	Turnover	1	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.47	15	1,248	0.001	76	$110.89	6%	100%	95%	0.49	0
RetaiHeE1	Retail	Heating	Early	1	Re-commissioning	Current Controls not working properly, setpoints not optimized,	sq ft	$0.2710	7	125,500	0.297	20,080	$5,441.68	16%	95%	75%	1.05	1
RetaiHeE2	Retail	Heating	Early	2	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$4.44	20	1,282	0.05	45	$200.00	4%	10%	95%	0.38	0
RetaiHeE3	Retail	Heating	Early	3	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.67	20	1,282	0.05	75	$125.00	6%	10%	95%	0.82	0
RetaiHeE4	Retail	Heating	Early	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.75	20	1,282	0.05	34	$127.43	3%	10%	95%	0.51	0
RetaiHeE5	Retail	Heating	Early	5	Humidification with High pressure, Ultrasonic devices	Electric Resistive Elements	unit	$0.1893	10	2,794	0.039	2,641	$500.00	95%	100%	95%	2.30	1
RetaiHeN1	Retail	Heating	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5 - Electric Heat	sq ft	$1.93	20	1,282	0.05	45	$87.00	4%	10%	95%	0.86	0
RetaiHeN2	Retail	Heating	New	2	Ground Source HP Open - Water	Air Source Heat Pump	ton	$9.65	15	1,282	0.23	78	$ 750.0	6%	20%	95%	0.26	0
RetaiHen3	Retail	Heating	new	3	Ground Source HP Closed	Air Source Heat Pump	ton	$9.65	15	1,282	0.001	78	$750.00	6%	100%	95%	0.07	0
RetaiHeN4	Retail	Heating	New	4	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.43	15	1,282	0.001	78	$110.89	6%	100%	95%	0.51	0
RetaiHeT1	Retail	Heating	Turnover	1	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.43	15	1,282	0.001	78	$110.89	6%	100%	95%	0.51	0
WarehHeE1	Warehouse	Heating	Early	1	Re-commissioning	Current Controls not working properly, setpoints not optimized,	sq ft	$0.2710	7	125,500	0.297	20,080	$5,441.68	16%	95%	75%	1.05	1
WarehHeE2	Warehouse	Heating	Early	2	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$4.44	20	1,102	0.05	45	$200.00	4%	10%	95%	0.38	0
WarehHeE3	Warehouse	Heating	Early	3	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.67	20	1,102	0.05	75	$125.00	7%	10%	95%	0.82	0
WarehHeE4	Warehouse	Heating	Early	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.75	20	1,102	0.05	34	$127.43	3%	10%	95%	0.51	0
WarehHeE5	Warehouse	Heating	Early	5	Humidification with High pressure, Ultrasonic devices	Electric Resistive Elements	unit	$0.1893	10	2,794	0.039	2,641	$500.00	95%	100%	95%	2.30	1
WarehHeN1	Warehouse	Heating	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5 - Electric Heat	sq ft	$1.93	20	1,102	0.05	45	$87.00	4%	10%	95%	0.86	0
WarehHeN2	Warehouse	Heating	New	2	Ground Source HP Open - Water	Air Source Heat Pump	ton	$11.23	15	1,102	0.23	67	$ 750.0	6%	20%	95%	0.25	0
WarehHen3	Warehouse	Heating	new	3	Ground Source HP Closed	Air Source Heat Pump	ton	$11.23	15	1,102	0.001	67	$750.00	6%	100%	95%	0.06	0
WarehHeN4	Warehouse	Heating	New	4	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.66	15	1,102	0.001	67	$110.89	6%	100%	95%	0.44	0
WarehHeT1	Warehouse	Heating	Turnover	1	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.66	15	1,102	0.001	67	$110.89	6%	100%	95%	0.44	0
GroceChE1	Grocery	Chiller	Early	1	Duct Sealing, down to 15%	Leakage of 29%	ton	$1.4368	15	6,612	0.013	66.1200	$95.00	1%	40%	$0.90	0.57	0
GroceChE2	Grocery	Chiller	Early	2	Duct Insulation, Add R8	No Insulation	ton	$1.8905	15	6,612	0.013	66.1200	$125.00	1%	50%	95%	0.44	0
GroceChE3	Grocery	Chiller	Early	3	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton	ton	$0.3781	15	6,612	0.065	330.6000	$125.00	5%	75%	75%	2.18	1
GroceChE4	Grocery	Chiller	Early	4	Energy Recovery Units	No Energy Recovery	ton	$0.3403	15	6,612	0.261	1,322.4	$450.00	20%	75%	75%	2.42	1
GroceChE5	Grocery	Chiller	Early	5	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.3447	7	6,612	0.209	1,058	$364.67	16%	75%	75%	1.01	1
GroceChE6	Grocery	Chiller	Early	6	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$0.82	15	6,612	0.05	245	$200.00	4%	15%	95%	1.01	1
GroceChE7	Grocery	Chiller	Early	7	Adding window shade film	No shade film	q ft window are	$7.0453	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.04	0
GroceChE8	Grocery	Chiller	Early	8	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.21	0
GroceChE9	Grocery	Chiller	Early	9	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.13	20	6,612	0.05	198	$225.00	3%	75%	95%	0.96	0
GroceChN1	Grocery	Chiller	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	sq ft	$0.38	20	6,612	0.05	231	$87.00	4%	15%	95%	2.82	1
GroceChN2	Grocery	Chiller	New	2	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.21	0
GroceChN3	Grocery	Chiller	New	3	Adding reflective roof treatment	Std color roof	sq ft roof area	$4.50	20	6,612	0.05	10	$45.00	0%	100%	95%	0.95	0
GroceChN4	Grocery	Chiller	New	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$1.97	20	6,612	0.05	65	$127.43	1%	45%	95%	0.73	0
GroceChN5	Grocery	Chiller	New	5	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.3195	15	6,612	0.76	798	$255.00	12%	95%	95%	3.97	1
GroceChN6	Grocery	Chiller	New	6	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.1767	15	6,612	1.944	2,052	$362.50	31%	95%	95%	7.19	1
GroceChN7	Grocery	Chiller	New	7	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.0916	15	15,846	1.728	1,824	$167.00	12%	95%	95%	13.87	1
GroceChN8	Grocery	Chiller	New	8	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.3479	15	6,612	0.065	330.6000	$115.00	5%	95%	75%	2.37	1
GroceChN9	Grocery	Chiller	New	9	Energy Recovery Units	No Energy Recovery	ton	$0.1891	15	6,612	0.261	1,322.4	$250.00	20%	95%	75%	4.35	1
GroceChN10	Grocery	Chiller	New	10	Duct Insulation, Add R8	No Insulation	ton	$1.8905	15	6,612	0.013	66.1200	$125.00	1%	100%	95%	0.44	0
GroceChT1	Grocery	Chiller	Turnover	1	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.3697	15	6,612	0.76	798	$295.00	12%	95%	95%	3.44	1
GroceChT2	Grocery	Chiller	Turnover	2	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2254	15	6,612	1.944	2,052	$462.50	31%	95%	95%	5.63	1
GroceChT3	Grocery	Chiller	Turnover	3	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.3595	15	6,612	1.944	1,157	$416.00	18%	95%	95%	4.75	1
GroceChN11	Grocery	Chiller	New	11	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.3595	15	6,612	1.944	1,157	$416.00	18%	95%	95%	4.75	1
GroceChT5	Grocery	Chiller	Turnover	5	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.3842	15	6,612	0.065	330.6000	$127.00	5%	95%	75%	2.14	1
GroceChT4	Grocery	Chiller	Turnover	4	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1135	15	15,846	1.728	1,824	$207.00	12%	95%	95%	11.19	1
InstiChE1	Institutional	Chiller	Early	1	Duct Sealing, down to 15%	Leakage of 29%	ton	$2.0251	15	4,691	0.009	46.9104	$95.00	1%	40%	$0.90	0.41	0
InstiChE2	Institutional	Chiller	Early	2	Duct Insulation, Add R8	No Insulation	ton	$2.6647	15	4,691	0.009	46.9104	$125.00	1%	50%	95%	0.31	0
InstiChE3	Institutional	Chiller	Early	3	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton	ton	$0.5329	15	4,691	0.046	234.5520	$125.00	5%	75%	75%	1.54	1
InstiChE4	Institutional	Chiller	Early	4	Energy Recovery Units	No Energy Recovery	ton	$0.4796	15	4,691	0.185	938.2	$450.00	20%	75%	75%	1.72	1
InstiChE5	Institutional	Chiller	Early	5	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.4859	7	4,691	0.148	751	$364.67	16%	75%	75%	0.71	0
InstiChE6	Institutional	Chiller	Early	6	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$0.82	15	4,691	0.05	245	$200.00	5%	15%	95%	1.01	1
InstiChE7	Institutional	Chiller	Early	7	Adding window shade film	No shade film	q ft window are	$7.0453	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.04	0
InstiChE8	Institutional	Chiller	Early	8	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.21	0
InstiChE9	Institutional	Chiller	Early	9	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.60	20	4,691	0.05	141	$225.00	3%	75%	95%	0.72	0
InstiChN1	Institutional	Chiller	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	sq ft	$0.53	20	4,691	0.05	164	$87.00	4%	15%	95%	2.11	1

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
InstiChN2	Institutional	Chiller	New	2	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.21	0
InstiChN3	Institutional	Chiller	New	3	Adding reflective roof treatment	Std color roof	sq ft roof area	$4.50	20	4,691	0.05	10	$45.00	0%	100%	95%	0.95	0
InstiChN4	Institutional	Chiller	New	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$2.65	20	4,691	0.05	48	$127.43	1%	45%	95%	0.61	0
InstiChN5	Institutional	Chiller	New	5	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.4504	15	4,691	0.76	566	$255.00	12%	95%	95%	3.33	1
InstiChN6	Institutional	Chiller	New	6	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2490	15	4,691	1.944	1,456	$362.50	31%	95%	95%	6.03	1
InstiChN7	Institutional	Chiller	New	7	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1290	15	11,242	1.728	1,294	$167.00	12%	95%	95%	11.63	1
InstiChN8	Institutional	Chiller	New	8	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.4903	15	4,691	0.046	234.5520	$115.00	5%	95%	75%	1.68	1
InstiChN9	Institutional	Chiller	New	9	Energy Recovery Units	No Energy Recovery	ton	$0.2665	15	4,691	0.185	938.2	$250.00	20%	95%	75%	3.09	1
InstiChN10	Institutional	Chiller	New	10	Duct Insulation, Add R8	No Insulation	ton	$2.6647	15	4,691	0.009	46.9104	$125.00	1%	100%	95%	0.31	0
InstiChT1	Institutional	Chiller	Turnover	1	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.5211	15	4,691	0.76	566	$295.00	12%	95%	95%	2.88	1
InstiChT2	Institutional	Chiller	Turnover	2	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.3177	15	4,691	1.944	1,456	$462.50	31%	95%	95%	4.73	1
InstiChT3	Institutional	Chiller	Turnover	3	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.5067	15	4,691	1.944	821	$416.00	18%	95%	95%	4.18	1
InstiChN11	Institutional	Chiller	New	11	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.5067	15	4,691	1.944	821	$416.00	18%	95%	95%	4.18	1
InstiChT5	Institutional	Chiller	Turnover	5	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.5415	15	4,691	0.046	234.5520	$127.00	5%	95%	75%	1.52	1
InstiChT4	Institutional	Chiller	Turnover	4	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1600	15	11,242	1.728	1,294	$207.00	12%	95%	95%	9.38	1
LodgiChE1	Lodging	Chiller	Early	1	Duct Sealing, down to 15%	Leakage of 29%	ton	$1.6956	15	5,603	0.011	56.0280	$95.00	1%	40%	$0.90	0.49	0
LodgiChE2	Lodging	Chiller	Early	2	Duct Insulation, Add R8	No Insulation	ton	$2.2310	15	5,603	0.011	56.0280	$125.00	1%	50%	95%	0.37	0
LodgiChE3	Lodging	Chiller	Early	3	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton	ton	$0.4462	15	5,603	0.055	280.1400	$125.00	5%	75%	75%	1.84	1
LodgiChE4	Lodging	Chiller	Early	4	Energy Recovery Units	No Energy Recovery	ton	$0.4016	15	5,603	0.221	1,120.6	$450.00	20%	75%	75%	2.05	1
LodgiChE5	Lodging	Chiller	Early	5	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.4068	7	5,603	0.177	896	$364.67	16%	75%	75%	0.85	0
LodgiChE6	Lodging	Chiller	Early	6	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$0.82	15	5,603	0.05	245	$200.00	4%	15%	95%	1.01	1
LodgiChE7	Lodging	Chiller	Early	7	Adding window shade film	No shade film	q ft window are	$7.0453	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.04	0
LodgiChE8	Lodging	Chiller	Early	8	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.21	0
LodgiChE9	Lodging	Chiller	Early	9	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.34	20	5,603	0.05	168	$225.00	3%	75%	95%	0.83	0
LodgiChN1	Lodging	Chiller	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	sq ft	$0.44	20	5,603	0.05	196	$87.00	4%	15%	95%	2.45	1
LodgiChN2	Lodging	Chiller	New	2	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.21	0
LodgiChN3	Lodging	Chiller	New	3	Adding reflective roof treatment	Std color roof	sq ft roof area	$4.50	20	5,603	0.05	10	$45.00	0%	100%	95%	0.95	0
LodgiChN4	Lodging	Chiller	New	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$2.22	20	5,603	0.05	58	$127.43	1%	45%	95%	0.68	0
LodgiChN5	Lodging	Chiller	New	5	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.3771	15	5,603	0.76	676	$255.00	12%	95%	95%	3.64	1
LodgiChN6	Lodging	Chiller	New	6	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2085	15	5,603	1.944	1,739	$362.50	31%	95%	95%	6.58	1
LodgiChN7	Lodging	Chiller	New	7	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1080	15	13,427	1.728	1,546	$167.00	12%	95%	95%	12.70	1
LodgiChN8	Lodging	Chiller	New	8	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.4105	15	5,603	0.055	280.1400	$115.00	5%	95%	75%	2.01	1
LodgiChN9	Lodging	Chiller	New	9	Energy Recovery Units	No Energy Recovery	ton	$0.2231	15	5,603	0.221	1,120.6	$250.00	20%	95%	75%	3.69	1
LodgiChN10	Lodging	Chiller	New	10	Duct Insulation, Add R8	No Insulation	ton	$2.2310	15	5,603	0.011	56.0280	$125.00	1%	100%	95%	0.37	0
LodgiChT1	Lodging	Chiller	Turnover	1	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.4363	15	5,603	0.76	676	$295.00	12%	95%	95%	3.14	1
LodgiChT2	Lodging	Chiller	Turnover	2	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2660	15	5,603	1.944	1,739	$462.50	31%	95%	95%	5.16	1
LodgiChT3	Lodging	Chiller	Turnover	3	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.4243	15	5,603	1.944	980	$416.00	18%	95%	95%	4.45	1
LodgiChN11	Lodging	Chiller	New	11	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.4243	15	5,603	1.944	980	$416.00	18%	95%	95%	4.45	1
LodgiChT5	Lodging	Chiller	Turnover	5	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.4533	15	5,603	0.055	280.1400	$127.00	5%	95%	75%	1.82	1
LodgiChT4	Lodging	Chiller	Turnover	4	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1339	15	13,427	1.728	1,546	$207.00	12%	95%	95%	10.24	1
MiscChE1	Misc	Chiller	Early	1	Duct Sealing, down to 15%	Leakage of 29%	ton	$1.4616	15	6,500	0.013	64.9977	$95.00	1%	40%	$0.90	0.56	0
MiscChE2	Misc	Chiller	Early	2	Duct Insulation, Add R8	No Insulation	ton	$1.9231	15	6,500	0.013	64.9977	$125.00	1%	50%	95%	0.43	0
MiscChE3	Misc	Chiller	Early	3	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton	ton	$0.3846	15	6,500	0.064	324.9885	$125.00	5%	75%	75%	2.14	1
MiscChE4	Misc	Chiller	Early	4	Energy Recovery Units	No Energy Recovery	ton	$0.3462	15	6,500	0.257	1,300.0	$450.00	20%	75%	75%	2.38	1
MiscChE5	Misc	Chiller	Early	5	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.3507	7	6,500	0.205	1,040	$364.67	16%	75%	75%	0.99	0
MiscChE6	Misc	Chiller	Early	6	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$0.82	15	6,500	0.05	245	$200.00	4%	15%	95%	1.01	1
MiscChE7	Misc	Chiller	Early	7	Adding window shade film	No shade film	q ft window are	$7.0453	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.04	0
MiscChE8	Misc	Chiller	Early	8	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.21	0
MiscChE9	Misc	Chiller	Early	9	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.15	20	6,500	0.05	195	$225.00	3%	75%	95%	0.94	0
MiscChN1	Misc	Chiller	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	sq ft	$0.38	20	6,500	0.05	227	$87.00	4%	15%	95%	2.78	1
MiscChN2	Misc	Chiller	New	2	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.21	0
MiscChN3	Misc	Chiller	New	3	Adding reflective roof treatment	Std color roof	sq ft roof area	$4.50	20	6,500	0.05	10	$45.00	0%	100%	95%	0.95	0
MiscChN4	Misc	Chiller	New	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$1.92	20	6,500	0.05	66	$127.43	1%	45%	95%	0.74	0
MiscChN5	Misc	Chiller	New	5	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.3251	15	6,500	0.76	784	$255.00	12%	95%	95%	3.94	1
MiscChN6	Misc	Chiller	New	6	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.1797	15	6,500	1.944	2,017	$362.50	31%	95%	95%	7.12	1
MiscChN7	Misc	Chiller	New	7	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.0931	15	15,577	1.728	1,793	$167.00	12%	95%	95%	13.74	1
MiscChN8	Misc	Chiller	New	8	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.3539	15	6,500	0.064	324.9885	$115.00	5%	95%	75%	2.33	1
MiscChN9	Misc	Chiller	New	9	Energy Recovery Units	No Energy Recovery	ton	$0.1923	15	6,500	0.257	1,300.0	$250.00	20%	95%	75%	4.28	1
MiscChN10	Misc	Chiller	New	10	Duct Insulation, Add R8	No Insulation	ton	$1.9231	15	6,500	0.013	64.9977	$125.00	1%	100%	95%	0.43	0
MiscChT1	Misc	Chiller	Turnover	1	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.3761	15	6,500	0.76	784	$295.00	12%	95%	95%	3.40	1
MiscChT2	Misc	Chiller	Turnover	2	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2293	15	6,500	1.944	2,017	$462.50	31%	95%	95%	5.58	1
MiscChT3	Misc	Chiller	Turnover	3	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.3657	15	6,500	1.944	1,137	$416.00	18%	95%	95%	4.71	1
MiscChN11	Misc	Chiller	New	11	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.3657	15	6,500	1.944	1,137	$416.00	18%	95%	95%	4.71	1
MiscChT5	Misc	Chiller	Turnover	5	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.3908	15	6,500	0.064	324.9885	$127.00	5%	95%	75%	2.11	1
MiscChT4	Misc	Chiller	Turnover	4	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1154	15	15,577	1.728	1,793	$207.00	12%	95%	95%	11.09	1
OfficChE1	Office	Chiller	Early	1	Duct Sealing, down to 15%	Leakage of 29%	ton	$1.5082	15	6,299	0.012	62.9880	$95.00	1%	40%	$0.90	0.55	0
OfficChE2	Office	Chiller	Early	2	Duct Insulation, Add R8	No Insulation	ton	$1.9845	15	6,299	0.012	62.9880	$125.00	1%	50%	95%	0.41	0
OfficChE3	Office	Chiller	Early	3	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton	ton	$0.3969	15	6,299	0.062	314.9400	$125.00	5%	75%	75%	2.07	1
OfficChE4	Office	Chiller	Early	4	Energy Recovery Units	No Energy Recovery	ton	$0.3572	15	6,299	0.249	1,259.8	$450.00	20%	75%	75%	2.30	1
OfficChE5	Office	Chiller	Early	5	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.3618	7	6,299	0.199	1,008	$364.67	16%	75%	75%	0.96	0
OfficChE6	Office	Chiller	Early	6	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$0.82	15	6,299	0.05	245	$200.00	4%	15%	95%	1.01	1
OfficChE7	Office	Chiller	Early	7	Adding window shade film	No shade film	q ft window are	$7.0453	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.04	0
OfficChE8	Office	Chiller	Early	8	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.21	0
OfficChE9	Office	Chiller	Early	9	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.19	20	6,299	0.05	189	$225.00	3%	75%	95%	0.92	0
OfficChN1	Office	Chiller	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	sq ft	$0.39	20	6,299	0.05	220	$87.00	4%	15%	95%	2.71	1
OfficChN2	Office	Chiller	New	2	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.21	0
OfficChN3	Office	Chiller	New	3	Adding reflective roof treatment	Std color roof	sq ft roof area	$4.50	20	6,299	0.05	10	$45.00	0%	100%	95%	0.95	0
OfficChN4	Office	Chiller	New	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$1.97	20	6,299	0.05	65	$127.43	1%	45%	95%	0.73	0
OfficChN5	Office	Chiller	New	5	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.3354	15	6,299	0.76	760	$255.00	12%	95%	95%	3.87	1
OfficChN6	Office	Chiller	New	6	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.1854	15	6,299	1.944	1,955	$362.50	31%	95%	95%	7.00	1
OfficChN7	Office	Chiller	New	7	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.0961	15	15,095	1.728	1,738	$167.00	12%	95%	95%	13.51	1
OfficChN8	Office	Chiller	New	8	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.3651	15	6,299	0.062	314.9400	$115.00	5%	95%	75%	2.25	1
OfficChN9	Office	Chiller	New	9	Energy Recovery Units	No Energy Recovery	ton	$0.1985	15	6,299	0.249	1,259.8	$250.00	20%	95%	75%	4.15	1
OfficChN10	Office	Chiller	New	10	Duct Insulation, Add R8	No Insulation	ton	$1.9845	15	6,299	0.012	62.9880	$125.00	1%	100%	95%	0.41	0
OfficChT1	Office	Chiller	Turnover	1	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.3881	15	6,299	0.76	760	$295.00	12%	95%	95%	3.35	1
OfficChT2	Office	Chiller	Turnover	2	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2366	15	6,299	1.944	1,955	$462.50	31%	95%	95%	5.49	1
OfficChT3	Office	Chiller	Turnover	3	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.3774	15	6,299	1.944	1,102	$416.00	18%	95%	95%	4.65	1
OfficChN11	Office	Chiller	New	11	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.3774	15	6,299	1.944	1,102	$416.00	18%	95%	95%	4.65	1
OfficChT5	Office	Chiller	Turnover	5	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.4033	15	6,299	0.062	314.9400	$127.00	5%	95%	75%	2.04	1
OfficChT4	Office	Chiller	Turnover	4	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1191	15	15,095	1.728	1,738	$207.00	12%	95%	95%	10.90	1
RestaChE1	Restaurant	Chiller	Early	1	Duct Sealing, down to 15%	Leakage of 29%	ton	$1.4086	15	6,744	0.013	67.4424	$95.00	1%	40%	$0.90	0.58	0
RestaChE2	Restaurant	Chiller	Early	2	Duct Insulation, Add R8	No Insulation	ton	$1.8534	15	6,744	0.013	67.4424	$125.00	1%	50%	95%	0.44	0
RestaChE3	Restaurant	Chiller	Early	3	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton	ton	$0.3707	15	6,744	0.067	337.2120	$125.00	5%	75%	75%	2.22	1
RestaChE4	Restaurant	Chiller	Early	4	Energy Recovery Units	No Energy Recovery	ton	$0.3336	15	6,744	0.266	1,348.8	$450.00	20%	75%	75%	2.47	1
RestaChE5	Restaurant	Chiller	Early	5	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.3379	7	6,744	0.213	1,079	$364.67	16%	75%	75%	1.03	1
RestaChE6	Restaurant	Chiller	Early	6	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$0.82	15	6,744	0.05	245	$200.00	4%	15%	95%	1.01	1
RestaChE7	Restaurant	Chiller	Early	7	Adding window shade film	No shade film	q ft window are	$7.0453	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.04	0

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
RestaChE8	Restaurant	Chiller	Early	8	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.21	0
RestaChE9	Restaurant	Chiller	Early	9	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.11	20	6,744	0.05	202	$225.00	3%	75%	95%	0.97	0
RestaChN1	Restaurant	Chiller	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	sq ft	$0.37	20	6,744	0.05	236	$87.00	4%	15%	95%	2.87	1
RestaChN2	Restaurant	Chiller	New	2	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.21	0
RestaChN3	Restaurant	Chiller	New	3	Adding reflective roof treatment	Std color roof	sq ft roof area	$4.50	20	6,744	0.05	10	$45.00	0%	100%	95%	0.95	0
RestaChN4	Restaurant	Chiller	New	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$1.84	20	6,744	0.05	69	$127.43	1%	45%	95%	0.76	0
RestaChN5	Restaurant	Chiller	New	5	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.3133	15	6,744	0.76	814	$255.00	12%	95%	95%	4.02	1
RestaChN6	Restaurant	Chiller	New	6	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.1732	15	6,744	1.944	2,093	$362.50	31%	95%	95%	7.27	1
RestaChN7	Restaurant	Chiller	New	7	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.0898	15	16,163	1.728	1,860	$167.00	12%	95%	95%	14.03	1
RestaChN8	Restaurant	Chiller	New	8	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.3410	15	6,744	0.067	337.2120	$115.00	5%	95%	75%	2.41	1
RestaChN9	Restaurant	Chiller	New	9	Energy Recovery Units	No Energy Recovery	ton	$0.1853	15	6,744	0.266	1,348.8	$250.00	20%	95%	75%	4.44	1
RestaChN10	Restaurant	Chiller	New	10	Duct Insulation, Add R8	No Insulation	ton	$1.8534	15	6,744	0.013	67.4424	$125.00	1%	100%	95%	0.44	0
RestaChT1	Restaurant	Chiller	Turnover	1	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.3624	15	6,744	0.76	814	$295.00	12%	95%	95%	3.47	1
RestaChT2	Restaurant	Chiller	Turnover	2	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2210	15	6,744	1.944	2,093	$462.50	31%	95%	95%	5.70	1
RestaChT3	Restaurant	Chiller	Turnover	3	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.3525	15	6,744	1.944	1,180	$416.00	18%	95%	95%	4.79	1
RestaChN11	Restaurant	Chiller	New	11	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.3525	15	6,744	1.944	1,180	$416.00	18%	95%	95%	4.79	1
RestaChT5	Restaurant	Chiller	Turnover	5	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.3766	15	6,744	0.067	337.2120	$127.00	5%	95%	75%	2.19	1
RestaChT4	Restaurant	Chiller	Turnover	4	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1113	15	16,163	1.728	1,860	$207.00	12%	95%	95%	11.32	1
RetaiChE1	Retail	Chiller	Early	1	Duct Sealing, down to 15%	Leakage of 29%	ton	$1.4368	15	6,612	0.013	66.1200	$95.00	1%	40%	$0.90	0.57	0
RetaiChE2	Retail	Chiller	Early	2	Duct Insulation, Add R8	No Insulation	ton	$1.8905	15	6,612	0.013	66.1200	$125.00	1%	50%	95%	0.44	0
RetaiChE3	Retail	Chiller	Early	3	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton	ton	$0.3781	15	6,612	0.065	330.6000	$125.00	5%	75%	75%	2.18	1
RetaiChE4	Retail	Chiller	Early	4	Energy Recovery Units	No Energy Recovery	ton	$0.3403	15	6,612	0.261	1,322.4	$450.00	20%	75%	75%	2.42	1
RetaiChE5	Retail	Chiller	Early	5	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.3447	7	6,612	0.209	1,058	$364.67	16%	75%	75%	1.01	1
RetaiChE6	Retail	Chiller	Early	6	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$0.82	15	6,612	0.05	245	$200.00	4%	15%	95%	1.01	1
RetaiChE7	Retail	Chiller	Early	7	Adding window shade film	No shade film	q ft window are	$7.0453	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.04	0
RetaiChE8	Retail	Chiller	Early	8	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.21	0
RetaiChE9	Retail	Chiller	Early	9	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.13	20	6,612	0.05	198	$225.00	3%	75%	95%	0.96	0
RetaiChN1	Retail	Chiller	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	sq ft	$0.38	20	6,612	0.05	231	$87.00	4%	15%	95%	2.82	1
RetaiChN2	Retail	Chiller	New	2	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.21	0
RetaiChN3	Retail	Chiller	New	3	Adding reflective roof treatment	Std color roof	sq ft roof area	$4.50	20	6,612	0.05	10	$45.00	0%	100%	95%	0.95	0
RetaiChN4	Retail	Chiller	New	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$1.88	20	6,612	0.05	68	$127.43	1%	45%	95%	0.75	0
RetaiChN5	Retail	Chiller	New	5	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.3195	15	6,612	0.76	798	$255.00	12%	95%	95%	3.97	1
RetaiChN6	Retail	Chiller	New	6	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.1767	15	6,612	1.944	2,052	$362.50	31%	95%	95%	7.19	1
RetaiChN7	Retail	Chiller	New	7	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.0916	15	15,846	1.728	1,824	$167.00	12%	95%	95%	13.87	1
RetaiChN8	Retail	Chiller	New	8	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.3479	15	6,612	0.065	330.6000	$115.00	5%	95%	75%	2.37	1
RetaiChN9	Retail	Chiller	New	9	Energy Recovery Units	No Energy Recovery	ton	$0.1891	15	6,612	0.261	1,322.4	$250.00	20%	95%	75%	4.35	1
RetaiChN10	Retail	Chiller	New	10	Duct Insulation, Add R8	No Insulation	ton	$1.8905	15	6,612	0.013	66.1200	$125.00	1%	100%	95%	0.44	0
RetaiChT1	Retail	Chiller	Turnover	1	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.3697	15	6,612	0.76	798	$295.00	12%	95%	95%	3.44	1
RetaiChT2	Retail	Chiller	Turnover	2	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2254	15	6,612	1.944	2,052	$462.50	31%	95%	95%	5.63	1
RetaiChT3	Retail	Chiller	Turnover	3	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.3595	15	6,612	1.944	1,157	$416.00	18%	95%	95%	4.75	1
RetaiChN11	Retail	Chiller	New	11	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.3595	15	6,612	1.944	1,157	$416.00	18%	95%	95%	4.75	1
RetaiChT5	Retail	Chiller	Turnover	5	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.3842	15	6,612	0.065	330.6000	$127.00	5%	95%	75%	2.14	1
RetaiChT4	Retail	Chiller	Turnover	4	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1135	15	15,846	1.728	1,824	$207.00	12%	95%	95%	11.19	1
WarehChE1	Warehouse	Chiller	Early	1	Duct Sealing, down to 15%	Leakage of 29%	ton	$1.8571	15	5,116	0.010	51.1560	$95.00	1%	40%	$0.90	0.44	0
WarehChE2	Warehouse	Chiller	Early	2	Duct Insulation, Add R8	No Insulation	ton	$2.4435	15	5,116	0.010	51.1560	$125.00	1%	50%	95%	0.34	0
WarehChE3	Warehouse	Chiller	Early	3	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton	ton	$0.4887	15	5,116	0.050	255.7800	$125.00	5%	75%	75%	1.68	1
WarehChE4	Warehouse	Chiller	Early	4	Energy Recovery Units	No Energy Recovery	ton	$0.4398	15	5,116	0.202	1,023.1	$450.00	20%	75%	75%	1.87	1
WarehChE5	Warehouse	Chiller	Early	5	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.4455	7	5,116	0.162	818	$364.67	16%	75%	75%	0.78	0
WarehChE6	Warehouse	Chiller	Early	6	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$0.82	15	5,116	0.05	245	$200.00	5%	15%	95%	1.01	1
WarehChE7	Warehouse	Chiller	Early	7	Adding window shade film	No shade film	q ft window are	$7.0453	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.04	0
WarehChE8	Warehouse	Chiller	Early	8	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.21	0
WarehChE9	Warehouse	Chiller	Early	9	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.47	20	5,116	0.05	153	$225.00	3%	75%	95%	0.77	0
WarehChN1	Warehouse	Chiller	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	sq ft	$0.49	20	5,116	0.05	179	$87.00	4%	15%	95%	2.27	1
WarehChN2	Warehouse	Chiller	New	2	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.21	0
WarehChN3	Warehouse	Chiller	New	3	Adding reflective roof treatment	Std color roof	sq ft roof area	$4.50	20	5,116	0.05	10	$45.00	0%	100%	95%	0.95	0
WarehChN4	Warehouse	Chiller	New	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$2.43	20	5,116	0.05	53	$127.43	1%	45%	95%	0.64	0
WarehChN5	Warehouse	Chiller	New	5	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.4130	15	5,116	0.76	617	$255.00	12%	95%	95%	3.47	1
WarehChN6	Warehouse	Chiller	New	6	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2283	15	5,116	1.944	1,588	$362.50	31%	95%	95%	6.29	1
WarehChN7	Warehouse	Chiller	New	7	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1183	15	12,260	1.728	1,411	$167.00	12%	95%	95%	12.13	1
WarehChN8	Warehouse	Chiller	New	8	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.4496	15	5,116	0.050	255.7800	$115.00	5%	95%	75%	1.83	1
WarehChN9	Warehouse	Chiller	New	9	Energy Recovery Units	No Energy Recovery	ton	$0.2444	15	5,116	0.202	1,023.1	$250.00	20%	95%	75%	3.37	1
WarehChN10	Warehouse	Chiller	New	10	Duct Insulation, Add R8	No Insulation	ton	$2.4435	15	5,116	0.010	51.1560	$125.00	1%	100%	95%	0.34	0
WarehChT1	Warehouse	Chiller	Turnover	1	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.4778	15	5,116	0.76	617	$295.00	12%	95%	95%	3.00	1
WarehChT2	Warehouse	Chiller	Turnover	2	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2913	15	5,116	1.944	1,588	$462.50	31%	95%	95%	4.93	1
WarehChT3	Warehouse	Chiller	Turnover	3	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.4647	15	5,116	1.944	895	$416.00	18%	95%	95%	4.30	1
WarehChN11	Warehouse	Chiller	New	11	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.4647	15	5,116	1.944	895	$416.00	18%	95%	95%	4.30	1
WarehChT5	Warehouse	Chiller	Turnover	5	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.4965	15	5,116	0.050	255.7800	$127.00	5%	95%	75%	1.66	1
WarehChT4	Warehouse	Chiller	Turnover	4	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1467	15	12,260	1.728	1,411	$207.00	12%	95%	95%	9.78	1
WarehHeT2	Warehouse	Heating	Turnover	2	7 day, two stage setback thermostat	Manual Thermostat - hp	ton	$0.10	10	3,761	0.008	564	$55.00	15%	100%	45%	4.46	1
GroceHeT2	Grocery	Heating	Turnover	2	7 day, two stage setback thermostat	Manual Thermostat - hp	ton	$0.08	10	4,374	0.010	656	$55.00	15%	100%	45%	5.19	1
HealtHeT2	Healthcare	Heating	Turnover	2	7 day, two stage setback thermostat	Manual Thermostat - hp	ton	$0.36	10	1,018	0.002	153	$55.00	15%	100%	45%	1.21	1
InstiHeT2	Institutional	Heating	Turnover	2	7 day, two stage setback thermostat	Manual Thermostat - hp	ton	$0.12	10	3,116	0.007	467	$55.00	15%	100%	45%	3.69	1
MiscHeT2	Misc	Heating	Turnover	2	7 day, two stage setback thermostat	Manual Thermostat - hp	ton	$0.10	10	3,624	0.008	544	$55.00	15%	100%	45%	4.30	1
OffiHeT2	Office	Heating	Turnover	2	7 day, two stage setback thermostat	Manual Thermostat - hp	ton	$0.13	10	2,795	0.006	419	$55.00	15%	100%	45%	3.31	1
RestaHeT2	Restaurant	Heating	Turnover	2	7 day, two stage setback thermostat	Manual Thermostat - hp	ton	$0.09	10	4,258	0.009	639	$55.00	15%	100%	45%	5.05	1
RetaiHeT2	Retail	Heating	Turnover	2	7 day, two stage setback thermostat	Manual Thermostat - hp	ton	$0.08	10	4,374	0.010	656	$55.00	15%	100%	45%	5.19	1
LodgiHeT2	Lodging	Heating	Turnover	2	7 day, two stage setback thermostat	Manual Thermostat - hp	ton	$0.07	10	5,299	0.012	795	$55.00	15%	100%	45%	6.28	1
OffiMoE1	Office	Motors	Early	1	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.20	1
OffiMoT23	Office	Motors	Turnover	23	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.20	1
RestaMoE1	Restaurant	Motors	Early	1	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.20	1
InstiMoT9	Institutional	Motors	Turnover	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5713	15	84274	6.136	22754.0	$13,000.00	27%	90.0%	80%	1.53	1
RestaMoT23	Restaurant	Motors	Turnover	23	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.20	1
RetaiMoE1	Retail	Motors	Early	1	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.20	1
RetaiMoT23	Retail	Motors	Turnover	23	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.20	1
WarehMoE1	Warehouse	Motors	Early	1	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.20	1
WarehMoT23	Warehouse	Motors	Turnover	23	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.20	1

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	PJM Summer Summer Peak KW Savings	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Fla
HealtChE1	Healthcare	Chiller	Early	1	Duct Sealing, down to 15%	Leakage of 29%	ton	$0.8282	15	11,470	0.023	114.7008	$95.00	1%	40%	90%	0.84	0
HealtChE2	Healthcare	Chiller	Early	2	Duct Insulation, Add R8	No Insulation	ton	$1.0898	15	11,470	0.023	114.7008	$125.00	1%	50%	95%	0.64	0
HealtChE3	Healthcare	Chiller	Early	3	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton	ton	$0.2180	15	11,470	0.113	573.5040	$125.00	5%	75%	75%	3.20	1
HealtChE4	Healthcare	Chiller	Early	4	Energy Recovery Units	No Energy Recovery	ton	$0.1962	15	11,470	0.453	2,294.0	$450.00	20%	75%	75%	3.56	1
HealtChE5	Healthcare	Chiller	Early	5	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.1987	7	11,470	0.362	1,835	$364.67	16%	75%	75%	1.84	1
HealtChE6	Healthcare	Chiller	Early	6	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$0.82	15	11,470	0.05	245	$200.00	2%	15%	95%	0.85	0
HealtChE7	Healthcare	Chiller	Early	7	Adding window shade film	No shade film	sq ft window ar	$7.0453	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.04	0
HealtChE8	Healthcare	Chiller	Early	8	Adding window shade screen	No shade screen	sq ft window ar	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.18	0
HealtChE9	Healthcare	Chiller	Early	9	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$0.65	20	11,470	0.05	344	$225.00	3%	75%	95%	1.23	1
HealtChN1	Healthcare	Chiller	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	sq ft	$0.22	20	11,470	0.05	401	$87.00	4%	15%	95%	3.62	1
HealtChN2	Healthcare	Chiller	New	2	Adding window shade screen	No shade screen	sq ft window ar	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.18	0
HealtChN3	Healthcare	Chiller	New	3	Adding reflective roof treatment	Std color roof	sq ft roof area	$4.50	20	11,470	0.05	10	$45.00	0%	100%	95%	1.00	1
HealtChN4	Healthcare	Chiller	New	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$1.08	20	11,470	0.05	118	$127.43	1%	45%	95%	0.94	0
HealtChN5	Healthcare	Chiller	New	5	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.1842	15	11,470	0.76	1,384	$255.00	12%	95%	95%	5.04	1
HealtChN6	Healthcare	Chiller	New	6	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.1018	15	11,470	1.944	3,560	$362.50	31%	95%	95%	9.12	1
HealtChN7	Healthcare	Chiller	New	7	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.0528	15	27,489	1.728	3,164	$167.00	12%	95%	95%	17.60	1
HealtChN8	Healthcare	Chiller	New	8	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.2005	15	11,470	0.113	573.5040	$115.00	5%	95%	75%	3.48	1
HealtChN9	Healthcare	Chiller	New	9	Energy Recovery Units	No Energy Recovery	ton	$0.1090	15	11,470	0.453	2,294.0	$250.00	20%	95%	75%	6.40	1
HealtChN10	Healthcare	Chiller	New	10	Duct Insulation, Add R8	No Insulation	ton	$1.0898	15	11,470	0.023	114.7008	$125.00	1%	100%	95%	0.64	0
HealtChT1	Healthcare	Chiller	Turnover	1	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2131	15	11,470	0.76	1,384	$295.00	12%	95%	95%	4.36	1
HealtChT2	Healthcare	Chiller	Turnover	2	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.1299	15	11,470	1.944	3,560	$462.50	31%	95%	95%	7.15	1
HealtChT3	Healthcare	Chiller	Turnover	3	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.2072	15	11,470	1.944	2,007	$416.00	18%	95%	95%	5.83	1
HealtChN11	Healthcare	Chiller	New	11	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.2072	15	11,470	1.944	2,007	$416.00	18%	95%	95%	5.83	1
HealtChT5	Healthcare	Chiller	Turnover	5	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.2214	15	11,470	0.113	573.5040	$127.00	5%	95%	75%	3.15	1
HealtChT4	Healthcare	Chiller	Turnover	4	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.0654	15	27,489	1.728	3,164	$207.00	12%	95%	95%	14.20	1
OfficFIE1	Office	Fluorescent	Early	1	Premium Efficiency T8 Lighting Replacement (32W lamps with low	Replace (E) T12 Lamp - Bundle	Fixture	$0.5712	14	394	0.011	97	$55.38	25%	95%	41%	1.08	1
GroceFIT6	Grocery	Fluorescent	Turnover	6	LED Retrofit Tube	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$1.0146	6	163	0.007	64	$65.00	39%	40%	95%	0.29	0
OfficFIE2	Office	Fluorescent	Early	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2641	14	1,578	0.054	473	$125.00	30%	95%	80%	2.34	1
OfficFIE3	Office	Fluorescent	Early	3	Photocell dimming control	No prior dimming control	Photocell	$0.2852	9	1,578	0.091	789	$225.00	50%	95%	95%	1.50	1
LodgInE6	Lodging	Incandescent	Early	6	Hotel Occupancy Sensors	No prior control	Per Room	$0.7447	10	240	0.019	168	$125.00	70%	90%	95%	0.63	0
OfficFIN1	Office	Fluorescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1781	15	20,340	0.234	2,034	$362.18	10%	95%	100%	3.65	1
OfficFIN2	Office	Fluorescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.3561	15	20,340	0.584	5,085	$1,810.90	25%	75%	100%	1.83	1
HealtHeE1	Healthcare	Heating	Early	1	Re-commissioning	Current Controls not working properly, setpoints not optimized,	sq ft	$0.2710	7	125,500	0.297	20,080	$5,441.68	16%	95%	75%	1.10	1
HealtHeE2	Healthcare	Heating	Early	2	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$4.44	20	2,866	0.05	45	$200.00	2%	10%	95%	0.35	0
HealtHeE3	Healthcare	Heating	Early	3	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.67	20	2,866	0.05	75	$125.00	3%	10%	95%	0.72	0
HealtHeE4	Healthcare	Heating	Early	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.75	20	2,866	0.05	34	$127.43	1%	10%	95%	0.48	0
HealtHeE5	Healthcare	Heating	Early	5	Humidification with High pressure, Ultrasonic devices	Electric Resistive Elements	unit	$0.1893	10	2,794	0.039	2,641	$500.00	95%	100%	95%	2.19	1
HealtHeN1	Healthcare	Heating	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5 - Electric Heat	sq ft	$1.93	20	2,866	0.05	45	$87.00	2%	10%	95%	0.80	0
WarehHIE1	Warehouse	HID	Early	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.5670	10	1,268	0.043	378	$214.50	30%	85%	80%	0.83	0
WarehHIE2	Warehouse	HID	Early	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.4472	10	1,856	0.077	671	$300.00	36%	85%	80%	1.05	1
WarehHIE3	Warehouse	HID	Early	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID fixture drawing 250 W	Fixture	$0.5150	10	1,268	0.052	456	$235.00	36%	85%	80%	0.91	0
WarehHIE4	Warehouse	HID	Early	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID fixture drawing 400 W	Fixture	$0.5081	10	1,856	0.074	640	$325.00	34%	85%	80%	0.92	0
WarehHIT5	Warehouse	HID	Turnover	5	Ceramic Metal Halide lamp	Replace non-ceramic lamp lamp 400 W	Lamp	$0.1282	4	1,560	0.031	273	$35.00	18%	85%	55%	1.55	1
WarehHIE8	Warehouse	HID	Early	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2465	10	5,070	0.175	1,521	$375.00	30%	85%	85%	1.90	1
WarehHIE9	Warehouse	HID	Early	9	Photocell dimming control	No prior dimming control	Photocell	$0.2170	10	5,070	0.291	2,535	$550.00	50%	85%	85%	2.16	1
WarehHIE10	Warehouse	HID	Early	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1972	10	5,070	0.058	507	$100.00	10%	85%	45%	2.38	1
WarehHIE7	Warehouse	HID	Early	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$1.2166	15	1,268	0.065	566	$688.00	45%	85%	80%	0.53	0
WarehHIT1	Warehouse	HID	Turnover	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.2921	10	1,268	0.043	378	$110.50	30%	85%	80%	1.60	1
WarehHIT2	Warehouse	HID	Turnover	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.3354	10	1,856	0.077	671	$225.00	36%	85%	80%	1.40	1
WarehHIT3	Warehouse	HID	Turnover	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID fixture drawing 250 W	Fixture	$0.3178	10	1,268	0.052	456	$145.00	36%	85%	80%	1.48	1
WarehHIT4	Warehouse	HID	Turnover	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.4065	10	1,856	0.074	640	$260.00	34%	85%	80%	1.15	1
WarehHIT6	Warehouse	HID	Turnover	6	Multi Lamp Hard Wired CFL	Replace HID Fixure Drawing 400 W	Fixture	$0.5140	10	1,856	0.095	827	$425.00	45%	85%	55%	0.91	0
WarehHIT7	Warehouse	HID	Turnover	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.6631	15	1,268	0.065	566	$375.00	45%	85%	80%	0.98	0
OfficInE2	Office	Incandescent	Early	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1159	14	3,594	0.124	1,078	$125.00	30%	95%	80%	5.32	1
OfficInE3	Office	Incandescent	Early	3	Photocell dimming control	No prior dimming control	Photocell	$0.1252	9	3,594	0.207	1,797	$225.00	50%	95%	95%	3.43	1
GroceInN1	Grocery	Incandescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0572	15	9,629	0.111	963	$55.11	10%	95%	100%	11.36	1
HealtInN1	Healthcare	Incandescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0842	15	49,948	0.574	4,995	$420.44	10%	95%	100%	7.72	1
AlllLaN1	All	Large Appliances	New	1	EnergyStar vending machine	Standard vending machine	machine	$0.2672	15	3,619	0.140	1,310	$350.00	36%	100%	50%	2.39	1
AlllLaN2	All	Large Appliances	New	2	Beverage machine control	Vending machine with no sensor	machine	$0.1021	5	3,619	0.178	1,665	$170.00	46%	100%	50%	2.35	1
AlllLaN3	All	Large Appliances	New	3	Other cold product control	Vending machine with no sensor	machine	$0.1111	5	3,504	0.172	1,612	$179.00	46%	100%	50%	2.16	1
AlllLaN4	All	Large Appliances	New	4	Non-cooled snack control	Vending machine with no sensor	machine	$0.4671	5	745	0.037	343	$160.00	46%	100%	50%	0.51	0
AlllLaN5	All	Large Appliances	New	5	EnergyStar dishwasher	Std Dishwasher	dishwasher	$0.4015	12	250	0.015	137	$55.00	55%	100%	50%	1.33	1
AlllLaN6	All	Large Appliances	New	6	EnergyStar refrigerator	Std Refrigerator	refrigerator	$0.3000	12	750	0.011	100	$30.00	13%	100%	50%	1.78	1
AlllLaN7	All	Large Appliances	New	7	Low-temperature dish machine	High temp dish machine with booster heater	removed kW	$0.0634	15	17,451	0.894	8,362	$530.00	48%	100%	50%	10.06	1
AlllLaN8	All	Large Appliances	New	8	High-efficiency washer	Standard washer, electric hot water	washer	$0.4380	10	2,262	0.102	959	$420.00	42%	100%	50%	1.05	1
AlllLaN9	All	Large Appliances	New	9	High-efficiency coin-op washer w/o Electric Water Heat	Coin-op wash, w/out electric hot water	washer	$1.7872	10	1,180	0.025	235	$420.00	20%	100%	50%	0.26	0
AlllLaN10	All	Large Appliances	New	10	High-efficiency coin-op washer w/ Electric water heat	Coin-op wash, electric hot water	washer	$0.4380	10	2,262	0.102	959	$420.00	42%	100%	50%	1.05	1
AlllLaT1	All	Large Appliances	Turnover	1	EnergyStar vending machine	Standard vending machine	machine	$0.2672	15	3,619	0.140	1,310	$350.00	36%	100%	50%	2.39	1
AlllLaT2	All	Large Appliances	Turnover	2	Beverage machine control	Vending machine with no sensor	machine	$0.1021	5	3,619	0.178	1,665	$170.00	46%	100%	50%	2.35	1
AlllLaT3	All	Large Appliances	Turnover	3	Other cold product control	Vending machine with no sensor	machine	$0.1111	5	3,504	0.172	1,612	$179.00	46%	100%	50%	2.16	1
AlllLaT4	All	Large Appliances	Turnover	4	Non-cooled snack control	Vending machine with no sensor	machine	$0.4671	5	745	0.037	343	$160.00	46%	100%	50%	0.51	0
AlllLaT5	All	Large Appliances	Turnover	5	EnergyStar dishwasher	Std Dishwasher	dishwasher	$0.4015	12	250	0.015	137	$55.00	55%	100%	50%	1.33	1
AlllLaT6	All	Large Appliances	Turnover	6	EnergyStar refrigerator	Std Refrigerator	refrigerator	$0.3000	12	750	0.011	100	$30.00	13%	100%	50%	1.78	1
AlllLaT7	All	Large Appliances	Turnover	7	Low-temperature dish machine	High temp dish machine with booster heater	removed kW	$0.0634	15	17,451	0.894	8,362	$530.00	48%	100%	50%	10.06	1
AlllLaT8	All	Large Appliances	Turnover	8	High-efficiency washer	Standard washer, electric hot water	washer	$0.4380	10	2,262	0.102	959	$420.00	42%	100%	50%	1.05	1
AlllLaT9	All	Large Appliances	Turnover	9	High-efficiency coin-op washer w/o Electric Water Heat	Coin-op wash, w/out electric hot water	washer	$1.7872	10	1,180	0.025	235	$420.00	20%	100%	50%	0.26	0
AlllLaT10	All	Large Appliances	Turnover	10	High-efficiency coin-op washer w/ Electric water heat	Coin-op wash, electric hot water	washer	$0.4380	10	2,262	0.102	959	$420.00	42%	100%	50%	1.05	1
OfficMoN1	Office	Motors	New	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.3115	15	12921	0.0282	117.2	$154	0.91%	74.4%	100%	0.57	0
OfficMoN2	Office	Motors	New	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.4170	15	49501	0.0231	367.6	$521	0.74%	74.4%	100%	0.44	0
OfficMoN3	Office	Motors	New	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.2732	15	121517	0.0138	541.0	$689	0.45%	66.3%	100%	0.47	0
OfficMoN4	Office	Motors	New	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.5357	15	244333	0.0121	953.4	$511	0.39%	55.8%	100%	1.10	1
OfficMoN5	Office	Motors	New	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-500 HP	Motor	$0.4495	15	524346	0.0284	4796.5	$2,156	0.91%	55.8%	100%	1.30	1
OfficMoN6	Office	Motors	New	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.6710	15	81970	2.109	16,394	$11,000.00	20%	55.0%	100%	0.99	0
OfficMoN7	Office	Motors	New	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.5200	15	81970	6.257	25000.8	$13,000.00	31%	70.0%	100%	1.44	1
OfficMoN8	Office	Motors	New	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4941	15	81970	0.000	26312.3	$13,000.00	32%	80.0%	100%	1.18	1
OfficMoN9	Office	Motors	New	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5874	15	81970	6.257	22131.8	$13,000.00	27%	70.0%	100%	1.31	1
OfficMoN10	Office	Motors	New	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.5413	15	81970	4.542	24017.1	$13,000.00	29%	55.0%	100%	1.31	1
OfficMoN11	Office	Motors	New	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5874	15	81970	6.257	22131.8	$13,000.00	27%	30.0%	100%	1.31	1
OfficMoT1	Office	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.3115	15	12921	0.0282	117.2	$154	0.91%	74.4%	100%	0.57	0
OfficMoT2	Office	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.4170	15	49501	0.0231	367.6	$521	0.74%	74.4%	100%	0.44	0
OfficMoT3	Office	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.2732	15	121517	0.0138	541.0	$689	0.45%	66.3%	100%	0.47	0
OfficMoT4	Office	Motors	Turnover	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.5357	15	244333	0.0121	953.4	$511	0.39%	55.8%	100%	1.10	1
OfficMoT5	Office	Motors	Turnover	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-250 HP	Motor	$0.4495	15	524346	0.0284	4796.5	$2,156	0.91%	55.8%	100%	1.30	1
OfficMoT6	Office	Motors	Turnover	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.6710	15	81970	2.109	16,394	$11,000.00	20%	55.0%	80%	0.99	0
OfficMoT7	Office	Motors	Turnover	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.5200	15	81970	6.257	25000.8	$13,000.00	31%	90.0%	80%	1.44	1
OfficMoT8	Office	Motors	Turnover	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4941	15	81970	0.000	26312.3	$13,000.00	32%	90.0%	80%	1.18	1
OfficMoT9	Office	Motors	Turnover	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5874	15	81970	6.257	22131.8	$13,000.00	27%	90.0%	80%	1.31	1
OfficMoT10	Office	Motors	Turnover	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.5413	15	81970	4.542	24017.1	$13,000.00	29%	80.0%	80%	1.31	1
OfficMoT11	Office	Motors	Turnover	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5874	15	81970	6.257	22131.8	$13,000.00	27%	55.0%	80%	1.31	1
OfficMoT12	Office	Motors	Turnover	12	Motors: Rewind 125-200 HP	(E) Motor	Motor	$0.6069	15	245909	0.159	1235.7	$750	0.5%	35.0%	95%	1.10	1
OfficMoT13	Office	Motors	Turnover	13	Motors: Rewind 201-500 HP	(E) Motor	Motor	$0.7470	15	532803	0.344	2677.4	$2,000	0.5%	50.0%	95%	0.89	0
OfficMoT14	Office	Motors	Turnover	14	Motors: Rewind 20-50 HP	(E) Motor	Motor	$0.5601	15	50263	0.057	446.3	$250	0.9%	10.0%	95%	1.19	1

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	PJM Summer Summer Peak KW Savings	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Fla
OfficMoT15	Office	Motors	Turnover	15	Motors: Rewind 500+ HP	(E) Motor	Motor	$0.6474	15	1229546	0.795	6178.6	$4,000	0.5%	70.0%	95%	1.03	1
OfficMoT16	Office	Motors	Turnover	16	Motors: Rewind 51-100 HP	(E) Motor	Motor	$0.6955	15	124291	0.092	718.9	$500	0.6%	20.0%	95%	0.96	0
OfficMoT17	Office	Motors	Turnover	17	Downsizing motor during retrofit	Larger hp standard motor	HP Reduction	$0.34	20	186,404	0.190	1,477	$500.00	0.79%	25%	95%	2.40	1
OfficMoN12	Office	Motors	New	12	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.53	1
OfficMoN13	Office	Motors	New	13	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.03	0
OfficMoN14	Office	Motors	New	14	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.12	1
OfficMoN15	Office	Motors	New	15	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.60	0
OfficMoT18	Office	Motors	Turnover	18	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.53	1
OfficMoT19	Office	Motors	Turnover	19	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.03	0
OfficMoT20	Office	Motors	Turnover	20	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.12	1
OfficMoT21	Office	Motors	Turnover	21	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.60	0
AllOfE1	All	Office Equipment	Early	1	PC network power management	No central control	PC	$0.14	5	410	0.023	215	$30.00	52.44%	75%	80%	1.72	1
AllOfE2	All	Office Equipment	Early	2	Occupancy sensor controls/Smart Strip	Computers, other plug loads	sensor	$0.60	5	413	0.010	124	$75.00	30.02%	55%	95%	0.39	0
AllOfN1	All	Office Equipment	New	1	ENERGY STAR® Office Equipment	Std Office Equipment	PC	$1.09	5	4,000	0.021	200	$218.00	5.00%	90%	80%	0.22	0
AllOfN2	All	Office Equipment	New	2	Energy Star - Water Cooler	Std Water Cooler	unit	$1.06	5	453	0.022	204	$215.67	45.08%	35%	80%	0.23	0
AllOfN3	All	Office Equipment	New	3	80 Plus® PC-desktop	Standard personal computer, desktop	PC	$0.19	5	410	0.014	130	$25.00	31.71%	100%	55%	1.25	1
AllOfN6	All	Office Equipment	New	6	Data Center - Server/Storage Virtualization	No Virtualization	unit	$1.76	5	4,818	0.452	4,227	$7,434	87.73%	70%	80%	0.14	0
AllOfT1	All	Office Equipment	Turnover	1	ENERGY STAR® Office Equipment	Std Office Equipment	PC	$1.09	5	4,000	0.021	200	$218.00	5.00%	90%	80%	0.22	0
AllOfT2	All	Office Equipment	Turnover	2	Energy Star - Water Cooler	Std Water Cooler	unit	$1.06	5	453	0.022	204	$215.67	45.08%	35%	80%	0.23	0
AllOfT3	All	Office Equipment	Turnover	3	80 Plus® PC-desktop	Standard personal computer, desktop	PC	$0.19	5	410	0.014	130	$25.00	31.71%	100%	55%	1.25	1
AllOfT6	All	Office Equipment	Turnover	6	Data Center - Server/Storage Virtualization	No Virtualization	unit	$1.76	5	4,818	0.452	4,227	$7,434	87.73%	70%	80%	0.14	0
HealtPaE1	Healthcare	Packaged DX	Early	1	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$3.13	20	1,766	0.05	64	$200.00	4%	15%	95%	0.42	0
HealtPaE2	Healthcare	Packaged DX	Early	2	Adding window shade film	No shade film	q ft window ar	$7.05	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.04	0
HealtPaE3	Healthcare	Packaged DX	Early	3	Adding window shade screen	No shade screen	q ft window ar	$3.90	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.17	0
HealtPaE4	Healthcare	Packaged DX	Early	4	Windows U<0.40, .55 SHGC	Existing window specifications	q ft window ar	$1.40	30	2	0.000	0	$0.28	13%	50%	95%	0.70	0
HealtPaE5	Healthcare	Packaged DX	Early	5	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$1.91	20	1,766	0.05	118	$225.00	7%	95%	95%	0.54	0
HealtPaE7	Healthcare	Packaged DX	Early	7	Automated control system	Baseline DX	ton	$0.27	10	1,866	0.011	93	$25.00	5%	100%	65%	1.76	1
HealtPaE8	Healthcare	Packaged DX	Early	8	Duct Sealing, down to 15%	Leakage of 29%	ton	$7.92	15	1,766	0.05	12	$95.00	1%	45%	80%	0.41	0
HealtPaE9	Healthcare	Packaged DX	Early	9	Hotel Keycard Sensors	No prior controls	oom Controlle	$0.29	10	1,585	0.041	342	$100.00	22%	95%	80%	1.62	1
HealtPaE10	Healthcare	Packaged DX	Early	10	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	ton	$0.55	1	1,920	0.05	64	$35.00	3%	100%	45%	0.19	0
HealtPaE11	Healthcare	Packaged DX	Early	11	7 day, two stage setback thermostat	Manual Thermostat	ton	$0.44	10	1,766	0.015	125	$55.00	7%	100%	45%	1.07	1
HealtPaE13	Healthcare	Packaged DX	Early	13	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.20	7	1,766	0.05	283	$55.15	16%	95%	75%	1.84	1
HealtPaN1	Healthcare	Packaged DX	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	ton	$1.36	20	1,766	0.05	64	$87.00	4%	100%	95%	0.96	0
HealtPaN2	Healthcare	Packaged DX	New	2	Adding reflective roof treatment	Std color roof	ton	$4.50	20	1,766	0.05	10	$45.00	1%	100%	95%	1.01	1
HealtPaN3	Healthcare	Packaged DX	New	3	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$1.06	20	1,766	0.05	118	$125.00	7%	100%	95%	0.97	0
HealtPaN4	Healthcare	Packaged DX	New	4	Green Roof (New construction or roof replacement)	Std Roof	ton	$1.08	20	1,766	0.05	118	$127.43	7%	45%	95%	0.95	0
HealtPaN5	Healthcare	Packaged DX	New	5	Duct Insulation, Add R8	No Insulation	ton	$10.42	20	1,766	0.05	12	$125.00	1%	100%	95%	0.37	0
HealtPaN6	Healthcare	Packaged DX	New	6	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$0.83	20	1,521	0.04	109	$90.40	7%	100%	95%	1.23	1
HealtPaN7	Healthcare	Packaged DX	New	7	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$0.89	20	1,521	0.08	203	$180.81	13%	100%	95%	1.15	1
HealtPaN8	Healthcare	Packaged DX	New	8	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$0.95	20	1,521	0.12	285	$271.21	19%	100%	95%	1.08	1
HealtPaN9	Healthcare	Packaged DX	New	9	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$0.47	20	1,766	0.05	118	$55.00	7%	100%	95%	2.20	1
HealtPaN10	Healthcare	Packaged DX	New	10	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$0.47	20	1,798	0.06	150	$70.00	8%	100%	95%	2.20	1
HealtPaN11	Healthcare	Packaged DX	New	11	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$0.79	20	1,978	0.06	146	$115.13	7%	100%	95%	1.31	1
HealtPaN12	Healthcare	Packaged DX	New	12	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$0.98	20	2,039	0.04	100	$98.39	5%	100%	95%	1.04	1
HealtPaN13	Healthcare	Packaged DX	New	13	Ground Source HP Open - Water	Air Source Heat Pump	ton	$1.30	15	1,798	0.23	577	$ 750.0	32%	20%	95%	0.65	0
HealtPaN14	Healthcare	Packaged DX	New	14	Ground Source HP Closed	Air Source Heat Pump	ton	$2.33	15	1,798	0.038	322	$750.00	18%	100%	95%	0.28	0
HealtPaN15	Healthcare	Packaged DX	New	15	Air-side Economizer	No Economizer	ton	$0.64	15	1,766	0.032	265	$170.00	15%	75%	45%	1.02	1
HealtPaN16	Healthcare	Packaged DX	New	16	Energy Recovery Units	No Energy Recovery	ton	$0.51	15	1,766	0.042	353	$179.00	20%	100%	95%	1.29	1
HealtPaN17	Healthcare	Packaged DX	New	17	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$1.32	15	1,866	0.010	84	$110.89	5%	100%	95%	0.50	0
HealtPaT1	Healthcare	Packaged DX	Turnover	1	Duct Insulation, Add R8	No Insulation	ton	$10.42	15	1,766	0.05	12	$125.00	1%	100%	95%	0.31	0
HealtPaT2	Healthcare	Packaged DX	Turnover	2	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$0.83	20	1,521	0.04	109	$90.40	7%	100%	95%	1.23	1
HealtPaT3	Healthcare	Packaged DX	Turnover	3	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$0.89	20	1,521	0.08	203	$180.81	13%	100%	95%	1.15	1
HealtPaT4	Healthcare	Packaged DX	Turnover	4	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$0.95	20	1,521	0.12	285	$271.21	19%	100%	95%	1.08	1
HealtPaT5	Healthcare	Packaged DX	Turnover	5	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$0.47	20	1,766	0.05	118	$55.00	7%	100%	95%	2.20	1
HealtPaT6	Healthcare	Packaged DX	Turnover	6	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$0.47	20	1,798	0.06	150	$70.00	8%	100%	95%	2.20	1
HealtPaT7	Healthcare	Packaged DX	Turnover	7	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$0.79	20	1,978	0.06	146	$115.13	7%	100%	95%	1.31	1
HealtPaT8	Healthcare	Packaged DX	Turnover	8	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$0.98	20	2,039	0.04	100	$98.39	5%	100%	95%	1.04	1
HealtPaT9	Healthcare	Packaged DX	Turnover	9	Ground Source HP Open - Water	Air Source Heat Pump	ton	$1.30	15	1,798	0.23	577	$ 750.0	32%	5%	95%	0.65	0
HealtPaT10	Healthcare	Packaged DX	Turnover	10	Ground Source HP Closed	Air Source Heat Pump	ton	$2.33	15	1,798	0.038	322	$750.00	18%	100%	95%	0.28	0
HealtPaT11	Healthcare	Packaged DX	Turnover	11	Air-side Economizer	No Economizer	ton	$0.64	15	1,766	0.032	265	$170.00	15%	75%	45%	1.02	1
HealtPaT12	Healthcare	Packaged DX	Turnover	12	Energy Recovery Units	No Energy Recovery	ton	$0.51	15	1,766	0.042	353	$179.00	20%	100%	95%	1.29	1
HealtPaT13	Healthcare	Packaged DX	Turnover	13	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$1.32	15	1,866	0.010	84	$110.89	5%	100%	95%	0.50	0
AllReT1	All	Refrigeration	Turnover	1	Vertical night covers	No covers present	linear ft	$0.34	5	4,380	0.006	44	$15.00	1.00%	50%	95%	0.73	0
AllReT2	All	Refrigeration	Turnover	2	eCube	No eCube	unit	$0.33	9	5,431	0.162	1,222	$399.00	22.50%	95%	95%	1.34	1
AllReT3	All	Refrigeration	Turnover	3	Anti-sweat heat (ASH) controls - Freezer	ASH without controls	Per Door	$0.16	12	2,985	0.029	1,882	$300.00	63%	95%	85%	3.07	1
AllReT4	All	Refrigeration	Turnover	4	Anti-sweat heat (ASH) controls - Cooler	ASH without controls	Per Door	$0.29	12	1,621	0.028	1,023	$300.00	63%	95%	85%	1.69	1
AllReT5	All	Refrigeration	Turnover	5	Floating head pressure controller	Standard head pressure control	ton	$0.46	14	18,314	0.085	641	$296.00	4%	50%	95%	1.36	1
AllReN1	All	Refrigeration	New	1	Efficient, low-temp reach-in	Standard low-temp reach-in	unit	$0.07	12	5,431	0.222	1,671	$123.33	30.77%	95%	95%	7.53	1
AllReN2	All	Refrigeration	New	2	No-heat glass doors	Standard low-temp reach-in	door	$0.67	10	3,986	0.106	797	$537.50	20.00%	95%	95%	0.71	0
AllReN3	All	Refrigeration	New	3	High Efficiency Ice Makers	Standard Ice Maker	Each	$0.16	10	11,815	0.042	318	$50.00	3%	85%	85%	3.04	1
AllReN4	All	Refrigeration	New	4	Compressor VSD	Base Refrigeration System - Grocery		$0.35	13	5,436	0.101	761	$267.00	14%	75%	86%	1.69	1
AllReN5	All	Refrigeration	New	5	VFD on cooling tower fans	Base single-speed fan		$0.29	15	7158	0.681	5,132	$1,507.40	72%	25%	95%	2.25	1
AllReN6	All	Refrigeration	New	6	Reach-in Cooler: Shaded Pole to PSC: 1-37 Watt			$0.60	15	832	0.047	352	$212.50	42%	75%	49%	1.10	1
AllReN7	All	Refrigeration	New	7	Reach-in Cooler: PSC to ECM: 1-37 Watt			$0.54	15	467	0.022	169	$91.25	36%	75%	49%	1.23	1
AllReN8	All	Refrigeration	New	8	Reach-in Cooler: Shaded Pole to ECM: 1-37 Watt			$0.59	15	832	0.069	521	$306.25	63%	75%	49%	1.13	1
AllReN9	All	Refrigeration	New	9	Reach-in Freezer: Shaded Pole to ECM: 1-14 Watt			$0.49	15	832	0.082	622	$306.25	75%	75%	49%	1.35	1
AllReN10	All	Refrigeration	New	10	Reach-in Shaded Pole to PSC Evaporator Fan Motor			$0.55	15	832	0.051	386	$212.50	46%	75%	49%	1.20	1
AllReN11	All	Refrigeration	New	11	Reach-in PSC to ECM Evaporator Fan Motor			$0.49	15	467	0.025	185	$91.25	40%	75%	49%	1.34	1
AllReN12	All	Refrigeration	New	12	Reach-in Shaded Pole to ECM Evaporator Fan Motor			$0.54	15	832	0.076	571	$306.25	69%	75%	49%	1.23	1
AllReN13	All	Refrigeration	New	13	Walk-in Cooler: PSC to ECM: 16-49 Watt			$0.35	15	711	0.034	258	$91.25	36%	75%	49%	1.87	1
AllReN14	All	Refrigeration	New	14	Walk-in Freezer: PSC to ECM: 16-49 Watt			$0.30	15	711	0.041	309	$91.25	43%	75%	49%	2.24	1
AllReN15	All	Refrigeration	New	15	Walk-in Cooler: Shaded Pole to ECM: 16-49 Watt			$0.44	15	1,175	0.093	704	$306.25	60%	75%	49%	1.52	1
AllReN16	All	Refrigeration	New	16	Walk-in Freezer: Shaded Pole to ECM: 16-49 Watt			$0.36	15	1,175	0.112	842	$306.25	72%	75%	49%	1.82	1
AllReN17	All	Refrigeration	New	17	Walk-in PSC to ECM			$0.32	15	711	0.038	283	$91.25	40%	75%	49%	2.05	1
AllReN18	All	Refrigeration	New	18	Walk-in Shaded Pole to ECM			$0.40	15	1175	0.103	773	$306.25	66%	75%	49%	1.67	1
AllReT6	All	Refrigeration	Turnover	6	High Efficiency Ice Makers	Standard Ice Making		$0.12	10	11,815	0.159	1,197	$140.00	10%	85%	85%	4.09	1
AllReN19	All	Refrigeration	New	19	High Efficiency Ice Machine Self Contained	Standard Ice Machine Self Contained		$0.31	10	4,341	0.042	318	$100.00	7%	85%	85%	1.52	1
AllReT7	All	Refrigeration	Turnover	7	Fluorescent walk-in light fixture	Incandescent walk-in light fixture	fixture	$0.42	15	792	0.065	491	$206.00	62.00%	85%	45%	1.58	1
AllReT8	All	Refrigeration	Turnover	8	LED Case Lighting	T12 or T10 fluorescent lighting	Light Bar	$0.43	15	677	0.070	526	$225.00	77.78%	95%	75%	1.55	1
AllReT9	All	Refrigeration	Turnover	9	LED Case Lighting - Occupancy Sensor	No Occupancy Sensor	Light Bar	$0.15	8	667	0.003	20	$3.00	3.00%	15%	95%	2.61	1
AllRcT10	All	Refrigeration	Turnover	10	Efficient, low-temp reach-in	Standard low-temp reach-in	unit	$0.07	12	5,431	0.222	1,671	$123.33	30.77%	85%	85%	7.53	1
AllRcT11	All	Refrigeration	Turnover	11	High R-Value Glass Doors		door	$0.67	10	3,986	0.106	797	$537.50	20.00%	85%	85%	0.71	0
AllRcT12	All	Refrigeration	Turnover	12	Compressor VSD retrofit	Base Refrigeration System - Grocery		$0.35	13	5,436	0.101	761	$267.00	14%	75%	86%	1.69	1
AllRcT13	All	Refrigeration	Turnover	13	Quick acting freezer doors			$0.62	10	38,544	4.461	33,637	$20,966.00	87%	75%	86%	0.77	0
AllRcT14	All	Refrigeration	Turnover	14	VFD on cooling tower fans	Base single-speed fan		$0.29	15	7158	0.681	5,132	$1,507.40	72%	35%	85%	2.25	1
AllRcT15	All	Refrigeration	Turnover	15	Reach-in Cooler: Shaded Pole to PSC: 1-37 Watt			$0.60	15	832	0.047	352	$212.50	42%	75%	49%	1.10	1
AllRcT16	All	Refrigeration	Turnover	16	Reach-in Cooler: PSC to ECM: 1-37 Watt			$0.54	15	467	0.022	169	$91.25	36%	75%	49%	1.23	1
AllRcT17	All	Refrigeration	Turnover	17	Reach-in Cooler: Shaded Pole to ECM: 1-37 Watt			$0.59	15	832	0.069	521	$306.25	63%	75%	49%	1.13	1
AllRcT18	All	Refrigeration	Turnover	18	Reach-in Freezer: Shaded Pole to ECM: 1-14 Watt			$0.49	15	832	0.082	622	$306.25	75%	75%	49%	1.35	1
AllRcT19	All	Refrigeration	Turnover	19	Reach-in Shaded Pole to PSC Evaporator Fan Motor			$0.55	15	832	0.051	386	$212.50	46%	75%	49%	1.20	1
AllRcT18	All	Refrigeration	Turnover	18	Reach-in PSC to ECM Evaporator Fan Motor			$0.49	15	467	0.025	185	$91.25	40%	75%	49%	1.34	1
AllRcT20	All	Refrigeration	Turnover	20	Reach-in Shaded Pole to ECM Evaporator Fan Motor			$0.54	15	832	0.076	571	$306.25	69%	75%	49%	1.23	1

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	PJM Summer Summer Peak KW Savings	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Fla
AllReT21	All	Refrigeration	Turnover	21	Walk-in Cooler: PSC to ECM: 16-49 Watt			$0.35	15	711	0.034	258	$91.25	36%	75%	49%	1.87	1
AllReT22	All	Refrigeration	Turnover	22	Walk-in Freezer: PSC to ECM: 16-49 Watt			$0.30	15	711	0.041	309	$91.25	43%	75%	49%	2.24	1
AllReT23	All	Refrigeration	Turnover	23	Walk-in Cooler: Shaded Pole to ECM: 16-49 Watt			$0.44	15	1,175	0.093	704	$306.25	60%	75%	49%	1.52	1
AllReT24	All	Refrigeration	Turnover	24	Walk-in Freezer: Shaded Pole to ECM: 16-49 Watt			$0.36	15	1,175	0.112	842	$306.25	72%	75%	49%	1.82	1
AllReT25	All	Refrigeration	Turnover	25	Walk-in PSC to ECM			$0.32	15	711	0.038	283	$91.25	40%	75%	49%	2.05	1
AllReT26	All	Refrigeration	Turnover	26	Walk-in Shaded Pole to ECM			$0.40	15	1175	0.103	773	$306.25	66%	75%	49%	1.67	1
AllSiT1	All	Signage	Turnover	1	Induction Street Lighting	Base HID Streetlighting	Fixture	$0.57	15	2,762	0.101	1,619	$925.00	59%	95%	95%	1.01	1
AllSiT2	All	Signage	Turnover	2	LED exit sign - 1 sided	Incandescent exit sign	Exit Sign	$0.15	15	175	0.024	158	$23.50	90%	65%	70%	4.28	1
AllSiT3	All	Signage	Turnover	3	LED exit sign -2 sided	Incandescent exit sign	Exit Sign	$0.16	15	350	0.048	228	$37.50	65%	65%	70%	4.11	1
AllSiT4	All	Signage	Turnover	4	Photoluminescent Exit Sign	Incandescent exit sign	Exit Sign	$0.17	15	175	0.011	175	$30.00	100%	50%	70%	3.38	1
AllSiT5	All	Signage	Turnover	5	LED or equivalent sign lighting -1 sided	Replace fluorescent sign lighting	Exit Sign	$0.28	15	79	0.009	61	$17.36	78%	48%	7%	2.24	1
AllSiT6	All	Signage	Turnover	6	LED or equivalent sign lighting -2 sided	Replace fluorescent sign lighting	Exit Sign	$0.12	15	175	0.002	140	$17.36	80%	48%	7%	4.41	1
AllSiT7	All	Signage	Turnover	7	LED Street Lighting	Std HID Street Lighting	Pole	$0.63	15	2,762	0.047	756	$475.00	27%	95%	95%	0.92	0
AllSiT8	All	Signage	Turnover	8	Red LED Traffic Light	Red Traffic Light	Signal	$0.37	10	332	0.019	299	$112.00	90%	95%	75%	1.11	1
AllSiT9	All	Signage	Turnover	9	Yellow LED Traffic Light	Yellow Standard Traffic Light	Lamp	$12.10	10	12	0.001	10	$121.00	83%	95%	75%	0.03	0
AllSiT10	All	Signage	Turnover	10	Green LED Traffic Light	Green Standard Traffic Light	Lamp	$0.77	10	260	0.014	226	$174.00	87%	95%	75%	0.54	0
AllSiT11	All	Signage	Turnover	11	Hand/Man LED	Pedestrian Standard	Lamp	$0.19	10	1,016	0.059	946	$182.00	93%	95%	75%	2.16	1
AllWaT1	All	Water Heating	Turnover	1	Ultrasonic Faucet Control	Manual Faucet Control	unit	$1.000	10	1,750	0.010	125	$125	7%	75%	75%	0.44	0
AllWaT2	All	Water Heating	Turnover	2	Faucet Aerators	Std Flow faucet	unit	$0.246	12	4,122	0.006	61	$15	6%	75%	75%	2.12	1
AllWaT3	All	Water Heating	Turnover	3	Hot Water (DHW) Pipe Insulation	No insulation present	10 ln ft	$0.292	14	4,122	0.011	124.00	$36.23	3%	75%	75%	2.02	1
AllWaT4	All	Water Heating	Turnover	4	Low-Flow Showerheads	Std Flow showerhead	unit	$0.108	9	4,122	0.042	461	$50	11%	75%	75%	3.77	1
AllWaT5	All	Water Heating	Turnover	5	Water Heater Thermostat Setback	Constant setpoint	unit	$0.029	2	4,122	0.053	577.09	$17	14%	75%	75%	3.36	1
AllWaN1	All	Water Heating	New	1	Ultrasonic Faucet Control	Manual Faucet Control	unit	$0.400	10	4,122	0.011	125	$50	3%	75%	75%	1.12	1
AllWaN2	All	Water Heating	New	2	Faucet Aerators	Std Flow faucet	unit	$0.082	12	4,122	0.006	61	$5	6%	75%	75%	6.36	1
AllWaN3	All	Water Heating	New	3	Hot Water (DHW) Pipe Insulation	No insulation present	10 ln ft	$0.292	14	4,122	0.011	124.00	$36.23	3%	75%	75%	2.02	1
AllWaN4	All	Water Heating	New	4	Low-Flow Showerheads	Std Flow showerhead	unit	$0.108	9	4,122	0.042	461	$50	11%	75%	75%	3.77	1
AllWaN5	All	Water Heating	New	5	Water Heater Thermostat Setback	Constant setpoint	unit	$0.029	2	4,122	0.053	577.09	$17	14%	75%	75%	3.36	1
AllWaN6	All	Water Heating	New	6	High Efficiency Water Heater (Electric) EF .93, 28-50 Gal	Std Efficiency water heater	unit	$0.541	14	4,122	0.012	133	$72	3%	75%	100%	1.09	1
AllWaN7	All	Water Heating	New	7	Heat Pump Water Heater (air source)	Base Water Heating	unit	$0.516	14	4,122	0.176	1,914.00	$988	46%	75%	100%	1.14	1
AllWaN8	All	Water Heating	New	8	Heat Recovery Unit	Base Water Heating	unit	$0.362	14	4,122	0.190	2,073	$750	50.3%	50%	95%	1.63	1
AllWaN9	All	Water Heating	New	9	Solar Water Heater	Base Water Heating	unit	$1.206	14	4,122	0.193	2,106	$2,540	82.0%	65%	95%	0.49	0
AllWaT6	All	Water Heating	Turnover	6	High Efficiency Water Heater (Electric) EF .93, 28-50 Gal	Std Efficiency water heater	unit	$0.541	14	4,122	0.012	133	$72	8.0%	100%	75%	1.09	1
AllWaT7	All	Water Heating	Turnover	7	Heat Pump Water Heater (air source)	Base Water Heating	unit	$0.516	14	4,122	0.176	1,914.00	$988	46%	75%	100%	1.14	1
AllWaT8	All	Water Heating	Turnover	8	Heat Recovery Unit	Base Water Heating	unit	$0.458	14	4,122	0.190	2,073	$950	50.3%	50%	95%	1.29	1
AllWaT9	All	Water Heating	Turnover	9	Solar Water Heater	Base Water Heating	unit	$1.401	14	4,122	0.193	2,106	$2,950	82.0%	65%	95%	0.42	0
GroceReN1	All	Refrigeration	New	20	Demand Defrost Electric	Base Refrigeration System - Grocery		$0.91	15	4	0.000	0	$0.05	1%	95%	92%	0.73	0
AllReT27	All	Refrigeration	Turnover	27	Demand Defrost Electric	Base Refrigeration System - Grocery		$0.91	15	4	0.000	0	$0.05	1%	95%	92%	0.73	0
GroceReN3	All	Refrigeration	New	21	Demand Hot Gas Defrost	Base Refrigeration System - Grocery		$0.35	15	4	0.000	0	$0.05	3%	95%	92%	1.87	1
AllReT28	All	Refrigeration	Turnover	28	Demand Hot Gas Defrost	Base Refrigeration System - Grocery		$0.35	15	4	0.000	0	$0.05	3%	95%	92%	1.87	1
GroceReN4	All	Refrigeration	New	22	Efficient compressor motor - scroll	Base Refrigeration System - Grocery		$0.09	15	15,825	0.084	633	$60.00	4%	95%	92%	6.99	1
AllReT29	All	Refrigeration	Turnover	29	Efficient compressor motor - scroll	Base Refrigeration System - Grocery		$0.09	15	15,825	0.084	633	$60.00	4%	95%	92%	6.99	1
GroceReN6	All	Refrigeration	New	23	High R-Value Glass Doors	Base Refrigeration System - Grocery	Door	$0.67	10	3,986	0.106	797	$537.50	20.00%	95%	92%	0.71	0
GroceReN7	All	Refrigeration	New	24	Refrigeration Commissioning	Base Refrigeration System - Grocery	Per refigerator	$0.31	7	8,800	0.187	1,408	$440.00	16%	95%	92%	1.10	1
AllReE1	All	Refrigeration	Early	1	Refrigeration Commissioning	Base Refrigeration System - Grocery	Per refigerator	$0.25	7	8,800	0.117	880	$220.00	10%	95%	92%	1.38	1
GroceReN8	All	Refrigeration	New	25	Strip curtains for walk-ins	Base Refrigeration System - Grocery		$0.50	15	29,900	0.079	598	$300.00	2%	45%	78%	1.32	1
AllReT30	All	Refrigeration	Turnover	30	Strip curtains for walk-ins	Base Refrigeration System - Grocery		$0.50	15	29,900	0.079	598	$300.00	2%	45%	78%	1.32	1
HealthPaN18	Healthcare	Packaged DX	New	18	Automated control system	Baseline DX	ton	$0.27	10	1,866	0.011	93	$25.00	5%	100%	65%	1.76	1
HealthPaN19	Healthcare	Packaged DX	New	19	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$0.50	10	1,585	0.010	86	$43.00	5%	100%	95%	0.95	0
HealthPaT15	Healthcare	Packaged DX	Turnover	15	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$0.50	10	1,585	0.010	86	$43.00	5%	100%	95%	0.95	0
AllCoN1	All	Cooking	New	1	Commercial Hot Food Holding Cabinets (Energy Star)	Standard Cabinet	Each	$0.94	12	23,411	0.187	1,592	$1,500.00	7%	40%	95%	0.58	0
AllCoN2	All	Cooking	New	2	High Efficiency Fryers (Energy Star)	Standard Fryer	Each	$5.45	12	18,196	0.027	233	$1,271.00	1%	40%	95%	0.10	0
AllCoN3	All	Cooking	New	3	High Efficiency Griddle	Standard Griddle	Each	$0.66	12	17,056	0.304	2,595	$1,700.00	15%	40%	95%	0.84	0
AllCoN4	All	Cooking	New	4	High Efficiency Induction Cooking	Standard Cooking	Each	$1.04	12	29,376	0.248	2,118	$2,213.00	7%	40%	95%	0.52	0
AllCoN5	All	Cooking	New	5	Electric Steam cooker	Standard Cooker	Each	$0.40	12	46,813	0.439	3,745	$1,500.00	8%	40%	95%	1.37	1
AllCoN6	All	Cooking	New	6	Electric convection oven	Standard Oven	Each	$1.20	15	12,193	0.265	2,262	$2,713.00	19%	40%	95%	0.54	0
AllCoN7	All	Cooking	New	7	Electric combination oven	Standard Oven	Each	$1.12	12	39,353	1.769	15,095	$16,884.00	38%	40%	95%	0.49	0
AllCoT1	All	Cooking	Turnover	1	Commercial Hot Food Holding Cabinets (Energy Star)	Standard Cabinet	Each	$0.94	12	23,411	0.187	1,592	$1,500.00	7%	40%	95%	0.58	0
AllCoT2	All	Cooking	Turnover	2	High Efficiency Fryers (Energy Star)	Standard Fryer	Each	$5.45	12	18,196	0.027	233	$1,271.00	1%	40%	95%	0.10	0
AllCoT3	All	Cooking	Turnover	3	High Efficiency Griddle	Standard Griddle	Each	$0.66	12	17,056	0.304	2,595	$1,700.00	15%	40%	95%	0.84	0
AllCoT4	All	Cooking	Turnover	4	High Efficiency Induction Cooking	Standard Cooking	Each	$1.04	12	29,376	0.248	2,118	$2,213.00	7%	40%	95%	0.52	0
AllCoT5	All	Cooking	Turnover	5	Electric Steam cooker	Standard Cooker	Each	$0.40	12	46,813	0.439	3,745	$1,500.00	8%	40%	95%	1.37	1
AllCoT6	All	Cooking	Turnover	6	Electric convection oven	Standard Oven	Each	$1.20	15	12,193	0.265	2,262	$2,713.00	19%	40%	95%	0.54	0
AllCoT7	All	Cooking	Turnover	7	Electric combination oven	Standard Oven	Each	$1.12	12	39,353	1.769	15,095	$16,884.00	38%	40%	95%	0.49	0
InstiFlE1	Institutional	Fluorescent	Early	1	Premium Efficiency T8 Lighting Replacement (32W lamps with low	Replace (E) T12 Lamp - Bundle	Fixture	$0.6076	15	371	0.010	91	$55.38	25%	95%	11%	1.07	1
InstiFlE2	Institutional	Fluorescent	Early	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2809	14	1,483	0.051	445	$125.00	30%	95%	80%	2.20	1
InstiFlE3	Institutional	Fluorescent	Early	3	Photocell dimming control	No prior dimming control	Photocell	$0.3034	9	1,483	0.085	742	$225.00	50%	95%	95%	1.41	1
GroceFlE1	Grocery	Fluorescent	Early	1	Premium Efficiency T8 Lighting Replacement (32W lamps with low	Replace (E) T12 Lamp - Bundle	Fixture	$0.2754	11	818	0.023	201	$55.38	25%	95%	55%	1.84	1
GroceFlE2	Grocery	Fluorescent	Early	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1273	14	3,272	0.113	982	$125.00	30%	95%	80%	4.84	1
GroceFlE3	Grocery	Fluorescent	Early	3	Photocell dimming control	No prior dimming control	Photocell	$0.1375	9	3,272	0.188	1,636	$225.00	50%	95%	95%	3.12	1
LodgeFlE1	Lodging	Fluorescent	Early	1	Premium Efficiency T8 Lighting Replacement (32W lamps with low	Replace (E) T12 Lamp - Bundle	Fixture	$0.3246	10	604	0.020	171	$55.38	25%	95%	55%	1.44	1
LodgeFlE2	Lodging	Fluorescent	Early	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1501	14	2,776	0.096	833	$125.00	30%	95%	80%	4.11	1
LodgeFlE3	Lodging	Fluorescent	Early	3	Photocell dimming control	No prior dimming control	Photocell	$0.1621	9	2,776	0.160	1,388	$225.00	50%	95%	95%	2.65	1
HealthFlE1	Healthcare	Fluorescent	Early	1	Premium Efficiency T8 Lighting Replacement (32W lamps with low	Replace (E) T12 Lamp - Bundle	Fixture	$0.2970	11	759	0.021	186	$55.38	25%	95%	44%	1.71	1
HealthFlE2	Healthcare	Fluorescent	Early	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1373	14	3,034	0.105	910	$125.00	30%	95%	80%	4.49	1
HealthFlE3	Healthcare	Fluorescent	Early	3	Photocell dimming control	No prior dimming control	Photocell	$0.1483	9	3,034	0.174	1,517	$225.00	50%	95%	95%	2.89	1
RestaFlE1	Restaurant	Fluorescent	Early	1	Premium Efficiency T8 Lighting Replacement (32W lamps with low	Replace (E) T12 Lamp - Bundle	Fixture	$0.3672	11	614	0.017	151	$55.38	25%	95%	49%	1.38	1
RestaFlE2	Restaurant	Fluorescent	Early	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1698	14	2,454	0.085	736	$125.00	30%	95%	80%	3.63	1
RestaFlE3	Restaurant	Fluorescent	Early	3	Photocell dimming control	No prior dimming control	Photocell	$0.1834	9	2,454	0.141	1,227	$225.00	50%	95%	95%	2.34	1
RetaiFlE1	Retail	Fluorescent	Early	1	Premium Efficiency T8 Lighting Replacement (32W lamps with low	Replace (E) T12 Lamp - Bundle	Fixture	$0.3810	11	591	0.017	145	$55.38	25%	95%	55%	1.33	1
RetaiFlE2	Retail	Fluorescent	Early	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1761	14	2,365	0.082	710	$125.00	30%	95%	80%	3.50	1
RetaiFlE3	Retail	Fluorescent	Early	3	Photocell dimming control	No prior dimming control	Photocell	$0.1902	9	2,365	0.136	1,183	$225.00	50%	95%	95%	2.25	1
WarehFlE1	Warehouse	Fluorescent	Early	1	Premium Efficiency T8 Lighting Replacement (32W lamps with low	Replace (E) T12 Lamp - Bundle	Fixture	$0.4113	12	548	0.015	135	$55.38	25%	95%	35%	1.33	1
WarehFlE2	Warehouse	Fluorescent	Early	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1901	14	2,191	0.076	657	$125.00	30%	95%	80%	3.24	1
WarehFlE3	Warehouse	Fluorescent	Early	3	No prior dimming control	Photocell	$0.2054	9	2,191	0.126	1,096	$225.00	50%	95%	95%	2.09	1
MiscFlE1	Misc	Fluorescent	Early	1	Premium Efficiency T8 Lighting Replacement (32W lamps with low	Replace (E) T12 Lamp - Bundle	Fixture	$0.3764	11	599	0.017	147	$55.38	25%	95%	44%	1.35	1
OfficHIN1	Office	HID	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1781	15	621	0.007	62	$11.06	10%	95%	100%	3.65	1
OfficHIN2	Office	HID	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.3561	15	621	0.018	155	$55.32	25%	85%	100%	1.83	1
OfficInN1	Office	Incandescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1781	15	2,727	0.031	273	$48.56	10%	95%	100%	3.65	1
OfficInN2	Office	Incandescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.3561	15	2,727	0.078	682	$242.78	25%	75%	100%	1.83	1
InstiFlN1	Institutional	Fluorescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1722	15	62,741	0.721	6,274	$1,080.26	10%	95%	100%	3.78	1
InstiFlN2	Institutional	Fluorescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.3444	15	62,741	1.803	15,685	$5,401.30	25%	75%	100%	1.89	1
HealtFlN1	Healthcare	Fluorescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0842	15	441,728	5.077	44,173	$3,718.25	10%	95%	100%	7.72	1
HealtFlN2	Healthcare	Fluorescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1684	15	441,728	12.691	110,432	$18,591.24	25%	75%	100%	3.86	1
GroceFlN1	Grocery	Fluorescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0572	15	60,020	0.690	6,002	$343.52	10%	95%	100%	11.36	1
GroceFlN2	Grocery	Fluorescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1145	15	60,020	1.724	15,005	$1,717.60	25%	75%	100%	5.68	1
LodgiFlN1	Lodging	Fluorescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1012	15	303,563	3.489	30,356	$3,071.87	10%	95%	100%	6.42	1
LodgiFlN2	Lodging	Fluorescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.2024	15	303,563	8.722	75,891	$15,359.37	25%	75%	100%	3.21	1
RestaFlN1	Restaurant	Fluorescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0763	15	13,140	0.151	1,314	$100.27	10%	95%	100%	8.52	1
RestaFlN2	Restaurant	Fluorescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1526	15	13,140	0.378	3,285	$501.37	25%	75%	100%	4.26	1
RetaiFlN1	Retail	Fluorescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0792	15	60,011	0.690	6,001	$475.15	10%	95%	100%	8.21	1
RetaiFlN2	Retail	Fluorescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1584	15	60,011	1.724	15,003	$2,375.74	25%	75%	100%	4.11	1
WarehFlN1	Warehouse	Fluorescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1603	15	44,747	0.514	4,475	$717.11	10%	95%	100%	4.06	1

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	PJM Summer Summer Peak KW Savings	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Fla
WarehFIN2	Warehouse	Fluorescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.3205	15	44,747	1.286	11,187	$3,585.53	25%	75%	100%	2.03	1
GroceHIN1	Grocery	HID	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0572	15	3,937	0.045	394	$22.53	10%	95%	100%	11.36	1
GroceHIN2	Grocery	HID	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1145	15	3,937	0.113	984	$112.66	25%	85%	100%	5.68	1
InstiHIN1	Institutional	HID	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1722	15	2,159	0.025	216	$37.18	10%	95%	100%	3.78	1
InstiHIN2	Institutional	HID	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.3444	15	2,159	0.062	540	$185.89	25%	85%	100%	1.89	1
HealtHIN1	Healthcare	HID	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0842	15	15,203	0.175	1,520	$127.97	10%	95%	100%	7.72	1
HealtHIN2	Healthcare	HID	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1684	15	15,203	0.437	3,801	$639.84	25%	85%	100%	3.86	1
LodgiHIN1	Lodging	HID	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1012	15	10,539	0.121	1,054	$106.65	10%	95%	100%	6.42	1
LodgiHIN2	Lodging	HID	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.2024	15	10,539	0.303	2,635	$533.27	25%	85%	100%	3.21	1
RestaHIN1	Restaurant	HID	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0763	15	459	0.005	46	$3.51	10%	95%	100%	8.52	1
RestaHIN2	Restaurant	HID	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1526	15	459	0.013	115	$17.53	25%	85%	100%	4.26	1
RetaiHIN1	Retail	HID	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0792	15	10,313	0.119	1,031	$81.65	10%	95%	100%	8.21	1
RetaiHIN2	Retail	HID	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1584	15	10,313	0.296	2,578	$408.25	25%	85%	100%	4.11	1
WarehHIN1	Warehouse	HID	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1603	15	7,843	0.090	784	$125.69	10%	95%	100%	4.06	1
WarehHIN2	Warehouse	HID	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.3205	15	7,843	0.225	1,961	$628.45	25%	85%	100%	2.03	1
MiscHIN1	Misc	HID	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0988	15	4,211	0.048	421	$41.61	10%	95%	100%	6.58	1
MiscHIN2	Misc	HID	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1976	15	4,211	0.121	1,053	$208.03	25%	85%	100%	3.29	1
MiscFIN1	Misc	Fluorescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0988	15	121,285	1.394	12,128	$1,198.38	10%	95%	100%	6.58	1
MiscFIN2	Misc	Fluorescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1976	15	121,285	3.485	30,321	$5,991.88	25%	75%	100%	3.29	1
InstiInN1	Institutional	Incandescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1722	15	7,094	0.082	709	$122.15	10%	95%	100%	3.78	1
InstiInN2	Institutional	Incandescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.3444	15	7,094	0.204	1,774	$610.75	25%	75%	100%	1.89	1
GroceInT1	Grocery	Incandescent	Turnover	1	CFL Lamp - 21 Watt	EISA - 75 Watt equivalent - 53W	Lamp	$0.0161	5	309	0.021	186	$3.00	60%	75%	50%	15.25	1
HealtInT1	Healthcare	Incandescent	Turnover	1	CFL Lamp - 21 Watt	EISA - 75 Watt equivalent - 53W	Lamp	$0.0174	5	286	0.020	173	$3.00	60%	75%	50%	14.14	1
GroceInN2	Grocery	Incandescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1145	15	9,629	0.277	2,407	$275.57	25%	75%	100%	5.68	1
HealtInN2	Healthcare	Incandescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1684	15	49,948	1.435	12,487	$2,102.19	25%	75%	100%	3.86	1
LodgiInN1	Lodging	Incandescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1012	15	72,424	0.832	7,242	$732.89	10%	95%	100%	6.42	1
LodgiInN2	Lodging	Incandescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.2024	15	72,424	2.081	18,106	$3,664.46	25%	75%	100%	3.21	1
RestaInN1	Restaurant	Incandescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0763	15	8,649	0.099	865	$66.01	10%	95%	100%	8.52	1
RestaInN2	Restaurant	Incandescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1526	15	8,649	0.249	2,162	$330.03	25%	75%	100%	4.26	1
RetaiInN1	Retail	Incandescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0792	15	9,628	0.111	963	$76.23	10%	95%	100%	8.21	1
RetaiInN2	Retail	Incandescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1584	15	9,628	0.277	2,407	$381.16	25%	75%	100%	4.11	1
WarehInN1	Warehouse	Incandescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1603	15	5,975	0.069	598	$95.76	10%	95%	100%	4.06	1
WarehInN2	Warehouse	Incandescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.3205	15	5,975	0.172	1,494	$478.78	25%	75%	100%	2.03	1
MiscInN1	Misc	Incandescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0988	15	28,936	0.333	2,894	$285.91	10%	95%	100%	6.58	1
MiscInN2	Misc	Incandescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1976	15	28,936	0.831	7,234	$1,429.55	25%	75%	100%	3.29	1
MiscFIE2	Misc	Fluorescent	Early	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1740	14	2,394	0.083	718	$125.00	30%	95%	80%	3.54	1
MiscFIE3	Misc	Fluorescent	Early	3	Photocell dimming control	No prior dimming control	Photocell	$0.1879	9	2,394	0.138	1,197	$225.00	50%	95%	95%	2.28	1
MiscFIN4	Misc	Fluorescent	New	4	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0696	14	2,394	0.083	718	$50.00	30%	95%	15%	8.86	1
MiscFIN3	Misc	Fluorescent	New	3	Photocell dimming control	No prior dimming control	Photocell	$0.1253	9	2,394	0.138	1,197	$150.00	50%	95%	75%	3.42	1
InstiFIN4	Institutional	Fluorescent	New	4	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1124	14	1,483	0.051	445	$50.00	30%	95%	15%	5.49	1
InstiFIN3	Institutional	Fluorescent	New	3	Photocell dimming control	No prior dimming control	Photocell	$0.2022	9	1,483	0.085	742	$150.00	50%	95%	75%	2.12	1
GroceFIN4	Grocery	Fluorescent	New	4	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0509	14	3,272	0.113	982	$50.00	30%	95%	15%	12.11	1
GroceFIN3	Grocery	Fluorescent	New	3	Photocell dimming control	No prior dimming control	Photocell	$0.0917	9	3,272	0.188	1,636	$150.00	50%	95%	75%	4.68	1
HealtFIN4	Healthcare	Fluorescent	New	4	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0549	14	3,034	0.105	910	$50.00	30%	95%	15%	11.23	1
HealtFIN3	Healthcare	Fluorescent	New	3	Photocell dimming control	No prior dimming control	Photocell	$0.0989	9	3,034	0.174	1,517	$150.00	50%	95%	75%	4.34	1
LodgiFIN4	Lodging	Fluorescent	New	4	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0600	14	2,776	0.096	833	$50.00	30%	95%	15%	10.27	1
LodgiFIN3	Lodging	Fluorescent	New	3	Photocell dimming control	No prior dimming control	Photocell	$0.1081	9	2,776	0.160	1,388	$150.00	50%	95%	75%	3.97	1
OfficFIN4	Office	Fluorescent	New	4	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1056	14	1,578	0.054	473	$50.00	30%	95%	15%	5.84	1
OfficFIN3	Office	Fluorescent	New	3	Photocell dimming control	No prior dimming control	Photocell	$0.1901	9	1,578	0.091	789	$150.00	50%	95%	75%	2.26	1
RestaFIN4	Restaurant	Fluorescent	New	4	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0679	14	2,454	0.085	736	$50.00	30%	95%	15%	9.08	1
RestaFIN3	Restaurant	Fluorescent	New	3	Photocell dimming control	No prior dimming control	Photocell	$0.1222	9	2,454	0.141	1,227	$150.00	50%	95%	75%	3.51	1
RetaiFIN4	Retail	Fluorescent	New	4	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0705	14	2,365	0.082	710	$50.00	30%	95%	15%	8.75	1
RetaiFIN3	Retail	Fluorescent	New	3	Photocell dimming control	No prior dimming control	Photocell	$0.1268	9	2,365	0.136	1,183	$150.00	50%	95%	75%	3.38	1
WarehFIN4	Warehouse	Fluorescent	New	4	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0761	14	2,191	0.076	657	$50.00	30%	95%	15%	8.11	1
WarehFIN3	Warehouse	Fluorescent	New	3	Photocell dimming control	No prior dimming control	Photocell	$0.1369	9	2,191	0.126	1,096	$150.00	50%	95%	75%	3.13	1
MiscFIT2	Misc	Fluorescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0696	14	2,394	0.083	718	$50.00	30%	95%	80%	8.86	1
MiscFIT3	Misc	Fluorescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.1253	9	2,394	0.138	1,197	$150.00	50%	95%	95%	3.42	1
InstiFIT2	Institutional	Fluorescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1124	14	1,483	0.051	445	$50.00	30%	95%	80%	5.49	1
InstiFIT3	Institutional	Fluorescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.2022	9	1,483	0.085	742	$150.00	50%	95%	95%	2.12	1
GroceFIT2	Grocery	Fluorescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0509	14	3,272	0.113	982	$50.00	30%	95%	80%	12.11	1
GroceFIT3	Grocery	Fluorescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.0917	9	3,272	0.188	1,636	$150.00	50%	95%	95%	4.68	1
HealtFIT2	Healthcare	Fluorescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0549	14	3,034	0.105	910	$50.00	30%	95%	80%	11.23	1
HealtFIT3	Healthcare	Fluorescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.0989	9	3,034	0.174	1,517	$150.00	50%	95%	95%	4.34	1
LodgiFIT2	Lodging	Fluorescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0600	14	2,776	0.096	833	$50.00	30%	95%	80%	10.27	1
LodgiFIT3	Lodging	Fluorescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.1081	9	2,776	0.160	1,388	$150.00	50%	95%	95%	3.97	1
OfficFIT2	Office	Fluorescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1056	14	1,578	0.054	473	$50.00	30%	95%	80%	5.84	1
OfficFIT3	Office	Fluorescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.1901	9	1,578	0.091	789	$150.00	50%	95%	95%	2.26	1
RestaFIT2	Restaurant	Fluorescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0679	14	2,454	0.085	736	$50.00	30%	95%	80%	9.08	1
RestaFIT3	Restaurant	Fluorescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.1222	9	2,454	0.141	1,227	$150.00	50%	95%	95%	3.51	1
RetaiFIT2	Retail	Fluorescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0705	14	2,365	0.082	710	$50.00	30%	95%	80%	8.75	1
RetaiFIT3	Retail	Fluorescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.1268	9	2,365	0.136	1,183	$150.00	50%	95%	95%	3.38	1
WarehFIT2	Warehouse	Fluorescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0761	14	2,191	0.076	657	$50.00	30%	95%	80%	8.11	1
WarehFIT3	Warehouse	Fluorescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.1369	9	2,191	0.126	1,096	$150.00	50%	95%	95%	3.13	1
GroceFIT1	Grocery	Fluorescent	Turnover	1	Premium Efficiency T8 Lighting Replacement (28W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.0650	6	163	0.004	36	$2.32	22%	90%	95%	4.49	1
GroceFIT4	Grocery	Fluorescent	Turnover	4	Premium Efficiency T8 Lighting Replacement (25W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.0990	6	163	0.002	20	$2.02	13%	60%	95%	2.95	1
GroceFIT5	Grocery	Fluorescent	Turnover	5	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.0307	11	582	0.010	83	$2.55	14%	75%	95%	16.54	1
GroceFIE4	Grocery	Fluorescent	Early	4	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.7257	11	582	0.010	83	$60.38	14%	75%	95%	0.70	0
HealtFIT6	Healthcare	Fluorescent	Turnover	6	LED Retrofit Tube	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$1.0943	7	151	0.007	59	$65.00	39%	40%	95%	0.31	0
HealtFIT1	Healthcare	Fluorescent	Turnover	1	Premium Efficiency T8 Lighting Replacement (28W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.0701	7	151	0.004	33	$2.32	22%	90%	95%	4.83	1
HealtFIT4	Healthcare	Fluorescent	Turnover	4	Premium Efficiency T8 Lighting Replacement (25W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.1068	7	151	0.002	19	$2.02	13%	60%	95%	3.17	1
HealtFIT5	Healthcare	Fluorescent	Turnover	5	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.0331	11	540	0.009	77	$2.55	14%	75%	95%	15.33	1
HealtFIE4	Healthcare	Fluorescent	Early	4	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.7769	11	540	0.009	77	$59.93	14%	75%	95%	0.65	0
InstiFIT6	Institutional	Fluorescent	Turnover	6	LED Retrofit Tube	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$2.2383	15	74	0.003	29	$65.00	39%	40%	95%	0.29	0
InstiFIT1	Institutional	Fluorescent	Turnover	1	Premium Efficiency T8 Lighting Replacement (28W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.1433	15	74	0.002	16	$2.32	22%	90%	95%	4.54	1
InstiFIT4	Institutional	Fluorescent	Turnover	4	Premium Efficiency T8 Lighting Replacement (25W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.2184	15	74	0.001	9	$2.02	13%	60%	95%	2.98	1
InstiFIT5	Institutional	Fluorescent	Turnover	5	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.0677	11	264	0.004	38	$2.55	14%	75%	95%	7.50	1
InstiFIE4	Institutional	Fluorescent	Early	4	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.9281	11	264	0.004	38	$35.00	14%	75%	95%	0.55	0
LodgiFIT6	Lodging	Fluorescent	Turnover	6	LED Retrofit Tube	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$1.1959	8	138	0.006	54	$65.00	39%	40%	95%	0.32	0
LodgiFIT1	Lodging	Fluorescent	Turnover	1	Premium Efficiency T8 Lighting Replacement (28W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.0766	8	138	0.003	30	$2.32	22%	90%	95%	5.01	1
LodgiFIT4	Lodging	Fluorescent	Turnover	4	Premium Efficiency T8 Lighting Replacement (25W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.1167	8	138	0.002	17	$2.02	13%	60%	95%	3.29	1
LodgiFIT5	Lodging	Fluorescent	Turnover	5	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.0362	11	494	0.008	71	$2.55	14%	75%	95%	14.03	1
LodgiFIE4	Lodging	Fluorescent	Early	4	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.4959	11	494	0.008	71	$35.00	14%	75%	95%	1.02	1
MiscFIT6	Misc	Fluorescent	Turnover	6	LED Retrofit Tube	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$1.3867	9	119	0.005	47	$65.00	39%	40%	95%	0.31	0
MiscFIT1	Misc	Fluorescent	Turnover	1	Premium Efficiency T8 Lighting Replacement (28W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.0888	9	119	0.003	26	$2.32	22%	90%	95%	4.83	1
MiscFIT4	Misc	Fluorescent	Turnover	4	Premium Efficiency T8 Lighting Replacement (25W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.1353	9	119	0.002	15	$2.02	13%	60%	95%	3.17	1
MiscFIT5	Misc	Fluorescent	Turnover	5	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.0420	11	426	0.007	61	$2.55	14%	75%	95%	12.10	1
MiscFIE4	Misc	Fluorescent	Early	4	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.5750	11	426	0.007	61	$35.00	14%	75%	95%	0.88	0
OfficFIT6	Office	Fluorescent	Turnover	6	LED Retrofit Tube	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$2.1044	14	79	0.004	31	$65.00	39%	40%	95%	0.29	0
OfficFIT1	Office	Fluorescent	Turnover	1	Premium Efficiency T8 Lighting Replacement (28W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.1348	14	79	0.002	17	$2.32	22%	90%	95%	4.58	1
OfficFIT4	Office	Fluorescent	Turnover	4	Premium Efficiency T8 Lighting Replacement (25W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.2053	14	79	0.001	10	$2.02	13%	60%	95%	3.00	1
OfficFIT5	Office	Fluorescent	Turnover	5	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.0637	11	281	0.005	40	$2.55	14%	75%	95%	7.97	1
OfficFIE4	Office	Fluorescent	Early	4	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.8726	11	281	0.005	40	$35.00	14%	75%	95%	0.58	0

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	PJM Summer Summer Peak KW Savings	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Fla
RestaFIT6	Restaurant	Fluorescent	Turnover	6	LED Retrofit Tube	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$1.3528	9	122	0.006	48	$65.00	39%	40%	95%	0.32	0
RestaFIT1	Restaurant	Fluorescent	Turnover	1	Premium Efficiency T8 Lighting Replacement (28W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.0866	9	122	0.003	27	$2.32	22%	90%	95%	4.95	1
RestaFIT4	Restaurant	Fluorescent	Turnover	4	Premium Efficiency T8 Lighting Replacement (25W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.1320	9	122	0.002	15	$2.02	13%	60%	95%	3.25	1
RestaFIT5	Restaurant	Fluorescent	Turnover	5	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.0409	11	437	0.007	62	$2.55	14%	75%	95%	12.40	1
RestaFIE4	Restaurant	Fluorescent	Early	4	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.5610	11	437	0.007	62	$35.00	14%	75%	95%	0.91	0
RetaiFIT6	Retail	Fluorescent	Turnover	6	LED Retrofit Tube	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$1.4036	9	118	0.005	46	$65.00	39%	40%	95%	0.31	0
RetaiFIT1	Retail	Fluorescent	Turnover	1	Premium Efficiency T8 Lighting Replacement (28W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.0899	9	118	0.003	26	$2.32	22%	90%	95%	4.77	1
RetaiFIT4	Retail	Fluorescent	Turnover	4	Premium Efficiency T8 Lighting Replacement (25W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.1369	9	118	0.002	15	$2.02	13%	60%	95%	3.13	1
RetaiFIT5	Retail	Fluorescent	Turnover	5	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.0425	11	421	0.007	60	$2.55	14%	75%	95%	11.96	1
RetaiFIE4	Retail	Fluorescent	Early	4	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.5820	11	421	0.007	60	$35.00	14%	75%	95%	0.87	0
WarehFIT6	Warehouse	Fluorescent	Turnover	6	LED Retrofit Tube	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$1.5152	10	109	0.005	43	$65.00	39%	40%	95%	0.31	0
WarehFIT1	Warehouse	Fluorescent	Turnover	1	Premium Efficiency T8 Lighting Replacement (28W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.0970	10	109	0.003	24	$2.32	22%	90%	95%	4.83	1
WarehFIT4	Warehouse	Fluorescent	Turnover	4	Premium Efficiency T8 Lighting Replacement (25W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.1478	10	109	0.002	14	$2.02	13%	60%	95%	3.17	1
WarehFIT5	Warehouse	Fluorescent	Turnover	5	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.0459	11	390	0.006	56	$2.55	14%	75%	95%	11.07	1
WarehFIE4	Warehouse	Fluorescent	Early	4	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.6283	11	390	0.006	56	$35.00	14%	75%	95%	0.81	0
GroceHIE1	Grocery	HID	Early	1	4'T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.3797	10	1,893	0.065	565	$214.50	30%	85%	80%	1.23	1
GroceHIE2	Grocery	HID	Early	2	4'T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.2995	10	2,772	0.115	1,002	$300.00	36%	85%	80%	1.57	1
GroceHIE3	Grocery	HID	Early	3	4'T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.3449	10	1,893	0.078	681	$235.00	36%	85%	80%	1.36	1
GroceHIE4	Grocery	HID	Early	4	4'T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.3403	10	2,772	0.110	955	$325.00	34%	85%	80%	1.38	1
GroceHIT5	Grocery	HID	Turnover	5	Ceramic Metal Halide lamp	Replace non-ceramic lamp lamp 400 W	Lamp	$0.0859	3	2,330	0.047	408	$35.00	18%	85%	55%	1.77	1
GroceHIE7	Grocery	HID	Early	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.8147	15	1,893	0.097	844	$688.00	45%	85%	80%	0.80	0
GroceHIT1	Grocery	HID	Turnover	1	4'T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.1956	10	1,893	0.065	565	$110.50	30%	85%	80%	2.40	1
GroceHIT2	Grocery	HID	Turnover	2	4'T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.2246	10	2,772	0.115	1,002	$225.00	36%	85%	80%	2.09	1
GroceHIT3	Grocery	HID	Turnover	3	4'T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.2128	10	1,893	0.078	681	$145.00	36%	85%	80%	2.20	1
GroceHIT4	Grocery	HID	Turnover	4	4'T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.2722	10	2,772	0.110	955	$260.00	34%	85%	80%	1.72	1
GroceHIT6	Grocery	HID	Turnover	6	Multi Lamp Hard Wired CFL	Replace HID Fixure Drawing 400 W	Fixture	$0.3442	10	2,772	0.142	1,235	$425.00	45%	85%	55%	1.36	1
GroceHIT7	Grocery	HID	Turnover	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.4441	15	1,893	0.097	844	$375.00	45%	85%	80%	1.46	1
HealtHIE1	Healthcare	HID	Early	1	4'T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.4095	10	1,755	0.060	524	$214.50	30%	85%	80%	1.14	1
HealtHIE2	Healthcare	HID	Early	2	4'T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.3230	10	2,570	0.107	929	$300.00	36%	85%	80%	1.45	1
HealtHIE3	Healthcare	HID	Early	3	4'T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.3720	10	1,755	0.073	632	$235.00	36%	85%	80%	1.26	1
HealtHIE4	Healthcare	HID	Early	4	4'T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.3670	10	2,570	0.102	886	$325.00	34%	85%	80%	1.28	1
HealtHIT5	Healthcare	HID	Turnover	5	Ceramic Metal Halide lamp	Replace non-ceramic lamp lamp 400 W	Lamp	$0.0926	3	2,160	0.043	378	$35.00	18%	85%	55%	1.64	1
HealtHIE7	Healthcare	HID	Early	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.8787	15	1,755	0.090	783	$688.00	45%	85%	80%	0.74	0
HealtHIT1	Healthcare	HID	Turnover	1	4'T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.2110	10	1,755	0.060	524	$110.50	30%	85%	80%	2.22	1
HealtHIT2	Healthcare	HID	Turnover	2	4'T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.2422	10	2,570	0.107	929	$225.00	36%	85%	80%	1.94	1
HealtHIT3	Healthcare	HID	Turnover	3	4'T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.2295	10	1,755	0.073	632	$145.00	36%	85%	80%	2.04	1
HealtHIT4	Healthcare	HID	Turnover	4	4'T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.2936	10	2,570	0.102	886	$260.00	34%	85%	80%	1.60	1
HealtHIT6	Healthcare	HID	Turnover	6	Multi Lamp Hard Wired CFL	Replace HID Fixure Drawing 400 W	Fixture	$0.3712	10	2,570	0.132	1,145	$425.00	45%	85%	55%	1.26	1
HealtHIT7	Healthcare	HID	Turnover	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.4789	15	1,755	0.090	783	$375.00	45%	85%	80%	1.36	1
InstiHIE1	Institutional	HID	Early	1	4'T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.8376	10	858	0.029	256	$214.50	30%	85%	80%	0.56	0
InstiHIE2	Institutional	HID	Early	2	4'T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.6607	10	1,257	0.052	454	$300.00	36%	85%	80%	0.71	0
InstiHIE3	Institutional	HID	Early	3	4'T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.7608	10	858	0.035	309	$235.00	36%	85%	80%	0.62	0
InstiHIE4	Institutional	HID	Early	4	4'T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.7506	10	1,257	0.050	433	$325.00	34%	85%	80%	0.62	0
InstiHIT5	Institutional	HID	Turnover	5	Ceramic Metal Halide lamp	Replace non-ceramic lamp lamp 400 W	Lamp	$0.1894	6	1,056	0.021	185	$35.00	18%	85%	55%	1.54	1
InstiHIE7	Institutional	HID	Early	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$1.7973	15	858	0.044	383	$688.00	45%	85%	80%	0.36	0
InstiHIT1	Institutional	HID	Turnover	1	4'T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.4315	10	858	0.029	256	$110.50	30%	85%	80%	1.09	1
InstiHIT2	Institutional	HID	Turnover	2	4'T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.4955	10	1,257	0.052	454	$225.00	36%	85%	80%	0.95	0
InstiHIT3	Institutional	HID	Turnover	3	4'T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.4694	10	858	0.035	309	$145.00	36%	85%	80%	1.00	0
InstiHIT4	Institutional	HID	Turnover	4	4'T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.6005	10	1,257	0.050	433	$260.00	34%	85%	80%	0.78	0
InstiHIT6	Institutional	HID	Turnover	6	Multi Lamp Hard Wired CFL	Replace HID Fixure Drawing 400 W	Fixture	$0.7594	10	1,257	0.064	560	$425.00	45%	85%	55%	0.62	0
InstiHIT7	Institutional	HID	Turnover	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.9796	15	858	0.044	383	$375.00	45%	85%	80%	0.66	0
LodgiHIE1	Lodging	HID	Early	1	4'T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.4475	10	1,606	0.055	479	$214.50	30%	85%	80%	1.05	1
LodgiHIE2	Lodging	HID	Early	2	4'T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.3530	10	2,352	0.098	850	$300.00	36%	85%	80%	1.33	1
LodgiHIE3	Lodging	HID	Early	3	4'T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.4065	10	1,606	0.066	578	$235.00	36%	85%	80%	1.15	1
LodgiHIE4	Lodging	HID	Early	4	4'T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.4011	10	2,352	0.093	810	$325.00	34%	85%	80%	1.17	1
LodgiHIT5	Lodging	HID	Turnover	5	Ceramic Metal Halide lamp	Replace non-ceramic lamp lamp 400 W	Lamp	$0.1012	3	1,976	0.040	346	$35.00	18%	85%	55%	1.50	1
LodgiHIE7	Lodging	HID	Early	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.9603	15	1,606	0.082	716	$688.00	45%	85%	80%	0.68	0
LodgiHIT1	Lodging	HID	Turnover	1	4'T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.2306	10	1,606	0.055	479	$110.50	30%	85%	80%	2.03	1
LodgiHIT2	Lodging	HID	Turnover	2	4'T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.2648	10	2,352	0.098	850	$225.00	36%	85%	80%	1.77	1
LodgiHIT3	Lodging	HID	Turnover	3	4'T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.2508	10	1,606	0.066	578	$145.00	36%	85%	80%	1.87	1
LodgiHIT4	Lodging	HID	Turnover	4	4'T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.3209	10	2,352	0.093	810	$260.00	34%	85%	80%	1.46	1
LodgiHIT6	Lodging	HID	Turnover	6	Multi Lamp Hard Wired CFL	Replace HID Fixure Drawing 400 W	Fixture	$0.4057	10	2,352	0.120	1,047	$425.00	45%	85%	55%	1.16	1
LodgiHIT7	Lodging	HID	Turnover	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.5234	15	1,606	0.082	716	$375.00	45%	85%	80%	1.24	1
OfficHIE1	Office	HID	Early	1	4'T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.7875	10	913	0.031	272	$214.50	30%	85%	80%	0.60	0
OfficHIE2	Office	HID	Early	2	4'T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.6211	10	1,337	0.056	483	$300.00	36%	85%	80%	0.75	0
OfficHIE3	Office	HID	Early	3	4'T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.7153	10	913	0.038	329	$235.00	36%	85%	80%	0.66	0
OfficHIE4	Office	HID	Early	4	4'T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.7057	10	1,337	0.053	461	$325.00	34%	85%	80%	0.66	0
OfficHIT5	Office	HID	Turnover	5	Ceramic Metal Halide lamp	Replace non-ceramic lamp lamp 400 W	Lamp	$0.1781	5	1,123	0.023	197	$35.00	18%	85%	55%	1.38	1
OfficHIE7	Office	HID	Early	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$1.6898	15	913	0.047	407	$688.00	45%	85%	80%	0.38	0
OfficHIT1	Office	HID	Turnover	1	4'T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.4057	10	913	0.031	272	$110.50	30%	85%	80%	1.16	1
OfficHIT2	Office	HID	Turnover	2	4'T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.4659	10	1,337	0.056	483	$225.00	36%	85%	80%	1.01	1
OfficHIT3	Office	HID	Turnover	3	4'T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.4414	10	913	0.038	329	$145.00	36%	85%	80%	1.06	1
OfficHIT4	Office	HID	Turnover	4	4'T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.5646	10	1,337	0.053	461	$260.00	34%	85%	80%	0.83	0
OfficHIT6	Office	HID	Turnover	6	Multi Lamp Hard Wired CFL	Replace HID Fixure Drawing 400 W	Fixture	$0.7139	10	1,337	0.068	595	$425.00	45%	85%	55%	0.66	0
OfficHIT7	Office	HID	Turnover	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.9210	15	913	0.047	407	$375.00	45%	85%	80%	0.71	0
RestaHIE1	Restaurant	HID	Early	1	4'T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.5063	10	1,420	0.049	424	$214.50	30%	85%	80%	0.93	0
RestaHIE2	Restaurant	HID	Early	2	4'T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.3993	10	2,079	0.086	751	$300.00	36%	85%	80%	1.17	1
RestaHIE3	Restaurant	HID	Early	3	4'T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.4598	10	1,420	0.059	511	$235.00	36%	85%	80%	1.02	1
RestaHIE4	Restaurant	HID	Early	4	4'T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.4537	10	2,079	0.082	716	$325.00	34%	85%	80%	1.03	1
RestaHIT5	Restaurant	HID	Turnover	5	Ceramic Metal Halide lamp	Replace non-ceramic lamp lamp 400 W	Lamp	$0.1145	3	1,747	0.035	306	$35.00	18%	85%	55%	1.33	1
RestaHIE7	Restaurant	HID	Early	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$1.0863	15	1,420	0.073	633	$688.00	45%	85%	80%	0.60	0
RestaHIT1	Restaurant	HID	Turnover	1	4'T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.2608	10	1,420	0.049	424	$110.50	30%	85%	80%	1.80	1
RestaHIT2	Restaurant	HID	Turnover	2	4'T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.2995	10	2,079	0.086	751	$225.00	36%	85%	80%	1.57	1
RestaHIT3	Restaurant	HID	Turnover	3	4'T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.2837	10	1,420	0.059	511	$145.00	36%	85%	80%	1.65	1
RestaHIT4	Restaurant	HID	Turnover	4	4'T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.3630	10	2,079	0.082	716	$260.00	34%	85%	80%	1.29	1
RestaHIT6	Restaurant	HID	Turnover	6	Multi Lamp Hard Wired CFL	Replace HID Fixure Drawing 400 W	Fixture	$0.4590	10	2,079	0.106	926	$425.00	45%	85%	55%	1.02	1
RestaHIT7	Restaurant	HID	Turnover	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.5921	15	1,420	0.073	633	$375.00	45%	85%	80%	1.10	1
RetaiHIE1	Retail	HID	Early	1	4'T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.5253	10	1,368	0.047	408	$214.50	30%	85%	80%	0.89	0
RetaiHIE2	Retail	HID	Early	2	4'T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.4143	10	2,004	0.083	724	$300.00	36%	85%	80%	1.13	1
RetaiHIE3	Retail	HID	Early	3	4'T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.4771	10	1,368	0.057	493	$235.00	36%	85%	80%	0.98	0
RetaiHIE4	Retail	HID	Early	4	4'T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.4707	10	2,004	0.079	690	$325.00	34%	85%	80%	1.00	0
RetaiHIT5	Retail	HID	Turnover	5	Ceramic Metal Halide lamp	Replace non-ceramic lamp lamp 400 W	Lamp	$0.1188	4	1,684	0.034	295	$35.00	18%	85%	55%	1.67	1
RetaiHIE7	Retail	HID	Early	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$1.1270	15	1,368	0.070	610	$688.00	45%	85%	80%	0.58	0
RetaiHIT1	Retail	HID	Turnover	1	4'T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.2706	10	1,368	0.047	408	$110.50	30%	85%	80%	1.73	1
RetaiHIT2	Retail	HID	Turnover	2	4'T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.3107	10	2,004	0.083	724	$225.00	36%	85%	80%	1.51	1
RetaiHIT3	Retail	HID	Turnover	3	4'T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.2944	10	1,368	0.057	493	$145.00	36%	85%	80%	1.59	1
RetaiHIT4	Retail	HID	Turnover	4	4'T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.3766	10	2,004	0.079	690	$260.00	34%	85%	80%	1.24	1
RetaiHIT6	Retail	HID	Turnover	6	Multi Lamp Hard Wired CFL	Replace HID Fixure Drawing 400 W	Fixture	$0.4762	10	2,004	0.103	893	$425.00	45%	85%	55%	0.98	0
RetaiHIT7	Retail	HID	Turnover	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.6143	15	1,368	0.070	610	$375.00	45%	85%	80%	1.06	1
MiscHIE1	Misc	HID	Early	1	4'T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.5189	10	1,385	0.048	413	$214.50	30%	85%	80%	0.90	0
MiscHIE2	Misc	HID	Early	2	4'T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.4093	10	2,028	0.084	733	$300.00	36%	85%	80%	1.15	1
MiscHIE3	Misc	HID	Early	3	4'T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.4713	10	1,385	0.057	499	$235.00	36%	85%	80%	0.99	0

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	PJM Summer Summer Peak KW Savings	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Fla
MiscHIE4	Misc	HID	Early	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.4650	10	2,028	0.080	699	$325.00	34%	85%	80%	1.01	1
MiscHIT5	Misc	HID	Turnover	5	Ceramic Metal Halide lamp	Replace non-ceramic lamp lamp 400 W	Lamp	$0.1173	4	1,705	0.034	298	$35.00	18%	85%	55%	1.69	1
MiscHIE7	Misc	HID	Early	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$1.1134	15	1,385	0.071	618	$688.00	45%	85%	80%	0.58	0
MiscHIT1	Misc	HID	Turnover	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.2673	10	1,385	0.048	413	$110.50	30%	85%	80%	1.75	1
MiscHIT2	Misc	HID	Turnover	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.3070	10	2,028	0.084	733	$225.00	36%	85%	80%	1.53	1
MiscHIT3	Misc	HID	Turnover	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.2908	10	1,385	0.057	499	$145.00	36%	85%	80%	1.61	1
MiscHIT4	Misc	HID	Turnover	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.3720	10	2,028	0.080	699	$260.00	34%	85%	80%	1.26	1
MiscHIT6	Misc	HID	Turnover	6	Multi Lamp Hard Wired CFL	Replace HID Fixure Drawing 400 W	Fixture	$0.4704	10	2,028	0.104	903	$425.00	45%	85%	55%	1.00	0
MiscHIT7	Misc	HID	Turnover	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.6069	15	1,385	0.071	618	$375.00	45%	85%	80%	1.07	1
GroceHIE8	Grocery	HID	Early	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1651	10	7,571	0.261	2,271	$375.00	30%	85%	85%	2.84	1
GroceHIE9	Grocery	HID	Early	9	Photocell dimming control	No prior dimming control	Photocell	$0.1453	10	7,571	0.435	3,786	$550.00	50%	85%	85%	3.23	1
GroceHIE10	Grocery	HID	Early	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1321	10	7,571	0.087	757	$100.00	10%	85%	45%	3.55	1
HealtHIE8	Healthcare	HID	Early	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1781	10	7,020	0.242	2,106	$375.00	30%	85%	85%	2.63	1
HealtHIE9	Healthcare	HID	Early	9	Photocell dimming control	No prior dimming control	Photocell	$0.1567	10	7,020	0.403	3,510	$550.00	50%	85%	85%	2.99	1
HealtHIE10	Healthcare	HID	Early	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1425	10	7,020	0.081	702	$100.00	10%	85%	45%	3.29	1
InstiHIE8	Institutional	HID	Early	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.3642	10	3,432	0.118	1,030	$375.00	30%	85%	85%	1.29	1
InstiHIE9	Institutional	HID	Early	9	Photocell dimming control	No prior dimming control	Photocell	$0.3205	10	3,432	0.197	1,716	$550.00	50%	85%	85%	1.46	1
InstiHIE10	Institutional	HID	Early	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.2914	10	3,432	0.039	343	$100.00	10%	85%	45%	1.61	1
OffieHIE8	Office	HID	Early	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.3424	10	3,650	0.126	1,095	$375.00	30%	85%	85%	1.37	1
OffieHIE9	Office	HID	Early	9	Photocell dimming control	No prior dimming control	Photocell	$0.3013	10	3,650	0.210	1,825	$550.00	50%	85%	85%	1.56	1
OffieHIE10	Office	HID	Early	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.2739	10	3,650	0.042	365	$100.00	10%	85%	45%	1.71	1
RestaHIE8	Restaurant	HID	Early	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2201	10	5,678	0.196	1,704	$375.00	30%	85%	85%	2.13	1
RestaHIE9	Restaurant	HID	Early	9	Photocell dimming control	No prior dimming control	Photocell	$0.1937	10	5,678	0.326	2,839	$550.00	50%	85%	85%	2.42	1
RestaHIE10	Restaurant	HID	Early	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1761	10	5,678	0.065	568	$100.00	10%	85%	45%	2.66	1
RetaiHIE8	Retail	HID	Early	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2284	10	5,473	0.189	1,642	$375.00	30%	85%	85%	2.05	1
RetaiHIE9	Retail	HID	Early	9	Photocell dimming control	No prior dimming control	Photocell	$0.2010	10	5,473	0.314	2,737	$550.00	50%	85%	85%	2.33	1
RetaiHIE10	Retail	HID	Early	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1827	10	5,473	0.063	547	$100.00	10%	85%	45%	2.57	1
MiscHIE8	Misc	HID	Early	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2256	10	5,540	0.191	1,662	$375.00	30%	85%	85%	2.08	1
MiscHIE9	Misc	HID	Early	9	Photocell dimming control	No prior dimming control	Photocell	$0.1986	10	5,540	0.318	2,770	$550.00	50%	85%	85%	2.36	1
MiscHIE10	Misc	HID	Early	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1805	10	5,540	0.064	554	$100.00	10%	85%	45%	2.60	1
LodgiHIE8	Lodging	HID	Early	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1946	10	6,423	0.221	1,927	$375.00	30%	85%	85%	2.41	1
LodgiHIE9	Lodging	HID	Early	9	Photocell dimming control	No prior dimming control	Photocell	$0.1713	10	6,423	0.369	3,212	$550.00	50%	85%	85%	2.74	1
LodgiHIE10	Lodging	HID	Early	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1557	10	6,423	0.074	642	$100.00	10%	85%	45%	3.01	1
LodgiHIT8	Lodging	HID	Turnover	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1427	10	6,423	0.221	1,927	$275.00	30%	85%	85%	3.29	1
LodgiHIT9	Lodging	HID	Turnover	9	Photocell dimming control	No prior dimming control	Photocell	$0.1713	10	6,423	0.369	3,212	$550.00	50%	85%	85%	2.74	1
LodgiHIT10	Lodging	HID	Turnover	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1168	10	6,423	0.074	642	$75.00	10%	85%	45%	4.02	1
GroceHIT8	Grocery	HID	Turnover	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1211	10	7,571	0.261	2,271	$275.00	30%	85%	85%	3.87	1
GroceHIT9	Grocery	HID	Turnover	9	Photocell dimming control	No prior dimming control	Photocell	$0.1453	10	7,571	0.435	3,786	$550.00	50%	85%	85%	3.23	1
GroceHIT10	Grocery	HID	Turnover	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.0991	10	7,571	0.087	757	$75.00	10%	85%	45%	4.73	1
HealtHIT8	Healthcare	HID	Turnover	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1306	10	7,020	0.242	2,106	$275.00	30%	85%	85%	3.59	1
HealtHIT9	Healthcare	HID	Turnover	9	Photocell dimming control	No prior dimming control	Photocell	$0.1567	10	7,020	0.403	3,510	$550.00	50%	85%	85%	2.99	1
HealtHIT10	Healthcare	HID	Turnover	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1068	10	7,020	0.081	702	$75.00	10%	85%	45%	4.39	1
InstiHIT8	Institutional	HID	Turnover	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2671	10	3,432	0.118	1,030	$275.00	30%	85%	85%	1.76	1
InstiHIT9	Institutional	HID	Turnover	9	Photocell dimming control	No prior dimming control	Photocell	$0.3205	10	3,432	0.197	1,716	$550.00	50%	85%	85%	1.46	1
InstiHIT10	Institutional	HID	Turnover	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.2185	10	3,432	0.039	343	$75.00	10%	85%	45%	2.15	1
OffieHIT8	Office	HID	Turnover	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2511	10	3,650	0.126	1,095	$275.00	30%	85%	85%	1.87	1
OffieHIT9	Office	HID	Turnover	9	Photocell dimming control	No prior dimming control	Photocell	$0.3013	10	3,650	0.210	1,825	$550.00	50%	85%	85%	1.56	1
OffieHIT10	Office	HID	Turnover	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.2055	10	3,650	0.042	365	$75.00	10%	85%	45%	2.28	1
MiscHIT8	Misc	HID	Turnover	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1655	10	5,540	0.191	1,662	$275.00	30%	85%	85%	2.83	1
MiscHIT9	Misc	HID	Turnover	9	Photocell dimming control	No prior dimming control	Photocell	$0.1986	10	5,540	0.318	2,770	$550.00	50%	85%	85%	2.36	1
MiscHIT10	Misc	HID	Turnover	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1354	10	5,540	0.064	554	$75.00	10%	85%	45%	3.46	1
RestaHIT8	Restaurant	HID	Turnover	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1614	10	5,678	0.196	1,704	$275.00	30%	85%	85%	2.90	1
RestaHIT9	Restaurant	HID	Turnover	9	Photocell dimming control	No prior dimming control	Photocell	$0.1937	10	5,678	0.326	2,839	$550.00	50%	85%	85%	2.42	1
RestaHIT10	Restaurant	HID	Turnover	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1321	10	5,678	0.065	568	$75.00	10%	85%	45%	3.55	1
RetaiHIT8	Retail	HID	Turnover	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1675	10	5,473	0.189	1,642	$275.00	30%	85%	85%	2.80	1
RetaiHIT9	Retail	HID	Turnover	9	Photocell dimming control	No prior dimming control	Photocell	$0.2010	10	5,473	0.314	2,737	$550.00	50%	85%	85%	2.33	1
RetaiHIT10	Retail	HID	Turnover	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1370	10	5,473	0.063	547	$75.00	10%	85%	45%	3.42	1
WarehHIT8	Warehouse	HID	Turnover	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1808	10	5,070	0.175	1,521	$275.00	30%	85%	85%	2.59	1
WarehHIT9	Warehouse	HID	Turnover	9	Photocell dimming control	No prior dimming control	Photocell	$0.2170	10	5,070	0.291	2,535	$550.00	50%	85%	85%	2.16	1
WarehHIT10	Warehouse	HID	Turnover	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1479	10	5,070	0.058	507	$75.00	10%	85%	45%	3.17	1
WarehHIN8	Warehouse	HID	New	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1781	10	4,680	0.161	1,404	$250.00	30%	85%	85%	2.63	1
WarehHIN9	Warehouse	HID	New	9	Photocell dimming control	No prior dimming control	Photocell	$0.1923	10	4,680	0.269	2,340	$450.00	50%	85%	85%	2.44	1
WarehHIN10	Warehouse	HID	New	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1389	10	4,680	0.054	468	$65.00	10%	25%	45%	3.38	1
GroceHIN8	Grocery	HID	New	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1192	10	6,989	0.241	2,097	$250.00	30%	85%	85%	3.93	1
GroceHIN9	Grocery	HID	New	9	Photocell dimming control	No prior dimming control	Photocell	$0.1288	10	6,989	0.402	3,494	$450.00	50%	85%	85%	3.64	1
GroceHIN10	Grocery	HID	New	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.0930	10	6,989	0.080	699	$65.00	10%	25%	45%	5.04	1
HealtHIN8	Healthcare	HID	New	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1286	10	6,480	0.223	1,944	$250.00	30%	85%	85%	3.65	1
HealtHIN9	Healthcare	HID	New	9	Photocell dimming control	No prior dimming control	Photocell	$0.1389	10	6,480	0.372	3,240	$450.00	50%	85%	85%	3.38	1
HealtHIN10	Healthcare	HID	New	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1003	10	6,480	0.074	648	$65.00	10%	25%	45%	4.67	1
InstiHIN8	Institutional	HID	New	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2630	10	3,168	0.109	950	$250.00	30%	85%	85%	1.78	1
InstiHIN9	Institutional	HID	New	9	Photocell dimming control	No prior dimming control	Photocell	$0.2841	10	3,168	0.182	1,584	$450.00	50%	85%	85%	1.65	1
InstiHIN10	Institutional	HID	New	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.2052	10	3,168	0.036	317	$65.00	10%	25%	45%	2.28	1
LodgiHIN8	Lodging	HID	New	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1405	10	5,929	0.204	1,779	$250.00	30%	85%	85%	3.34	1
LodgiHIN9	Lodging	HID	New	9	Photocell dimming control	No prior dimming control	Photocell	$0.1518	10	5,929	0.341	2,965	$450.00	50%	85%	85%	3.09	1
LodgiHIN10	Lodging	HID	New	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1096	10	5,929	0.068	593	$65.00	10%	25%	45%	4.28	1
OffieHIN8	Office	HID	New	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2473	10	3,370	0.116	1,011	$250.00	30%	85%	85%	1.90	1
OffieHIN9	Office	HID	New	9	Photocell dimming control	No prior dimming control	Photocell	$0.2671	10	3,370	0.194	1,685	$450.00	50%	85%	85%	1.76	1
OffieHIN10	Office	HID	New	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1929	10	3,370	0.039	337	$65.00	10%	25%	45%	2.43	1
RestaHIN8	Restaurant	HID	New	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1590	10	5,242	0.181	1,572	$250.00	30%	85%	85%	2.95	1
RestaHIN9	Restaurant	HID	New	9	Photocell dimming control	No prior dimming control	Photocell	$0.1717	10	5,242	0.301	2,621	$450.00	50%	85%	85%	2.73	1
RestaHIN10	Restaurant	HID	New	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1240	10	5,242	0.060	524	$65.00	10%	25%	45%	3.78	1
RetaiHIN8	Retail	HID	New	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1650	10	5,052	0.174	1,516	$250.00	30%	85%	85%	2.84	1
RetaiHIN9	Retail	HID	New	9	Photocell dimming control	No prior dimming control	Photocell	$0.1781	10	5,052	0.290	2,526	$450.00	50%	85%	85%	2.63	1
RetaiHIN10	Retail	HID	New	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1287	10	5,052	0.058	505	$65.00	10%	25%	45%	3.64	1
miscHIN8	misc	HID	New	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1630	10	5,114	0.176	1,534	$250.00	30%	85%	85%	2.88	1
MiscHIN9	Misc	HID	New	9	Photocell dimming control	No prior dimming control	Photocell	$0.1760	10	5,114	0.294	2,557	$450.00	50%	85%	85%	2.66	1
MiscHIN10	Misc	HID	New	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1271	10	5,114	0.059	511	$65.00	10%	25%	45%	3.69	1
OffieInN3	Office	Incandescent	New	3	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0464	14	3,594	0.124	1,078	$50.00	30%	95%	15%	13.30	1
OffieInN4	Office	Incandescent	New	4	Photocell dimming control	No prior dimming control	Photocell	$0.0835	9	3,594	0.207	1,797	$150.00	50%	95%	95%	5.14	1
OffieInT2	Office	Incandescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1159	14	3,594	0.124	1,078	$125.00	30%	95%	80%	5.32	1
OffieInT3	Office	Incandescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.1252	9	3,594	0.207	1,797	$225.00	50%	95%	95%	3.43	1
GroceInN3	Grocery	Incandescent	New	3	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0224	14	7,455	0.257	2,236	$50.00	30%	95%	15%	27.59	1
GroceInT2	Grocery	Incandescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0559	14	7,455	0.257	2,236	$125.00	30%	95%	80%	11.03	1
HealtInT2	Healthcare	Incandescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0603	14	6,912	0.238	2,074	$125.00	30%	95%	80%	10.23	1
GroceInN4	Grocery	Incandescent	New	4	Photocell dimming control	No prior dimming control	Photocell	$0.0402	9	7,455	0.428	3,727	$150.00	50%	95%	95%	10.66	1
HealtInN3	Healthcare	Incandescent	New	3	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0241	14	6,912	0.238	2,074	$50.00	30%	95%	15%	25.58	1
GroceInT3	Grocery	Incandescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.0604	9	7,455	0.428	3,727	$225.00	50%	95%	95%	7.10	1
HealtInT3	Healthcare	Incandescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.0651	9	6,912	0.397	3,456	$225.00	50%	95%	95%	6.59	1
HealtInN4	Healthcare	Incandescent	New	4	Photocell dimming control	No prior dimming control	Photocell	$0.0434	9	6,912	0.397	3,456	$150.00	50%	95%	95%	9.88	1
InstiInN3	Institutional	Incandescent	New	3	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0493	14	3,379	0.117	1,014	$50.00	30%	95%	15%	12.51	1
InstiInN4	Institutional	Incandescent	New	4	Photocell dimming control	No prior dimming control	Photocell	$0.0888	9	3,379	0.194	1,690	$150.00	50%	95%	95%	4.83	1
InstiInT2	Institutional	Incandescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1233	14	3,379	0.117	1,014	$125.00	30%	95%	80%	5.00	1

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	PJM Summer Summer Peak KW Savings	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Fla
InstInT3	Institutional	Incandescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.1332	9	3,379	0.194	1,690	$225.00	50%	95%	95%	3.22	1
LodgInN3	Lodging	Incandescent	New	3	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0264	14	6,324	0.218	1,897	$50.00	30%	95%	15%	23.40	1
LodgInN4	Lodging	Incandescent	New	4	Photocell dimming control	No prior dimming control	Photocell	$0.0474	9	6,324	0.363	3,162	$150.00	50%	95%	95%	9.04	1
LodgInT2	Lodging	Incandescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0659	14	6,324	0.218	1,897	$125.00	30%	95%	80%	9.36	1
LodgInT3	Lodging	Incandescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.0712	9	6,324	0.363	3,162	$225.00	50%	95%	95%	6.03	1
RestaInN3	Restaurant	Incandescent	New	3	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0298	14	5,591	0.193	1,677	$50.00	30%	95%	15%	20.69	1
RestaInN4	Restaurant	Incandescent	New	4	Photocell dimming control	No prior dimming control	Photocell	$0.0537	9	5,591	0.321	2,796	$150.00	50%	95%	95%	7.99	1
RestaInT2	Restaurant	Incandescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0745	14	5,591	0.193	1,677	$125.00	30%	95%	80%	8.28	1
RestaInT3	Restaurant	Incandescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.0805	9	5,591	0.321	2,796	$225.00	50%	95%	95%	5.33	1
RetaiInN3	Retail	Incandescent	New	3	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0309	14	5,389	0.186	1,617	$50.00	30%	95%	15%	19.94	1
RetaiInN4	Retail	Incandescent	New	4	Photocell dimming control	No prior dimming control	Photocell	$0.0557	9	5,389	0.310	2,694	$150.00	50%	95%	95%	7.70	1
RetaiInT2	Retail	Incandescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0773	14	5,389	0.186	1,617	$125.00	30%	95%	80%	7.98	1
RetaiInT3	Retail	Incandescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.0835	9	5,389	0.310	2,694	$225.00	50%	95%	95%	5.14	1
WarehInN3	Warehouse	Incandescent	New	3	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0334	14	4,992	0.172	1,498	$50.00	30%	95%	15%	18.47	1
WarehInN4	Warehouse	Incandescent	New	4	Photocell dimming control	No prior dimming control	Photocell	$0.0601	9	4,992	0.287	2,496	$150.00	50%	95%	95%	7.14	1
WarehInT2	Warehouse	Incandescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0835	14	4,992	0.172	1,498	$125.00	30%	95%	80%	7.39	1
WarehInT3	Warehouse	Incandescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.0901	9	4,992	0.287	2,496	$225.00	50%	95%	95%	4.76	1
MiscInN3	Misc	Incandescent	New	3	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0306	14	5,455	0.188	1,636	$50.00	30%	95%	15%	20.19	1
MiscInN4	Misc	Incandescent	New	4	Photocell dimming control	No prior dimming control	Photocell	$0.0550	9	5,455	0.313	2,727	$150.00	50%	95%	95%	7.80	1
MiscInT2	Misc	Incandescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0764	14	5,455	0.188	1,636	$125.00	30%	95%	80%	8.07	1
MiscInT3	Misc	Incandescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.0825	9	5,455	0.313	2,727	$225.00	50%	95%	95%	5.20	1
GroceInT4	Grocery	Incandescent	Turnover	4	LED Lamp - 12 Watt	EISA - 60 Watt equivalent - 43W	Lamp	$0.1329	5	250	0.021	181	$23.99	72%	75%	50%	1.85	1
HealtInT4	Healthcare	Incandescent	Turnover	4	LED Lamp - 12 Watt	EISA - 60 Watt equivalent - 43W	Lamp	$0.1433	5	232	0.019	167	$23.99	72%	75%	50%	1.71	1
GroceInT5	Grocery	Incandescent	Turnover	5	LED Lamp PAR - 12 Watt	Halogen PAR - 45 W	Lamp	$0.1908	5	262	0.021	181	$34.45	69%	75%	90%	1.29	1
HealtInT5	Healthcare	Incandescent	Turnover	5	LED Lamp PAR - 12 Watt	Halogen PAR - 45 W	Lamp	$0.2058	5	243	0.019	167	$34.45	69%	75%	90%	1.19	1
InstInT1	Institutional	Incandescent	Turnover	1	CFL Lamp - 21 Watt	EISA - 75 Watt equivalent - 53W	Lamp	$0.0355	5	140	0.010	84	$3.00	60%	75%	50%	6.91	1
InstInT4	Institutional	Incandescent	Turnover	4	LED Lamp - 12 Watt	EISA - 60 Watt equivalent - 43W	Lamp	$0.2931	5	114	0.009	82	$23.99	72%	75%	50%	0.84	0
InstInT5	Institutional	Incandescent	Turnover	5	LED Lamp PAR - 12 Watt	Halogen PAR - 45 W	Lamp	$0.4209	5	119	0.009	82	$34.45	69%	75%	90%	0.58	0
LodgInT1	Lodging	Incandescent	Turnover	1	CFL Lamp - 21 Watt	EISA - 75 Watt equivalent - 53W	Lamp	$0.0190	5	262	0.018	158	$3.00	60%	75%	50%	12.94	1
LodgInT4	Lodging	Incandescent	Turnover	4	LED Lamp - 12 Watt	EISA - 60 Watt equivalent - 43W	Lamp	$0.1566	5	212	0.018	153	$23.99	72%	75%	50%	1.57	1
LodgInT5	Lodging	Incandescent	Turnover	5	LED Lamp PAR - 12 Watt	Halogen PAR - 45 W	Lamp	$0.2249	5	222	0.018	153	$34.45	69%	75%	90%	1.09	1
OfficInT1	Office	Incandescent	Turnover	1	CFL Lamp - 21 Watt	EISA - 75 Watt equivalent - 53W	Lamp	$0.0334	5	149	0.010	90	$3.00	60%	75%	50%	7.35	1
OfficInT4	Office	Incandescent	Turnover	4	LED Lamp - 12 Watt	EISA - 60 Watt equivalent - 43W	Lamp	$0.2756	5	121	0.010	87	$23.99	72%	75%	50%	0.89	0
OfficInT5	Office	Incandescent	Turnover	5	LED Lamp PAR - 12 Watt	Halogen PAR - 45 W	Lamp	$0.3958	5	126	0.010	87	$34.45	69%	75%	90%	0.62	0
RestaInT1	Restaurant	Incandescent	Turnover	1	CFL Lamp - 21 Watt	EISA - 75 Watt equivalent - 53W	Lamp	$0.0215	5	232	0.016	140	$3.00	60%	75%	50%	11.44	1
RestaInT4	Restaurant	Incandescent	Turnover	4	LED Lamp - 12 Watt	EISA - 60 Watt equivalent - 43W	Lamp	$0.1772	5	188	0.016	135	$23.99	72%	75%	50%	1.39	1
RestaInT5	Restaurant	Incandescent	Turnover	5	LED Lamp PAR - 12 Watt	Halogen PAR - 45 W	Lamp	$0.2544	5	197	0.016	135	$34.45	69%	75%	90%	0.96	0
RetaiInT1	Retail	Incandescent	Turnover	1	CFL Lamp - 21 Watt	EISA - 75 Watt equivalent - 53W	Lamp	$0.0223	5	223	0.015	135	$3.00	60%	75%	50%	11.02	1
RetaiInT4	Retail	Incandescent	Turnover	4	LED Lamp - 12 Watt	EISA - 60 Watt equivalent - 43W	Lamp	$0.1838	5	181	0.015	131	$23.99	72%	75%	50%	1.34	1
RetaiInT5	Retail	Incandescent	Turnover	5	LED Lamp PAR - 12 Watt	Halogen PAR - 45 W	Lamp	$0.2640	5	189	0.015	131	$34.45	69%	75%	90%	0.93	0
miscInT1	misc	Incandescent	Turnover	1	CFL Lamp - 21 Watt	EISA - 75 Watt equivalent - 53W	Lamp	$0.0220	5	226	0.016	136	$3.00	60%	75%	50%	11.16	1
miscInT4	misc	Incandescent	Turnover	4	LED Lamp - 12 Watt	EISA - 60 Watt equivalent - 43W	Lamp	$0.1816	5	183	0.015	132	$23.99	72%	75%	50%	1.35	1
miscInT5	misc	Incandescent	Turnover	5	LED Lamp PAR - 12 Watt	Halogen PAR - 45 W	Lamp	$0.2608	5	192	0.015	132	$34.45	69%	75%	90%	0.94	0
WarehInT1	Warehouse	Incandescent	Turnover	1	CFL Lamp - 21 Watt	EISA - 75 Watt equivalent - 53W	Lamp	$0.0240	5	207	0.014	125	$3.00	60%	75%	50%	10.21	1
WarehInT4	Warehouse	Incandescent	Turnover	4	LED Lamp - 12 Watt	EISA - 60 Watt equivalent - 43W	Lamp	$0.1984	5	168	0.014	121	$23.99	72%	75%	50%	1.24	1
WarehInT5	Warehouse	Incandescent	Turnover	5	LED Lamp PAR - 12 Watt	Halogen PAR - 45 W	Lamp	$0.2849	5	176	0.014	121	$34.45	69%	75%	90%	0.86	0
LodgInN6	Lodging	Incandescent	New	6	Hotel Occupancy Sensors	No prior control	Per Room	$0.4468	10	240	0.019	168	$75.00	70%	90%	95%	1.05	1
LodgInT6	Lodging	Incandescent	Turnover	6	Hotel Occupancy Sensors	No prior control	Per Room	$0.5957	10	240	0.019	168	$100.00	70%	90%	95%	0.79	0
AllSiN1	All	Signage	New	1	Induction Street Lighting	Base HID Streetlighting	Fixture	$0.54	15	2,762	0.101	1,619	$875.00	59%	95%	95%	1.07	1
AllSiN2	All	Signage	New	2	LED or equivalent sign lighting	Replace fluorescent sign lighting	Exit Sign	$0.58	15	52	0.002	30	$17.36	58%	95%	7%	0.99	0
AllSiN3	All	Signage	New	3	LED Street Lighting	Std HID Street Lighting	Pole	$0.56	15	3,023	0.047	756	$425.00	25%	95%	95%	1.03	1
AllSiE1	All	Signage	Early	1	Dusk to Dawn	Time Clock Control	Pole	$0.17	15	3,023	0.076	1,209	$200.00	40%	95%	50%	3.50	1
OfficMoT22	Office	Motors	Turnover	22	Air Comp Improvements			$0.11	15	56148	1.148	8,928	$990.00	16%	28%	65%	6.02	1
OfficMoE2	Office	Motors	Early	2	Air Compressor Optimization			$0.16	15	56148	2.174	16,901	$2,750.00	30%	38%	65%	4.10	1
GroceMoE1	Grocery	Motors	Early	1	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.27	1
AllOrT1	All	Other	Turnover	1	Motor Improvements Bundle - Industrial Model	No Motor Improvements	Motor	$0.48	14	10000	0.128	1,092	$522.00	11%	90%	95%	1.29	1
AllOrT2	All	Other	Turnover	2	EE Transformer - CSL 3	NEMA Transformer - 75W	Motor	$0.60	15	4197	0.187	1,595	$950.00	23%	90%	95%	1.10	1
AllOrN1	All	Other	New	1	EE Transformer - CSL 3	NEMA Transformer - 75W	Motor	$0.60	15	4197	0.187	1,595	$950.00	23%	90%	95%	1.10	1
AllReN26	All	Refrigeration	New	26	Anti-sweat heat (ASH) controls - Freezer	ASH without controls	Per Door	$0.16	12	2,985	0.029	1,882	$300.00	63%	95%	85%	3.07	1
AllReN27	All	Refrigeration	New	27	Anti-sweat heat (ASH) controls - Cooler	ASH without controls	Per Door	$0.29	12	1,621	0.028	1,023	$300.00	63%	95%	85%	1.69	1
GroceMoN1	Grocery	Motors	New	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1015	15	15384	0.0282	139.5	$154	0.91%	74.4%	100%	0.65	0
GroceMoN2	Grocery	Motors	New	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.1901	15	58940	0.0231	437.7	$521	0.74%	74.4%	100%	0.52	0
GroceMoN3	Grocery	Motors	New	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0693	15	144688	0.0138	644.1	$689	0.45%	66.3%	100%	0.56	0
GroceMoN4	Grocery	Motors	New	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4499	15	290922	0.0121	1135.2	$511	0.39%	55.8%	100%	1.31	1
GroceMoN5	Grocery	Motors	New	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-500 HP	Motor	$0.3775	15	624328	0.0284	5711.1	$2,156	0.91%	55.8%	100%	1.55	1
GroceMoN6	Grocery	Motors	New	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5635	15	97600	2.511	19,520	$11,000.00	20%	55.0%	100%	1.18	1
GroceMoN7	Grocery	Motors	New	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4367	15	97600	3.941	29767.9	$13,000.00	31%	70.0%	100%	1.53	1
GroceMoN8	Grocery	Motors	New	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4149	15	97600	0.000	31329.5	$13,000.00	32%	80.0%	100%	1.40	1
GroceMoN9	Grocery	Motors	New	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.4915	15	97600	3.941	26449.5	$13,000.00	27%	70.0%	100%	1.39	1
GroceMoN10	Grocery	Motors	New	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4515	15	97600	2.798	28791.9	$13,000.00	30%	55.0%	100%	1.43	1
GroceMoN11	Grocery	Motors	New	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.4915	15	97600	3.941	26449.5	$13,000.00	27%	30.0%	100%	1.39	1
GroceMoT1	Grocery	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1015	15	15384	0.0282	139.5	$154	0.91%	74.4%	100%	0.65	0
GroceMoT2	Grocery	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.1901	15	58940	0.0231	437.7	$521	0.74%	74.4%	100%	0.52	0
GroceMoT3	Grocery	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0693	15	144688	0.0138	644.1	$689	0.45%	66.3%	100%	0.56	0
GroceMoT4	Grocery	Motors	Turnover	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4499	15	290922	0.0121	1135.2	$511	0.39%	55.8%	100%	1.31	1
GroceMoT5	Grocery	Motors	Turnover	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-250 HP	Motor	$0.3775	15	624328	0.0284	5711.1	$2,156	0.91%	55.8%	100%	1.55	1
GroceMoT6	Grocery	Motors	Turnover	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5635	15	97600	2.511	19,520	$11,000.00	20%	55.0%	80%	1.18	1
GroceMoT7	Grocery	Motors	Turnover	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4367	15	97600	3.941	29767.9	$13,000.00	31%	90.0%	80%	1.53	1
GroceMoT8	Grocery	Motors	Turnover	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4149	15	97600	0.000	31329.5	$13,000.00	32%	90.0%	80%	1.40	1
GroceMoT9	Grocery	Motors	Turnover	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.4915	15	97600	3.941	26449.5	$13,000.00	27%	90.0%	80%	1.39	1
GroceMoT10	Grocery	Motors	Turnover	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4515	15	97600	2.798	28791.9	$13,000.00	30%	80.0%	80%	1.43	1
GroceMoT11	Grocery	Motors	Turnover	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.4915	15	97600	3.941	26449.5	$13,000.00	27%	55.0%	80%	1.39	1
GroceMoT12	Grocery	Motors	Turnover	12	Motors: Rewind 125-200 HP	(E) Motor	Motor	$0.5097	15	292799	0.189	1471.4	$750	0.5%	35.0%	95%	1.31	1
GroceMoT13	Grocery	Motors	Turnover	13	Motors: Rewind 201-500 HP	(E) Motor	Motor	$0.6274	15	634398	0.410	3187.9	$2,000	0.5%	50.0%	95%	1.06	1
GroceMoT14	Grocery	Motors	Turnover	14	Motors: Rewind 20-50 HP	(E) Motor	Motor	$0.4704	15	59847	0.068	531.4	$250	0.9%	10.0%	95%	1.42	1
GroceMoT15	Grocery	Motors	Turnover	15	Motors: Rewind 500+ HP	(E) Motor	Motor	$0.5437	15	1463995	0.946	7356.8	$4,000	0.5%	70.0%	95%	1.23	1
GroceMoT16	Grocery	Motors	Turnover	16	Motors: Rewind 51-100 HP	(E) Motor	Motor	$0.5841	15	147991	0.110	856.0	$500	0.6%	20.0%	95%	1.14	1
GroceMoT17	Grocery	Motors	Turnover	17	Downsizing motor during retrofit	Larger hp standard motor	HP Reduction	$0.34	20	186,404	0.190	1,477	$500.00	0.79%	25%	95%	2.40	1
GroceMoN12	Grocery	Motors	New	12	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.53	1
GroceMoN13	Grocery	Motors	New	13	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.03	0
GroceMoN14	Grocery	Motors	New	14	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.12	1
GroceMoN15	Grocery	Motors	New	15	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.60	0
GroceMoT18	Grocery	Motors	Turnover	18	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.53	1
GroceMoT19	Grocery	Motors	Turnover	19	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.03	0
GroceMoT20	Grocery	Motors	Turnover	20	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.12	1
GroceMoT21	Grocery	Motors	Turnover	21	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.60	0
GroceMoT22	Grocery	Motors	Turnover	22	Air Comp Improvements			$0.11	15	56148	1.148	8,928	$990.00	16%	28%	65%	6.02	1
GroceMoE2	Grocery	Motors	Early	2	Air Compressor Optimization			$0.16	15	56148	2.174	16,901	$2,750.00	30%	38%	65%	4.10	1
GroceMoT23	Grocery	Motors	Turnover	23	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.27	1
HealtMoN1	Healthcare	Motors	New	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$0.8576	15	19759	0.0282	179.2	$154	0.91%	74.4%	100%	0.80	0
HealtMoN2	Healthcare	Motors	New	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$0.9266	15	75700	0.0231	562.2	$521	0.74%	74.4%	100%	0.66	0
HealtMoN3	Healthcare	Motors	New	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$0.8325	15	185830	0.0138	827.3	$689	0.45%	66.3%	100%	0.71	0

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	PJM Summer Summer Peak KW Savings	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Fla
HealtMoN4	Healthcare	Motors	New	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.3503	15	373646	0.0121	1458.0	$511	0.39%	55.8%	100%	1.68	1
HealtMoN5	Healthcare	Motors	New	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-500 HP	Motor	$0.2939	15	801855	0.0284	7335.1	$2,156	0.91%	55.8%	100%	1.99	1
HealtMoN6	Healthcare	Motors	New	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.4388	15	125352	3.225	25,070	$11,000.00	20%	55.0%	100%	1.52	1
HealtMoN7	Healthcare	Motors	New	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.3771	15	125352	3.941	34471.8	$13,000.00	28%	70.0%	100%	1.74	1
HealtMoN8	Healthcare	Motors	New	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.3231	15	125352	0.000	40238.0	$13,000.00	32%	80.0%	100%	1.80	1
HealtMoN9	Healthcare	Motors	New	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.4490	15	125352	3.941	28956.3	$13,000.00	23%	70.0%	100%	1.50	1
HealtMoN10	Healthcare	Motors	New	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.3758	15	125352	2.798	34597.2	$13,000.00	28%	55.0%	100%	1.69	1
HealtMoN11	Healthcare	Motors	New	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.4233	15	125352	3.941	30711.3	$13,000.00	25%	30.0%	100%	1.58	1
HealtMoT1	Healthcare	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$0.8576	15	19759	0.0282	179.2	$154	0.91%	74.4%	100%	0.80	0
HealtMoT2	Healthcare	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$0.9266	15	75700	0.0231	562.2	$521	0.74%	74.4%	100%	0.66	0
HealtMoT3	Healthcare	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$0.8325	15	185830	0.0138	827.3	$689	0.45%	66.3%	100%	0.71	0
HealtMoT4	Healthcare	Motors	Turnover	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.3503	15	373646	0.0121	1458.0	$511	0.39%	55.8%	100%	1.68	1
HealtMoT5	Healthcare	Motors	Turnover	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-250 HP	Motor	$0.2939	15	801855	0.0284	7335.1	$2,156	0.91%	55.8%	100%	1.99	1
HealtMoT6	Healthcare	Motors	Turnover	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.4388	15	125352	3.225	25,070	$11,000.00	20%	55.0%	80%	1.52	1
HealtMoT7	Healthcare	Motors	Turnover	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.3771	15	125352	3.941	34471.8	$13,000.00	28%	90.0%	80%	1.74	1
HealtMoT8	Healthcare	Motors	Turnover	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.3231	15	125352	0.000	40238.0	$13,000.00	32%	90.0%	80%	1.80	1
HealtMoT9	Healthcare	Motors	Turnover	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.4490	15	125352	3.941	28956.3	$13,000.00	23%	90.0%	80%	1.50	1
HealtMoT10	Healthcare	Motors	Turnover	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.3758	15	125352	2.798	34597.2	$13,000.00	28%	80.0%	80%	1.69	1
HealtMoT11	Healthcare	Motors	Turnover	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.4233	15	125352	3.941	30711.3	$13,000.00	25%	55.0%	80%	1.58	1
HealtMoT12	Healthcare	Motors	Turnover	12	Motors: Rewind 125-200 HP	(E) Motor	Motor	$0.3969	15	376056	0.243	1889.7	$750	0.5%	35.0%	95%	1.68	1
HealtMoT13	Healthcare	Motors	Turnover	13	Motors: Rewind 201-500 HP	(E) Motor	Motor	$0.4885	15	814788	0.527	4094.4	$2,000	0.5%	50.0%	95%	1.37	1
HealtMoT14	Healthcare	Motors	Turnover	14	Motors: Rewind 20-50 HP	(E) Motor	Motor	$0.3663	15	76864	0.088	682.5	$250	0.9%	10.0%	95%	1.82	1
HealtMoT15	Healthcare	Motors	Turnover	15	Motors: Rewind 500+ HP	(E) Motor	Motor	$0.4233	15	1880281	1.216	9448.6	$4,000	0.5%	70.0%	95%	1.58	1
HealtMoT16	Healthcare	Motors	Turnover	16	Motors: Rewind 51-100 HP	(E) Motor	Motor	$0.4548	15	190072	0.141	1099.4	$500	0.6%	20.0%	95%	1.47	1
HealtMoT17	Healthcare	Motors	Turnover	17	Downsizing motor during retrofit	Larger hp standard motor	HP Reduction	$0.34	20	186,404	0.190	1,477	$500.00	0.79%	25%	95%	2.40	1
HealtMoN12	Healthcare	Motors	New	12	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.53	1
HealtMoN13	Healthcare	Motors	New	13	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.03	0
HealtMoN14	Healthcare	Motors	New	14	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.12	1
HealtMoN15	Healthcare	Motors	New	15	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.60	0
HealtMoT18	Healthcare	Motors	Turnover	18	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.53	1
HealtMoT19	Healthcare	Motors	Turnover	19	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.03	0
HealtMoT20	Healthcare	Motors	Turnover	20	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.12	1
HealtMoT21	Healthcare	Motors	Turnover	21	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.60	0
HealtMoT22	Healthcare	Motors	Turnover	22	Air Comp Improvements			$0.11	15	56148	1.148	8,928	$990.00	16%	28%	65%	6.02	1
HealtMoE2	Healthcare	Motors	Early	2	Air Compressor Optimization			$0.16	15	56148	2.174	16,901	$2,750.00	30%	38%	65%	4.10	1
HealtMoE1	Healthcare	Motors	Early	1	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.27	1
InstiMoN1	Institutional	Motors	New	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.2757	15	13284	0.0282	120.5	$154	0.91%	74.4%	100%	0.58	0
InstiMoN2	Institutional	Motors	New	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.3783	15	50893	0.0231	377.9	$521	0.74%	74.4%	100%	0.45	0
InstiMoN3	Institutional	Motors	New	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.2384	15	124933	0.0138	556.2	$689	0.45%	66.3%	100%	0.48	0
InstiMoN4	Institutional	Motors	New	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.5211	15	251201	0.0121	980.2	$511	0.39%	55.8%	100%	1.13	1
InstiMoN5	Institutional	Motors	New	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-500 HP	Motor	$0.4372	15	539086	0.0284	4931.3	$2,156	0.91%	55.8%	100%	1.34	1
InstiMoN6	Institutional	Motors	New	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.6526	15	84274	2.168	16,855	$11,000.00	20%	55.0%	100%	1.02	1
InstiMoN7	Institutional	Motors	New	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.5074	15	84274	6.136	25619.3	$13,000.00	30%	70.0%	100%	1.46	1
InstiMoN8	Institutional	Motors	New	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4806	15	84274	0.000	27051.9	$13,000.00	32%	80.0%	100%	1.21	1
InstiMoN9	Institutional	Motors	New	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5713	15	84274	6.136	22754.0	$13,000.00	27%	70.0%	100%	1.33	1
InstiMoN10	Institutional	Motors	New	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.5265	15	84274	4.452	24692.3	$13,000.00	29%	55.0%	100%	1.33	1
InstiMoN11	Institutional	Motors	New	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5713	15	84274	6.136	22754.0	$13,000.00	27%	30.0%	100%	1.33	1
InstiMoT1	Institutional	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.2757	15	13284	0.0282	120.5	$154	0.91%	74.4%	100%	0.58	0
InstiMoT10	Institutional	Motors	Turnover	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.5265	15	84274	4.452	24692.3	$13,000.00	29%	80.0%	80%	1.33	1
InstiMoT11	Institutional	Motors	Turnover	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5713	15	84274	6.136	22754.0	$13,000.00	27%	55.0%	80%	1.33	1
InstiMoT12	Institutional	Motors	Turnover	12	Motors: Rewind 125-200 HP	(E) Motor	Motor	$0.5903	15	252822	0.163	1270.5	$750	0.5%	35.0%	95%	1.13	1
InstiMoT13	Institutional	Motors	Turnover	13	Motors: Rewind 201-500 HP	(E) Motor	Motor	$0.7266	15	547781	0.354	2752.7	$2,000	0.5%	50.0%	95%	0.92	0
InstiMoT14	Institutional	Motors	Turnover	14	Motors: Rewind 20-50 HP	(E) Motor	Motor	$0.5448	15	51676	0.059	458.9	$250	0.9%	10.0%	95%	1.22	1
InstiMoT15	Institutional	Motors	Turnover	15	Motors: Rewind 500+ HP	(E) Motor	Motor	$0.6297	15	1264109	0.817	6352.3	$4,000	0.5%	70.0%	95%	1.06	1
InstiMoT16	Institutional	Motors	Turnover	16	Motors: Rewind 51-100 HP	(E) Motor	Motor	$0.6765	15	127785	0.095	739.1	$500	0.6%	20.0%	95%	0.99	0
InstiMoT17	Institutional	Motors	Turnover	17	Downsizing motor during retrofit	Larger hp standard motor	HP Reduction	$0.34	20	186,404	0.190	1,477	$500.00	0.79%	25%	95%	2.40	1
InstiMoT2	Institutional	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.3783	15	50893	0.0231	377.9	$521	0.74%	74.4%	100%	0.45	0
HealtMoT23	Healthcare	Motors	Turnover	23	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.27	1
InstiMoT3	Institutional	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.2384	15	124933	0.0138	556.2	$689	0.45%	66.3%	100%	0.48	0
InstiMoT4	Institutional	Motors	Turnover	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.5211	15	251201	0.0121	980.2	$511	0.39%	55.8%	100%	1.13	1
InstiMoT5	Institutional	Motors	Turnover	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-250 HP	Motor	$0.4372	15	539086	0.0284	4931.3	$2,156	0.91%	55.8%	100%	1.34	1
InstiMoT6	Institutional	Motors	Turnover	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.6526	15	84274	2.168	16,855	$11,000.00	20%	55.0%	80%	1.02	1
InstiMoT7	Institutional	Motors	Turnover	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.5074	15	84274	6.136	25619.3	$13,000.00	30%	90.0%	80%	1.46	1
InstiMoT8	Institutional	Motors	Turnover	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4806	15	84274	0.000	27051.9	$13,000.00	32%	90.0%	80%	1.21	1
InstiMoN12	Institutional	Motors	New	12	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.53	1
InstiMoN13	Institutional	Motors	New	13	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.03	0
InstiMoN14	Institutional	Motors	New	14	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.12	1
InstiMoN15	Institutional	Motors	New	15	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.60	0
InstiMoT18	Institutional	Motors	Turnover	18	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.53	1
InstiMoT19	Institutional	Motors	Turnover	19	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.03	0
InstiMoT20	Institutional	Motors	Turnover	20	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.12	1
InstiMoT21	Institutional	Motors	Turnover	21	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.60	0
InstiMoT22	Institutional	Motors	Turnover	22	Air Comp Improvements			$0.11	15	56148	1.148	8,928	$990.00	16%	28%	65%	6.02	1
InstiMoE2	Institutional	Motors	Early	2	Air Compressor Optimization			$0.16	15	56148	2.174	16,901	$2,750.00	30%	38%	65%	4.10	1
InstiMoE1	Institutional	Motors	Early	1	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.27	1
LodgiMoN1	Lodging	Motors	New	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1114	15	15247	0.0282	138.3	$154	0.91%	74.4%	100%	0.65	0
LodgiMoN2	Lodging	Motors	New	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.2008	15	58416	0.0231	433.8	$521	0.74%	74.4%	100%	0.51	0
LodgiMoN3	Lodging	Motors	New	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0789	15	143401	0.0138	638.4	$689	0.45%	66.3%	100%	0.55	0
LodgiMoN4	Lodging	Motors	New	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4540	15	288334	0.0121	1125.1	$511	0.39%	55.8%	100%	1.30	1
LodgiMoN5	Lodging	Motors	New	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-500 HP	Motor	$0.3809	15	618773	0.0284	5660.3	$2,156	0.91%	55.8%	100%	1.54	1
LodgiMoN6	Lodging	Motors	New	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5686	15	96731	2.489	19,346	$11,000.00	20%	55.0%	100%	1.17	1
LodgiMoN7	Lodging	Motors	New	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4477	15	96731	4.693	29035.5	$13,000.00	30%	70.0%	100%	1.54	1
LodgiMoN8	Lodging	Motors	New	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4187	15	96731	0.000	31050.8	$13,000.00	32%	80.0%	100%	1.39	1
LodgiMoN9	Lodging	Motors	New	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5087	15	96731	4.693	25553.2	$13,000.00	26%	70.0%	100%	1.38	1
LodgiMoN10	Lodging	Motors	New	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4616	15	96731	3.364	28164.9	$13,000.00	29%	55.0%	100%	1.43	1
LodgiMoN11	Lodging	Motors	New	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5043	15	96731	4.693	25778.9	$13,000.00	27%	30.0%	100%	1.39	1
LodgiMoT1	Lodging	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1114	15	15247	0.0282	138.3	$154	0.91%	74.4%	100%	0.65	0
LodgiMoT2	Lodging	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.2008	15	58416	0.0231	433.8	$521	0.74%	74.4%	100%	0.51	0
LodgiMoT3	Lodging	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0789	15	143401	0.0138	638.4	$689	0.45%	66.3%	100%	0.55	0
LodgiMoT4	Lodging	Motors	Turnover	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4540	15	288334	0.0121	1125.1	$511	0.39%	55.8%	100%	1.30	1
LodgiMoT5	Lodging	Motors	Turnover	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-250 HP	Motor	$0.3809	15	618773	0.0284	5660.3	$2,156	0.91%	55.8%	100%	1.54	1
LodgiMoT6	Lodging	Motors	Turnover	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5686	15	96731	2.489	19,346	$11,000.00	20%	55.0%	80%	1.17	1
LodgiMoT7	Lodging	Motors	Turnover	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4477	15	96731	4.693	29035.5	$13,000.00	30%	90.0%	80%	1.54	1
LodgiMoT8	Lodging	Motors	Turnover	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4187	15	96731	0.000	31050.8	$13,000.00	32%	90.0%	80%	1.39	1
LodgiMoT9	Lodging	Motors	Turnover	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5087	15	96731	4.693	25553.2	$13,000.00	26%	90.0%	80%	1.38	1
LodgiMoT10	Lodging	Motors	Turnover	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4616	15	96731	3.364	28164.9	$13,000.00	29%	80.0%	80%	1.43	1
LodgiMoT11	Lodging	Motors	Turnover	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5043	15	96731	4.693	25778.9	$13,000.00	27%	55.0%	80%	1.39	1
LodgiMoT12	Lodging	Motors	Turnover	12	Motors: Rewind 125-200 HP	(E) Motor	Motor	$0.5143	15	290194	0.188	1458.3	$750	0.5%	35.0%	95%	1.30	1
LodgiMoT13	Lodging	Motors	Turnover	13	Motors: Rewind 201-500 HP	(E) Motor	Motor	$0.6330	15	628754	0.406	3159.6	$2,000	0.5%	50.0%	95%	1.05	1
LodgiMoT14	Lodging	Motors	Turnover	14	Motors: Rewind 20-50 HP	(E) Motor	Motor	$0.4747	15	59314	0.068	526.7	$250	0.9%	10.0%	95%	1.41	1
LodgiMoT15	Lodging	Motors	Turnover	15	Motors: Rewind 500+ HP	(E) Motor	Motor	$0.5486	15	1450970	0.938	7291.3	$4,000	0.5%	70.0%	95%	1.22	1
LodgiMoT16	Lodging	Motors	Turnover	16	Motors: Rewind 51-100 HP	(E) Motor	Motor	$0.5894	15	146674	0.109	848.4	$500	0.6%	20.0%	95%	1.13	1

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	PJM Summer Summer Peak KW Savings	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Fla
LodgiMoT17	Lodging	Motors	Turnover	17	Downsizing motor during retrofit	Larger hp standard motor	HP Reduction	$0.34	20	186,404	0.190	1,477	$500.00	0.79%	25%	95%	2.40	1
LodgiMoN12	Lodging	Motors	New	12	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.53	1
LodgiMoN13	Lodging	Motors	New	13	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.03	0
LodgiMoN14	Lodging	Motors	New	14	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.12	1
LodgiMoN15	Lodging	Motors	New	15	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.60	0
LodgiMoT18	Lodging	Motors	Turnover	18	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.53	1
LodgiMoT19	Lodging	Motors	Turnover	19	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.03	0
LodgiMoT20	Lodging	Motors	Turnover	20	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.12	1
LodgiMoT21	Lodging	Motors	Turnover	21	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.60	0
LodgiMoT22	Lodging	Motors	Turnover	22	Air Comp Improvements			$0.11	15	56148	1.148	8,928	$990.00	16%	28%	65%	6.02	1
LodgiMoE2	Lodging	Motors	Early	2	Air Compressor Optimization			$0.16	15	56148	2.174	16,901	$2,750.00	30%	38%	65%	4.10	1
InstiMoT23	Institutional	Motors	Turnover	23	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.27	1
miscMoN1	misc	Motors	New	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1114	15	15247	0.0282	138.3	$154	0.91%	74.4%	100%	0.65	0
miscMoN2	misc	Motors	New	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.2008	15	58416	0.0231	433.8	$521	0.74%	74.4%	100%	0.51	0
miscMoN3	misc	Motors	New	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0789	15	143401	0.0138	638.4	$689	0.45%	66.3%	100%	0.55	0
miscMoN4	misc	Motors	New	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4540	15	288334	0.0121	1125.1	$511	0.39%	55.8%	100%	1.30	1
miscMoN5	misc	Motors	New	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-500 HP	Motor	$0.3809	15	618773	0.0284	5660.3	$2,156	0.91%	55.8%	100%	1.54	1
miscMoN6	misc	Motors	New	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5686	15	96731	2.489	19,346	$11,000.00	20%	55.0%	100%	1.17	1
miscMoN7	misc	Motors	New	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4477	15	96731	4.693	29035.5	$13,000.00	30%	70.0%	100%	1.54	1
miscMoN8	misc	Motors	New	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4187	15	96731	0.000	31050.8	$13,000.00	32%	80.0%	100%	1.39	1
miscMoN9	misc	Motors	New	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5087	15	96731	4.693	25553.2	$13,000.00	26%	70.0%	100%	1.38	1
miscMoN10	misc	Motors	New	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4616	15	96731	3.364	28164.9	$13,000.00	29%	55.0%	100%	1.43	1
miscMoN11	misc	Motors	New	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5043	15	96731	4.693	25778.9	$13,000.00	27%	30.0%	100%	1.39	1
miscMoT1	misc	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1114	15	15247	0.0282	138.3	$154	0.91%	74.4%	100%	0.65	0
miscMoT2	misc	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.2008	15	58416	0.0231	433.8	$521	0.74%	74.4%	100%	0.51	0
miscMoT3	misc	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0789	15	143401	0.0138	638.4	$689	0.45%	66.3%	100%	0.55	0
miscMoT4	misc	Motors	Turnover	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4540	15	288334	0.0121	1125.1	$511	0.39%	55.8%	100%	1.30	1
miscMoT5	misc	Motors	Turnover	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-250 HP	Motor	$0.3809	15	618773	0.0284	5660.3	$2,156	0.91%	55.8%	100%	1.54	1
miscMoT6	misc	Motors	Turnover	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5686	15	96731	2.489	19,346	$11,000.00	20%	55.0%	80%	1.17	1
miscMoT7	misc	Motors	Turnover	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4477	15	96731	4.693	29035.5	$13,000.00	30%	90.0%	80%	1.54	1
miscMoT8	misc	Motors	Turnover	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4187	15	96731	0.000	31050.8	$13,000.00	32%	90.0%	80%	1.39	1
miscMoT9	misc	Motors	Turnover	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5087	15	96731	4.693	25553.2	$13,000.00	26%	90.0%	80%	1.38	1
miscMoT10	misc	Motors	Turnover	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4616	15	96731	3.364	28164.9	$13,000.00	29%	80.0%	80%	1.43	1
miscMoT11	misc	Motors	Turnover	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5043	15	96731	4.693	25778.9	$13,000.00	27%	55.0%	80%	1.39	1
miscMoT12	misc	Motors	Turnover	12	Motors: Rewind 125-200 HP	(E) Motor	Motor	$0.5143	15	290194	0.188	1458.3	$750	0.5%	35.0%	95%	1.30	1
miscMoT13	misc	Motors	Turnover	13	Motors: Rewind 201-500 HP	(E) Motor	Motor	$0.6330	15	628754	0.406	3159.6	$2,000	0.5%	50.0%	95%	1.05	1
miscMoT14	misc	Motors	Turnover	14	Motors: Rewind 20-50 HP	(E) Motor	Motor	$0.4747	15	59314	0.068	526.7	$250	0.9%	10.0%	95%	1.41	1
miscMoT15	misc	Motors	Turnover	15	Motors: Rewind 500+ HP	(E) Motor	Motor	$0.5486	15	1450970	0.938	7291.3	$4,000	0.5%	70.0%	95%	1.22	1
miscMoT16	misc	Motors	Turnover	16	Motors: Rewind 51-100 HP	(E) Motor	Motor	$0.5894	15	146674	0.109	848.4	$500	0.6%	20.0%	95%	1.13	1
miscMoT17	misc	Motors	Turnover	17	Downsizing motor during retrofit	Larger hp standard motor	HP Reduction	$0.34	20	186,404	0.190	1,477	$500.00	0.79%	25%	95%	2.40	1
miscMoN12	misc	Motors	New	12	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.53	1
miscMoN13	misc	Motors	New	13	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.03	0
miscMoN14	misc	Motors	New	14	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.12	1
miscMoN15	misc	Motors	New	15	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.60	0
miscMoT18	misc	Motors	Turnover	18	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.53	1
miscMoT19	misc	Motors	Turnover	19	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.03	0
miscMoT20	misc	Motors	Turnover	20	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.12	1
miscMoT21	misc	Motors	Turnover	21	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.60	0
miscMoT22	misc	Motors	Turnover	22	Air Comp Improvements			$0.11	15	56148	1.148	8,928	$990.00	16%	28%	65%	6.02	1
miscMoE2	misc	Motors	Early	2	Air Compressor Optimization			$0.16	15	56148	2.174	16,901	$2,750.00	30%	38%	65%	4.10	1
LodgiMoE1	Lodging	Motors	Early	1	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.27	1
RetaiMoN1	Retail	Motors	New	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1015	15	15384	0.0282	139.5	$154	0.91%	74.4%	100%	0.65	0
RetaiMoN2	Retail	Motors	New	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.1901	15	58940	0.0231	437.7	$521	0.74%	74.4%	100%	0.52	0
RetaiMoN3	Retail	Motors	New	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0693	15	144688	0.0138	644.1	$689	0.45%	66.3%	100%	0.56	0
RetaiMoN4	Retail	Motors	New	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4499	15	290922	0.0121	1135.2	$511	0.39%	55.8%	100%	1.31	1
RetaiMoN5	Retail	Motors	New	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-500 HP	Motor	$0.3775	15	624328	0.0284	5711.1	$2,156	0.91%	55.8%	100%	1.55	1
RetaiMoN6	Retail	Motors	New	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5635	15	97600	2.511	19,520	$11,000.00	20%	55.0%	100%	1.18	1
RetaiMoN7	Retail	Motors	New	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4367	15	97600	3.941	29767.9	$13,000.00	31%	70.0%	100%	1.53	1
RetaiMoN8	Retail	Motors	New	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4149	15	97600	0.000	31329.5	$13,000.00	32%	80.0%	100%	1.40	1
RetaiMoN9	Retail	Motors	New	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.4915	15	97600	3.941	26449.5	$13,000.00	27%	70.0%	100%	1.39	1
RetaiMoN10	Retail	Motors	New	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4515	15	97600	2.798	28791.9	$13,000.00	30%	55.0%	100%	1.43	1
RetaiMoN11	Retail	Motors	New	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.4915	15	97600	3.941	26449.5	$13,000.00	27%	30.0%	100%	1.39	1
RetaiMoT1	Retail	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1015	15	15384	0.0282	139.5	$154	0.91%	74.4%	100%	0.65	0
RetaiMoT2	Retail	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.1901	15	58940	0.0231	437.7	$521	0.74%	74.4%	100%	0.52	0
RetaiMoT3	Retail	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0693	15	144688	0.0138	644.1	$689	0.45%	66.3%	100%	0.56	0
RetaiMoT4	Retail	Motors	Turnover	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4499	15	290922	0.0121	1135.2	$511	0.39%	55.8%	100%	1.31	1
RetaiMoT5	Retail	Motors	Turnover	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-250 HP	Motor	$0.3775	15	624328	0.0284	5711.1	$2,156	0.91%	55.8%	100%	1.55	1
RetaiMoT6	Retail	Motors	Turnover	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5635	15	97600	2.511	19,520	$11,000.00	20%	55.0%	80%	1.18	1
RetaiMoT7	Retail	Motors	Turnover	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4367	15	97600	3.941	29767.9	$13,000.00	31%	90.0%	80%	1.53	1
RetaiMoT8	Retail	Motors	Turnover	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4149	15	97600	0.000	31329.5	$13,000.00	32%	90.0%	80%	1.40	1
RetaiMoT9	Retail	Motors	Turnover	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.4915	15	97600	3.941	26449.5	$13,000.00	27%	90.0%	80%	1.39	1
RetaiMoT10	Retail	Motors	Turnover	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4515	15	97600	2.798	28791.9	$13,000.00	30%	80.0%	80%	1.43	1
RetaiMoT11	Retail	Motors	Turnover	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.4915	15	97600	3.941	26449.5	$13,000.00	27%	55.0%	80%	1.39	1
RetaiMoT12	Retail	Motors	Turnover	12	Motors: Rewind 125-200 HP	(E) Motor	Motor	$0.5097	15	292799	0.189	1471.4	$750	0.5%	35.0%	95%	1.31	1
RetaiMoT13	Retail	Motors	Turnover	13	Motors: Rewind 201-500 HP	(E) Motor	Motor	$0.6274	15	634398	0.410	3187.9	$2,000	0.5%	50.0%	95%	1.06	1
RetaiMoT14	Retail	Motors	Turnover	14	Motors: Rewind 20-50 HP	(E) Motor	Motor	$0.4704	15	59847	0.068	531.4	$250	0.9%	10.0%	95%	1.42	1
RetaiMoT15	Retail	Motors	Turnover	15	Motors: Rewind 500+ HP	(E) Motor	Motor	$0.5437	15	1463995	0.946	7356.8	$4,000	0.5%	70.0%	95%	1.23	1
RetaiMoT16	Retail	Motors	Turnover	16	Motors: Rewind 51-100 HP	(E) Motor	Motor	$0.5841	15	147991	0.110	856.0	$500	0.6%	20.0%	95%	1.14	1
RetaiMoT17	Retail	Motors	Turnover	17	Downsizing motor during retrofit	Larger hp standard motor	HP Reduction	$0.34	20	186,404	0.190	1,477	$500.00	0.79%	25%	95%	2.40	1
RetaiMoN12	Retail	Motors	New	12	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.53	1
RetaiMoN13	Retail	Motors	New	13	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.03	0
RetaiMoN14	Retail	Motors	New	14	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.12	1
RetaiMoN15	Retail	Motors	New	15	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.60	0
RetaiMoT18	Retail	Motors	Turnover	18	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.53	1
RetaiMoT19	Retail	Motors	Turnover	19	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.03	0
RetaiMoT20	Retail	Motors	Turnover	20	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.12	1
RetaiMoT21	Retail	Motors	Turnover	21	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.60	0
RetaiMoT22	Retail	Motors	Turnover	22	Air Comp Improvements			$0.11	15	56148	1.148	8,928	$990.00	16%	28%	65%	6.02	1
RetaiMoE2	Retail	Motors	Early	2	Air Compressor Optimization			$0.16	15	56148	2.174	16,901	$2,750.00	30%	38%	65%	4.10	1
LodgiMoT23	Lodging	Motors	Turnover	23	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.27	1
RestaMoN1	Restaurant	Motors	New	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1487	15	14753	0.0282	133.8	$154	0.91%	74.4%	100%	0.63	0
RestaMoN2	Restaurant	Motors	New	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.2410	15	56520	0.0231	419.7	$521	0.74%	74.4%	100%	0.50	0
RestaMoN3	Restaurant	Motors	New	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.1151	15	138748	0.0138	617.7	$689	0.45%	66.3%	100%	0.54	0
RestaMoN4	Restaurant	Motors	New	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4692	15	278979	0.0121	1088.6	$511	0.39%	55.8%	100%	1.26	1
RestaMoN5	Restaurant	Motors	New	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-500 HP	Motor	$0.3937	15	598698	0.0284	5476.7	$2,156	0.91%	55.8%	100%	1.49	1
RestaMoN6	Restaurant	Motors	New	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5877	15	93593	2.408	18,719	$11,000.00	20%	55.0%	100%	1.14	1
RestaMoN7	Restaurant	Motors	New	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4524	15	93593	3.941	28733.0	$13,000.00	31%	70.0%	100%	1.49	1
RestaMoN8	Restaurant	Motors	New	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4327	15	93593	0.000	30043.3	$13,000.00	32%	80.0%	100%	1.35	1
RestaMoN9	Restaurant	Motors	New	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5107	15	93593	3.941	25457.3	$13,000.00	27%	70.0%	100%	1.34	1
RestaMoN10	Restaurant	Motors	New	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4708	15	93593	2.798	27609.9	$13,000.00	30%	55.0%	100%	1.38	1
RestaMoN11	Restaurant	Motors	New	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5107	15	93593	3.941	25457.3	$13,000.00	27%	30.0%	100%	1.34	1
RestaMoT1	Restaurant	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1487	15	14753	0.0282	133.8	$154	0.91%	74.4%	100%	0.63	0

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	PJM Summer Summer Peak KW Savings	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Fla
RestaMoT2	Restaurant	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.2410	15	56520	0.0231	419.7	$521	0.74%	74.4%	100%	0.50	0
RestaMoT3	Restaurant	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.1151	15	138748	0.0138	617.7	$689	0.45%	66.3%	100%	0.54	0
RestaMoT4	Restaurant	Motors	Turnover	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4692	15	278979	0.0121	1088.6	$511	0.39%	55.8%	100%	1.26	1
RestaMoT5	Restaurant	Motors	Turnover	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-250 HP	Motor	$0.3937	15	598698	0.0284	5476.7	$2,156	0.91%	55.8%	100%	1.49	1
RestaMoT6	Restaurant	Motors	Turnover	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5877	15	93593	2.408	18,719	$11,000.00	20%	55.0%	80%	1.14	1
RestaMoT7	Restaurant	Motors	Turnover	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4524	15	93593	3.941	28733.0	$13,000.00	31%	90.0%	80%	1.49	1
RestaMoT8	Restaurant	Motors	Turnover	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4327	15	93593	0.000	30043.3	$13,000.00	32%	90.0%	80%	1.35	1
RestaMoT9	Restaurant	Motors	Turnover	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5107	15	93593	3.941	25457.3	$13,000.00	27%	90.0%	80%	1.34	1
RestaMoT10	Restaurant	Motors	Turnover	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4708	15	93593	2.798	27609.9	$13,000.00	30%	80.0%	80%	1.38	1
RestaMoT11	Restaurant	Motors	Turnover	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5107	15	93593	3.941	25457.3	$13,000.00	27%	55.0%	80%	1.34	1
RestaMoT12	Restaurant	Motors	Turnover	12	Motors: Rewind 125-200 HP	(E) Motor	Motor	$0.5316	15	280779	0.182	1410.9	$750	0.5%	35.0%	95%	1.26	1
RestaMoT13	Restaurant	Motors	Turnover	13	Motors: Rewind 201-500 HP	(E) Motor	Motor	$0.6542	15	608354	0.393	3057.1	$2,000	0.5%	50.0%	95%	1.02	1
RestaMoT14	Restaurant	Motors	Turnover	14	Motors: Rewind 20-50 HP	(E) Motor	Motor	$0.4906	15	57390	0.066	509.6	$250	0.9%	10.0%	95%	1.36	1
RestaMoT15	Restaurant	Motors	Turnover	15	Motors: Rewind 500+ HP	(E) Motor	Motor	$0.5670	15	1403894	0.908	7054.7	$4,000	0.5%	70.0%	95%	1.18	1
RestaMoT16	Restaurant	Motors	Turnover	16	Motors: Rewind 51-100 HP	(E) Motor	Motor	$0.6091	15	141915	0.106	820.8	$500	0.6%	20.0%	95%	1.10	1
RestaMoT17	Restaurant	Motors	Turnover	17	Downsizing motor during retrofit	Larger hp standard motor	HP Reduction	$0.34	20	186,404	0.190	1,477	$500.00	0.79%	25%	95%	2.40	1
RestaMoN12	Restaurant	Motors	New	12	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.53	1
RestaMoN13	Restaurant	Motors	New	13	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.03	0
RestaMoN14	Restaurant	Motors	New	14	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.12	1
RestaMoN15	Restaurant	Motors	New	15	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.60	0
RestaMoT18	Restaurant	Motors	Turnover	18	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.53	1
RestaMoT19	Restaurant	Motors	Turnover	19	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.03	0
RestaMoT20	Restaurant	Motors	Turnover	20	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.12	1
RestaMoT21	Restaurant	Motors	Turnover	21	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.60	0
RestaMoT22	Restaurant	Motors	Turnover	22	Air Comp Improvements			$0.11	15	56148	1.148	8,928	$990.00	16%	28%	65%	6.02	1
RestaMoE2	Restaurant	Motors	Early	2	Air Compressor Optimization			$0.16	15	56148	2.174	16,901	$2,750.00	30%	38%	65%	4.10	1
miscMoE1	misc	Motors	Early	1	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.27	1
WarehMoN1	Warehouse	Motors	New	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1114	15	15247	0.0282	138.3	$154	0.91%	74.4%	100%	0.65	0
WarehMoN2	Warehouse	Motors	New	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.2008	15	58416	0.0231	433.8	$521	0.74%	74.4%	100%	0.51	0
WarehMoN3	Warehouse	Motors	New	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0789	15	143401	0.0138	638.4	$689	0.45%	66.3%	100%	0.55	0
WarehMoN4	Warehouse	Motors	New	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4540	15	288334	0.0121	1125.1	$511	0.39%	55.8%	100%	1.30	1
WarehMoN5	Warehouse	Motors	New	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-500 HP	Motor	$0.3809	15	618773	0.0284	5660.3	$2,156	0.91%	55.8%	100%	1.54	1
WarehMoN6	Warehouse	Motors	New	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5686	15	96731	2.489	19,346	$11,000.00	20%	55.0%	100%	1.17	1
WarehMoN7	Warehouse	Motors	New	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4477	15	96731	4.693	29035.5	$13,000.00	30%	70.0%	100%	1.54	1
WarehMoN8	Warehouse	Motors	New	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4187	15	96731	0.000	31050.8	$13,000.00	32%	80.0%	100%	1.39	1
WarehMoN9	Warehouse	Motors	New	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5087	15	96731	4.693	25553.2	$13,000.00	26%	70.0%	100%	1.38	1
WarehMoN10	Warehouse	Motors	New	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4616	15	96731	3.364	28164.9	$13,000.00	29%	55.0%	100%	1.43	1
WarehMoN11	Warehouse	Motors	New	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5043	15	96731	4.693	25778.9	$13,000.00	27%	30.0%	100%	1.39	1
WarehMoT1	Warehouse	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1114	15	15247	0.0282	138.3	$154	0.91%	74.4%	100%	0.65	0
WarehMoT2	Warehouse	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.2008	15	58416	0.0231	433.8	$521	0.74%	74.4%	100%	0.51	0
WarehMoT3	Warehouse	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0789	15	143401	0.0138	638.4	$689	0.45%	66.3%	100%	0.55	0
WarehMoT4	Warehouse	Motors	Turnover	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4540	15	288334	0.0121	1125.1	$511	0.39%	55.8%	100%	1.30	1
WarehMoT5	Warehouse	Motors	Turnover	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-250 HP	Motor	$0.3809	15	618773	0.0284	5660.3	$2,156	0.91%	55.8%	100%	1.54	1
WarehMoT6	Warehouse	Motors	Turnover	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5686	15	96731	2.489	19,346	$11,000.00	20%	55.0%	80%	1.17	1
WarehMoT7	Warehouse	Motors	Turnover	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4477	15	96731	4.693	29035.5	$13,000.00	30%	90.0%	80%	1.54	1
WarehMoT8	Warehouse	Motors	Turnover	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4187	15	96731	0.000	31050.8	$13,000.00	32%	90.0%	80%	1.39	1
WarehMoT9	Warehouse	Motors	Turnover	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5087	15	96731	4.693	25553.2	$13,000.00	26%	90.0%	80%	1.38	1
WarehMoT10	Warehouse	Motors	Turnover	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4616	15	96731	3.364	28164.9	$13,000.00	29%	80.0%	80%	1.43	1
WarehMoT11	Warehouse	Motors	Turnover	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5043	15	96731	4.693	25778.9	$13,000.00	27%	55.0%	80%	1.39	1
WarehMoT12	Warehouse	Motors	Turnover	12	Motors: Rewind 125-200 HP	(E) Motor	Motor	$0.5143	15	290194	0.188	1458.3	$750	0.5%	35.0%	95%	1.30	1
WarehMoT13	Warehouse	Motors	Turnover	13	Motors: Rewind 201-500 HP	(E) Motor	Motor	$0.6330	15	628754	0.406	3159.6	$2,000	0.5%	50.0%	95%	1.05	1
WarehMoT14	Warehouse	Motors	Turnover	14	Motors: Rewind 20-50 HP	(E) Motor	Motor	$0.4747	15	59314	0.068	526.7	$250	0.9%	10.0%	95%	1.41	1
WarehMoT15	Warehouse	Motors	Turnover	15	Motors: Rewind 500+ HP	(E) Motor	Motor	$0.5486	15	1450970	0.938	7291.3	$4,000	0.5%	70.0%	95%	1.22	1
WarehMoT16	Warehouse	Motors	Turnover	16	Motors: Rewind 51-100 HP	(E) Motor	Motor	$0.5894	15	146674	0.109	848.4	$500	0.6%	20.0%	95%	1.13	1
WarehMoT17	Warehouse	Motors	Turnover	17	Downsizing motor during retrofit	Larger hp standard motor	HP Reduction	$0.34	20	186,404	0.190	1,477	$500.00	0.79%	25%	95%	2.40	1
WarehMoN12	Warehouse	Motors	New	12	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.53	1
WarehMoN13	Warehouse	Motors	New	13	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.03	0
WarehMoN14	Warehouse	Motors	New	14	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.12	1
WarehMoN15	Warehouse	Motors	New	15	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.60	0
WarehMoT18	Warehouse	Motors	Turnover	18	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.53	1
WarehMoT19	Warehouse	Motors	Turnover	19	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.03	0
WarehMoT20	Warehouse	Motors	Turnover	20	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.12	1
WarehMoT21	Warehouse	Motors	Turnover	21	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.60	0
WarehMoT22	Warehouse	Motors	Turnover	22	Air Comp Improvements			$0.11	15	56148	1.148	8,928	$990.00	16%	28%	65%	6.02	1
WarehMoE2	Warehouse	Motors	Early	2	Air Compressor Optimization			$0.16	15	56148	2.174	16,901	$2,750.00	30%	38%	65%	4.10	1
MiscMoT23	Misc	Motors	Turnover	23	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.27	1
HealtHeN2	Healthcare	Heating	New	2	Ground Source HP Open - Water	Air Source Heat Pump	ton	$4.32	15	2,866	0.23	174	$ 750.0	6%	20%	95%	0.34	0
HealtHen3	Healthcare	Heating	new	3	Ground Source HP Closed	Air Source Heat Pump	ton	$4.32	15	2,866	0.003	174	$750.00	6%	100%	95%	0.13	0
GrocePaE1	Grocery	Packaged DX	Early	1	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$3.13	20	1,077	0.05	64	$200.00	6%	15%	9%	0.42	0
GrocePaE2	Grocery	Packaged DX	Early	2	Adding window shade film	No shade film	ft window are	$7.05	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.04	0
GrocePaE3	Grocery	Packaged DX	Early	3	Adding window shade screen	No shade screen	ft window are	$3.90	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.17	0
GrocePaE4	Grocery	Packaged DX	Early	4	Windows U<0.40, .55 SHGC	Existing window specifications	ft window are	$1.40	30	2	0.000	0	$0.28	13%	50%	95%	0.70	0
GrocePaE5	Grocery	Packaged DX	Early	5	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$3.13	20	1,077	0.05	72	$225.00	7%	95%	95%	0.39	0
GrocePaE7	Grocery	Packaged DX	Early	7	Automated control system	Baseline DX	ton	$0.44	10	1,138	0.007	57	$25.00	5%	100%	65%	1.08	1
GrocePaE8	Grocery	Packaged DX	Early	8	Duct Sealing, down to 15%	Leakage of 29%	ton	$7.92	15	1,077	0.05	12	$95.00	1%	45%	80%	0.41	0
GrocePaE9	Grocery	Packaged DX	Early	9	Hotel Keycard Sensors	No prior controls	oom Controlle	$0.29	10	966	0.041	342	$100.00	35%	95%	80%	1.62	1
GrocePaE10	Grocery	Packaged DX	Early	10	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	ton	$0.55	1	1,171	0.05	64	$35.00	5%	100%	45%	0.19	0
GrocePaE11	Grocery	Packaged DX	Early	11	7 day, two stage setback thermostat	Manual Thermostat	ton	$0.44	10	1,077	0.015	125	$55.00	12%	100%	45%	1.07	1
GrocePaE13	Grocery	Packaged DX	Early	13	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.32	7	1,077	0.05	172	$55.15	16%	95%	75%	1.25	1
GrocePaN1	Grocery	Packaged DX	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	ton	$1.36	20	1,077	0.05	64	$87.00	6%	100%	95%	0.96	0
GrocePaN2	Grocery	Packaged DX	New	2	Adding reflective roof treatment	Std color roof	ton	$4.50	20	1,077	0.05	10	$45.00	1%	100%	95%	1.01	1
GrocePaN3	Grocery	Packaged DX	New	3	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$1.74	20	1,077	0.05	72	$125.00	7%	100%	95%	0.71	0
GrocePaN4	Grocery	Packaged DX	New	4	Green Roof (New construction or roof replacement)	Std Roof	ton	$1.78	20	1,077	0.05	72	$127.43	7%	45%	95%	0.70	0
GrocePaN5	Grocery	Packaged DX	New	5	Duct Insulation, Add R8	No Insulation	ton	$10.42	20	1,077	0.05	12	$125.00	1%	100%	95%	0.37	0
GrocePaN6	Grocery	Packaged DX	New	6	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$1.36	20	928	0.04	66	$90.40	7%	100%	95%	0.90	0
GrocePaN7	Grocery	Packaged DX	New	7	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$1.46	20	928	0.08	124	$180.81	13%	100%	95%	0.84	0
GrocePaN8	Grocery	Packaged DX	New	8	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$1.56	20	928	0.12	174	$271.21	19%	100%	95%	0.79	0
GrocePaN9	Grocery	Packaged DX	New	9	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$0.77	20	1,077	0.05	72	$55.00	7%	100%	95%	1.61	1
GrocePaN10	Grocery	Packaged DX	New	10	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$0.77	20	1,096	0.06	91	$70.00	8%	100%	95%	1.61	1
GrocePaN11	Grocery	Packaged DX	New	11	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.29	20	1,206	0.06	89	$115.13	7%	100%	95%	0.96	0
GrocePaN12	Grocery	Packaged DX	New	12	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$1.61	20	1,243	0.04	61	$98.39	5%	100%	95%	0.76	0
GrocePaN13	Grocery	Packaged DX	New	13	Ground Source HP Open - Water	Air Source Heat Pump	ton	$2.13	15	1,096	0.23	352	$ 750.0	32%	20%	95%	0.48	0
GrocePaN14	Grocery	Packaged DX	New	14	Ground Source HP Closed	Air Source Heat Pump	ton	$3.82	15	1,096	0.023	196	$750.00	18%	100%	95%	0.17	0
GrocePaN15	Grocery	Packaged DX	New	15	Air-side Economizer	No Economizer	ton	$1.05	15	1,077	0.019	162	$170.00	15%	75%	45%	0.62	0
GrocePaN16	Grocery	Packaged DX	New	16	Energy Recovery Units	No Energy Recovery	ton	$0.83	15	1,077	0.026	215	$179.00	20%	100%	95%	0.79	0
GrocePaN17	Grocery	Packaged DX	New	17	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$2.16	15	1,138	0.006	51	$110.89	5%	100%	95%	0.30	0
GrocePaT1	Grocery	Packaged DX	Turnover	1	Duct Insulation, Add R8	No Insulation	ton	$10.42	15	1,077	0.05	12	$125.00	1%	100%	95%	0.31	0
GrocePaT2	Grocery	Packaged DX	Turnover	2	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$1.36	20	928	0.04	66	$90.40	7%	100%	95%	0.90	0
GrocePaT3	Grocery	Packaged DX	Turnover	3	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$1.46	20	928	0.08	124	$180.81	13%	100%	95%	0.84	0
GrocePaT4	Grocery	Packaged DX	Turnover	4	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$1.56	20	928	0.12	174	$271.21	19%	100%	95%	0.79	0
GrocePaT5	Grocery	Packaged DX	Turnover	5	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$0.77	20	1,077	0.05	72	$55.00	7%	100%	95%	1.61	1
GrocePaT6	Grocery	Packaged DX	Turnover	6	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$0.77	20	1,096	0.06	91	$70.00	8%	100%	95%	1.61	1

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	PJM Summer Summer Peak KW Savings	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Fla
GrocePaT7	Grocery	Packaged DX	Turnover	7	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.29	20	1,206	0.06	89	$115.13	7%	100%	95%	0.96	0
GrocePaT8	Grocery	Packaged DX	Turnover	8	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$1.61	20	1,243	0.04	61	$98.39	5%	100%	95%	0.76	0
GrocePaT9	Grocery	Packaged DX	Turnover	9	Ground Source HP Open - Water	Air Source Heat Pump	ton	$2.13	15	1,096	0.23	352	$ 750.0	32%	5%	95%	0.48	0
GrocePaT10	Grocery	Packaged DX	Turnover	10	Ground Source HP Closed	Air Source Heat Pump	ton	$3.82	15	1,096	0.023	196	$750.00	18%	100%	95%	0.17	0
GrocePaT11	Grocery	Packaged DX	Turnover	11	Air-side Economizer	No Economizer	ton	$1.05	15	1,077	0.019	162	$170.00	15%	75%	45%	0.62	0
GrocePaT12	Grocery	Packaged DX	Turnover	12	Energy Recovery Units	No Energy Recovery	ton	$0.83	15	1,077	0.026	215	$179.00	20%	100%	95%	0.79	0
GrocePaT13	Grocery	Packaged DX	Turnover	13	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$2.16	15	1,138	0.006	51	$110.89	5%	100%	95%	0.30	0
GrocePaN18	Grocery	Packaged DX	New	18	Automated control system	Baseline DX	ton	$0.44	10	1,138	0.007	57	$25.00	5%	100%	65%	1.08	1
GrocePaN19	Grocery	Packaged DX	New	19	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$0.82	10	966	0.006	53	$43.00	5%	100%	95%	0.58	0
GrocePaT15	Grocery	Packaged DX	Turnover	15	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$0.82	10	966	0.006	53	$43.00	5%	100%	95%	0.58	0
InstiPaE1	Institutional	Packaged DX	Early	1	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$3.13	20	803	0.05	64	$200.00	8%	15%	9%	0.42	0
InstiPaE2	Institutional	Packaged DX	Early	2	Adding window shade film	No shade film	ft window ar	$7.05	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.04	0
InstiPaE3	Institutional	Packaged DX	Early	3	Adding window shade screen	No shade screen	ft window ar	$3.90	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.17	0
InstiPaE4	Institutional	Packaged DX	Early	4	Windows U<0.40, .55 SHGC	Existing window specifications	ft window ar	$1.40	30	2	0.000	0	$0.28	13%	50%	95%	0.70	0
InstiPaE5	Institutional	Packaged DX	Early	5	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$4.21	20	803	0.05	54	$225.00	7%	95%	95%	0.34	0
InstiPaE7	Institutional	Packaged DX	Early	7	Automated control system	Baseline DX	ton	$0.59	10	848	0.005	42	$25.00	5%	100%	65%	0.80	0
InstiPaE8	Institutional	Packaged DX	Early	8	Duct Sealing, down to 15%	Leakage of 29%	ton	$7.92	15	803	0.05	12	$95.00	1%	45%	80%	0.41	0
InstiPaE9	Institutional	Packaged DX	Early	9	Hotel Keycard Sensors	No prior controls	oom Controlle	$0.29	10	720	0.041	342	$100.00	47%	95%	80%	1.62	1
InstiPaE10	Institutional	Packaged DX	Early	10	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	ton	$0.55	1	873	0.05	64	$35.00	7%	100%	45%	0.19	0
InstiPaE11	Institutional	Packaged DX	Early	11	7 day, two stage setback thermostat	Manual Thermostat	ton	$0.44	10	803	0.015	125	$55.00	16%	100%	45%	1.07	1
InstiPaE13	Institutional	Packaged DX	Early	13	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.43	7	803	0.05	128	$55.15	16%	95%	75%	1.01	1
InstiPaN1	Institutional	Packaged DX	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	ton	$1.36	20	803	0.05	64	$87.00	8%	100%	95%	0.96	0
InstiPaN2	Institutional	Packaged DX	New	2	Adding reflective roof treatment	Std color roof	ton	$4.50	20	803	0.05	10	$45.00	1%	100%	95%	1.01	1
InstiPaN3	Institutional	Packaged DX	New	3	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$2.34	20	803	0.05	54	$125.00	7%	100%	95%	0.61	0
InstiPaN4	Institutional	Packaged DX	New	4	Green Roof (New construction or roof replacement)	Std Roof	ton	$2.38	20	803	0.05	54	$127.43	7%	45%	95%	0.59	0
InstiPaN5	Institutional	Packaged DX	New	5	Duct Insulation, Add R8	No Insulation	ton	$10.42	20	803	0.05	12	$125.00	1%	100%	95%	0.37	0
InstiPaN6	Institutional	Packaged DX	New	6	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$1.83	20	691	0.04	49	$90.40	7%	100%	95%	0.77	0
InstiPaN7	Institutional	Packaged DX	New	7	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$1.96	20	691	0.08	92	$180.81	13%	100%	95%	0.72	0
InstiPaN8	Institutional	Packaged DX	New	8	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$2.09	20	691	0.12	130	$271.21	19%	100%	95%	0.68	0
InstiPaN9	Institutional	Packaged DX	New	9	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.03	20	803	0.05	54	$55.00	7%	100%	95%	1.38	1
InstiPaN10	Institutional	Packaged DX	New	10	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.03	20	817	0.06	68	$70.00	8%	100%	95%	1.38	1
InstiPaN11	Institutional	Packaged DX	New	11	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.73	20	899	0.06	67	$115.13	7%	100%	95%	0.82	0
InstiPaN12	Institutional	Packaged DX	New	12	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$2.17	20	927	0.04	45	$98.39	5%	100%	95%	0.65	0
InstiPaN13	Institutional	Packaged DX	New	13	Ground Source HP Open - Water	Air Source Heat Pump	ton	$2.86	15	817	0.23	262	$ 750.0	32%	20%	95%	0.41	0
InstiPaN14	Institutional	Packaged DX	New	14	Ground Source HP Closed	Air Source Heat Pump	ton	$5.12	15	817	0.017	146	$750.00	18%	100%	95%	0.13	0
InstiPaN15	Institutional	Packaged DX	New	15	Air-side Economizer	No Economizer	ton	$1.41	15	803	0.014	120	$170.00	15%	75%	45%	0.46	0
InstiPaN16	Institutional	Packaged DX	New	16	Energy Recovery Units	No Energy Recovery	ton	$1.12	15	803	0.019	161	$179.00	20%	100%	95%	0.59	0
InstiPaN17	Institutional	Packaged DX	New	17	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$2.90	15	848	0.005	38	$110.89	5%	100%	95%	0.23	0
InstiPaT1	Institutional	Packaged DX	Turnover	1	Duct Insulation, Add R8	No Insulation	ton	$10.42	15	803	0.05	12	$125.00	1%	100%	95%	0.31	0
InstiPaT2	Institutional	Packaged DX	Turnover	2	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$1.83	20	691	0.04	49	$90.40	7%	100%	95%	0.77	0
InstiPaT3	Institutional	Packaged DX	Turnover	3	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$1.96	20	691	0.08	92	$180.81	13%	100%	95%	0.72	0
InstiPaT4	Institutional	Packaged DX	Turnover	4	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$2.09	20	691	0.12	130	$271.21	19%	100%	95%	0.68	0
InstiPaT5	Institutional	Packaged DX	Turnover	5	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.03	20	803	0.05	54	$55.00	7%	100%	95%	1.38	1
InstiPaT6	Institutional	Packaged DX	Turnover	6	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.03	20	817	0.06	68	$70.00	8%	100%	95%	1.38	1
InstiPaT7	Institutional	Packaged DX	Turnover	7	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.73	20	899	0.06	67	$115.13	7%	100%	95%	0.82	0
InstiPaT8	Institutional	Packaged DX	Turnover	8	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$2.17	20	927	0.04	45	$98.39	5%	100%	95%	0.65	0
InstiPaT9	Institutional	Packaged DX	Turnover	9	Ground Source HP Open - Water	Air Source Heat Pump	ton	$2.86	15	817	0.23	262	$ 750.0	32%	5%	95%	0.41	0
InstiPaT10	Institutional	Packaged DX	Turnover	10	Ground Source HP Closed	Air Source Heat Pump	ton	$5.12	15	817	0.017	146	$750.00	18%	100%	95%	0.13	0
InstiPaT11	Institutional	Packaged DX	Turnover	11	Air-side Economizer	No Economizer	ton	$1.41	15	803	0.014	120	$170.00	15%	75%	45%	0.46	0
InstiPaT12	Institutional	Packaged DX	Turnover	12	Energy Recovery Units	No Energy Recovery	ton	$1.12	15	803	0.019	161	$179.00	20%	100%	95%	0.59	0
InstiPaT13	Institutional	Packaged DX	Turnover	13	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$2.90	15	848	0.005	38	$110.89	5%	100%	95%	0.23	0
InstiPaN18	Institutional	Packaged DX	New	18	Automated control system	Baseline DX	ton	$0.59	10	848	0.005	42	$25.00	5%	100%	65%	0.80	0
InstiPaN19	Institutional	Packaged DX	New	19	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.09	10	720	0.005	39	$43.00	5%	100%	95%	0.43	0
InstiPaT15	Institutional	Packaged DX	Turnover	15	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.09	10	720	0.005	39	$43.00	5%	100%	95%	0.43	0
LodgiPaE1	Lodging	Packaged DX	Early	1	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$3.13	20	958	0.05	64	$200.00	7%	15%	9%	0.42	0
LodgiPaE2	Lodging	Packaged DX	Early	2	Adding window shade film	No shade film	ft window ar	$7.05	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.04	0
LodgiPaE3	Lodging	Packaged DX	Early	3	Adding window shade screen	No shade screen	ft window ar	$3.90	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.17	0
LodgiPaE4	Lodging	Packaged DX	Early	4	Windows U<0.40, .55 SHGC	Existing window specifications	ft window ar	$1.40	30	2	0.000	0	$0.28	13%	50%	95%	0.70	0
LodgiPaE5	Lodging	Packaged DX	Early	5	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$3.52	20	958	0.05	64	$225.00	7%	95%	95%	0.37	0
LodgiPaE7	Lodging	Packaged DX	Early	7	Automated control system	Baseline DX	ton	$0.49	10	1,012	0.006	51	$25.00	5%	100%	65%	0.96	0
LodgiPaE8	Lodging	Packaged DX	Early	8	Duct Sealing, down to 15%	Leakage of 29%	ton	$7.92	15	958	0.05	12	$95.00	1%	45%	80%	0.41	0
LodgiPaE9	Lodging	Packaged DX	Early	9	Hotel Keycard Sensors	No prior controls	oom Controlle	$0.29	10	860	0.041	342	$100.00	40%	95%	80%	1.62	1
LodgiPaE10	Lodging	Packaged DX	Early	10	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	ton	$0.55	1	1,042	0.05	64	$35.00	6%	100%	45%	0.19	0
LodgiPaE11	Lodging	Packaged DX	Early	11	7 day, two stage setback thermostat	Manual Thermostat	ton	$0.44	10	958	0.015	125	$55.00	13%	100%	45%	1.07	1
LodgiPaE13	Lodging	Packaged DX	Early	13	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.36	7	958	0.05	153	$55.15	16%	95%	75%	1.15	1
LodgiPaN1	Lodging	Packaged DX	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	ton	$1.36	20	958	0.05	64	$87.00	7%	100%	95%	0.96	0
LodgiPaN2	Lodging	Packaged DX	New	2	Adding reflective roof treatment	Std color roof	ton	$4.50	20	958	0.05	10	$45.00	1%	100%	95%	1.01	1
LodgiPaN3	Lodging	Packaged DX	New	3	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$1.96	20	958	0.05	64	$125.00	7%	100%	95%	0.66	0
LodgiPaN4	Lodging	Packaged DX	New	4	Green Roof (New construction or roof replacement)	Std Roof	ton	$2.00	20	958	0.05	64	$127.43	7%	45%	95%	0.65	0
LodgiPaN5	Lodging	Packaged DX	New	5	Duct Insulation, Add R8	No Insulation	ton	$10.42	20	958	0.05	12	$125.00	1%	100%	95%	0.37	0
LodgiPaN6	Lodging	Packaged DX	New	6	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$1.53	20	825	0.04	59	$90.40	7%	100%	95%	0.85	0
LodgiPaN7	Lodging	Packaged DX	New	7	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$1.64	20	825	0.08	110	$180.81	13%	100%	95%	0.79	0
LodgiPaN8	Lodging	Packaged DX	New	8	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$1.75	20	825	0.12	155	$271.21	19%	100%	95%	0.74	0
LodgiPaN9	Lodging	Packaged DX	New	9	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$0.86	20	958	0.05	64	$55.00	7%	100%	95%	1.51	1
LodgiPaN10	Lodging	Packaged DX	New	10	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$0.86	20	975	0.06	81	$70.00	8%	100%	95%	1.51	1
LodgiPaN11	Lodging	Packaged DX	New	11	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.45	20	1,073	0.06	79	$115.13	7%	100%	95%	0.90	0
LodgiPaN12	Lodging	Packaged DX	New	12	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$1.81	20	1,106	0.04	54	$98.39	5%	100%	95%	0.72	0
LodgiPaN13	Lodging	Packaged DX	New	13	Ground Source HP Open - Water	Air Source Heat Pump	ton	$2.40	15	975	0.23	313	$ 750.0	32%	20%	95%	0.45	0
LodgiPaN14	Lodging	Packaged DX	New	14	Ground Source HP Closed	Air Source Heat Pump	ton	$4.29	15	975	0.021	175	$750.00	18%	100%	95%	0.15	0
LodgiPaN15	Lodging	Packaged DX	New	15	Air-side Economizer	No Economizer	ton	$1.18	15	958	0.017	144	$170.00	15%	75%	45%	0.55	0
LodgiPaN16	Lodging	Packaged DX	New	16	Energy Recovery Units	No Energy Recovery	ton	$0.93	15	958	0.023	192	$179.00	20%	100%	95%	0.70	0
LodgiPaN17	Lodging	Packaged DX	New	17	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$2.43	15	1,012	0.005	46	$110.89	5%	100%	95%	0.27	0
LodgiPaT1	Lodging	Packaged DX	Turnover	1	Duct Insulation, Add R8	No Insulation	ton	$10.42	15	958	0.05	12	$125.00	1%	100%	95%	0.31	0
LodgiPaT2	Lodging	Packaged DX	Turnover	2	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$1.53	20	825	0.04	59	$90.40	7%	100%	95%	0.85	0
LodgiPaT3	Lodging	Packaged DX	Turnover	3	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$1.64	20	825	0.08	110	$180.81	13%	100%	95%	0.79	0
LodgiPaT4	Lodging	Packaged DX	Turnover	4	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$1.75	20	825	0.12	155	$271.21	19%	100%	95%	0.74	0
LodgiPaT5	Lodging	Packaged DX	Turnover	5	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$0.86	20	958	0.05	64	$55.00	7%	100%	95%	1.51	1
LodgiPaT6	Lodging	Packaged DX	Turnover	6	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$0.86	20	975	0.06	81	$70.00	8%	100%	95%	1.51	1
LodgiPaT7	Lodging	Packaged DX	Turnover	7	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.45	20	1,073	0.06	79	$115.13	7%	100%	95%	0.90	0
LodgiPaT8	Lodging	Packaged DX	Turnover	8	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$1.81	20	1,106	0.04	54	$98.39	5%	100%	95%	0.72	0
LodgiPaT9	Lodging	Packaged DX	Turnover	9	Ground Source HP Open - Water	Air Source Heat Pump	ton	$2.40	15	975	0.23	313	$ 750.0	32%	5%	95%	0.45	0
LodgiPaT10	Lodging	Packaged DX	Turnover	10	Ground Source HP Closed	Air Source Heat Pump	ton	$4.29	15	975	0.021	175	$750.00	18%	100%	95%	0.15	0
LodgiPaT11	Lodging	Packaged DX	Turnover	11	Air-side Economizer	No Economizer	ton	$1.18	15	958	0.017	144	$170.00	15%	75%	45%	0.55	0
LodgiPaT12	Lodging	Packaged DX	Turnover	12	Energy Recovery Units	No Energy Recovery	ton	$0.93	15	958	0.023	192	$179.00	20%	100%	95%	0.70	0
LodgiPaT13	Lodging	Packaged DX	Turnover	13	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$2.43	15	1,012	0.005	46	$110.89	5%	100%	95%	0.27	0
LodgiPaN18	Lodging	Packaged DX	New	18	Automated control system	Baseline DX	ton	$0.49	10	1,012	0.006	51	$25.00	5%	100%	65%	0.96	0
LodgiPaN19	Lodging	Packaged DX	New	19	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$0.92	10	860	0.006	47	$43.00	5%	100%	95%	0.52	0
LodgiPaT15	Lodging	Packaged DX	Turnover	15	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$0.92	10	860	0.006	47	$43.00	5%	100%	95%	0.52	0
MiscPaE1	Misc	Packaged DX	Early	1	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$3.13	20	1,105	0.05	64	$200.00	6%	15%	9%	0.42	0
MiscPaE2	Misc	Packaged DX	Early	2	Adding window shade film	No shade film	ft window ar	$7.05	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.04	0
MiscPaE3	Misc	Packaged DX	Early	3	Adding window shade screen	No shade screen	ft window ar	$3.90	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.17	0
MiscPaE4	Misc	Packaged DX	Early	4	Windows U<0.40, .55 SHGC	Existing window specifications	ft window ar	$1.40	30	2	0.000	0	$0.28	13%	50%	95%	0.70	0

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	PJM Summer Summer Peak KW Savings	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Fla
MiscPaE5	Misc	Packaged DX	Early	5	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$3.05	20	1,105	0.05	74	$225.00	7%	95%	95%	0.40	0
MiscPaE7	Misc	Packaged DX	Early	7	Automated control system	Baseline DX	ton	$0.43	10	1,167	0.007	58	$25.00	5%	100%	65%	1.10	1
MiscPaE8	Misc	Packaged DX	Early	8	Duct Sealing, down to 15%	Leakage of 29%	ton	$7.92	15	1,105	0.05	12	$95.00	1%	45%	80%	0.41	0
MiscPaE9	Misc	Packaged DX	Early	9	Hotel Keycard Sensors	No prior controls	oom Controlle	$0.29	10	992	0.041	342	$100.00	34%	95%	80%	1.62	1
MiscPaE10	Misc	Packaged DX	Early	10	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	ton	$0.55	1	1,201	0.05	64	$35.00	5%	100%	45%	0.19	0
MiscPaE11	Misc	Packaged DX	Early	11	7 day, two stage setback thermostat	Manual Thermostat	ton	$0.44	10	1,105	0.015	125	$55.00	11%	100%	45%	1.07	1
MiscPaE13	Misc	Packaged DX	Early	13	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.31	7	1,105	0.05	177	$55.15	16%	95%	75%	1.27	1
MiscPaN1	Misc	Packaged DX	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	ton	$1.36	20	1,105	0.05	64	$87.00	6%	100%	95%	0.96	0
MiscPaN2	Misc	Packaged DX	New	2	Adding reflective roof treatment	Std color roof	ton	$4.50	20	1,105	0.05	10	$45.00	1%	100%	95%	1.01	1
MiscPaN3	Misc	Packaged DX	New	3	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$1.70	20	1,105	0.05	74	$125.00	7%	100%	95%	0.72	0
MiscPaN4	Misc	Packaged DX	New	4	Green Roof (New construction or roof replacement)	Std Roof	ton	$1.73	20	1,105	0.05	74	$127.43	7%	45%	95%	0.71	0
MiscPaN5	Misc	Packaged DX	New	5	Duct Insulation, Add R8	No Insulation	ton	$10.42	20	1,105	0.05	12	$125.00	1%	100%	95%	0.37	0
MiscPaN6	Misc	Packaged DX	New	6	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$1.33	20	952	0.04	68	$90.40	7%	100%	95%	0.92	0
MiscPaN7	Misc	Packaged DX	New	7	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$1.42	20	952	0.08	127	$180.81	13%	100%	95%	0.86	0
MiscPaN8	Misc	Packaged DX	New	8	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$1.52	20	952	0.12	178	$271.21	19%	100%	95%	0.80	0
MiscPaN9	Misc	Packaged DX	New	9	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$0.75	20	1,105	0.05	74	$55.00	7%	100%	95%	1.63	1
MiscPaN10	Misc	Packaged DX	New	10	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$0.75	20	1,125	0.06	94	$70.00	8%	100%	95%	1.63	1
MiscPaN11	Misc	Packaged DX	New	11	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.26	20	1,238	0.06	92	$115.13	7%	100%	95%	0.97	0
MiscPaN12	Misc	Packaged DX	New	12	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$1.57	20	1,276	0.04	63	$98.39	5%	100%	95%	0.78	0
MiscPaN13	Misc	Packaged DX	New	13	Ground Source HP Open - Water	Air Source Heat Pump	ton	$2.08	15	1,125	0.23	361	$ 750.0	32%	20%	95%	0.48	0
MiscPaN14	Misc	Packaged DX	New	14	Ground Source HP Closed	Air Source Heat Pump	ton	$3.72	15	1,125	0.024	201	$750.00	18%	100%	95%	0.18	0
MiscPaN15	Misc	Packaged DX	New	15	Air-side Economizer	No Economizer	ton	$1.03	15	1,105	0.020	166	$170.00	15%	75%	45%	0.64	0
MiscPaN16	Misc	Packaged DX	New	16	Energy Recovery Units	No Energy Recovery	ton	$0.81	15	1,105	0.026	221	$179.00	20%	100%	95%	0.81	0
MiscPaN17	Misc	Packaged DX	New	17	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$2.11	15	1,167	0.006	53	$110.89	5%	100%	95%	0.31	0
MiscPaT1	Misc	Packaged DX	Turnover	1	Duct Insulation, Add R8	No Insulation	ton	$10.42	15	1,105	0.05	12	$125.00	1%	100%	95%	0.31	0
MiscPaT2	Misc	Packaged DX	Turnover	2	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$1.33	20	952	0.04	68	$90.40	7%	100%	95%	0.92	0
MiscPaT3	Misc	Packaged DX	Turnover	3	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$1.42	20	952	0.08	127	$180.81	13%	100%	95%	0.86	0
MiscPaT4	Misc	Packaged DX	Turnover	4	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$1.52	20	952	0.12	178	$271.21	19%	100%	95%	0.80	0
MiscPaT5	Misc	Packaged DX	Turnover	5	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$0.75	20	1,105	0.05	74	$55.00	7%	100%	95%	1.63	1
MiscPaT6	Misc	Packaged DX	Turnover	6	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$0.75	20	1,125	0.06	94	$70.00	8%	100%	95%	1.63	1
MiscPaT7	Misc	Packaged DX	Turnover	7	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.26	20	1,238	0.06	92	$115.13	7%	100%	95%	0.97	0
MiscPaT8	Misc	Packaged DX	Turnover	8	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$1.57	20	1,276	0.04	63	$98.39	5%	100%	95%	0.78	0
MiscPaT9	Misc	Packaged DX	Turnover	9	Ground Source HP Open - Water	Air Source Heat Pump	ton	$2.08	15	1,125	0.23	361	$ 750.0	32%	5%	95%	0.48	0
MiscPaT10	Misc	Packaged DX	Turnover	10	Ground Source HP Closed	Air Source Heat Pump	ton	$3.72	15	1,125	0.024	201	$750.00	18%	100%	95%	0.18	0
MiscPaT11	Misc	Packaged DX	Turnover	11	Air-side Economizer	No Economizer	ton	$1.03	15	1,105	0.020	166	$170.00	15%	75%	45%	0.64	0
MiscPaT12	Misc	Packaged DX	Turnover	12	Energy Recovery Units	No Energy Recovery	ton	$0.81	15	1,105	0.026	221	$179.00	20%	100%	95%	0.81	0
MiscPaT13	Misc	Packaged DX	Turnover	13	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$2.11	15	1,167	0.006	53	$110.89	5%	100%	95%	0.31	0
MiscPaN18	Misc	Packaged DX	New	18	Automated control system	Baseline DX	ton	$0.43	10	1,167	0.007	58	$25.00	5%	100%	65%	1.10	1
MiscPaN19	Misc	Packaged DX	New	19	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$0.80	10	992	0.006	54	$43.00	5%	100%	95%	0.59	0
MiscPaT15	Misc	Packaged DX	Turnover	15	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$0.80	10	992	0.006	54	$43.00	5%	100%	95%	0.59	0
OfficPaE1	Office	Packaged DX	Early	1	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$3.13	20	1,077	0.05	64	$200.00	6%	15%	9%	0.42	0
OfficPaE2	Office	Packaged DX	Early	2	Adding window shade film	No shade film	q ft window ar	$7.05	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.04	0
OfficPaE3	Office	Packaged DX	Early	3	Adding window shade screen	No shade screen	q ft window ar	$3.90	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.17	0
OfficPaE4	Office	Packaged DX	Early	4	Windows U<0.40, .55 SHGC	Existing window specifications	q ft window ar	$1.40	30	2	0.000	0	$0.28	13%	50%	95%	0.70	0
OfficPaE5	Office	Packaged DX	Early	5	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$3.13	20	1,077	0.05	72	$225.00	7%	95%	95%	0.39	0
OfficPaE7	Office	Packaged DX	Early	7	Automated control system	Baseline DX	ton	$0.44	10	1,138	0.007	57	$25.00	5%	100%	65%	1.08	1
OfficPaE8	Office	Packaged DX	Early	8	Duct Sealing, down to 15%	Leakage of 29%	ton	$7.92	15	1,077	0.05	12	$95.00	1%	45%	80%	0.41	0
OfficPaE9	Office	Packaged DX	Early	9	Hotel Keycard Sensors	No prior controls	oom Controlle	$0.29	10	966	0.041	342	$100.00	35%	95%	80%	1.62	1
OfficPaE10	Office	Packaged DX	Early	10	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	ton	$0.55	1	1,171	0.05	64	$35.00	5%	100%	45%	0.19	0
OfficPaE11	Office	Packaged DX	Early	11	7 day, two stage setback thermostat	Manual Thermostat	ton	$0.44	10	1,077	0.015	125	$55.00	12%	100%	45%	1.07	1
OfficPaE13	Office	Packaged DX	Early	13	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.32	7	1,077	0.05	172	$55.15	16%	95%	75%	1.25	1
OfficPaN1	Office	Packaged DX	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	ton	$1.36	20	1,077	0.05	64	$87.00	6%	100%	95%	0.96	0
OfficPaN2	Office	Packaged DX	New	2	Adding reflective roof treatment	Std color roof	ton	$4.50	20	1,077	0.05	10	$45.00	1%	100%	95%	1.01	1
OfficPaN3	Office	Packaged DX	New	3	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$1.74	20	1,077	0.05	72	$125.00	7%	100%	95%	0.71	0
OfficPaN4	Office	Packaged DX	New	4	Green Roof (New construction or roof replacement)	Std Roof	ton	$1.78	20	1,077	0.05	72	$127.43	7%	45%	95%	0.70	0
OfficPaN5	Office	Packaged DX	New	5	Duct Insulation, Add R8	No Insulation	ton	$10.42	20	1,077	0.05	12	$125.00	1%	100%	95%	0.37	0
OfficPaN6	Office	Packaged DX	New	6	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$1.36	20	928	0.04	66	$90.40	7%	100%	95%	0.90	0
OfficPaN7	Office	Packaged DX	New	7	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$1.46	20	928	0.08	124	$180.81	13%	100%	95%	0.84	0
OfficPaN8	Office	Packaged DX	New	8	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$1.56	20	928	0.12	174	$271.21	19%	100%	95%	0.79	0
OfficPaN9	Office	Packaged DX	New	9	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$0.77	20	1,077	0.05	72	$55.00	7%	100%	95%	1.61	1
OfficPaN10	Office	Packaged DX	New	10	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$0.77	20	1,096	0.06	91	$70.00	8%	100%	95%	1.61	1
OfficPaN11	Office	Packaged DX	New	11	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.29	20	1,206	0.06	89	$115.13	7%	100%	95%	0.96	0
OfficPaN12	Office	Packaged DX	New	12	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$1.61	20	1,243	0.04	61	$98.39	5%	100%	95%	0.76	0
OfficPaN13	Office	Packaged DX	New	13	Ground Source HP Open - Water	Air Source Heat Pump	ton	$2.13	15	1,096	0.23	352	$ 750.0	32%	20%	95%	0.48	0
OfficPaN14	Office	Packaged DX	New	14	Ground Source HP Closed	Air Source Heat Pump	ton	$3.82	15	1,096	0.023	196	$750.00	18%	100%	95%	0.17	0
OfficPaN15	Office	Packaged DX	New	15	Air-side Economizer	No Economizer	ton	$1.05	15	1,077	0.019	162	$170.00	15%	75%	45%	0.62	0
OfficPaN16	Office	Packaged DX	New	16	Energy Recovery Units	No Energy Recovery	ton	$0.83	15	1,077	0.026	215	$179.00	20%	100%	95%	0.79	0
OfficPaN17	Office	Packaged DX	New	17	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$2.16	15	1,138	0.006	51	$110.89	5%	100%	95%	0.30	0
OfficPaT1	Office	Packaged DX	Turnover	1	Duct Insulation, Add R8	No Insulation	ton	$10.42	15	1,077	0.05	12	$125.00	1%	100%	95%	0.31	0
OfficPaT2	Office	Packaged DX	Turnover	2	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$1.36	20	928	0.04	66	$90.40	7%	100%	95%	0.90	0
OfficPaT3	Office	Packaged DX	Turnover	3	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$1.46	20	928	0.08	124	$180.81	13%	100%	95%	0.84	0
OfficPaT4	Office	Packaged DX	Turnover	4	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$1.56	20	928	0.12	174	$271.21	19%	100%	95%	0.79	0
OfficPaT5	Office	Packaged DX	Turnover	5	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$0.77	20	1,077	0.05	72	$55.00	7%	100%	95%	1.61	1
OfficPaT6	Office	Packaged DX	Turnover	6	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$0.77	20	1,096	0.06	91	$70.00	8%	100%	95%	1.61	1
OfficPaT7	Office	Packaged DX	Turnover	7	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.29	20	1,206	0.06	89	$115.13	7%	100%	95%	0.96	0
OfficPaT8	Office	Packaged DX	Turnover	8	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$1.61	20	1,243	0.04	61	$98.39	5%	100%	95%	0.76	0
OfficPaT9	Office	Packaged DX	Turnover	9	Ground Source HP Open - Water	Air Source Heat Pump	ton	$2.13	15	1,096	0.23	352	$ 750.0	32%	5%	95%	0.48	0
OfficPaT10	Office	Packaged DX	Turnover	10	Ground Source HP Closed	Air Source Heat Pump	ton	$3.82	15	1,096	0.023	196	$750.00	18%	100%	95%	0.17	0
OfficPaT11	Office	Packaged DX	Turnover	11	Air-side Economizer	No Economizer	ton	$1.05	15	1,077	0.019	162	$170.00	15%	75%	45%	0.62	0
OfficPaT12	Office	Packaged DX	Turnover	12	Energy Recovery Units	No Energy Recovery	ton	$0.83	15	1,077	0.026	215	$179.00	20%	100%	95%	0.79	0
OfficPaT13	Office	Packaged DX	Turnover	13	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$2.16	15	1,138	0.006	51	$110.89	5%	100%	95%	0.30	0
OfficPaN18	Office	Packaged DX	New	18	Automated control system	Baseline DX	ton	$0.44	10	1,138	0.007	57	$25.00	5%	100%	65%	1.08	1
OfficPaN19	Office	Packaged DX	New	19	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$0.82	10	966	0.006	53	$43.00	5%	100%	95%	0.58	0
OfficPaT15	Office	Packaged DX	Turnover	15	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$0.82	10	966	0.006	53	$43.00	5%	100%	95%	0.58	0
RestaPaE1	Restaurant	Packaged DX	Early	1	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$3.13	20	1,154	0.05	64	$200.00	6%	15%	9%	0.42	0
RestaPaE2	Restaurant	Packaged DX	Early	2	Adding window shade film	No shade film	q ft window ar	$7.05	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.04	0
RestaPaE3	Restaurant	Packaged DX	Early	3	Adding window shade screen	No shade screen	q ft window ar	$3.90	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.17	0
RestaPaE4	Restaurant	Packaged DX	Early	4	Windows U<0.40, .55 SHGC	Existing window specifications	q ft window ar	$1.40	30	2	0.000	0	$0.28	13%	50%	95%	0.70	0
RestaPaE5	Restaurant	Packaged DX	Early	5	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$2.92	20	1,154	0.05	77	$225.00	7%	95%	95%	0.41	0
RestaPaE7	Restaurant	Packaged DX	Early	7	Automated control system	Baseline DX	ton	$0.41	10	1,219	0.007	61	$25.00	5%	100%	65%	1.15	1
RestaPaE8	Restaurant	Packaged DX	Early	8	Duct Sealing, down to 15%	Leakage of 29%	ton	$7.92	15	1,154	0.05	12	$95.00	1%	45%	80%	0.41	0
RestaPaE9	Restaurant	Packaged DX	Early	9	Hotel Keycard Sensors	No prior controls	oom Controlle	$0.29	10	1,036	0.041	342	$100.00	33%	95%	80%	1.62	1
RestaPaE10	Restaurant	Packaged DX	Early	10	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	ton	$0.55	1	1,255	0.05	64	$35.00	5%	100%	45%	0.19	0
RestaPaE11	Restaurant	Packaged DX	Early	11	7 day, two stage setback thermostat	Manual Thermostat	ton	$0.44	10	1,154	0.015	125	$55.00	11%	100%	45%	1.07	1
RestaPaE13	Restaurant	Packaged DX	Early	13	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.30	7	1,154	0.05	185	$55.15	16%	95%	75%	1.32	1
RestaPaN1	Restaurant	Packaged DX	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	ton	$1.36	20	1,154	0.05	64	$87.00	6%	100%	95%	0.96	0
RestaPaN2	Restaurant	Packaged DX	New	2	Adding reflective roof treatment	Std color roof	ton	$4.50	20	1,154	0.05	10	$45.00	1%	100%	95%	1.01	1
RestaPaN3	Restaurant	Packaged DX	New	3	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$1.62	20	1,154	0.05	77	$125.00	7%	100%	95%	0.74	0
RestaPaN4	Restaurant	Packaged DX	New	4	Green Roof (New construction or roof replacement)	Std Roof	ton	$1.66	20	1,154	0.05	77	$127.43	7%	45%	95%	0.72	0
RestaPaN5	Restaurant	Packaged DX	New	5	Duct Insulation, Add R8	No Insulation	ton	$10.42	20	1,154	0.05	12	$125.00	1%	100%	95%	0.37	0
RestaPaN6	Restaurant	Packaged DX	New	6	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$1.27	20	994	0.04	71	$90.40	7%	100%	95%	0.94	0
RestaPaN7	Restaurant	Packaged DX	New	7	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$1.36	20	994	0.08	133	$180.81	13%	100%	95%	0.88	0

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	PJM Summer Summer Peak KW Savings	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Fla
RestaPaN8	Restaurant	Packaged DX	New	8	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$1.45	20	994	0.12	186	$271.21	19%	100%	95%	0.82	0
RestaPaN9	Restaurant	Packaged DX	New	9	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$0.71	20	1,154	0.05	77	$55.00	7%	100%	95%	1.68	1
RestaPaN10	Restaurant	Packaged DX	New	10	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$0.71	20	1,175	0.06	98	$70.00	8%	100%	95%	1.68	1
RestaPaN11	Restaurant	Packaged DX	New	11	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.20	20	1,292	0.06	96	$115.13	7%	100%	95%	1.00	0
RestaPaN12	Restaurant	Packaged DX	New	12	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$1.51	20	1,332	0.04	65	$98.39	5%	100%	95%	0.80	0
RestaPaN13	Restaurant	Packaged DX	New	13	Ground Source HP Open - Water	Air Source Heat Pump	ton	$1.99	15	1,175	0.23	377	$ 750.0	32%	20%	95%	0.50	0
RestaPaN14	Restaurant	Packaged DX	New	14	Ground Source HP Closed	Air Source Heat Pump	ton	$3.56	15	1,175	0.025	210	$750.00	18%	100%	95%	0.18	0
RestaPaN15	Restaurant	Packaged DX	New	15	Air-side Economizer	No Economizer	ton	$0.98	15	1,154	0.021	173	$170.00	15%	75%	45%	0.67	0
RestaPaN16	Restaurant	Packaged DX	New	16	Energy Recovery Units	No Energy Recovery	ton	$0.78	15	1,154	0.028	231	$179.00	20%	100%	95%	0.84	0
RestaPaN17	Restaurant	Packaged DX	New	17	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$2.02	15	1,219	0.007	55	$110.89	5%	100%	95%	0.32	0
RestaPaT1	Restaurant	Packaged DX	Turnover	1	Duct Insulation, Add R8	No Insulation	ton	$10.42	15	1,154	0.05	12	$125.00	1%	100%	95%	0.31	0
RestaPaT2	Restaurant	Packaged DX	Turnover	2	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$1.27	20	994	0.04	71	$90.40	7%	100%	95%	0.94	0
RestaPaT3	Restaurant	Packaged DX	Turnover	3	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$1.36	20	994	0.08	133	$180.81	13%	100%	95%	0.88	0
RestaPaT4	Restaurant	Packaged DX	Turnover	4	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$1.45	20	994	0.12	186	$271.21	19%	100%	95%	0.82	0
RestaPaT5	Restaurant	Packaged DX	Turnover	5	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$0.71	20	1,154	0.05	77	$55.00	7%	100%	95%	1.68	1
RestaPaT6	Restaurant	Packaged DX	Turnover	6	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$0.71	20	1,175	0.06	98	$70.00	8%	100%	95%	1.68	1
RestaPaT7	Restaurant	Packaged DX	Turnover	7	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.20	20	1,292	0.06	96	$115.13	7%	100%	95%	1.00	0
RestaPaT8	Restaurant	Packaged DX	Turnover	8	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$1.51	20	1,332	0.04	65	$98.39	5%	100%	95%	0.80	0
RestaPaT9	Restaurant	Packaged DX	Turnover	9	Ground Source HP Open - Water	Air Source Heat Pump	ton	$1.99	15	1,175	0.23	377	$ 750.0	32%	5%	95%	0.50	0
RestaPaT10	Restaurant	Packaged DX	Turnover	10	Ground Source HP Closed	Air Source Heat Pump	ton	$3.56	15	1,175	0.025	210	$750.00	18%	100%	95%	0.18	0
RestaPaT11	Restaurant	Packaged DX	Turnover	11	Air-side Economizer	No Economizer	ton	$0.98	15	1,154	0.021	173	$170.00	15%	75%	45%	0.67	0
RestaPaT12	Restaurant	Packaged DX	Turnover	12	Energy Recovery Units	No Energy Recovery	ton	$0.78	15	1,154	0.028	231	$179.00	20%	100%	95%	0.84	0
RestaPaT13	Restaurant	Packaged DX	Turnover	13	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$2.02	15	1,219	0.007	55	$110.89	5%	100%	95%	0.32	0
RestaPaN18	Restaurant	Packaged DX	New	18	Automated control system	Baseline DX	ton	$0.41	10	1,219	0.007	61	$25.00	5%	100%	65%	1.15	1
RestaPaN19	Restaurant	Packaged DX	New	19	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$0.76	10	1,036	0.007	56	$43.00	5%	100%	95%	0.62	0
RestaPaT15	Restaurant	Packaged DX	Turnover	15	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$0.76	10	1,036	0.007	56	$43.00	5%	100%	95%	0.62	0
RetaiPaE1	Retail	Packaged DX	Early	1	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$3.13	20	1,130	0.05	64	$200.00	6%	15%	9%	0.42	0
RetaiPaE2	Retail	Packaged DX	Early	2	Adding window shade film	No shade film	ft window ar	$7.05	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.04	0
RetaiPaE3	Retail	Packaged DX	Early	3	Adding window shade screen	No shade screen	ft window ar	$3.90	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.17	0
RetaiPaE4	Retail	Packaged DX	Early	4	Windows U<0.40, .55 SHGC	Existing window specifications	ft window ar	$1.40	30	2	0.000	0	$0.28	13%	50%	95%	0.70	0
RetaiPaE5	Retail	Packaged DX	Early	5	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$2.99	20	1,130	0.05	75	$225.00	7%	95%	95%	0.40	0
RetaiPaE7	Retail	Packaged DX	Early	7	Automated control system	Baseline DX	ton	$0.42	10	1,194	0.007	60	$25.00	5%	100%	65%	1.13	1
RetaiPaE8	Retail	Packaged DX	Early	8	Duct Sealing, down to 15%	Leakage of 29%	ton	$7.92	15	1,130	0.05	12	$95.00	1%	45%	80%	0.41	0
RetaiPaE9	Retail	Packaged DX	Early	9	Hotel Keycard Sensors	No prior controls	oom Controlle	$0.29	10	1,014	0.041	342	$100.00	34%	95%	80%	1.62	1
RetaiPaE10	Retail	Packaged DX	Early	10	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	ton	$0.55	1	1,229	0.05	64	$35.00	5%	100%	45%	0.19	0
RetaiPaE11	Retail	Packaged DX	Early	11	7 day, two stage setback thermostat	Manual Thermostat	ton	$0.44	10	1,130	0.015	125	$55.00	11%	100%	45%	1.07	1
RetaiPaE13	Retail	Packaged DX	Early	13	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.30	7	1,130	0.05	181	$55.15	16%	95%	75%	1.29	1
RetaiPaN1	Retail	Packaged DX	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	ton	$1.36	20	1,130	0.05	64	$87.00	6%	100%	95%	0.96	0
RetaiPaN2	Retail	Packaged DX	New	2	Adding reflective roof treatment	Std color roof	ton	$4.50	20	1,130	0.05	10	$45.00	1%	100%	95%	1.01	1
RetaiPaN3	Retail	Packaged DX	New	3	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$1.66	20	1,130	0.05	75	$125.00	7%	100%	95%	0.73	0
RetaiPaN4	Retail	Packaged DX	New	4	Green Roof (New construction or roof replacement)	Std Roof	ton	$1.69	20	1,130	0.05	75	$127.43	7%	45%	95%	0.71	0
RetaiPaN5	Retail	Packaged DX	New	5	Duct Insulation, Add R8	No Insulation	ton	$10.42	20	1,130	0.05	12	$125.00	1%	100%	95%	0.37	0
RetaiPaN6	Retail	Packaged DX	New	6	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$1.30	20	974	0.04	70	$90.40	7%	100%	95%	0.93	0
RetaiPaN7	Retail	Packaged DX	New	7	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$1.39	20	974	0.08	130	$180.81	13%	100%	95%	0.87	0
RetaiPaN8	Retail	Packaged DX	New	8	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$1.49	20	974	0.12	183	$271.21	19%	100%	95%	0.81	0
RetaiPaN9	Retail	Packaged DX	New	9	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$0.73	20	1,130	0.05	75	$55.00	7%	100%	95%	1.66	1
RetaiPaN10	Retail	Packaged DX	New	10	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$0.73	20	1,151	0.06	96	$70.00	8%	100%	95%	1.66	1
RetaiPaN11	Retail	Packaged DX	New	11	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.23	20	1,266	0.06	94	$115.13	7%	100%	95%	0.98	0
RetaiPaN12	Retail	Packaged DX	New	12	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$1.54	20	1,305	0.04	64	$98.39	5%	100%	95%	0.79	0
RetaiPaN13	Retail	Packaged DX	New	13	Ground Source HP Open - Water	Air Source Heat Pump	ton	$2.03	15	1,151	0.23	369	$ 750.0	32%	20%	95%	0.49	0
RetaiPaN14	Retail	Packaged DX	New	14	Ground Source HP Closed	Air Source Heat Pump	ton	$3.64	15	1,151	0.025	206	$750.00	18%	100%	95%	0.18	0
RetaiPaN15	Retail	Packaged DX	New	15	Air-side Economizer	No Economizer	ton	$1.00	15	1,130	0.020	170	$170.00	15%	75%	45%	0.65	0
RetaiPaN16	Retail	Packaged DX	New	16	Energy Recovery Units	No Energy Recovery	ton	$0.79	15	1,130	0.027	226	$179.00	20%	100%	95%	0.83	0
RetaiPaN17	Retail	Packaged DX	New	17	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$2.06	15	1,194	0.006	54	$110.89	5%	100%	95%	0.32	0
RetaiPaT1	Retail	Packaged DX	Turnover	1	Duct Insulation, Add R8	No Insulation	ton	$10.42	15	1,130	0.05	12	$125.00	1%	100%	95%	0.31	0
RetaiPaT2	Retail	Packaged DX	Turnover	2	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$1.30	20	974	0.04	70	$90.40	7%	100%	95%	0.93	0
RetaiPaT3	Retail	Packaged DX	Turnover	3	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$1.39	20	974	0.08	130	$180.81	13%	100%	95%	0.87	0
RetaiPaT4	Retail	Packaged DX	Turnover	4	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$1.49	20	974	0.12	183	$271.21	19%	100%	95%	0.81	0
RetaiPaT5	Retail	Packaged DX	Turnover	5	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$0.73	20	1,130	0.05	75	$55.00	7%	100%	95%	1.66	1
RetaiPaT6	Retail	Packaged DX	Turnover	6	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$0.73	20	1,151	0.06	96	$70.00	8%	100%	95%	1.66	1
RetaiPaT7	Retail	Packaged DX	Turnover	7	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.23	20	1,266	0.06	94	$115.13	7%	100%	95%	0.98	0
RetaiPaT8	Retail	Packaged DX	Turnover	8	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$1.54	20	1,305	0.04	64	$98.39	5%	100%	95%	0.79	0
RetaiPaT9	Retail	Packaged DX	Turnover	9	Ground Source HP Open - Water	Air Source Heat Pump	ton	$2.03	15	1,151	0.23	369	$ 750.0	32%	5%	95%	0.49	0
RetaiPaT10	Retail	Packaged DX	Turnover	10	Ground Source HP Closed	Air Source Heat Pump	ton	$3.64	15	1,151	0.025	206	$750.00	18%	100%	95%	0.18	0
RetaiPaT11	Retail	Packaged DX	Turnover	11	Air-side Economizer	No Economizer	ton	$1.00	15	1,130	0.020	170	$170.00	15%	75%	45%	0.65	0
RetaiPaT12	Retail	Packaged DX	Turnover	12	Energy Recovery Units	No Energy Recovery	ton	$0.79	15	1,130	0.027	226	$179.00	20%	100%	95%	0.83	0
RetaiPaT13	Retail	Packaged DX	Turnover	13	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$2.06	15	1,194	0.006	54	$110.89	5%	100%	95%	0.32	0
RetaiPaN18	Retail	Packaged DX	New	18	Automated control system	Baseline DX	ton	$0.42	10	1,194	0.007	60	$25.00	5%	100%	65%	1.13	1
RetaiPaN19	Retail	Packaged DX	New	19	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$0.78	10	1,014	0.007	55	$43.00	5%	100%	95%	0.61	0
RetaiPaT15	Retail	Packaged DX	Turnover	15	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$0.78	10	1,014	0.007	55	$43.00	5%	100%	95%	0.61	0
WarehPaE1	Warehouse	Packaged DX	Early	1	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$3.13	20	875	0.05	64	$200.00	7%	15%	9%	0.42	0
WarehPaE2	Warehouse	Packaged DX	Early	2	Adding window shade film	No shade film	ft window ar	$7.05	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.04	0
WarehPaE3	Warehouse	Packaged DX	Early	3	Adding window shade screen	No shade screen	ft window ar	$3.90	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.17	0
WarehPaE4	Warehouse	Packaged DX	Early	4	Windows U<0.40, .55 SHGC	Existing window specifications	ft window ar	$1.40	30	2	0.000	0	$0.28	13%	50%	95%	0.70	0
WarehPaE5	Warehouse	Packaged DX	Early	5	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$3.86	20	875	0.05	58	$225.00	7%	95%	95%	0.35	0
WarehPaE7	Warehouse	Packaged DX	Early	7	Automated control system	Baseline DX	ton	$0.54	10	925	0.006	46	$25.00	5%	100%	65%	0.87	0
WarehPaE8	Warehouse	Packaged DX	Early	8	Duct Sealing, down to 15%	Leakage of 29%	ton	$7.92	15	875	0.05	12	$95.00	1%	45%	80%	0.41	0
WarehPaE9	Warehouse	Packaged DX	Early	9	Hotel Keycard Sensors	No prior controls	oom Controlle	$0.29	10	786	0.041	342	$100.00	44%	95%	80%	1.62	1
WarehPaE10	Warehouse	Packaged DX	Early	10	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	ton	$0.55	1	952	0.05	64	$35.00	7%	100%	45%	0.19	0
WarehPaE11	Warehouse	Packaged DX	Early	11	7 day, two stage setback thermostat	Manual Thermostat	ton	$0.44	10	875	0.015	125	$55.00	14%	100%	45%	1.07	1
WarehPaE13	Warehouse	Packaged DX	Early	13	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.39	7	875	0.05	140	$55.15	16%	95%	75%	1.08	1
WarehPaN1	Warehouse	Packaged DX	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	ton	$1.36	20	875	0.05	64	$87.00	7%	100%	95%	0.96	0
WarehPaN2	Warehouse	Packaged DX	New	2	Adding reflective roof treatment	Std color roof	ton	$4.50	20	875	0.05	10	$45.00	1%	100%	95%	1.01	1
WarehPaN3	Warehouse	Packaged DX	New	3	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$2.14	20	875	0.05	58	$125.00	7%	100%	95%	0.63	0
WarehPaN4	Warehouse	Packaged DX	New	4	Green Roof (New construction or roof replacement)	Std Roof	ton	$2.18	20	875	0.05	58	$127.43	7%	45%	95%	0.62	0
WarehPaN5	Warehouse	Packaged DX	New	5	Duct Insulation, Add R8	No Insulation	ton	$10.42	20	875	0.05	12	$125.00	1%	100%	95%	0.37	0
WarehPaN6	Warehouse	Packaged DX	New	6	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$1.68	20	754	0.04	54	$90.40	7%	100%	95%	0.81	0
WarehPaN7	Warehouse	Packaged DX	New	7	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$1.80	20	754	0.08	101	$180.81	13%	100%	95%	0.75	0
WarehPaN8	Warehouse	Packaged DX	New	8	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$1.92	20	754	0.12	141	$271.21	19%	100%	95%	0.71	0
WarehPaN9	Warehouse	Packaged DX	New	9	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$0.94	20	875	0.05	58	$55.00	7%	100%	95%	1.44	1
WarehPaN10	Warehouse	Packaged DX	New	10	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$0.94	20	891	0.06	74	$70.00	8%	100%	95%	1.44	1
WarehPaN11	Warehouse	Packaged DX	New	11	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.59	20	980	0.06	73	$115.13	7%	100%	95%	0.86	0
WarehPaN12	Warehouse	Packaged DX	New	12	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$1.99	20	1,011	0.04	50	$98.39	5%	100%	95%	0.68	0
WarehPaN13	Warehouse	Packaged DX	New	13	Ground Source HP Open - Water	Air Source Heat Pump	ton	$2.62	15	891	0.23	286	$ 750.0	32%	20%	95%	0.43	0
WarehPaN14	Warehouse	Packaged DX	New	14	Ground Source HP Closed	Air Source Heat Pump	ton	$4.70	15	891	0.019	160	$750.00	18%	100%	95%	0.14	0
WarehPaN15	Warehouse	Packaged DX	New	15	Air-side Economizer	No Economizer	ton	$1.29	15	875	0.016	131	$170.00	15%	75%	45%	0.51	0
WarehPaN16	Warehouse	Packaged DX	New	16	Energy Recovery Units	No Energy Recovery	ton	$1.02	15	875	0.021	175	$179.00	20%	100%	95%	0.64	0
WarehPaN17	Warehouse	Packaged DX	New	17	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$2.66	15	925	0.005	42	$110.89	5%	100%	95%	0.25	0
WarehPaT1	Warehouse	Packaged DX	Turnover	1	Duct Insulation, Add R8	No Insulation	ton	$10.42	15	875	0.05	12	$125.00	1%	100%	95%	0.31	0
WarehPaT2	Warehouse	Packaged DX	Turnover	2	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$1.68	20	754	0.04	54	$90.40	7%	100%	95%	0.81	0
WarehPaT3	Warehouse	Packaged DX	Turnover	3	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$1.80	20	754	0.08	101	$180.81	13%	100%	95%	0.75	0
WarehPaT4	Warehouse	Packaged DX	Turnover	4	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$1.92	20	754	0.12	141	$271.21	19%	100%	95%	0.71	0

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	PJM Summer Summer Peak KW Savings	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Fla
WarehPaT5	Warehouse	Packaged DX	Turnover	5	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$0.94	20	875	0.05	58	$55.00	7%	100%	95%	1.44	1
WarehPaT6	Warehouse	Packaged DX	Turnover	6	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$0.94	20	891	0.06	74	$70.00	8%	100%	95%	1.44	1
WarehPaT7	Warehouse	Packaged DX	Turnover	7	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.59	20	980	0.06	73	$115.13	7%	100%	95%	0.86	0
WarehPaT8	Warehouse	Packaged DX	Turnover	8	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$1.99	20	1,011	0.04	50	$98.39	5%	100%	95%	0.68	0
WarehPaT9	Warehouse	Packaged DX	Turnover	9	Ground Source HP Open - Water	Air Source Heat Pump	ton	$2.62	15	891	0.23	286	$ 750.0	32%	5%	95%	0.43	0
WarehPaT10	Warehouse	Packaged DX	Turnover	10	Ground Source HP Closed	Air Source Heat Pump	ton	$4.70	15	891	0.019	160	$750.00	18%	100%	95%	0.14	0
WarehPaT11	Warehouse	Packaged DX	Turnover	11	Air-side Economizer	No Economizer	ton	$1.29	15	875	0.016	131	$170.00	15%	75%	45%	0.51	0
WarehPaT12	Warehouse	Packaged DX	Turnover	12	Energy Recovery Units	No Energy Recovery	ton	$1.02	15	875	0.021	175	$179.00	20%	100%	95%	0.64	0
WarehPaT13	Warehouse	Packaged DX	Turnover	13	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$2.66	15	925	0.005	42	$110.89	5%	100%	95%	0.25	0
WarehPaN18	Warehouse	Packaged DX	New	18	Automated control system	Baseline DX	ton	$0.54	10	925	0.006	46	$25.00	5%	100%	65%	0.87	0
WarehPaN19	Warehouse	Packaged DX	New	19	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.00	10	786	0.005	43	$43.00	5%	100%	95%	0.47	0
WarehPaT15	Warehouse	Packaged DX	Turnover	15	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.00	10	786	0.005	43	$43.00	5%	100%	95%	0.47	0
HealtHeN4	Healthcare	Heating	New	4	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$0.64	15	2,866	0.003	174	$110.89	6%	100%	95%	0.90	0
HealtHeT1	Healthcare	Heating	Turnover	1	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$0.64	15	2,866	0.003	174	$110.89	6%	100%	95%	0.90	0
GroceHeE1	Grocery	Heating	Early	1	Re-commissioning	Current Controls not working properly, setpoints not optimized,	sq ft	$0.2710	7	125,500	0.297	20,080	$5,441.68	16%	95%	75%	1.10	1
GroceHeE2	Grocery	Heating	Early	2	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$4.44	20	1,259	0.05	45	$200.00	4%	10%	95%	0.35	0
GroceHeE3	Grocery	Heating	Early	3	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.67	20	1,259	0.05	75	$125.00	6%	10%	95%	0.72	0
GroceHeE4	Grocery	Heating	Early	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.75	20	1,259	0.05	34	$127.43	3%	10%	95%	0.48	0
GroceHeE5	Grocery	Heating	Early	5	Humidification with High pressure, Ultrasonic devices	Electric Resistive Elements	unit	$0.1893	10	2,794	0.039	2,641	$500.00	95%	100%	95%	2.19	1
GroceHeN1	Grocery	Heating	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5 - Electric Heat	sq ft	$1.93	20	1,259	0.05	45	$87.00	4%	10%	95%	0.80	0
GroceHeN2	Grocery	Heating	New	2	Ground Source HP Open - Water	Air Source Heat Pump	ton	$9.83	15	1,259	0.23	76	$ 750.0	6%	20%	95%	0.27	0
GroceHen3	Grocery	Heating	new	3	Ground Source HP Closed	Air Source Heat Pump	ton	$9.83	15	1,259	0.001	76	$750.00	6%	100%	95%	0.06	0
GroceHeN4	Grocery	Heating	New	4	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.45	15	1,259	0.001	76	$110.89	6%	100%	95%	0.40	0
GroceHeT1	Grocery	Heating	Turnover	1	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.45	15	1,259	0.001	76	$110.89	6%	100%	95%	0.40	0
InstiHeE1	Institutional	Heating	Early	1	Re-commissioning	Current Controls not working properly, setpoints not optimized,	sq ft	$0.2710	7	125,500	0.297	20,080	$5,441.68	16%	95%	75%	1.10	1
InstiHeE2	Institutional	Heating	Early	2	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$4.44	20	896	0.05	45	$200.00	5%	10%	95%	0.35	0
InstiHeE3	Institutional	Heating	Early	3	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.67	20	896	0.05	75	$125.00	8%	10%	95%	0.72	0
InstiHeE4	Institutional	Heating	Early	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.75	20	896	0.05	34	$127.43	4%	10%	95%	0.48	0
InstiHeE5	Institutional	Heating	Early	5	Humidification with High pressure, Ultrasonic devices	Electric Resistive Elements	unit	$0.1893	10	2,794	0.039	2,641	$500.00	95%	100%	95%	2.19	1
InstiHeN1	Institutional	Heating	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5 - Electric Heat	sq ft	$1.93	20	896	0.05	45	$87.00	5%	10%	95%	0.80	0
InstiHeN2	Institutional	Heating	New	2	Ground Source HP Open - Water	Air Source Heat Pump	ton	$13.81	15	896	0.23	54	$ 750.0	6%	20%	95%	0.25	0
InstiHen3	Institutional	Heating	new	3	Ground Source HP Closed	Air Source Heat Pump	ton	$13.81	15	896	0.001	54	$750.00	6%	100%	95%	0.04	0
InstiHeN4	Institutional	Heating	New	4	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$2.04	15	896	0.001	54	$110.89	6%	100%	95%	0.28	0
InstiHeT1	Institutional	Heating	Turnover	1	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$2.04	15	896	0.001	54	$110.89	6%	100%	95%	0.28	0
LodgiHeE1	Lodging	Heating	Early	1	Re-commissioning	Current Controls not working properly, setpoints not optimized,	sq ft	$0.2710	7	125,500	0.297	20,080	$5,441.68	16%	95%	75%	1.10	1
LodgiHeE2	Lodging	Heating	Early	2	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$4.44	20	1,525	0.05	45	$200.00	3%	10%	95%	0.35	0
LodgiHeE3	Lodging	Heating	Early	3	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.67	20	1,525	0.05	75	$125.00	5%	10%	95%	0.72	0
LodgiHeE4	Lodging	Heating	Early	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.75	20	1,525	0.05	34	$127.43	2%	10%	95%	0.48	0
LodgiHeE5	Lodging	Heating	Early	5	Humidification with High pressure, Ultrasonic devices	Electric Resistive Elements	unit	$0.1893	10	2,794	0.039	2,641	$500.00	95%	100%	95%	2.19	1
LodgiHeN1	Lodging	Heating	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5 - Electric Heat	sq ft	$1.93	20	1,525	0.05	45	$87.00	3%	10%	95%	0.80	0
LodgiHeN2	Lodging	Heating	New	2	Ground Source HP Open - Water	Air Source Heat Pump	ton	$8.12	15	1,525	0.23	92	$ 750.0	6%	20%	95%	0.28	0
LodgiHen3	Lodging	Heating	new	3	Ground Source HP Closed	Air Source Heat Pump	ton	$8.12	15	1,525	0.001	92	$750.00	6%	100%	95%	0.07	0
LodgiHeN4	Lodging	Heating	New	4	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.20	15	1,525	0.001	92	$110.89	6%	100%	95%	0.48	0
LodgiHeT1	Lodging	Heating	Turnover	1	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.20	15	1,525	0.001	92	$110.89	6%	100%	95%	0.48	0
MiscHeE1	Misc	Heating	Early	1	Re-commissioning	Current Controls not working properly, setpoints not optimized,	sq ft	$0.2710	7	125,500	0.297	20,080	$5,441.68	16%	95%	75%	1.10	1
MiscHeE2	Misc	Heating	Early	2	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$4.44	20	1,365	0.05	45	$200.00	3%	10%	95%	0.35	0
MiscHeE3	Misc	Heating	Early	3	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.67	20	1,365	0.05	75	$125.00	5%	10%	95%	0.72	0
MiscHeE4	Misc	Heating	Early	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.75	20	1,365	0.05	34	$127.43	2%	10%	95%	0.48	0
MiscHeE5	Misc	Heating	Early	5	Humidification with High pressure, Ultrasonic devices	Electric Resistive Elements	unit	$0.1893	10	2,794	0.039	2,641	$500.00	95%	100%	95%	2.19	1
MiscHeN1	Misc	Heating	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5 - Electric Heat	sq ft	$1.93	20	1,365	0.05	45	$87.00	3%	10%	95%	0.80	0
MiscHeN2	Misc	Heating	New	2	Ground Source HP Open - Water	Air Source Heat Pump	ton	$9.07	15	1,365	0.23	83	$ 750.0	6%	20%	95%	0.27	0
MiscHen3	Misc	Heating	new	3	Ground Source HP Closed	Air Source Heat Pump	ton	$9.07	15	1,365	0.001	83	$750.00	6%	100%	95%	0.06	0
MiscHeN4	Misc	Heating	New	4	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.34	15	1,365	0.001	83	$110.89	6%	100%	95%	0.43	0
MiscHeT1	Misc	Heating	Turnover	1	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.34	15	1,365	0.001	83	$110.89	6%	100%	95%	0.43	0
OffieHeE1	Office	Heating	Early	1	Re-commissioning	Current Controls not working properly, setpoints not optimized,	sq ft	$0.2710	7	125,500	0.297	20,080	$5,441.68	16%	95%	75%	1.10	1
OffieHeE2	Office	Heating	Early	2	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$4.44	20	804	0.05	45	$200.00	6%	10%	95%	0.35	0
OffieHeE3	Office	Heating	Early	3	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.67	20	804	0.05	75	$125.00	9%	10%	95%	0.72	0
OffieHeE4	Office	Heating	Early	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.75	20	804	0.05	34	$127.43	4%	10%	95%	0.48	0
OffieHeE5	Office	Heating	Early	5	Humidification with High pressure, Ultrasonic devices	Electric Resistive Elements	unit	$0.1893	10	2,794	0.039	2,641	$500.00	95%	100%	95%	2.19	1
OffieHeN1	Office	Heating	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5 - Electric Heat	sq ft	$1.93	20	804	0.05	45	$87.00	6%	10%	95%	0.80	0
OffieHeN2	Office	Heating	New	2	Ground Source HP Open - Water	Air Source Heat Pump	ton	$15.38	15	804	0.23	49	$ 750.0	6%	20%	95%	0.24	0
OffieHen3	Office	Heating	new	3	Ground Source HP Closed	Air Source Heat Pump	ton	$15.38	15	804	0.001	49	$750.00	6%	100%	95%	0.04	0
OffieHeN4	Office	Heating	New	4	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$2.27	15	804	0.001	49	$110.89	6%	100%	95%	0.25	0
OffieHeT1	Office	Heating	Turnover	1	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$2.27	15	804	0.001	49	$110.89	6%	100%	95%	0.25	0
RestaHeE1	Restaurant	Heating	Early	1	Re-commissioning	Current Controls not working properly, setpoints not optimized,	sq ft	$0.2710	7	125,500	0.297	20,080	$5,441.68	16%	95%	75%	1.10	1
RestaHeE2	Restaurant	Heating	Early	2	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$4.44	20	1,225	0.05	45	$200.00	4%	10%	95%	0.35	0
RestaHeE3	Restaurant	Heating	Early	3	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.67	20	1,225	0.05	75	$125.00	6%	10%	95%	0.72	0
RestaHeE4	Restaurant	Heating	Early	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.75	20	1,225	0.05	34	$127.43	3%	10%	95%	0.48	0
RestaHeE5	Restaurant	Heating	Early	5	Humidification with High pressure, Ultrasonic devices	Electric Resistive Elements	unit	$0.1893	10	2,794	0.039	2,641	$500.00	95%	100%	95%	2.19	1
RestaHeN1	Restaurant	Heating	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5 - Electric Heat	sq ft	$1.93	20	1,225	0.05	45	$87.00	4%	10%	95%	0.80	0
RestaHeN2	Restaurant	Heating	New	2	Ground Source HP Open - Water	Air Source Heat Pump	ton	$10.10	15	1,225	0.23	74	$ 750.0	6%	20%	95%	0.26	0
RestaHen3	Restaurant	Heating	new	3	Ground Source HP Closed	Air Source Heat Pump	ton	$10.10	15	1,225	0.001	74	$750.00	6%	100%	95%	0.06	0
RestaHeN4	Restaurant	Heating	New	4	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.49	15	1,225	0.001	74	$110.89	6%	100%	95%	0.39	0
RestaHeT1	Restaurant	Heating	Turnover	1	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.49	15	1,225	0.001	74	$110.89	6%	100%	95%	0.39	0
RetaiHeE1	Retail	Heating	Early	1	Re-commissioning	Current Controls not working properly, setpoints not optimized,	sq ft	$0.2710	7	125,500	0.297	20,080	$5,441.68	16%	95%	75%	1.10	1
RetaiHeE2	Retail	Heating	Early	2	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$4.44	20	1,259	0.05	45	$200.00	4%	10%	95%	0.35	0
RetaiHeE3	Retail	Heating	Early	3	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.67	20	1,259	0.05	75	$125.00	6%	10%	95%	0.72	0
RetaiHeE4	Retail	Heating	Early	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.75	20	1,259	0.05	34	$127.43	3%	10%	95%	0.48	0
RetaiHeE5	Retail	Heating	Early	5	Humidification with High pressure, Ultrasonic devices	Electric Resistive Elements	unit	$0.1893	10	2,794	0.039	2,641	$500.00	95%	100%	95%	2.19	1
RetaiHeN1	Retail	Heating	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5 - Electric Heat	sq ft	$1.93	20	1,259	0.05	45	$87.00	4%	10%	95%	0.80	0
RetaiHeN2	Retail	Heating	New	2	Ground Source HP Open - Water	Air Source Heat Pump	ton	$9.83	15	1,259	0.23	76	$ 750.0	6%	20%	95%	0.27	0
RetaiHen3	Retail	Heating	new	3	Ground Source HP Closed	Air Source Heat Pump	ton	$9.83	15	1,259	0.001	76	$750.00	6%	100%	95%	0.06	0
RetaiHeN4	Retail	Heating	New	4	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.45	15	1,259	0.001	76	$110.89	6%	100%	95%	0.40	0
RetaiHeT1	Retail	Heating	Turnover	1	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.45	15	1,259	0.001	76	$110.89	6%	100%	95%	0.40	0
WarehHeE1	Warehouse	Heating	Early	1	Re-commissioning	Current Controls not working properly, setpoints not optimized,	sq ft	$0.2710	7	125,500	0.297	20,080	$5,441.68	16%	95%	75%	1.10	1
WarehHeE2	Warehouse	Heating	Early	2	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$4.44	20	1,082	0.05	45	$200.00	4%	10%	95%	0.35	0
WarehHeE3	Warehouse	Heating	Early	3	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.67	20	1,082	0.05	75	$125.00	7%	10%	95%	0.72	0
WarehHeE4	Warehouse	Heating	Early	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.75	20	1,082	0.05	34	$127.43	3%	10%	95%	0.48	0
WarehHeE5	Warehouse	Heating	Early	5	Humidification with High pressure, Ultrasonic devices	Electric Resistive Elements	unit	$0.1893	10	2,794	0.039	2,641	$500.00	95%	100%	95%	2.19	1
WarehHeN1	Warehouse	Heating	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5 - Electric Heat	sq ft	$1.93	20	1,082	0.05	45	$87.00	4%	10%	95%	0.80	0
WarehHeN2	Warehouse	Heating	New	2	Ground Source HP Open - Water	Air Source Heat Pump	ton	$11.43	15	1,082	0.23	66	$ 750.0	6%	20%	95%	0.26	0
WarehHen3	Warehouse	Heating	new	3	Ground Source HP Closed	Air Source Heat Pump	ton	$11.43	15	1,082	0.001	66	$750.00	6%	100%	95%	0.05	0
WarehHeN4	Warehouse	Heating	New	4	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.69	15	1,082	0.001	66	$110.89	6%	100%	95%	0.34	0
WarehHeT1	Warehouse	Heating	Turnover	1	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.69	15	1,082	0.001	66	$110.89	6%	100%	95%	0.34	0
GroceChE1	Grocery	Chiller	Early	1	Duct Sealing, down to 15%	Leakage of 29%	ton	$1.2938	15	7,343	0.014	73.4280	$95.00	1%	40%	$0.90	0.54	0
GroceChE2	Grocery	Chiller	Early	2	Duct Insulation, Add R8	No Insulation	ton	$1.7023	15	7,343	0.014	73.4280	$125.00	1%	50%	95%	0.41	0
GroceChE3	Grocery	Chiller	Early	3	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton	ton	$0.3405	15	7,343	0.072	367.1400	$125.00	5%	75%	75%	2.05	1
GroceChE4	Grocery	Chiller	Early	4	Energy Recovery Units	No Energy Recovery	ton	$0.3064	15	7,343	0.290	1,468.6	$450.00	20%	75%	75%	2.28	1
GroceChE5	Grocery	Chiller	Early	5	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.3104	7	7,343	0.232	1,175	$364.67	16%	75%	75%	1.18	1
GroceChE6	Grocery	Chiller	Early	6	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$0.82	15	7,343	0.05	245	$200.00	3%	15%	95%	0.85	0
GroceChE7	Grocery	Chiller	Early	7	Adding window shade film	No shade film	ft window ar	$7.0453	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.04	0
GroceChE8	Grocery	Chiller	Early	8	Adding window shade screen	No shade screen	ft window ar	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.18	0

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	PJM Summer Summer Peak KW Savings	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Fla
GroceChE9	Grocery	Chiller	Early	9	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.02	20	7,343	0.05	220	$225.00	3%	75%	95%	0.85	0
GroceChN1	Grocery	Chiller	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	sq ft	$0.34	20	7,343	0.05	257	$87.00	4%	15%	95%	2.48	1
GroceChN2	Grocery	Chiller	New	2	Adding window shade screen	No shade screen	ft window ar	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.18	0
GroceChN3	Grocery	Chiller	New	3	Adding reflective roof treatment	Std color roof	sq ft roof area	$4.50	20	7,343	0.05	10	$45.00	0%	100%	95%	1.00	1
GroceChN4	Grocery	Chiller	New	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$1.78	20	7,343	0.05	72	$127.43	1%	45%	95%	0.69	0
GroceChN5	Grocery	Chiller	New	5	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2877	15	7,343	0.76	886	$255.00	12%	95%	95%	3.94	1
GroceChN6	Grocery	Chiller	New	6	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.1591	15	7,343	1.944	2,279	$362.50	31%	95%	95%	7.12	1
GroceChN7	Grocery	Chiller	New	7	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.0824	15	17,597	1.728	2,026	$167.00	12%	95%	95%	13.74	1
GroceChN8	Grocery	Chiller	New	8	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.3132	15	7,343	0.072	367.1400	$115.00	5%	95%	75%	2.23	1
GroceChN9	Grocery	Chiller	New	9	Energy Recovery Units	No Energy Recovery	ton	$0.1702	15	7,343	0.290	1,468.6	$250.00	20%	95%	75%	4.10	1
GroceChN10	Grocery	Chiller	New	10	Duct Insulation, Add R8	No Insulation	ton	$1.7023	15	7,343	0.014	73.4280	$125.00	1%	100%	95%	0.41	0
GroceChT1	Grocery	Chiller	Turnover	1	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.3329	15	7,343	0.76	886	$295.00	12%	95%	95%	3.40	1
GroceChT2	Grocery	Chiller	Turnover	2	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2030	15	7,343	1.944	2,279	$462.50	31%	95%	95%	5.58	1
GroceChT3	Grocery	Chiller	Turnover	3	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.3237	15	7,343	1.944	1,285	$416.00	18%	95%	95%	4.85	1
GroceChN11	Grocery	Chiller	New	11	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.3237	15	7,343	1.944	1,285	$416.00	18%	95%	95%	4.85	1
GroceChT5	Grocery	Chiller	Turnover	5	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.3459	15	7,343	0.072	367.1400	$127.00	5%	95%	75%	2.02	1
GroceChT4	Grocery	Chiller	Turnover	4	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1022	15	17,597	1.728	2,026	$207.00	12%	95%	95%	11.08	1
InstiChE1	Institutional	Chiller	Early	1	Duct Sealing, down to 15%	Leakage of 29%	ton	$1.8224	15	5,213	0.010	52.1304	$95.00	1%	40%	$0.90	0.38	0
InstiChE2	Institutional	Chiller	Early	2	Duct Insulation, Add R8	No Insulation	ton	$2.3978	15	5,213	0.010	52.1304	$125.00	1%	50%	95%	0.29	0
InstiChE3	Institutional	Chiller	Early	3	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton	ton	$0.4796	15	5,213	0.051	260.6520	$125.00	5%	75%	75%	1.45	1
InstiChE4	Institutional	Chiller	Early	4	Energy Recovery Units	No Energy Recovery	ton	$0.4316	15	5,213	0.206	1,042.6	$450.00	20%	75%	75%	1.62	1
InstiChE5	Institutional	Chiller	Early	5	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.4372	7	5,213	0.165	834	$364.67	16%	75%	75%	0.84	0
InstiChE6	Institutional	Chiller	Early	6	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$0.82	15	5,213	0.05	245	$200.00	5%	15%	95%	0.85	0
InstiChE7	Institutional	Chiller	Early	7	Adding window shade film	No shade film	ft window ar	$7.0453	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.04	0
InstiChE8	Institutional	Chiller	Early	8	Adding window shade screen	No shade screen	ft window ar	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.18	0
InstiChE9	Institutional	Chiller	Early	9	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.44	20	5,213	0.05	156	$225.00	3%	75%	95%	0.65	0
InstiChN1	Institutional	Chiller	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	sq ft	$0.48	20	5,213	0.05	182	$87.00	4%	15%	95%	1.89	1
InstiChN2	Institutional	Chiller	New	2	Adding window shade screen	No shade screen	ft window ar	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.18	0
InstiChN3	Institutional	Chiller	New	3	Adding reflective roof treatment	Std color roof	sq ft roof area	$4.50	20	5,213	0.05	10	$45.00	0%	100%	95%	1.00	1
InstiChN4	Institutional	Chiller	New	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$2.38	20	5,213	0.05	54	$127.43	1%	45%	95%	0.59	0
InstiChN5	Institutional	Chiller	New	5	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.4053	15	5,213	0.76	629	$255.00	12%	95%	95%	3.36	1
InstiChN6	Institutional	Chiller	New	6	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2241	15	5,213	1.944	1,618	$362.50	31%	95%	95%	6.09	1
InstiChN7	Institutional	Chiller	New	7	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1161	15	12,493	1.728	1,438	$167.00	12%	95%	95%	11.74	1
InstiChN8	Institutional	Chiller	New	8	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.4412	15	5,213	0.051	260.6520	$115.00	5%	95%	75%	1.58	1
InstiChN9	Institutional	Chiller	New	9	Energy Recovery Units	No Energy Recovery	ton	$0.2398	15	5,213	0.206	1,042.6	$250.00	20%	95%	75%	2.91	1
InstiChN10	Institutional	Chiller	New	10	Duct Insulation, Add R8	No Insulation	ton	$2.3978	15	5,213	0.010	52.1304	$125.00	1%	100%	95%	0.29	0
InstiChT1	Institutional	Chiller	Turnover	1	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.4689	15	5,213	0.76	629	$295.00	12%	95%	95%	2.91	1
InstiChT2	Institutional	Chiller	Turnover	2	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2859	15	5,213	1.944	1,618	$462.50	31%	95%	95%	4.77	1
InstiChT3	Institutional	Chiller	Turnover	3	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.4560	15	5,213	1.944	912	$416.00	18%	95%	95%	4.34	1
InstiChN11	Institutional	Chiller	New	11	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.4560	15	5,213	1.944	912	$416.00	18%	95%	95%	4.34	1
InstiChT5	Institutional	Chiller	Turnover	5	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.4872	15	5,213	0.051	260.6520	$127.00	5%	95%	75%	1.43	1
InstiChT4	Institutional	Chiller	Turnover	4	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1439	15	12,493	1.728	1,438	$207.00	12%	95%	95%	9.47	1
LodgiChE1	Lodging	Chiller	Early	1	Duct Sealing, down to 15%	Leakage of 29%	ton	$1.5268	15	6,222	0.012	62.2224	$95.00	1%	40%	$0.90	0.46	0
LodgiChE2	Lodging	Chiller	Early	2	Duct Insulation, Add R8	No Insulation	ton	$2.0089	15	6,222	0.012	62.2224	$125.00	1%	50%	95%	0.35	0
LodgiChE3	Lodging	Chiller	Early	3	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton	ton	$0.4018	15	6,222	0.061	311.1120	$125.00	5%	75%	75%	1.74	1
LodgiChE4	Lodging	Chiller	Early	4	Energy Recovery Units	No Energy Recovery	ton	$0.3616	15	6,222	0.246	1,244.4	$450.00	20%	75%	75%	1.93	1
LodgiChE5	Lodging	Chiller	Early	5	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.3663	7	6,222	0.197	996	$364.67	16%	75%	75%	1.00	0
LodgiChE6	Lodging	Chiller	Early	6	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$0.82	15	6,222	0.05	245	$200.00	4%	15%	95%	0.85	0
LodgiChE7	Lodging	Chiller	Early	7	Adding window shade film	No shade film	ft window ar	$7.0453	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.04	0
LodgiChE8	Lodging	Chiller	Early	8	Adding window shade screen	No shade screen	ft window ar	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.18	0
LodgiChE9	Lodging	Chiller	Early	9	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.21	20	6,222	0.05	187	$225.00	3%	75%	95%	0.74	0
LodgiChN1	Lodging	Chiller	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	sq ft	$0.40	20	6,222	0.05	218	$87.00	4%	15%	95%	2.17	1
LodgiChN2	Lodging	Chiller	New	2	Adding window shade screen	No shade screen	ft window ar	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.18	0
LodgiChN3	Lodging	Chiller	New	3	Adding reflective roof treatment	Std color roof	sq ft roof area	$4.50	20	6,222	0.05	10	$45.00	0%	100%	95%	1.00	1
LodgiChN4	Lodging	Chiller	New	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$2.00	20	6,222	0.05	64	$127.43	1%	45%	95%	0.65	0
LodgiChN5	Lodging	Chiller	New	5	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.3396	15	6,222	0.76	751	$255.00	12%	95%	95%	3.63	1
LodgiChN6	Lodging	Chiller	New	6	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.1877	15	6,222	1.944	1,931	$362.50	31%	95%	95%	6.58	1
LodgiChN7	Lodging	Chiller	New	7	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.0973	15	14,912	1.728	1,716	$167.00	12%	95%	95%	12.69	1
LodgiChN8	Lodging	Chiller	New	8	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.3696	15	6,222	0.061	311.1120	$115.00	5%	95%	75%	1.89	1
LodgiChN9	Lodging	Chiller	New	9	Energy Recovery Units	No Energy Recovery	ton	$0.2009	15	6,222	0.246	1,244.4	$250.00	20%	95%	75%	3.47	1
LodgiChN10	Lodging	Chiller	New	10	Duct Insulation, Add R8	No Insulation	ton	$2.0089	15	6,222	0.012	62.2224	$125.00	1%	100%	95%	0.35	0
LodgiChT1	Lodging	Chiller	Turnover	1	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.3928	15	6,222	0.76	751	$295.00	12%	95%	95%	3.14	1
LodgiChT2	Lodging	Chiller	Turnover	2	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2395	15	6,222	1.944	1,931	$462.50	31%	95%	95%	5.15	1
LodgiChT3	Lodging	Chiller	Turnover	3	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.3820	15	6,222	1.944	1,089	$416.00	18%	95%	95%	4.58	1
LodgiChN11	Lodging	Chiller	New	11	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.3820	15	6,222	1.944	1,089	$416.00	18%	95%	95%	4.58	1
LodgiChT5	Lodging	Chiller	Turnover	5	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.4082	15	6,222	0.061	311.1120	$127.00	5%	95%	75%	1.71	1
LodgiChT4	Lodging	Chiller	Turnover	4	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1206	15	14,912	1.728	1,716	$207.00	12%	95%	95%	10.24	1
MiscChE1	Misc	Chiller	Early	1	Duct Sealing, down to 15%	Leakage of 29%	ton	$1.3156	15	7,221	0.014	72.2100	$95.00	1%	40%	$0.90	0.53	0
MiscChE2	Misc	Chiller	Early	2	Duct Insulation, Add R8	No Insulation	ton	$1.7311	15	7,221	0.014	72.2100	$125.00	1%	50%	95%	0.40	0
MiscChE3	Misc	Chiller	Early	3	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton	ton	$0.3462	15	7,221	0.071	361.0500	$125.00	5%	75%	75%	2.02	1
MiscChE4	Misc	Chiller	Early	4	Energy Recovery Units	No Energy Recovery	ton	$0.3116	15	7,221	0.285	1,444.2	$450.00	20%	75%	75%	2.24	1
MiscChE5	Misc	Chiller	Early	5	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.3156	7	7,221	0.228	1,155	$364.67	16%	75%	75%	1.16	1
MiscChE6	Misc	Chiller	Early	6	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$0.82	15	7,221	0.05	245	$200.00	3%	15%	95%	0.85	0
MiscChE7	Misc	Chiller	Early	7	Adding window shade film	No shade film	ft window ar	$7.0453	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.04	0
MiscChE8	Misc	Chiller	Early	8	Adding window shade screen	No shade screen	ft window ar	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.18	0
MiscChE9	Misc	Chiller	Early	9	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.04	20	7,221	0.05	217	$225.00	3%	75%	95%	0.83	0
MiscChN1	Misc	Chiller	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	sq ft	$0.34	20	7,221	0.05	253	$87.00	4%	15%	95%	2.44	1
MiscChN2	Misc	Chiller	New	2	Adding window shade screen	No shade screen	ft window ar	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.18	0
MiscChN3	Misc	Chiller	New	3	Adding reflective roof treatment	Std color roof	sq ft roof area	$4.50	20	7,221	0.05	10	$45.00	0%	100%	95%	1.00	1
MiscChN4	Misc	Chiller	New	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$1.73	20	7,221	0.05	74	$127.43	1%	45%	95%	0.70	0
MiscChN5	Misc	Chiller	New	5	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2926	15	7,221	0.76	871	$255.00	12%	95%	95%	3.90	1
MiscChN6	Misc	Chiller	New	6	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.1618	15	7,221	1.944	2,241	$362.50	31%	95%	95%	7.06	1
MiscChN7	Misc	Chiller	New	7	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.0838	15	17,306	1.728	1,992	$167.00	12%	95%	95%	13.62	1
MiscChN8	Misc	Chiller	New	8	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.3185	15	7,221	0.071	361.0500	$115.00	5%	95%	75%	2.19	1
MiscChN9	Misc	Chiller	New	9	Energy Recovery Units	No Energy Recovery	ton	$0.1731	15	7,221	0.285	1,444.2	$250.00	20%	95%	75%	4.03	1
MiscChN10	Misc	Chiller	New	10	Duct Insulation, Add R8	No Insulation	ton	$1.7311	15	7,221	0.014	72.2100	$125.00	1%	100%	95%	0.40	0
MiscChT1	Misc	Chiller	Turnover	1	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.3385	15	7,221	0.76	871	$295.00	12%	95%	95%	3.37	1
MiscChT2	Misc	Chiller	Turnover	2	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2064	15	7,221	1.944	2,241	$462.50	31%	95%	95%	5.53	1
MiscChT3	Misc	Chiller	Turnover	3	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.3292	15	7,221	1.944	1,264	$416.00	18%	95%	95%	4.82	1
MiscChN11	Misc	Chiller	New	11	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.3292	15	7,221	1.944	1,264	$416.00	18%	95%	95%	4.82	1
MiscChT5	Misc	Chiller	Turnover	5	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.3518	15	7,221	0.071	361.0500	$127.00	5%	95%	75%	1.98	1
MiscChT4	Misc	Chiller	Turnover	4	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1039	15	17,306	1.728	1,992	$207.00	12%	95%	95%	10.99	1
OfficChE1	Office	Chiller	Early	1	Duct Sealing, down to 15%	Leakage of 29%	ton	$1.3582	15	6,995	0.014	69.9480	$95.00	1%	40%	$0.90	0.51	0
OfficChE2	Office	Chiller	Early	2	Duct Insulation, Add R8	No Insulation	ton	$1.7870	15	6,995	0.014	69.9480	$125.00	1%	50%	95%	0.39	0
OfficChE3	Office	Chiller	Early	3	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton	ton	$0.3574	15	6,995	0.069	349.7400	$125.00	5%	75%	75%	1.95	1
OfficChE4	Office	Chiller	Early	4	Energy Recovery Units	No Energy Recovery	ton	$0.3217	15	6,995	0.276	1,399.0	$450.00	20%	75%	75%	2.17	1
OfficChE5	Office	Chiller	Early	5	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.3258	7	6,995	0.221	1,119	$364.67	16%	75%	75%	1.12	1
OfficChE6	Office	Chiller	Early	6	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$0.82	15	6,995	0.05	245	$200.00	4%	15%	95%	0.85	0
OfficChE7	Office	Chiller	Early	7	Adding window shade film	No shade film	ft window ar	$7.0453	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.04	0
OfficChE8	Office	Chiller	Early	8	Adding window shade screen	No shade screen	ft window ar	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.18	0
OfficChE9	Office	Chiller	Early	9	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.07	20	6,995	0.05	210	$225.00	3%	75%	95%	0.81	0
OfficChN1	Office	Chiller	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	sq ft	$0.36	20	6,995	0.05	245	$87.00	4%	15%	95%	2.38	1

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	PJM Summer Summer Peak KW Savings	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Fla
OfficChN2	Office	Chiller	New	2	Adding window shade screen	No shade screen	sq ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.18	0
OfficChN3	Office	Chiller	New	3	Adding reflective roof treatment	Std color roof	sq ft roof area	$4.50	20	6,995	0.05	10	$45.00	0%	100%	95%	1.00	1
OfficChN4	Office	Chiller	New	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$1.78	20	6,995	0.05	72	$127.43	1%	45%	95%	0.69	0
OfficChN5	Office	Chiller	New	5	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.3021	15	6,995	0.76	844	$255.00	12%	95%	95%	3.84	1
OfficChN6	Office	Chiller	New	6	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.1670	15	6,995	1.944	2,171	$362.50	31%	95%	95%	6.95	1
OfficChN7	Office	Chiller	New	7	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.0865	15	16,763	1.728	1,930	$167.00	12%	95%	95%	13.41	1
OfficChN8	Office	Chiller	New	8	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.3288	15	6,995	0.069	349.7400	$115.00	5%	95%	75%	2.12	1
OfficChN9	Office	Chiller	New	9	Energy Recovery Units	No Energy Recovery	ton	$0.1787	15	6,995	0.276	1,399.0	$250.00	20%	95%	75%	3.90	1
OfficChN10	Office	Chiller	New	10	Duct Insulation, Add R8	No Insulation	ton	$1.7870	15	6,995	0.014	69.9480	$125.00	1%	100%	95%	0.39	0
OfficChT1	Office	Chiller	Turnover	1	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.3494	15	6,995	0.76	844	$295.00	12%	95%	95%	3.32	1
OfficChT2	Office	Chiller	Turnover	2	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2131	15	6,995	1.944	2,171	$462.50	31%	95%	95%	5.45	1
OfficChT3	Office	Chiller	Turnover	3	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.3398	15	6,995	1.944	1,224	$416.00	18%	95%	95%	4.77	1
OfficChN11	Office	Chiller	New	11	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.3398	15	6,995	1.944	1,224	$416.00	18%	95%	95%	4.77	1
OfficChT5	Office	Chiller	Turnover	5	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.3631	15	6,995	0.069	349.7400	$127.00	5%	95%	75%	1.92	1
OfficChT4	Office	Chiller	Turnover	4	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1073	15	16,763	1.728	1,930	$207.00	12%	95%	95%	10.82	1
RestaChE1	Restaurant	Chiller	Early	1	Duct Sealing, down to 15%	Leakage of 29%	ton	$1.2674	15	7,496	0.015	74.9592	$95.00	1%	40%	$0.90	0.55	0
RestaChE2	Restaurant	Chiller	Early	2	Duct Insulation, Add R8	No Insulation	ton	$1.6676	15	7,496	0.015	74.9592	$125.00	1%	50%	95%	0.42	0
RestaChE3	Restaurant	Chiller	Early	3	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton	ton	$0.3335	15	7,496	0.074	374.7960	$125.00	5%	75%	75%	2.09	1
RestaChE4	Restaurant	Chiller	Early	4	Energy Recovery Units	No Energy Recovery	ton	$0.3002	15	7,496	0.296	1,499.2	$450.00	20%	75%	75%	2.32	1
RestaChE5	Restaurant	Chiller	Early	5	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.3041	7	7,496	0.237	1,199	$364.67	16%	75%	75%	1.20	1
RestaChE6	Restaurant	Chiller	Early	6	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$0.82	15	7,496	0.05	245	$200.00	3%	15%	95%	0.85	0
RestaChE7	Restaurant	Chiller	Early	7	Adding window shade film	No shade film	sq ft window are	$7.0453	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.04	0
RestaChE8	Restaurant	Chiller	Early	8	Adding window shade screen	No shade screen	sq ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.18	0
RestaChE9	Restaurant	Chiller	Early	9	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.00	20	7,496	0.05	225	$225.00	3%	75%	95%	0.86	0
RestaChN1	Restaurant	Chiller	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	sq ft	$0.33	20	7,496	0.05	262	$87.00	4%	15%	95%	2.52	1
RestaChN2	Restaurant	Chiller	New	2	Adding window shade screen	No shade screen	sq ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.18	0
RestaChN3	Restaurant	Chiller	New	3	Adding reflective roof treatment	Std color roof	sq ft roof area	$4.50	20	7,496	0.05	10	$45.00	0%	100%	95%	1.00	1
RestaChN4	Restaurant	Chiller	New	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$1.66	20	7,496	0.05	77	$127.43	1%	45%	95%	0.72	0
RestaChN5	Restaurant	Chiller	New	5	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2819	15	7,496	0.76	905	$255.00	12%	95%	95%	3.98	1
RestaChN6	Restaurant	Chiller	New	6	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.1558	15	7,496	1.944	2,326	$362.50	31%	95%	95%	7.19	1
RestaChN7	Restaurant	Chiller	New	7	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.0808	15	17,964	1.728	2,068	$167.00	12%	95%	95%	13.88	1
RestaChN8	Restaurant	Chiller	New	8	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.3068	15	7,496	0.074	374.7960	$115.00	5%	95%	75%	2.27	1
RestaChN9	Restaurant	Chiller	New	9	Energy Recovery Units	No Energy Recovery	ton	$0.1668	15	7,496	0.296	1,499.2	$250.00	20%	95%	75%	4.18	1
RestaChN10	Restaurant	Chiller	New	10	Duct Insulation, Add R8	No Insulation	ton	$1.6676	15	7,496	0.015	74.9592	$125.00	1%	100%	95%	0.42	0
RestaChT1	Restaurant	Chiller	Turnover	1	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.3261	15	7,496	0.76	905	$295.00	12%	95%	95%	3.44	1
RestaChT2	Restaurant	Chiller	Turnover	2	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.1988	15	7,496	1.944	2,326	$462.50	31%	95%	95%	5.64	1
RestaChT3	Restaurant	Chiller	Turnover	3	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.3171	15	7,496	1.944	1,312	$416.00	18%	95%	95%	4.89	1
RestaChN11	Restaurant	Chiller	New	11	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.3171	15	7,496	1.944	1,312	$416.00	18%	95%	95%	4.89	1
RestaChT5	Restaurant	Chiller	Turnover	5	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.3389	15	7,496	0.074	374.7960	$127.00	5%	95%	75%	2.06	1
RestaChT4	Restaurant	Chiller	Turnover	4	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1001	15	17,964	1.728	2,068	$207.00	12%	95%	95%	11.20	1
RetaiChE1	Retail	Chiller	Early	1	Duct Sealing, down to 15%	Leakage of 29%	ton	$1.2938	15	7,343	0.014	73.4280	$95.00	1%	40%	$0.90	0.54	0
RetaiChE2	Retail	Chiller	Early	2	Duct Insulation, Add R8	No Insulation	ton	$1.7023	15	7,343	0.014	73.4280	$125.00	1%	50%	95%	0.41	0
RetaiChE3	Retail	Chiller	Early	3	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton	ton	$0.3405	15	7,343	0.072	367.1400	$125.00	5%	75%	75%	2.05	1
RetaiChE4	Retail	Chiller	Early	4	Energy Recovery Units	No Energy Recovery	ton	$0.3064	15	7,343	0.290	1,468.6	$450.00	20%	75%	75%	2.28	1
RetaiChE5	Retail	Chiller	Early	5	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.3104	7	7,343	0.232	1,175	$364.67	16%	75%	75%	1.18	1
RetaiChE6	Retail	Chiller	Early	6	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$0.82	15	7,343	0.05	245	$200.00	3%	15%	95%	0.85	0
RetaiChE7	Retail	Chiller	Early	7	Adding window shade film	No shade film	sq ft window are	$7.0453	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.04	0
RetaiChE8	Retail	Chiller	Early	8	Adding window shade screen	No shade screen	sq ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.18	0
RetaiChE9	Retail	Chiller	Early	9	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.02	20	7,343	0.05	220	$225.00	3%	75%	95%	0.85	0
RetaiChN1	Retail	Chiller	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	sq ft	$0.34	20	7,343	0.05	257	$87.00	4%	15%	95%	2.48	1
RetaiChN2	Retail	Chiller	New	2	Adding window shade screen	No shade screen	sq ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.18	0
RetaiChN3	Retail	Chiller	New	3	Adding reflective roof treatment	Std color roof	sq ft roof area	$4.50	20	7,343	0.05	10	$45.00	0%	100%	95%	1.00	1
RetaiChN4	Retail	Chiller	New	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$1.69	20	7,343	0.05	75	$127.43	1%	45%	95%	0.71	0
RetaiChN5	Retail	Chiller	New	5	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2877	15	7,343	0.76	886	$255.00	12%	95%	95%	3.94	1
RetaiChN6	Retail	Chiller	New	6	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.1591	15	7,343	1.944	2,279	$362.50	31%	95%	95%	7.12	1
RetaiChN7	Retail	Chiller	New	7	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.0824	15	17,597	1.728	2,026	$167.00	12%	95%	95%	13.74	1
RetaiChN8	Retail	Chiller	New	8	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.3132	15	7,343	0.072	367.1400	$115.00	5%	95%	75%	2.23	1
RetaiChN9	Retail	Chiller	New	9	Energy Recovery Units	No Energy Recovery	ton	$0.1702	15	7,343	0.290	1,468.6	$250.00	20%	95%	75%	4.10	1
RetaiChN10	Retail	Chiller	New	10	Duct Insulation, Add R8	No Insulation	ton	$1.7023	15	7,343	0.014	73.4280	$125.00	1%	100%	95%	0.41	0
RetaiChT1	Retail	Chiller	Turnover	1	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.3329	15	7,343	0.76	886	$295.00	12%	95%	95%	3.40	1
RetaiChT2	Retail	Chiller	Turnover	2	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2030	15	7,343	1.944	2,279	$462.50	31%	95%	95%	5.58	1
RetaiChT3	Retail	Chiller	Turnover	3	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.3237	15	7,343	1.944	1,285	$416.00	18%	95%	95%	4.85	1
RetaiChN11	Retail	Chiller	New	11	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.3237	15	7,343	1.944	1,285	$416.00	18%	95%	95%	4.85	1
RetaiChT5	Retail	Chiller	Turnover	5	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.3459	15	7,343	0.072	367.1400	$127.00	5%	95%	75%	2.02	1
RetaiChT4	Retail	Chiller	Turnover	4	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1022	15	17,597	1.728	2,026	$207.00	12%	95%	95%	11.08	1
WarehChE1	Warehouse	Chiller	Early	1	Duct Sealing, down to 15%	Leakage of 29%	ton	$1.6707	15	5,686	0.011	56.8632	$95.00	1%	40%	$0.90	0.42	0
WarehChE2	Warehouse	Chiller	Early	2	Duct Insulation, Add R8	No Insulation	ton	$2.1983	15	5,686	0.011	56.8632	$125.00	1%	50%	95%	0.32	0
WarehChE3	Warehouse	Chiller	Early	3	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton	ton	$0.4397	15	5,686	0.056	284.3160	$125.00	5%	75%	75%	1.59	1
WarehChE4	Warehouse	Chiller	Early	4	Energy Recovery Units	No Energy Recovery	ton	$0.3957	15	5,686	0.224	1,137.3	$450.00	20%	75%	75%	1.76	1
WarehChE5	Warehouse	Chiller	Early	5	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.4008	7	5,686	0.180	910	$364.67	16%	75%	75%	0.91	0
WarehChE6	Warehouse	Chiller	Early	6	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$0.82	15	5,686	0.05	245	$200.00	4%	15%	95%	0.85	0
WarehChE7	Warehouse	Chiller	Early	7	Adding window shade film	No shade film	sq ft window are	$7.0453	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.04	0
WarehChE8	Warehouse	Chiller	Early	8	Adding window shade screen	No shade screen	sq ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.18	0
WarehChE9	Warehouse	Chiller	Early	9	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.32	20	5,686	0.05	171	$225.00	3%	75%	95%	0.69	0
WarehChN1	Warehouse	Chiller	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	sq ft	$0.44	20	5,686	0.05	199	$87.00	4%	15%	95%	2.02	1
WarehChN2	Warehouse	Chiller	New	2	Adding window shade screen	No shade screen	sq ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.18	0
WarehChN3	Warehouse	Chiller	New	3	Adding reflective roof treatment	Std color roof	sq ft roof area	$4.50	20	5,686	0.05	10	$45.00	0%	100%	95%	1.00	1
WarehChN4	Warehouse	Chiller	New	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$2.18	20	5,686	0.05	58	$127.43	1%	45%	95%	0.62	0
WarehChN5	Warehouse	Chiller	New	5	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.3716	15	5,686	0.76	686	$255.00	12%	95%	95%	3.49	1
WarehChN6	Warehouse	Chiller	New	6	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2054	15	5,686	1.944	1,765	$362.50	31%	95%	95%	6.32	1
WarehChN7	Warehouse	Chiller	New	7	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1065	15	13,628	1.728	1,569	$167.00	12%	95%	95%	12.18	1
WarehChN8	Warehouse	Chiller	New	8	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.4045	15	5,686	0.056	284.3160	$115.00	5%	95%	75%	1.72	1
WarehChN9	Warehouse	Chiller	New	9	Energy Recovery Units	No Energy Recovery	ton	$0.2198	15	5,686	0.224	1,137.3	$250.00	20%	95%	75%	3.17	1
WarehChN10	Warehouse	Chiller	New	10	Duct Insulation, Add R8	No Insulation	ton	$2.1983	15	5,686	0.011	56.8632	$125.00	1%	100%	95%	0.32	0
WarehChT1	Warehouse	Chiller	Turnover	1	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.4299	15	5,686	0.76	686	$295.00	12%	95%	95%	3.02	1
WarehChT2	Warehouse	Chiller	Turnover	2	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2621	15	5,686	1.944	1,765	$462.50	31%	95%	95%	4.95	1
WarehChT3	Warehouse	Chiller	Turnover	3	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.4180	15	5,686	1.944	995	$416.00	18%	95%	95%	4.45	1
WarehChN11	Warehouse	Chiller	New	11	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.4180	15	5,686	1.944	995	$416.00	18%	95%	95%	4.45	1
WarehChT5	Warehouse	Chiller	Turnover	5	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.4467	15	5,686	0.056	284.3160	$127.00	5%	95%	75%	1.56	1
WarehChT4	Warehouse	Chiller	Turnover	4	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1320	15	13,628	1.728	1,569	$207.00	12%	95%	95%	9.83	1
WarehHeT2	Warehouse	Heating	Turnover	2	7 day, two stage setback thermostat	Manual Thermostat - hp	ton	$0.10	10	3,693	0.008	554	$55.00	15%	100%	45%	4.18	1
GroceHeT2	Grocery	Heating	Turnover	2	7 day, two stage setback thermostat	Manual Thermostat - hp	ton	$0.09	10	4,297	0.010	645	$55.00	15%	100%	45%	4.87	1
HealtHeT2	Healthcare	Heating	Turnover	2	7 day, two stage setback thermostat	Manual Thermostat - hp	ton	$0.04	10	9,778	0.022	1,467	$55.00	15%	100%	45%	11.08	1
InstiHeT2	Institutional	Heating	Turnover	2	7 day, two stage setback thermostat	Manual Thermostat - hp	ton	$0.12	10	3,058	0.007	459	$55.00	15%	100%	45%	3.46	1
MiscHeT2	Misc	Heating	Turnover	2	7 day, two stage setback thermostat	Manual Thermostat - hp	ton	$0.08	10	4,656	0.010	698	$55.00	15%	100%	45%	5.28	1
OfficHeT2	Office	Heating	Turnover	2	7 day, two stage setback thermostat	Manual Thermostat - hp	ton	$0.13	10	2,745	0.006	412	$55.00	15%	100%	45%	3.11	1
RestaHeT2	Restaurant	Heating	Turnover	2	7 day, two stage setback thermostat	Manual Thermostat - hp	ton	$0.09	10	4,181	0.009	627	$55.00	15%	100%	45%	4.74	1
RetaiHeT2	Retail	Heating	Turnover	2	7 day, two stage setback thermostat	Manual Thermostat - hp	ton	$0.09	10	4,297	0.010	645	$55.00	15%	100%	45%	4.87	1
LodgiHeT2	Lodging	Heating	Turnover	2	7 day, two stage setback thermostat	Manual Thermostat - hp	ton	$0.07	10	5,203	0.012	780	$55.00	15%	100%	45%	5.89	1
OfficMoE1	Office	Motors	Early	1	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.27	1
OfficMoT23	Office	Motors	Turnover	23	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.27	1
RestaMoE1	Restaurant	Motors	Early	1	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.27	1

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	PJM Summer Summer Peak KW Savings	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
InstiMoT9	Institutional	Motors	Turnover	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5713	15	84274	6.136	22754.0	$13,000.00	27%	90.0%	80%	1.33	1
RestaMoT23	Restaurant	Motors	Turnover	23	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.27	1
RetaiMoE1	Retail	Motors	Early	1	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.27	1
RetaiMoT23	Retail	Motors	Turnover	23	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.27	1
WarehMoE1	Warehouse	Motors	Early	1	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.27	1
WarehMoT23	Warehouse	Motors	Turnover	23	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.27	1

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
HealtChE1	Healthcare	Chiller	Early	1	Duct Sealing, down to 15%	Leakage of 29%	ton	$0.9204	15	10,322	0.020	103.2168	$95.00	1%	40%	90%	0.917	0
HealtChE2	Healthcare	Chiller	Early	2	Duct Insulation, Add R8	No Insulation	ton	$1.2110	15	10,322	0.020	103.2168	$125.00	1%	50%	95%	0.697	0
HealtChE3	Healthcare	Chiller	Early	3	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton	ton	$0.2422	15	10,322	0.102	516.0840	$125.00	5%	75%	75%	3.484	1
HealtChE4	Healthcare	Chiller	Early	4	Energy Recovery Units	No Energy Recovery	ton	$0.2180	15	10,322	0.407	2,064.3	$450.00	20%	75%	75%	3.871	1
HealtChE5	Healthcare	Chiller	Early	5	Re-commissioning	economizer not functioning	ton	$0.2208	7	10,322	0.326	1,651	$364.67	16%	75%	75%	1.612	1
HealtChE6	Healthcare	Chiller	Early	6	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$0.82	15	10,322	0.05	245	$200.00	2%	15%	95%	1.032	1
HealtChE7	Healthcare	Chiller	Early	7	Adding window shade film	No shade film	q ft window are	$7.0453	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.036	0
HealtChE8	Healthcare	Chiller	Early	8	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.216	0
HealtChE9	Healthcare	Chiller	Early	9	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$0.73	20	10,322	0.05	310	$225.00	3%	75%	95%	1.446	1
HealtChN1	Healthcare	Chiller	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	sq ft	$0.24	20	10,322	0.05	361	$87.00	4%	15%	95%	4.296	1
HealtChN2	Healthcare	Chiller	New	2	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.216	0
HealtChN3	Healthcare	Chiller	New	3	Adding reflective roof treatment	Std color roof	sq ft roof area	$4.50	20	10,322	0.05	10	$45.00	0%	100%	95%	0.970	0
HealtChN4	Healthcare	Chiller	New	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$1.20	20	10,322	0.05	106	$127.43	1%	45%	95%	1.050	1
HealtChN5	Healthcare	Chiller	New	5	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2047	15	10,322	0.76	1,246	$255.00	12%	95%	95%	5.344	1
HealtChN6	Healthcare	Chiller	New	6	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.1132	15	10,322	1.944	3,203	$362.50	31%	95%	95%	9.666	1
HealtChN7	Healthcare	Chiller	New	7	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.0587	15	24,736	1.728	2,847	$167.00	12%	95%	95%	18.651	1
HealtChN8	Healthcare	Chiller	New	8	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.2228	15	10,322	0.102	516.0840	$115.00	5%	95%	75%	3.787	1
HealtChN9	Healthcare	Chiller	New	9	Energy Recovery Units	No Energy Recovery	ton	$0.1211	15	10,322	0.407	2,064.3	$250.00	20%	95%	75%	6.968	1
HealtChN10	Healthcare	Chiller	New	10	Duct Insulation, Add R8	No Insulation	ton	$1.2110	15	10,322	0.020	103.2168	$125.00	1%	100%	95%	0.697	0
HealtChT1	Healthcare	Chiller	Turnover	1	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2368	15	10,322	0.76	1,246	$295.00	12%	95%	95%	4.619	1
HealtChT2	Healthcare	Chiller	Turnover	2	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.1444	15	10,322	1.944	3,203	$462.50	31%	95%	95%	7.576	1
HealtChT3	Healthcare	Chiller	Turnover	3	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.2303	15	10,322	1.944	1,806	$416.00	18%	95%	95%	5.994	1
HealtChN11	Healthcare	Chiller	New	11	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.2303	15	10,322	1.944	1,806	$416.00	18%	95%	95%	5.994	1
HealtChT5	Healthcare	Chiller	Turnover	5	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.2461	15	10,322	0.102	516.0840	$127.00	5%	95%	75%	3.429	1
HealtChT4	Healthcare	Chiller	Turnover	4	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.0727	15	24,736	1.728	2,847	$207.00	12%	95%	95%	15.047	1
OfficFlE1	Office	Fluorescent	Early	1	power factor ballasts) - Bundle	Replace (E) T12 Lamp - Bundle	Fixture	$0.5712	14	394	0.011	97	$55.38	25%	95%	41%	1.305	1
GroceFlT6	Grocery	Fluorescent	Turnover	6	LED Retrofit Tube	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$1.0146	6	163	0.007	64	$65.00	39%	40%	95%	0.278	0
OfficFlE2	Office	Fluorescent	Early	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2641	14	1,578	0.054	473	$125.00	30%	95%	80%	2.822	1
OfficFlE3	Office	Fluorescent	Early	3	Photocell dimming control	No prior dimming control	Photocell	$0.2852	9	1,578	0.091	789	$225.00	50%	95%	95%	1.467	1
LodgiInE6	Lodging	Incandescent	Early	6	Hotel Occupancy Sensors	No prior control	Per Room	$0.7447	10	240	0.019	168	$125.00	70%	90%	95%	0.660	0
OfficFlN1	Office	Fluorescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1781	15	20,340	0.234	2,034	$362.18	10%	95%	100%	4.493	1
OfficFlN2	Office	Fluorescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.3561	15	20,340	0.584	5,085	$1,810.90	25%	75%	100%	2.246	1
HealtHeE1	Healthcare	Heating	Early	1	Re-commissioning	economizer not functioning	sq ft	$0.2710	7	125,500	0.297	20,080	$5,441.68	16%	95%	75%	1.078	1
HealtHeE2	Healthcare	Heating	Early	2	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$4.44	20	298	0.05	45	$200.00	15%	10%	95%	0.385	0
HealtHeE3	Healthcare	Heating	Early	3	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.67	20	298	0.05	75	$125.00	25%	10%	95%	0.844	0
HealtHeE4	Healthcare	Heating	Early	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.75	20	298	0.05	34	$127.43	11%	10%	95%	0.522	0
HealtHeE5	Healthcare	Heating	Early	5	Humidification with High pressure, Ultrasonic devices	Electric Resistive Elements	unit	$0.1893	10	2,794	0.039	2,641	$500.00	95%	100%	95%	2.354	1
HealtHeN1	Healthcare	Heating	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5 - Electric Heat	sq ft	$1.93	20	298	0.05	45	$87.00	15%	10%	95%	0.885	0
WarehHIE1	Warehouse	HID	Early	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.5670	10	1,268	0.043	378	$214.50	30%	85%	80%	0.867	0
WarehHIE2	Warehouse	HID	Early	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.4472	10	1,856	0.077	671	$300.00	36%	85%	80%	1.099	1
WarehHIE3	Warehouse	HID	Early	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.5150	10	1,268	0.052	456	$235.00	36%	85%	80%	0.954	0
WarehHIE4	Warehouse	HID	Early	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.5081	10	1,856	0.074	640	$325.00	34%	85%	80%	0.967	0
WarehHIT5	Warehouse	HID	Turnover	5	Ceramic Metal Halide lamp	Replace non-ceramic lamp lamp 400 W	Lamp	$0.1282	4	1,560	0.031	273	$35.00	18%	85%	55%	1.438	1
WarehHIE8	Warehouse	HID	Early	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2465	10	5,070	0.175	1,521	$375.00	30%	85%	85%	1.994	1
WarehHIE9	Warehouse	HID	Early	9	Photocell dimming control	No prior dimming control	Photocell	$0.2170	10	5,070	0.291	2,535	$550.00	50%	85%	85%	2.265	1
WarehHIE10	Warehouse	HID	Early	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1972	10	5,070	0.058	507	$100.00	10%	85%	45%	2.492	1
WarehHIE7	Warehouse	HID	Early	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$1.2166	15	1,268	0.065	566	$688.00	45%	85%	80%	0.658	0
WarehHIT1	Warehouse	HID	Turnover	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.2921	10	1,268	0.043	378	$110.50	30%	85%	80%	1.683	1
WarehHIT2	Warehouse	HID	Turnover	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.3354	10	1,856	0.077	671	$225.00	36%	85%	80%	1.465	1
WarehHIT3	Warehouse	HID	Turnover	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.3178	10	1,268	0.052	456	$145.00	36%	85%	80%	1.547	1
WarehHIT4	Warehouse	HID	Turnover	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.4065	10	1,856	0.074	640	$260.00	34%	85%	80%	1.209	1
WarehHIT6	Warehouse	HID	Turnover	6	Multi Lamp Hard Wired CFL	Replace HID Fixure Drawing 400 W	Fixture	$0.5140	10	1,856	0.095	827	$425.00	45%	85%	55%	0.956	0
WarehHIT7	Warehouse	HID	Turnover	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.6631	15	1,268	0.065	566	$375.00	45%	85%	80%	1.206	1
OfficInE2	Office	Incandescent	Early	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1159	14	3,594	0.124	1,078	$125.00	30%	95%	80%	6.429	1
OfficInE3	Office	Incandescent	Early	3	Photocell dimming control	No prior dimming control	Photocell	$0.1252	9	3,594	0.207	1,797	$225.00	50%	95%	95%	3.342	1
GroceInN1	Grocery	Incandescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0572	15	9,629	0.111	963	$55.11	10%	95%	100%	13.977	1
HealtInN1	Healthcare	Incandescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0842	15	49,948	0.574	4,995	$420.44	10%	95%	100%	9.504	1
AllLaN1	All	arge Appliance	New	1	EnergyStar vending machine	Standard vending machine	machine	$0.2672	15	3,619	0.140	1,310	$350.00	36%	100%	50%	2.965	1
AllLaN2	All	arge Appliance	New	2	Beverage machine control	Vending machine with no sensor	machine	$0.1021	5	3,619	0.178	1,665	$170.00	46%	100%	50%	2.244	1
AllLaN3	All	arge Appliance	New	3	Other cold product control	Vending machine with no sensor	machine	$0.1111	5	3,504	0.172	1,612	$179.00	46%	100%	50%	2.063	1
AllLaN4	All	arge Appliance	New	4	Non-cooled snack control	Vending machine with no sensor	machine	$0.4671	5	745	0.037	343	$160.00	46%	100%	50%	0.490	0
AllLaN5	All	arge Appliance	New	5	EnergyStar dishwasher	Std Dishwasher	dishwasher	$0.4015	12	250	0.015	137	$55.00	55%	100%	50%	1.541	1
AllLaN6	All	arge Appliance	New	6	EnergyStar refrigerator	Std Refrigerator	refrigerator	$0.3000	12	750	0.011	100	$30.00	13%	100%	50%	2.062	1
AllLaN7	All	arge Appliance	New	7	Low-temperature dish machine	High temp dish machine with booster heater	removed kW	$0.0634	15	17,451	0.894	8,362	$530.00	48%	100%	50%	12.502	1
AllLaN8	All	arge Appliance	New	8	High-efficiency washer	Standard washer, electric hot water	washer	$0.4380	10	2,262	0.102	959	$420.00	42%	100%	50%	1.108	1
AllLaN9	All	arge Appliance	New	9	High-efficiency coin-op washer w/o Electric Water Heat	Coin-op wash, w/out electric hot water	washer	$1.7872	10	1,180	0.025	235	$420.00	20%	100%	50%	0.271	0
AllLaN10	All	arge Appliance	New	10	High-efficiency coin-op washer w/ Electric water heat	Coin-op wash, electric hot water	washer	$0.4380	10	2,262	0.102	959	$420.00	42%	100%	50%	1.108	1
AllLaT1	All	arge Appliance	Turnover	1	EnergyStar vending machine	Standard vending machine	machine	$0.2672	15	3,619	0.140	1,310	$350.00	36%	100%	50%	2.965	1
AllLaT2	All	arge Appliance	Turnover	2	Beverage machine control	Vending machine with no sensor	machine	$0.1021	5	3,619	0.178	1,665	$170.00	46%	100%	50%	2.244	1
AllLaT3	All	arge Appliance	Turnover	3	Other cold product control	Vending machine with no sensor	machine	$0.1111	5	3,504	0.172	1,612	$179.00	46%	100%	50%	2.063	1
AllLaT4	All	arge Appliance	Turnover	4	Non-cooled snack control	Vending machine with no sensor	machine	$0.4671	5	745	0.037	343	$160.00	46%	100%	50%	0.490	0
AllLaT5	All	arge Appliance	Turnover	5	EnergyStar dishwasher	Std Dishwasher	dishwasher	$0.4015	12	250	0.015	137	$55.00	55%	100%	50%	1.541	1
AllLaT6	All	arge Appliance	Turnover	6	EnergyStar refrigerator	Std Refrigerator	refrigerator	$0.3000	12	750	0.011	100	$30.00	13%	100%	50%	2.062	1
AllLaT7	All	arge Appliance	Turnover	7	Low-temperature dish machine	High temp dish machine with booster heater	removed kW	$0.0634	15	17,451	0.894	8,362	$530.00	48%	100%	50%	12.502	1
AllLaT8	All	arge Appliance	Turnover	8	High-efficiency washer	Standard washer, electric hot water	washer	$0.4380	10	2,262	0.102	959	$420.00	42%	100%	50%	1.108	1
AllLaT9	All	arge Appliance	Turnover	9	High-efficiency coin-op washer w/o Electric Water Heat	Coin-op wash, w/out electric hot water	washer	$1.7872	10	1,180	0.025	235	$420.00	20%	100%	50%	0.271	0
AllLaT10	All	arge Appliance	Turnover	10	High-efficiency coin-op washer w/ Electric water heat	Coin-op wash, electric hot water	washer	$0.4380	10	2,262	0.102	959	$420.00	42%	100%	50%	1.108	1
OfficMoN1	Office	Motors	New	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.3115	15	12921	0.0282	117.2	$154	0.91%	74.4%	100%	0.670	0
OfficMoN2	Office	Motors	New	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.4170	15	49501	0.0231	367.6	$521	0.74%	74.4%	100%	0.544	0
OfficMoN3	Office	Motors	New	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.2732	15	121517	0.0138	541.0	$689	0.45%	66.3%	100%	0.587	0
OfficMoN4	Office	Motors	New	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.5357	15	244333	0.0121	953.4	$511	0.39%	55.8%	100%	1.381	1
OfficMoN5	Office	Motors	New	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-500 HP	Motor	$0.4495	15	524346	0.0284	4796.5	$2,156	0.91%	55.8%	100%	1.637	1
OfficMoN6	Office	Motors	New	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.6710	15	81970	2.109	16,394	$11,000.00	20%	55.0%	100%	1.209	1
OfficMoN7	Office	Motors	New	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.5200	15	81970	6.257	25000.8	$13,000.00	31%	70.0%	100%	1.702	1
OfficMoN8	Office	Motors	New	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4941	15	81970	0.000	26312.3	$13,000.00	32%	80.0%	100%	1.482	1
OfficMoN9	Office	Motors	New	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5874	15	81970	6.257	22131.8	$13,000.00	27%	70.0%	100%	1.541	1
OfficMoN10	Office	Motors	New	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.5413	15	81970	4.542	24017.1	$13,000.00	29%	55.0%	100%	1.566	1
OfficMoN11	Office	Motors	New	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5874	15	81970	6.257	22131.8	$13,000.00	27%	30.0%	100%	1.541	1
OfficMoT1	Office	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.3115	15	12921	0.0282	117.2	$154	0.91%	74.4%	100%	0.670	0

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
OfficMoT2	Office	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.4170	15	49501	0.0231	367.6	$521	0.74%	74.4%	100%	0.544	0
OfficMoT3	Office	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.2732	15	121517	0.0138	541.0	$689	0.45%	66.3%	100%	0.587	0
OfficMoT4	Office	Motors	Turnover	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.5357	15	244333	0.0121	953.4	$511	0.39%	55.8%	100%	1.381	1
OfficMoT5	Office	Motors	Turnover	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-250 HP	Motor	$0.4495	15	524346	0.0284	4796.5	$2,156	0.91%	55.8%	100%	1.637	1
OfficMoT6	Office	Motors	Turnover	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.6710	15	81970	2.109	16,394	$11,000.00	20%	55.0%	80%	1.209	1
OfficMoT7	Office	Motors	Turnover	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.5200	15	81970	6.257	25000.8	$13,000.00	31%	90.0%	80%	1.702	1
OfficMoT8	Office	Motors	Turnover	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4941	15	81970	0.000	26312.3	$13,000.00	32%	90.0%	80%	1.482	1
OfficMoT9	Office	Motors	Turnover	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5874	15	81970	6.257	22131.8	$13,000.00	27%	90.0%	80%	1.541	1
OfficMoT10	Office	Motors	Turnover	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.5413	15	81970	4.542	24017.1	$13,000.00	29%	80.0%	80%	1.566	1
OfficMoT11	Office	Motors	Turnover	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5874	15	81970	6.257	22131.8	$13,000.00	27%	55.0%	80%	1.541	1
OfficMoT12	Office	Motors	Turnover	12	Motors: Rewind 125-200 HP	(E) Motor	Motor	$0.6069	15	245909	0.159	1235.7	$750	0.5%	35.0%	95%	1.336	1
OfficMoT13	Office	Motors	Turnover	13	Motors: Rewind 201-500 HP	(E) Motor	Motor	$0.7470	15	532803	0.344	2677.4	$2,000	0.5%	50.0%	95%	1.086	1
OfficMoT14	Office	Motors	Turnover	14	Motors: Rewind 20-50 HP	(E) Motor	Motor	$0.5601	15	50263	0.057	446.3	$250	0.9%	10.0%	95%	1.448	1
OfficMoT15	Office	Motors	Turnover	15	Motors: Rewind 500+ HP	(E) Motor	Motor	$0.6474	15	1229546	0.795	6178.6	$4,000	0.5%	70.0%	95%	1.253	1
OfficMoT16	Office	Motors	Turnover	16	Motors: Rewind 51-100 HP	(E) Motor	Motor	$0.6955	15	124291	0.092	718.9	$500	0.6%	20.0%	95%	1.166	1
OfficMoT17	Office	Motors	Turnover	17	Downsizing motor during retrofit	Larger hp standard motor	HP Reduction	$0.34	20	186,404	0.190	1,477	$500.00	0.79%	25%	95%	3.079	1
OfficMoN12	Office	Motors	New	12	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.635	1
OfficMoN13	Office	Motors	New	13	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.031	0
OfficMoN14	Office	Motors	New	14	Electronically Commutated Motors (ECM) on an Air Handler Unit	replaced with 85% eff. ECPM motor		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.789	1
OfficMoN15	Office	Motors	New	15	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.628	0
OfficMoT18	Office	Motors	Turnover	18	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.635	1
OfficMoT19	Office	Motors	Turnover	19	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.031	0
OfficMoT20	Office	Motors	Turnover	20	Electronically Commutated Motors (ECM) on an Air Handler Unit	replaced with 85% eff. ECPM motor		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.789	1
OfficMoT21	Office	Motors	Turnover	21	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.628	0
AllOfE1	All	ffice Equipme	Early	1	PC network power management	No central control	PC	$0.14	5	410	0.023	215	$30.00	52.44%	75%	80%	1.642	1
AllOfE2	All	ffice Equipme	Early	2	Occupancy sensor controls/Smart Strip	Computers, other plug loads	sensor	$0.60	5	413	0.010	124	$75.00	30.02%	55%	95%	0.367	0
AllOfN1	All	ffice Equipme	New	1	ENERGY STAR® Office Equipment	Std Office Equipment	PC	$1.09	5	4,000	0.021	200	$218.00	5.00%	90%	80%	0.210	0
AllOfN2	All	ffice Equipme	New	2	Energy Star - Water Cooler	Std Water Cooler	unit	$1.06	5	453	0.022	204	$215.67	45.08%	35%	80%	0.217	0
AllOfN3	All	ffice Equipme	New	3	80 Plus® PC-desktop	Standard personal computer, desktop	PC	$0.19	5	410	0.014	130	$25.00	31.71%	100%	55%	1.191	1
AllOfN6	All	ffice Equipme	New	6	Data Center - Server/Storage Virtualization	No Virtualization	unit	$1.76	5	4,818	0.452	4,227	$7,434	87.73%	70%	80%	0.130	0
AllOfT1	All	ffice Equipme	Turnover	1	ENERGY STAR® Office Equipment	Std Office Equipment	PC	$1.09	5	4,000	0.021	200	$218.00	5.00%	90%	80%	0.210	0
AllOfT2	All	ffice Equipme	Turnover	2	Energy Star - Water Cooler	Std Water Cooler	unit	$1.06	5	453	0.022	204	$215.67	45.08%	35%	80%	0.217	0
AllOfT3	All	ffice Equipme	Turnover	3	80 Plus® PC-desktop	Standard personal computer, desktop	PC	$0.19	5	410	0.014	130	$25.00	31.71%	100%	55%	1.191	1
AllOfT6	All	ffice Equipme	Turnover	6	Data Center - Server/Storage Virtualization	No Virtualization	unit	$1.76	5	4,818	0.452	4,227	$7,434	87.73%	70%	80%	0.130	0
HealtPaE1	Healthcare	Packaged DX	Early	1	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$3.13	20	1,589	0.05	64	$200.00	4%	15%	95%	0.475	0
HealtPaE2	Healthcare	Packaged DX	Early	2	Adding window shade film	No shade film	q ft window are	$7.05	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.033	0
HealtPaE3	Healthcare	Packaged DX	Early	3	Adding window shade screen	No shade screen	q ft window are	$3.90	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.206	0
HealtPaE4	Healthcare	Packaged DX	Early	4	Windows U<0.40, .55 SHGC	Existing window specifications	q ft window are	$1.40	30	2	0.000	0	$0.28	13%	50%	95%	0.951	0
HealtPaE5	Healthcare	Packaged DX	Early	5	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$2.12	20	1,589	0.05	106	$225.00	7%	95%	95%	0.599	0
HealtPaE7	Healthcare	Packaged DX	Early	7	Automated control system	Baseline DX	ton	$0.30	10	1,679	0.010	84	$25.00	5%	100%	65%	1.660	1
HealtPaE8	Healthcare	Packaged DX	Early	8	Duct Sealing, down to 15%	Leakage of 29%	ton	$7.92	15	1,589	0.05	12	$95.00	1%	45%	80%	0.400	0
HealtPaE9	Healthcare	Packaged DX	Early	9	Hotel Keycard Sensors	No prior controls	oom Controlle	$0.29	10	1,426	0.041	342	$100.00	24%	95%	80%	1.690	1
HealtPaE10	Healthcare	Packaged DX	Early	10	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	ton	$0.55	1	1,728	0.05	64	$35.00	4%	100%	45%	0.202	0
HealtPaE11	Healthcare	Packaged DX	Early	11	7 day, two stage setback thermostat	Manual Thermostat	ton	$0.44	10	1,589	0.015	125	$55.00	8%	100%	45%	1.123	1
HealtPaE13	Healthcare	Packaged DX	Early	13	Re-commissioning	economizer not functioning	ton	$0.22	7	1,589	0.05	254	$55.15	16%	95%	75%	1.643	1
HealtPaN1	Healthcare	Packaged DX	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	ton	$1.36	20	1,589	0.05	64	$87.00	4%	100%	95%	1.091	1
HealtPaN2	Healthcare	Packaged DX	New	2	Adding reflective roof treatment	Std color roof	ton	$4.50	20	1,589	0.05	10	$45.00	1%	100%	95%	0.972	0
HealtPaN3	Healthcare	Packaged DX	New	3	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$1.18	20	1,589	0.05	106	$125.00	7%	100%	95%	1.077	1
HealtPaN4	Healthcare	Packaged DX	New	4	Green Roof (New construction or roof replacement)	Std Roof	ton	$1.20	20	1,589	0.05	106	$127.43	7%	45%	95%	1.057	1
HealtPaN5	Healthcare	Packaged DX	New	5	Duct Insulation, Add R8	No Insulation	ton	$10.42	20	1,589	0.05	12	$125.00	1%	100%	95%	0.365	0
HealtPaN6	Healthcare	Packaged DX	New	6	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$0.92	20	1,369	0.04	98	$90.40	7%	100%	95%	1.375	1
HealtPaN7	Healthcare	Packaged DX	New	7	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$0.99	20	1,369	0.08	183	$180.81	13%	100%	95%	1.283	1
HealtPaN8	Healthcare	Packaged DX	New	8	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$1.06	20	1,369	0.12	257	$271.21	19%	100%	95%	1.203	1
HealtPaN9	Healthcare	Packaged DX	New	9	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$0.52	20	1,589	0.05	106	$55.00	7%	100%	95%	2.448	1
HealtPaN10	Healthcare	Packaged DX	New	10	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$0.52	20	1,618	0.06	135	$70.00	8%	100%	95%	2.448	1
HealtPaN11	Healthcare	Packaged DX	New	11	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$0.87	20	1,780	0.06	132	$115.13	7%	100%	95%	1.456	1
HealtPaN12	Healthcare	Packaged DX	New	12	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$1.09	20	1,835	0.04	90	$98.39	5%	100%	95%	1.162	1
HealtPaN13	Healthcare	Packaged DX	New	13	Ground Source HP Open - Water	Air Source Heat Pump	ton	$1.44	15	1,618	0.23	519	$ 750.0	32%	20%	95%	0.697	0
HealtPaN14	Healthcare	Packaged DX	New	14	Ground Source HP Closed	Air Source Heat Pump	ton	$2.59	15	1,618	0.035	290	$750.00	18%	100%	95%	0.310	0
HealtPaN15	Healthcare	Packaged DX	New	15	Air-side Economizer	No Economizer	ton	$0.71	15	1,589	0.028	238	$170.00	15%	75%	45%	1.126	1
HealtPaN16	Healthcare	Packaged DX	New	16	Energy Recovery Units	No Energy Recovery	ton	$0.56	15	1,589	0.038	318	$179.00	20%	100%	95%	1.426	1
HealtPaN17	Healthcare	Packaged DX	New	17	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$1.47	15	1,679	0.009	76	$110.89	5%	100%	95%	0.548	0
HealtPaT1	Healthcare	Packaged DX	Turnover	1	Duct Insulation, Add R8	No Insulation	ton	$10.42	15	1,589	0.05	12	$125.00	1%	100%	95%	0.304	0
HealtPaT2	Healthcare	Packaged DX	Turnover	2	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$0.92	20	1,369	0.04	98	$90.40	7%	100%	95%	1.375	1
HealtPaT3	Healthcare	Packaged DX	Turnover	3	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$0.99	20	1,369	0.08	183	$180.81	13%	100%	95%	1.283	1
HealtPaT4	Healthcare	Packaged DX	Turnover	4	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$1.06	20	1,369	0.12	257	$271.21	19%	100%	95%	1.203	1
HealtPaT5	Healthcare	Packaged DX	Turnover	5	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$0.52	20	1,589	0.05	106	$55.00	7%	100%	95%	2.448	1
HealtPaT6	Healthcare	Packaged DX	Turnover	6	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$0.52	20	1,618	0.06	135	$70.00	8%	100%	95%	2.448	1
HealtPaT7	Healthcare	Packaged DX	Turnover	7	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$0.87	20	1,780	0.06	132	$115.13	7%	100%	95%	1.456	1
HealtPaT8	Healthcare	Packaged DX	Turnover	8	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$1.09	20	1,835	0.04	90	$98.39	5%	100%	95%	1.162	1
HealtPaT9	Healthcare	Packaged DX	Turnover	9	Ground Source HP Open - Water	Air Source Heat Pump	ton	$1.44	15	1,618	0.23	519	$ 750.0	32%	5%	95%	0.697	0
HealtPaT10	Healthcare	Packaged DX	Turnover	10	Ground Source HP Closed	Air Source Heat Pump	ton	$2.59	15	1,618	0.035	290	$750.00	18%	100%	95%	0.310	0
HealtPaT11	Healthcare	Packaged DX	Turnover	11	Air-side Economizer	No Economizer	ton	$0.71	15	1,589	0.028	238	$170.00	15%	75%	45%	1.126	1
HealtPaT12	Healthcare	Packaged DX	Turnover	12	Energy Recovery Units	No Energy Recovery	ton	$0.56	15	1,589	0.038	318	$179.00	20%	100%	95%	1.426	1
HealtPaT13	Healthcare	Packaged DX	Turnover	13	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$1.47	15	1,679	0.009	76	$110.89	5%	100%	95%	0.548	0
AllReT1	All	Refrigeration	Turnover	1	Vertical night covers	No covers present	linear ft	$0.34	5	4,380	0.006	44	$15.00	1.00%	50%	95%	0.697	0
AllReT2	All	Refrigeration	Turnover	2	eCube	No eCube	unit	$0.33	9	5,431	0.162	1,222	$399.00	22.50%	95%	95%	1.303	1
AllReT3	All	Refrigeration	Turnover	3	Anti-sweat heat (ASH) controls - Freezer	ASH without controls	Per Door	$0.16	12	2,985	0.029	1,882	$300.00	63%	95%	85%	3.588	1
AllReT4	All	Refrigeration	Turnover	4	Anti-sweat heat (ASH) controls - Cooler	ASH without controls	Per Door	$0.29	12	1,621	0.028	1,023	$300.00	63%	95%	85%	1.971	1
AllReT5	All	Refrigeration	Turnover	5	Floating head pressure controller	Standard head pressure control	ton	$0.46	14	18,314	0.085	641	$296.00	4%	50%	95%	1.634	1
AllReN1	All	Refrigeration	New	1	Efficient, low-temp reach-in	Standard low-temp reach-in	unit	$0.07	12	5,431	0.222	1,671	$123.33	30.77%	95%	95%	8.593	1
AllReN2	All	Refrigeration	New	2	No-heat glass doors	Standard low-temp reach-in	door	$0.67	10	3,986	0.106	797	$537.50	20.00%	95%	95%	0.740	0
AllReN3	All	Refrigeration	New	3	High Efficiency Ice Makers	Standard Ice Maker	Each	$0.16	10	11,815	0.042	318	$50.00	3%	85%	85%	3.175	1
AllReN4	All	Refrigeration	New	4	Compressor VSD	Base Refrigeration System - Grocery		$0.35	13	5,436	0.101	761	$267.00	14%	75%	86%	1.985	1
AllReN5	All	Refrigeration	New	5	VFD on cooling tower fans	Base single-speed fan		$0.29	15	7158	0.681	5,132	$1,507.40	72%	25%	95%	2.757	1
AllReN6	All	Refrigeration	New	6	Reach-in Cooler: Shaded Pole to PSC: 1-37 Watt			$0.60	15	832	0.047	352	$212.50	42%	75%	49%	1.342	1
AllReN7	All	Refrigeration	New	7	Reach-in Cooler: PSC to ECM: 1-37 Watt			$0.54	15	467	0.022	169	$91.25	36%	75%	49%	1.500	1
AllReN8	All	Refrigeration	New	8	Reach-in Cooler: Shaded Pole to ECM: 1-37 Watt			$0.59	15	832	0.069	521	$306.25	63%	75%	49%	1.378	1
AllReN9	All	Refrigeration	New	9	Reach-in Freezer: Shaded Pole to ECM: 1-14 Watt			$0.49	15	832	0.082	622	$306.25	75%	75%	49%	1.645	1

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
AllReN10	All	Refrigeration	New	10	Reach-in Shaded Pole to PSC Evaporator Fan Motor			$0.55	15	832	0.051	386	$212.50	46%	75%	49%	1.471	1
AllReN11	All	Refrigeration	New	11	Reach-in PSC to ECM Evaporator Fan Motor			$0.49	15	467	0.025	185	$91.25	40%	75%	49%	1.642	1
AllReN12	All	Refrigeration	New	12	Reach-in Shaded Pole to ECM Evaporator Fan Motor			$0.54	15	832	0.076	571	$306.25	69%	75%	49%	1.510	1
AllReN13	All	Refrigeration	New	13	Walk-in Cooler: PSC to ECM: 16-49 Watt			$0.35	15	711	0.034	258	$91.25	36%	75%	49%	2.290	1
AllReN14	All	Refrigeration	New	14	Walk-in Freezer: PSC to ECM: 16-49 Watt			$0.30	15	711	0.041	309	$91.25	43%	75%	49%	2.743	1
AllReN15	All	Refrigeration	New	15	Walk-in Cooler: Shaded Pole to ECM: 16-49 Watt			$0.44	15	1,175	0.093	704	$306.25	60%	75%	49%	1.862	1
AllReN16	All	Refrigeration	New	16	Walk-in Freezer: Shaded Pole to ECM: 16-49 Watt			$0.36	15	1,175	0.112	842	$306.25	72%	75%	49%	2.227	1
AllReN17	All	Refrigeration	New	17	Walk-in PSC to ECM			$0.32	15	711	0.038	283	$91.25	40%	75%	49%	2.512	1
AllReN18	All	Refrigeration	New	18	Walk-in Shaded Pole to ECM			$0.40	15	1175	0.103	773	$306.25	66%	75%	49%	2.044	1
AllReT6	All	Refrigeration	Turnover	6	High Efficiency Ice Makers	Standard Ice Making		$0.12	10	11,815	0.159	1,197	$140.00	10%	85%	85%	4.268	1
AllReN19	All	Refrigeration	New	19	High Efficiency Ice Machine Self Contained	Standard Ice Machine Self Contained		$0.31	10	4,341	0.042	318	$100.00	7%	85%	85%	1.587	1
AllReT7	All	Refrigeration	Turnover	7	Fluorescent walk-in light fixture	Incandescent walk-in light fixture	fixture	$0.42	15	792	0.065	491	$206.00	62.00%	85%	45%	1.929	1
AllReT8	All	Refrigeration	Turnover	8	LED Case Lighting	T12 or T10 fluorescent lighting	Light Bar	$0.43	15	677	0.070	526	$225.00	77.78%	95%	75%	1.895	1
AllReT9	All	Refrigeration	Turnover	9	LED Case Lighting - Occupancy Sensor	No Occupancy Sensor	Light Bar	$0.15	8	667	0.003	20	$3.00	3.00%	15%	95%	2.540	1
AllReT10	All	Refrigeration	Turnover	10	Efficient, low-temp reach-in	Standard low-temp reach-in	unit	$0.07	12	5,431	0.222	1,671	$123.33	30.77%	85%	85%	8.593	1
AllReT11	All	Refrigeration	Turnover	11	High R-Value Glass Doors		door	$0.67	10	3,986	0.106	797	$537.50	20.00%	85%	85%	0.740	0
AllReT12	All	Refrigeration	Turnover	12	Compressor VSD retrofit	Base Refrigeration System - Grocery		$0.35	13	5,436	0.101	761	$267.00	14%	75%	86%	1.985	1
AllReT13	All	Refrigeration	Turnover	13	Quick acting freezer doors			$0.62	10	38,544	4.461	33,637	$20,966.00	87%	75%	86%	0.801	0
AllReT14	All	Refrigeration	Turnover	14	VFD on cooling tower fans	Base single-speed fan		$0.29	15	7158	0.681	5,132	$1,507.40	72%	35%	85%	2.757	1
AllReT15	All	Refrigeration	Turnover	15	Reach-in Cooler: Shaded Pole to PSC: 1-37 Watt			$0.60	15	832	0.047	352	$212.50	42%	75%	49%	1.342	1
AllReT16	All	Refrigeration	Turnover	16	Reach-in Cooler: PSC to ECM: 1-37 Watt			$0.54	15	467	0.022	169	$91.25	36%	75%	49%	1.500	1
AllReT17	All	Refrigeration	Turnover	17	Reach-in Cooler: Shaded Pole to ECM: 1-37 Watt			$0.59	15	832	0.069	521	$306.25	63%	75%	49%	1.378	1
AllReT18	All	Refrigeration	Turnover	18	Reach-in Freezer: Shaded Pole to ECM: 1-14 Watt			$0.49	15	832	0.082	622	$306.25	75%	75%	49%	1.645	1
AllReT19	All	Refrigeration	Turnover	19	Reach-in Shaded Pole to PSC Evaporator Fan Motor			$0.55	15	832	0.051	386	$212.50	46%	75%	49%	1.471	1
AllReT18	All	Refrigeration	Turnover	18	Reach-in PSC to ECM Evaporator Fan Motor			$0.49	15	467	0.025	185	$91.25	40%	75%	49%	1.642	1
AllReT20	All	Refrigeration	Turnover	20	Reach-in Shaded Pole to ECM Evaporator Fan Motor			$0.54	15	832	0.076	571	$306.25	69%	75%	49%	1.510	1
AllReT21	All	Refrigeration	Turnover	21	Walk-in Cooler: PSC to ECM: 16-49 Watt			$0.35	15	711	0.034	258	$91.25	36%	75%	49%	2.290	1
AllReT22	All	Refrigeration	Turnover	22	Walk-in Freezer: PSC to ECM: 16-49 Watt			$0.30	15	711	0.041	309	$91.25	43%	75%	49%	2.743	1
AllReT23	All	Refrigeration	Turnover	23	Walk-in Cooler: Shaded Pole to ECM: 16-49 Watt			$0.44	15	1,175	0.093	704	$306.25	60%	75%	49%	1.862	1
AllReT24	All	Refrigeration	Turnover	24	Walk-in Freezer: Shaded Pole to ECM: 16-49 Watt			$0.36	15	1,175	0.112	842	$306.25	72%	75%	49%	2.227	1
AllReT25	All	Refrigeration	Turnover	25	Walk-in PSC to ECM			$0.32	15	711	0.038	283	$91.25	40%	75%	49%	2.512	1
AllReT26	All	Refrigeration	Turnover	26	Walk-in Shaded Pole to ECM			$0.40	15	1175	0.103	773	$306.25	66%	75%	49%	2.044	1
AllSiT1	All	Signage	Turnover	1	Induction Street Lighting	Base HID Streetlighting	Fixture	$0.57	15	2,762	0.101	1,619	$925.00	59%	95%	95%	1.322	1
AllSiT2	All	Signage	Turnover	2	LED exit sign - 1 sided	Incandescent exit sign	Exit Sign	$0.15	15	175	0.024	158	$23.50	90%	65%	70%	5.436	1
AllSiT3	All	Signage	Turnover	3	LED exit sign -2 sided	Incandescent exit sign	Exit Sign	$0.16	15	350	0.048	228	$37.50	65%	65%	70%	5.138	1
AllSiT4	All	Signage	Turnover	4	Photoluminescent Exit Sign	Incandescent exit sign	Exit Sign	$0.17	15	175	0.011	175	$30.00	100%	50%	70%	4.412	1
AllSiT5	All	Signage	Turnover	5	LED or equivalent sign lighting -1 sided	Replace fluorescent sign lighting	Exit Sign	$0.28	15	79	0.009	61	$17.36	78%	48%	7%	2.850	1
AllSiT6	All	Signage	Turnover	6	LED or equivalent sign lighting -2 sided	Replace fluorescent sign lighting	Exit Sign	$0.12	15	175	0.002	140	$17.36	80%	48%	7%	5.865	1
AllSiT7	All	Signage	Turnover	7	LED Street Lighting	Std HID Street Lighting	Pole	$0.63	15	2,762	0.047	756	$475.00	27%	95%	95%	1.202	1
AllSiT8	All	Signage	Turnover	8	Red LED Traffic Light	Red Traffic Light	Signal	$0.37	10	332	0.019	299	$112.00	90%	95%	75%	1.213	1
AllSiT9	All	Signage	Turnover	9	Yellow LED Traffic Light	Yellow Standard Traffic Light	Lamp	$12.10	10	12	0.001	10	$121.00	83%	95%	75%	0.038	0
AllSiT10	All	Signage	Turnover	10	Green LED Traffic Light	Green Standard Traffic Light	Lamp	$0.77	10	260	0.014	226	$174.00	87%	95%	75%	0.590	0
AllSiT11	All	Signage	Turnover	11	Hand/Man LED	Pedestrian Standard	Lamp	$0.19	10	1,016	0.059	946	$182.00	93%	95%	75%	2.362	1
AllWaT1	All	Water Heating	Turnover	1	Ultrasonic Faucet Control	Manual Faucet Control	unit	$1.000	10	1,750	0.010	125	$125	7%	75%	75%	0.470	0
AllWaT2	All	Water Heating	Turnover	2	Faucet Aerators	Std Flow faucet	unit	$0.246	12	4,122	0.006	61	$15	6%	75%	75%	2.480	1
AllWaT3	All	Water Heating	Turnover	3	Hot Water (DHW) Pipe Insulation	No insulation present	10 ln ft	$0.292	14	4,122	0.011	124.00	$36.23	3%	75%	75%	2.493	1
AllWaT4	All	Water Heating	Turnover	4	Low-Flow Showerheads	Std Flow showerhead	unit	$0.108	9	4,122	0.042	461	$50	11%	75%	75%	3.732	1
AllWaT5	All	Water Heating	Turnover	5	Water Heater Thermostat Setback	Constant setpoint	unit	$0.029	2	4,122	0.053	577.09	$17	14%	75%	75%	3.218	1
AllWaN1	All	Water Heating	New	1	Ultrasonic Faucet Control	Manual Faucet Control	unit	$0.400	10	4,122	0.011	125	$50	3%	75%	75%	1.193	1
AllWaN2	All	Water Heating	New	2	Faucet Aerators	Std Flow faucet	unit	$0.082	12	4,122	0.006	61	$5	6%	75%	75%	7.441	1
AllWaN3	All	Water Heating	New	3	Hot Water (DHW) Pipe Insulation	No insulation present	10 ln ft	$0.292	14	4,122	0.011	124.00	$36.23	3%	75%	75%	2.493	1
AllWaN4	All	Water Heating	New	4	Low-Flow Showerheads	Std Flow showerhead	unit	$0.108	9	4,122	0.042	461	$50	11%	75%	75%	3.732	1
AllWaN5	All	Water Heating	New	5	Water Heater Thermostat Setback	Constant setpoint	unit	$0.029	2	4,122	0.053	577.09	$17	14%	75%	75%	3.218	1
AllWaN6	All	Water Heating	New	6	High Efficiency Water Heater (Electric) EF .93, 28-50 Gal	Std Efficiency water heater	unit	$0.541	14	4,122	0.012	133	$72	3%	75%	100%	1.345	1
AllWaN7	All	Water Heating	New	7	Heat Pump Water Heater (air source)	Base Water Heating	unit	$0.516	14	4,122	0.176	1,914.00	$988	46%	75%	100%	1.411	1
AllWaN8	All	Water Heating	New	8	Heat Recovery Unit	Base Water Heating	unit	$0.362	14	4,122	0.190	2,073	$750	50.3%	50%	95%	2.013	1
AllWaN9	All	Water Heating	New	9	Solar Water Heater	Base Water Heating	unit	$1.206	14	4,122	0.193	2,106	$2,540	82.0%	65%	95%	0.604	0
AllWaT6	All	Water Heating	Turnover	6	High Efficiency Water Heater (Electric) EF .93, 28-50 Gal	Std Efficiency water heater	unit	$0.541	14	4,122	0.012	133	$72	8.0%	100%	75%	1.345	1
AllWaT7	All	Water Heating	Turnover	7	Heat Pump Water Heater (air source)	Base Water Heating	unit	$0.516	14	4,122	0.176	1,914.00	$988	46%	75%	100%	1.411	1
AllWaT8	All	Water Heating	Turnover	8	Heat Recovery Unit	Base Water Heating	unit	$0.458	14	4,122	0.190	2,073	$950	50.3%	50%	95%	1.590	1
AllWaT9	All	Water Heating	Turnover	9	Solar Water Heater	Base Water Heating	unit	$1.401	14	4,122	0.193	2,106	$2,950	82.0%	65%	95%	0.520	0
GroceReN1	All	Refrigeration	New	20	Demand Defrost Electric	Base Refrigeration System - Grocery		$0.91	15	4	0.000	0	$0.05	1%	95%	92%	0.892	0
AllReT27	All	Refrigeration	Turnover	27	Demand Defrost Electric	Base Refrigeration System - Grocery		$0.91	15	4	0.000	0	$0.05	1%	95%	92%	0.892	0
GroceReN3	All	Refrigeration	New	21	Demand Hot Gas Defrost	Base Refrigeration System - Grocery		$0.35	15	4	0.000	0	$0.05	3%	95%	92%	2.288	1
AllReT28	All	Refrigeration	Turnover	28	Demand Hot Gas Defrost	Base Refrigeration System - Grocery		$0.35	15	4	0.000	0	$0.05	3%	95%	92%	2.288	1
GroceReN4	All	Refrigeration	New	22	Efficient compressor motor - scroll	Base Refrigeration System - Grocery		$0.09	15	15,825	0.084	633	$60.00	4%	95%	92%	8.544	1
AllReT29	All	Refrigeration	Turnover	29	Efficient compressor motor - scroll	Base Refrigeration System - Grocery		$0.09	15	15,825	0.084	633	$60.00	4%	95%	92%	8.544	1
GroceReN6	All	Refrigeration	New	23	High R-Value Glass Doors	Base Refrigeration System - Grocery	Door	$0.67	10	3,986	0.106	797	$537.50	20.00%	95%	92%	0.740	0
GroceReN7	All	Refrigeration	New	24	Refrigeration Commissioning	Base Refrigeration System - Grocery	Per refigerator	$0.31	7	8,800	0.187	1,408	$440.00	16%	95%	92%	1.072	1
AllReE1	All	Refrigeration	Early	1	Refrigeration Commissioning	Base Refrigeration System - Grocery	Per refigerator	$0.25	7	8,800	0.117	880	$220.00	10%	95%	92%	1.340	1
GroceReN8	All	Refrigeration	New	25	Strip curtains for walk-ins	Base Refrigeration System - Grocery		$0.50	15	29,900	0.079	598	$300.00	2%	45%	78%	1.614	1
AllReT30	All	Refrigeration	Turnover	30	Strip curtains for walk-ins	Base Refrigeration System - Grocery		$0.50	15	29,900	0.079	598	$300.00	2%	45%	78%	1.614	1
HealtPaN18	Healthcare	Packaged DX	New	18	Automated control system	Baseline DX	ton	$0.30	10	1,679	0.010	84	$25.00	5%	100%	65%	1.660	1
HealtPaN19	Healthcare	Packaged DX	New	19	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$0.55	10	1,426	0.009	78	$43.00	5%	100%	95%	0.894	0
HealtPaT15	Healthcare	Packaged DX	Turnover	15	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$0.55	10	1,426	0.009	78	$43.00	5%	100%	95%	0.894	0
AllCoN1	All	Cooking	New	1	Commercial Hot Food Holding Cabinets (Energy Star)	Standard Cabinet	Each	$0.94	12	23,411	0.187	1,592	$1,500.00	7%	40%	95%	0.665	0
AllCoN2	All	Cooking	New	2	High Efficiency Fryers (Energy Star)	Standard Fryer	Each	$5.45	12	18,196	0.027	233	$1,271.00	1%	40%	95%	0.115	0
AllCoN3	All	Cooking	New	3	High Efficiency Griddle	Standard Griddle	Each	$0.66	12	17,056	0.304	2,595	$1,700.00	15%	40%	95%	0.957	0
AllCoN4	All	Cooking	New	4	High Efficiency Induction Cooking	Standard Cooking	Each	$1.04	12	29,376	0.248	2,118	$2,213.00	7%	40%	95%	0.600	0
AllCoN5	All	Cooking	New	5	Electric Steam cooker	Standard Cooker	Each	$0.40	12	46,813	0.439	3,745	$1,500.00	8%	40%	95%	1.565	1
AllCoN6	All	Cooking	New	6	Electric convection oven	Standard Oven	Each	$1.20	15	12,193	0.265	2,262	$2,713.00	19%	40%	95%	0.668	0
AllCoN7	All	Cooking	New	7	Electric combination oven	Standard Oven	Each	$1.12	12	39,353	1.769	15,095	$16,884.00	38%	40%	95%	0.561	0
AllCoT1	All	Cooking	Turnover	1	Commercial Hot Food Holding Cabinets (Energy Star)	Standard Cabinet	Each	$0.94	12	23,411	0.187	1,592	$1,500.00	7%	40%	95%	0.665	0
AllCoT2	All	Cooking	Turnover	2	High Efficiency Fryers (Energy Star)	Standard Fryer	Each	$5.45	12	18,196	0.027	233	$1,271.00	1%	40%	95%	0.115	0
AllCoT3	All	Cooking	Turnover	3	High Efficiency Griddle	Standard Griddle	Each	$0.66	12	17,056	0.304	2,595	$1,700.00	15%	40%	95%	0.957	0
AllCoT4	All	Cooking	Turnover	4	High Efficiency Induction Cooking	Standard Cooking	Each	$1.04	12	29,376	0.248	2,118	$2,213.00	7%	40%	95%	0.600	0
AllCoT5	All	Cooking	Turnover	5	Electric Steam cooker	Standard Cooker	Each	$0.40	12	46,813	0.439	3,745	$1,500.00	8%	40%	95%	1.565	1
AllCoT6	All	Cooking	Turnover	6	Electric convection oven	Standard Oven	Each	$1.20	15	12,193	0.265	2,262	$2,713.00	19%	40%	95%	0.668	0
AllCoT7	All	Cooking	Turnover	7	Electric combination oven	Standard Oven	Each	$1.12	12	39,353	1.769	15,095	$16,884.00	38%	40%	95%	0.561	0

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
InstiFlE1	Institutional	Fluorescent	Early	1	power factor ballasts) - Bundle	Replace (E) T12 Lamp - Bundle	Fixture	$0.6076	15	371	0.010	91	$55.38	25%	95%	11%	1.317	1
InstiFlE2	Institutional	Fluorescent	Early	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2809	14	1,483	0.051	445	$125.00	30%	95%	80%	2.653	1
InstiFlE3	Institutional	Fluorescent	Early	3	Photocell dimming control	No prior dimming control	Photocell	$0.3034	9	1,483	0.085	742	$225.00	50%	95%	95%	1.379	1
GroceFlE1	Grocery	Fluorescent	Early	1	power factor ballasts) - Bundle	Replace (E) T12 Lamp - Bundle	Fixture	$0.2754	11	818	0.023	201	$55.38	25%	95%	55%	2.035	1
GroceFlE2	Grocery	Fluorescent	Early	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1273	14	3,272	0.113	982	$125.00	30%	95%	80%	5.853	1
GroceFlE3	Grocery	Fluorescent	Early	3	Photocell dimming control	No prior dimming control	Photocell	$0.1375	9	3,272	0.188	1,636	$225.00	50%	95%	95%	3.042	1
LodgiFlE1	Lodging	Fluorescent	Early	1	power factor ballasts) - Bundle	Replace (E) T12 Lamp - Bundle	Fixture	$0.3246	10	694	0.020	171	$55.38	25%	95%	55%	1.514	1
LodgiFlE2	Lodging	Fluorescent	Early	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1501	14	2,776	0.096	833	$125.00	30%	95%	80%	4.965	1
LodgiFlE3	Lodging	Fluorescent	Early	3	Photocell dimming control	No prior dimming control	Photocell	$0.1621	9	2,776	0.160	1,388	$225.00	50%	95%	95%	2.581	1
HealtFlE1	Healthcare	Fluorescent	Early	1	power factor ballasts) - Bundle	Replace (E) T12 Lamp - Bundle	Fixture	$0.2970	11	759	0.021	186	$55.38	25%	95%	44%	1.887	1
HealtFlE2	Healthcare	Fluorescent	Early	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1373	14	3,034	0.105	910	$125.00	30%	95%	80%	5.427	1
HealtFlE3	Healthcare	Fluorescent	Early	3	Photocell dimming control	No prior dimming control	Photocell	$0.1483	9	3,034	0.174	1,517	$225.00	50%	95%	95%	2.821	1
RestaFlE1	Restaurant	Fluorescent	Early	1	power factor ballasts) - Bundle	Replace (E) T12 Lamp - Bundle	Fixture	$0.3672	11	614	0.017	151	$55.38	25%	95%	49%	1.526	1
RestaFlE2	Restaurant	Fluorescent	Early	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1698	14	2,454	0.085	736	$125.00	30%	95%	80%	4.390	1
RestaFlE3	Restaurant	Fluorescent	Early	3	Photocell dimming control	No prior dimming control	Photocell	$0.1834	9	2,454	0.141	1,227	$225.00	50%	95%	95%	2.282	1
RetaiFlE1	Retail	Fluorescent	Early	1	power factor ballasts) - Bundle	Replace (E) T12 Lamp - Bundle	Fixture	$0.3810	11	591	0.017	145	$55.38	25%	95%	55%	1.471	1
RetaiFlE2	Retail	Fluorescent	Early	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1761	14	2,365	0.082	710	$125.00	30%	95%	80%	4.231	1
RetaiFlE3	Retail	Fluorescent	Early	3	Photocell dimming control	No prior dimming control	Photocell	$0.1902	9	2,365	0.136	1,183	$225.00	50%	95%	95%	2.199	1
WarehFlE1	Warehouse	Fluorescent	Early	1	power factor ballasts) - Bundle	Replace (E) T12 Lamp - Bundle	Fixture	$0.4113	12	548	0.015	135	$55.38	25%	95%	35%	1.521	1
WarehFlE2	Warehouse	Fluorescent	Early	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1901	14	2,191	0.076	657	$125.00	30%	95%	80%	3.919	1
WarehFlE3	Warehouse	Fluorescent	Early	3	Photocell dimming control	No prior dimming control	Photocell	$0.2054	9	2,191	0.126	1,096	$225.00	50%	95%	95%	2.037	1
MiscFlE1	Misc	Fluorescent	Early	1	power factor ballasts) - Bundle	Replace (E) T12 Lamp - Bundle	Fixture	$0.3764	11	599	0.017	147	$55.38	25%	95%	44%	1.489	1
OfficHIN1	Office	HID	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1781	15	621	0.007	62	$11.06	10%	95%	100%	4.493	1
OfficHIN2	Office	HID	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.3561	15	621	0.018	155	$55.32	25%	85%	100%	2.246	1
OfficInN1	Office	Incandescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1781	15	2,727	0.031	273	$48.56	10%	95%	100%	4.493	1
OfficInN2	Office	Incandescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.3561	15	2,727	0.078	682	$242.78	25%	75%	100%	2.246	1
InstiFlN1	Institutional	Fluorescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1722	15	62,741	0.721	6,274	$1,080.26	10%	95%	100%	4.646	1
InstiFlN2	Institutional	Fluorescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.3444	15	62,741	1.803	15,685	$5,401.30	25%	75%	100%	2.323	1
HealtFlN1	Healthcare	Fluorescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0842	15	441,728	5.077	44,173	$3,718.25	10%	95%	100%	9.504	1
HealtFlN2	Healthcare	Fluorescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1684	15	441,728	12.691	110,432	$18,591.24	25%	75%	100%	4.752	1
GroceFlN1	Grocery	Fluorescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0572	15	60,020	0.690	6,002	$343.52	10%	95%	100%	13.977	1
GroceFlN2	Grocery	Fluorescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1145	15	60,020	1.724	15,005	$1,717.60	25%	75%	100%	6.988	1
LodgiFlN1	Lodging	Fluorescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1012	15	303,563	3.489	30,356	$3,071.87	10%	95%	100%	7.905	1
LodgiFlN2	Lodging	Fluorescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.2024	15	303,563	8.722	75,891	$15,359.37	25%	75%	100%	3.953	1
RestaFlN1	Restaurant	Fluorescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0763	15	13,140	0.151	1,314	$100.27	10%	95%	100%	10.483	1
RestaFlN2	Restaurant	Fluorescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1526	15	13,140	0.378	3,285	$501.37	25%	75%	100%	5.241	1
RetaiFlN1	Retail	Fluorescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0792	15	60,011	0.690	6,001	$475.15	10%	95%	100%	10.104	1
RetaiFlN2	Retail	Fluorescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1584	15	60,011	1.724	15,003	$2,375.74	25%	75%	100%	5.052	1
WarehFlN1	Warehouse	Fluorescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1603	15	44,747	0.514	4,475	$717.11	10%	95%	100%	4.992	1
WarehFlN2	Warehouse	Fluorescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.3205	15	44,747	1.286	11,187	$3,585.53	25%	75%	100%	2.496	1
GroceHIN1	Grocery	HID	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0572	15	3,937	0.045	394	$22.53	10%	95%	100%	13.977	1
GroceHIN2	Grocery	HID	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1145	15	3,937	0.113	984	$112.66	25%	85%	100%	6.988	1
InstiHIN1	Institutional	HID	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1722	15	2,159	0.025	216	$37.18	10%	95%	100%	4.646	1
InstiHIN2	Institutional	HID	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.3444	15	2,159	0.062	540	$185.89	25%	85%	100%	2.323	1
HealtHIN1	Healthcare	HID	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0842	15	15,203	0.175	1,520	$127.97	10%	95%	100%	9.504	1
HealtHIN2	Healthcare	HID	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1684	15	15,203	0.437	3,801	$639.84	25%	85%	100%	4.752	1
LodgiHIN1	Lodging	HID	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1012	15	10,539	0.121	1,054	$106.65	10%	95%	100%	7.905	1
LodgiHIN2	Lodging	HID	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.2024	15	10,539	0.303	2,635	$533.27	25%	85%	100%	3.953	1
RestaHIN1	Restaurant	HID	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0763	15	459	0.005	46	$3.51	10%	95%	100%	10.483	1
RestaHIN2	Restaurant	HID	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1526	15	459	0.013	115	$17.53	25%	85%	100%	5.241	1
RetaiHIN1	Retail	HID	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0792	15	10,313	0.119	1,031	$81.65	10%	95%	100%	10.104	1
RetaiHIN2	Retail	HID	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1584	15	10,313	0.296	2,578	$408.25	25%	85%	100%	5.052	1
WarehHIN1	Warehouse	HID	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1603	15	7,843	0.090	784	$125.69	10%	95%	100%	4.992	1
WarehHIN2	Warehouse	HID	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.3205	15	7,843	0.225	1,961	$628.45	25%	85%	100%	2.496	1
MiscHIN1	Misc	HID	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0988	15	4,211	0.048	421	$41.61	10%	95%	100%	8.096	1
MiscHIN2	Misc	HID	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1976	15	4,211	0.121	1,053	$208.03	25%	85%	100%	4.048	1
MiscFlN1	Misc	Fluorescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0988	15	121,285	1.394	12,128	$1,198.38	10%	95%	100%	8.096	1
MiscFlN2	Misc	Fluorescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1976	15	121,285	3.485	30,321	$5,991.88	25%	75%	100%	4.048	1
InstiInN1	Institutional	Incandescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1722	15	7,094	0.082	709	$122.15	10%	95%	100%	4.646	1
InstiInN2	Institutional	Incandescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.3444	15	7,094	0.204	1,774	$610.75	25%	75%	100%	2.323	1
GroceInT1	Grocery	Incandescent	Turnover	1	CFL Lamp - 21 Watt	EISA - 75 Watt equivalent - 53W	Lamp	$0.0161	5	309	0.021	186	$3.00	60%	75%	50%	14.529	1
HealtInT1	Healthcare	Incandescent	Turnover	1	CFL Lamp - 21 Watt	EISA - 75 Watt equivalent - 53W	Lamp	$0.0174	5	286	0.020	173	$3.00	60%	75%	50%	13.471	1
GroceInN2	Grocery	Incandescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1145	15	9,629	0.277	2,407	$275.57	25%	75%	100%	6.988	1
HealtInN2	Healthcare	Incandescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1684	15	49,948	1.435	12,487	$2,102.19	25%	75%	100%	4.752	1
LodgiInN1	Lodging	Incandescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1012	15	72,424	0.832	7,242	$732.89	10%	95%	100%	7.905	1
LodgiInN2	Lodging	Incandescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.2024	15	72,424	2.081	18,106	$3,664.46	25%	75%	100%	3.953	1
RestaInN1	Restaurant	Incandescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0763	15	8,649	0.099	865	$66.01	10%	95%	100%	10.483	1
RestaInN2	Restaurant	Incandescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1526	15	8,649	0.249	2,162	$330.03	25%	75%	100%	5.241	1
RetaiInN1	Retail	Incandescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0792	15	9,628	0.111	963	$76.23	10%	95%	100%	10.104	1
RetaiInN2	Retail	Incandescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1584	15	9,628	0.277	2,407	$381.16	25%	75%	100%	5.052	1
WarehInN1	Warehouse	Incandescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1603	15	5,975	0.069	598	$95.76	10%	95%	100%	4.992	1
WarehInN2	Warehouse	Incandescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.3205	15	5,975	0.172	1,494	$478.78	25%	75%	100%	2.496	1
MiscInN1	Misc	Incandescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0988	15	28,936	0.333	2,894	$285.91	10%	95%	100%	8.096	1
MiscInN2	Misc	Incandescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1976	15	28,936	0.831	7,234	$1,429.55	25%	75%	100%	4.048	1
MiscFlE2	Misc	Fluorescent	Early	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1740	14	2,394	0.083	718	$125.00	30%	95%	80%	4.282	1
MiscFlE3	Misc	Fluorescent	Early	3	Photocell dimming control	No prior dimming control	Photocell	$0.1879	9	2,394	0.138	1,197	$225.00	50%	95%	95%	2.226	1
MiscFlN4	Misc	Fluorescent	New	4	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0696	14	2,394	0.083	718	$50.00	30%	95%	15%	10.706	1
MiscFlN3	Misc	Fluorescent	New	3	Photocell dimming control	No prior dimming control	Photocell	$0.1253	9	2,394	0.138	1,197	$150.00	50%	95%	75%	3.339	1
InstiFlN4	Institutional	Fluorescent	New	4	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1124	14	1,483	0.051	445	$50.00	30%	95%	15%	6.633	1
InstiFlN3	Institutional	Fluorescent	New	3	Photocell dimming control	No prior dimming control	Photocell	$0.2022	9	1,483	0.085	742	$150.00	50%	95%	75%	2.069	1
GroceFlN4	Grocery	Fluorescent	New	4	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0509	14	3,272	0.113	982	$50.00	30%	95%	15%	14.632	1
GroceFlN3	Grocery	Fluorescent	New	3	Photocell dimming control	No prior dimming control	Photocell	$0.0917	9	3,272	0.188	1,636	$150.00	50%	95%	75%	4.564	1
HealtFlN4	Healthcare	Fluorescent	New	4	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0549	14	3,034	0.105	910	$50.00	30%	95%	15%	13.567	1
HealtFlN3	Healthcare	Fluorescent	New	3	Photocell dimming control	No prior dimming control	Photocell	$0.0989	9	3,034	0.174	1,517	$150.00	50%	95%	75%	4.231	1
LodgiFlN4	Lodging	Fluorescent	New	4	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0600	14	2,776	0.096	833	$50.00	30%	95%	15%	12.414	1
LodgiFlN3	Lodging	Fluorescent	New	3	Photocell dimming control	No prior dimming control	Photocell	$0.1081	9	2,776	0.160	1,388	$150.00	50%	95%	75%	3.872	1
OfficFlN4	Office	Fluorescent	New	4	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1056	14	1,578	0.054	473	$50.00	30%	95%	15%	7.055	1
OfficFlN3	Office	Fluorescent	New	3	Photocell dimming control	No prior dimming control	Photocell	$0.1901	9	1,578	0.091	789	$150.00	50%	95%	75%	2.200	1
RestaFlN4	Restaurant	Fluorescent	New	4	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0679	14	2,454	0.085	736	$50.00	30%	95%	15%	10.974	1

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
RestaFIN3	Restaurant	Fluorescent	New	3	Photocell dimming control	No prior dimming control	Photocell	$0.1222	9	2,454	0.141	1,227	$150.00	50%	95%	75%	3.423	1
RetaiFIN4	Retail	Fluorescent	New	4	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0705	14	2,365	0.082	710	$50.00	30%	95%	15%	10.577	1
RetaiFIN3	Retail	Fluorescent	New	3	Photocell dimming control	No prior dimming control	Photocell	$0.1268	9	2,365	0.136	1,183	$150.00	50%	95%	75%	3.299	1
WarehFIN4	Warehouse	Fluorescent	New	4	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0761	14	2,191	0.076	657	$50.00	30%	95%	15%	9.798	1
WarehFIN3	Warehouse	Fluorescent	New	3	Photocell dimming control	No prior dimming control	Photocell	$0.1369	9	2,191	0.126	1,096	$150.00	50%	95%	75%	3.056	1
MiscFIT2	Misc	Fluorescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0696	14	2,394	0.083	718	$50.00	30%	95%	80%	10.706	1
MiscFIT3	Misc	Fluorescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.1253	9	2,394	0.138	1,197	$150.00	50%	95%	95%	3.339	1
InstiFIT2	Institutional	Fluorescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1124	14	1,483	0.051	445	$50.00	30%	95%	80%	6.633	1
InstiFIT3	Institutional	Fluorescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.2022	9	1,483	0.085	742	$150.00	50%	95%	95%	2.069	1
GroceFIT2	Grocery	Fluorescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0509	14	3,272	0.113	982	$50.00	30%	95%	80%	14.632	1
GroceFIT3	Grocery	Fluorescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.0917	9	3,272	0.188	1,636	$150.00	50%	95%	95%	4.564	1
HealtFIT2	Healthcare	Fluorescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0549	14	3,034	0.105	910	$50.00	30%	95%	80%	13.567	1
HealtFIT3	Healthcare	Fluorescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.0989	9	3,034	0.174	1,517	$150.00	50%	95%	95%	4.231	1
LodgiFIT2	Lodging	Fluorescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0600	14	2,776	0.096	833	$50.00	30%	95%	80%	12.414	1
LodgiFIT3	Lodging	Fluorescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.1081	9	2,776	0.160	1,388	$150.00	50%	95%	95%	3.872	1
OfficFIT2	Office	Fluorescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1056	14	1,578	0.054	473	$50.00	30%	95%	80%	7.055	1
OfficFIT3	Office	Fluorescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.1901	9	1,578	0.091	789	$150.00	50%	95%	95%	2.200	1
RestaFIT2	Restaurant	Fluorescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0679	14	2,454	0.085	736	$50.00	30%	95%	80%	10.974	1
RestaFIT3	Restaurant	Fluorescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.1222	9	2,454	0.141	1,227	$150.00	50%	95%	95%	3.423	1
RetaiFIT2	Retail	Fluorescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0705	14	2,365	0.082	710	$50.00	30%	95%	80%	10.577	1
RetaiFIT3	Retail	Fluorescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.1268	9	2,365	0.136	1,183	$150.00	50%	95%	95%	3.299	1
WarehFIT2	Warehouse	Fluorescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0761	14	2,191	0.076	657	$50.00	30%	95%	80%	9.798	1
WarehFIT3	Warehouse	Fluorescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.1369	9	2,191	0.126	1,096	$150.00	50%	95%	95%	3.056	1
GroceFIT1	Grocery	Fluorescent	Turnover	1	Premium Efficiency T8 Lighting Replacement (28W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.0650	6	163	0.004	36	$2.32	22%	90%	95%	4.342	1
GroceFIT4	Grocery	Fluorescent	Turnover	4	Premium Efficiency T8 Lighting Replacement (25W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.0990	6	163	0.002	20	$2.02	13%	60%	95%	2.850	1
GroceFIT5	Grocery	Fluorescent	Turnover	5	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.0307	11	582	0.010	83	$2.55	14%	75%	95%	18.255	1
GroceFIE4	Grocery	Fluorescent	Early	4	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.7257	11	582	0.010	83	$60.38	14%	75%	95%	0.772	0
HealtFIT6	Healthcare	Fluorescent	Turnover	6	LED Retrofit Tube	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$1.0943	7	151	0.007	59	$65.00	39%	40%	95%	0.301	0
HealtFIT1	Healthcare	Fluorescent	Turnover	1	Premium Efficiency T8 Lighting Replacement (28W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.0701	7	151	0.004	33	$2.32	22%	90%	95%	4.695	1
HealtFIT4	Healthcare	Fluorescent	Turnover	4	Premium Efficiency T8 Lighting Replacement (25W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.1068	7	151	0.002	19	$2.02	13%	60%	95%	3.081	1
HealtFIT5	Healthcare	Fluorescent	Turnover	5	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.0331	11	540	0.009	77	$2.55	14%	75%	95%	16.926	1
HealtFIE4	Healthcare	Fluorescent	Early	4	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.7769	11	540	0.009	77	$59.93	14%	75%	95%	0.721	0
InstiFIT6	Institutional	Fluorescent	Turnover	6	LED Retrofit Tube	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$2.2383	15	74	0.003	29	$65.00	39%	40%	95%	0.357	0
InstiFIT1	Institutional	Fluorescent	Turnover	1	Premium Efficiency T8 Lighting Replacement (28W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.1433	15	74	0.002	16	$2.32	22%	90%	95%	5.581	1
InstiFIT4	Institutional	Fluorescent	Turnover	4	Premium Efficiency T8 Lighting Replacement (25W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.2184	15	74	0.001	9	$2.02	13%	60%	95%	3.663	1
InstiFIT5	Institutional	Fluorescent	Turnover	5	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.0677	11	264	0.004	38	$2.55	14%	75%	95%	8.275	1
InstiFIE4	Institutional	Fluorescent	Early	4	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.9281	11	264	0.004	38	$35.00	14%	75%	95%	0.604	0
LodgiFIT6	Lodging	Fluorescent	Turnover	6	LED Retrofit Tube	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$1.1959	8	138	0.006	54	$65.00	39%	40%	95%	0.313	0
LodgiFIT1	Lodging	Fluorescent	Turnover	1	Premium Efficiency T8 Lighting Replacement (28W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.0766	8	138	0.003	30	$2.32	22%	90%	95%	4.889	1
LodgiFIT4	Lodging	Fluorescent	Turnover	4	Premium Efficiency T8 Lighting Replacement (25W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.1167	8	138	0.002	17	$2.02	13%	60%	95%	3.209	1
LodgiFIT5	Lodging	Fluorescent	Turnover	5	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.0362	11	494	0.008	71	$2.55	14%	75%	95%	15.487	1
LodgiFIE4	Lodging	Fluorescent	Early	4	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.4959	11	494	0.008	71	$35.00	14%	75%	95%	1.130	1
MiscFIT6	Misc	Fluorescent	Turnover	6	LED Retrofit Tube	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$1.3867	9	119	0.005	47	$65.00	39%	40%	95%	0.302	0
MiscFIT1	Misc	Fluorescent	Turnover	1	Premium Efficiency T8 Lighting Replacement (28W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.0888	9	119	0.003	26	$2.32	22%	90%	95%	4.711	1
MiscFIT4	Misc	Fluorescent	Turnover	4	Premium Efficiency T8 Lighting Replacement (25W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.1353	9	119	0.002	15	$2.02	13%	60%	95%	3.092	1
MiscFIT5	Misc	Fluorescent	Turnover	5	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.0420	11	426	0.007	61	$2.55	14%	75%	95%	13.357	1
MiscFIE4	Misc	Fluorescent	Early	4	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.5750	11	426	0.007	61	$35.00	14%	75%	95%	0.975	0
OfficFIT6	Office	Fluorescent	Turnover	6	LED Retrofit Tube	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$2.1044	14	79	0.004	31	$65.00	39%	40%	95%	0.354	0
OfficFIT1	Office	Fluorescent	Turnover	1	Premium Efficiency T8 Lighting Replacement (28W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.1348	14	79	0.002	17	$2.32	22%	90%	95%	5.530	1
OfficFIT4	Office	Fluorescent	Turnover	4	Premium Efficiency T8 Lighting Replacement (25W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.2053	14	79	0.001	10	$2.02	13%	60%	95%	3.630	1
OfficFIT5	Office	Fluorescent	Turnover	5	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.0637	11	281	0.005	40	$2.55	14%	75%	95%	8.801	1
OfficFIE4	Office	Fluorescent	Early	4	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.8726	11	281	0.005	40	$35.00	14%	75%	95%	0.642	0
RestaFIT6	Restaurant	Fluorescent	Turnover	6	LED Retrofit Tube	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$1.3528	9	122	0.006	48	$65.00	39%	40%	95%	0.309	0
RestaFIT1	Restaurant	Fluorescent	Turnover	1	Premium Efficiency T8 Lighting Replacement (28W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.0866	9	122	0.003	27	$2.32	22%	90%	95%	4.829	1
RestaFIT4	Restaurant	Fluorescent	Turnover	4	Premium Efficiency T8 Lighting Replacement (25W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.1320	9	122	0.002	15	$2.02	13%	60%	95%	3.170	1
RestaFIT5	Restaurant	Fluorescent	Turnover	5	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.0409	11	437	0.007	62	$2.55	14%	75%	95%	13.691	1
RestaFIE4	Restaurant	Fluorescent	Early	4	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.5610	11	437	0.007	62	$35.00	14%	75%	95%	0.999	0
RetaiFIT6	Retail	Fluorescent	Turnover	6	LED Retrofit Tube	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$1.4036	9	118	0.005	46	$65.00	39%	40%	95%	0.298	0
RetaiFIT1	Retail	Fluorescent	Turnover	1	Premium Efficiency T8 Lighting Replacement (28W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.0899	9	118	0.003	26	$2.32	22%	90%	95%	4.654	1
RetaiFIT4	Retail	Fluorescent	Turnover	4	Premium Efficiency T8 Lighting Replacement (25W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.1369	9	118	0.002	15	$2.02	13%	60%	95%	3.055	1
RetaiFIT5	Retail	Fluorescent	Turnover	5	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.0425	11	421	0.007	60	$2.55	14%	75%	95%	13.196	1
RetaiFIE4	Retail	Fluorescent	Early	4	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.5820	11	421	0.007	60	$35.00	14%	75%	95%	0.963	0
WarehFIT6	Warehouse	Fluorescent	Turnover	6	LED Retrofit Tube	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$1.5152	10	109	0.005	43	$65.00	39%	40%	95%	0.324	0
WarehFIT1	Warehouse	Fluorescent	Turnover	1	Premium Efficiency T8 Lighting Replacement (28W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.0970	10	109	0.003	24	$2.32	22%	90%	95%	5.065	1
WarehFIT4	Warehouse	Fluorescent	Turnover	4	Premium Efficiency T8 Lighting Replacement (25W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.1478	10	109	0.002	14	$2.02	13%	60%	95%	3.325	1
WarehFIT5	Warehouse	Fluorescent	Turnover	5	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.0459	11	390	0.006	56	$2.55	14%	75%	95%	12.224	1
WarehFIE4	Warehouse	Fluorescent	Early	4	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.6283	11	390	0.006	56	$35.00	14%	75%	95%	0.892	0
GroceHIE1	Grocery	HID	Early	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.3797	10	1,893	0.065	565	$214.50	30%	85%	80%	1.294	1
GroceHIE2	Grocery	HID	Early	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.2995	10	2,772	0.115	1,002	$300.00	36%	85%	80%	1.641	1
GroceHIE3	Grocery	HID	Early	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.3449	10	1,893	0.078	681	$235.00	36%	85%	80%	1.425	1
GroceHIE4	Grocery	HID	Early	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.3403	10	2,772	0.110	955	$325.00	34%	85%	80%	1.444	1
GroceHIT5	Grocery	HID	Turnover	5	Ceramic Metal Halide lamp	Replace non-ceramic lamp lamp 400 W	Lamp	$0.0859	3	2,330	0.047	408	$35.00	18%	85%	55%	1.699	1
GroceHIE7	Grocery	HID	Early	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.8147	15	1,893	0.097	844	$688.00	45%	85%	80%	0.982	0
GroceHIT1	Grocery	HID	Turnover	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.1956	10	1,893	0.065	565	$110.50	30%	85%	80%	2.513	1
GroceHIT2	Grocery	HID	Turnover	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.2246	10	2,772	0.115	1,002	$225.00	36%	85%	80%	2.188	1
GroceHIT3	Grocery	HID	Turnover	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.2128	10	1,893	0.078	681	$145.00	36%	85%	80%	2.310	1
GroceHIT4	Grocery	HID	Turnover	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.2722	10	2,772	0.110	955	$260.00	34%	85%	80%	1.806	1
GroceHIT6	Grocery	HID	Turnover	6	Multi Lamp Hard Wired CFL	Replace HID Fixure Drawing 400 W	Fixture	$0.3442	10	2,772	0.142	1,235	$425.00	45%	85%	55%	1.428	1
GroceHIT7	Grocery	HID	Turnover	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.4441	15	1,893	0.097	844	$375.00	45%	85%	80%	1.801	1
HealtHIE1	Healthcare	HID	Early	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.4095	10	1,755	0.060	524	$214.50	30%	85%	80%	1.200	1
HealtHIE2	Healthcare	HID	Early	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.3230	10	2,570	0.107	929	$300.00	36%	85%	80%	1.522	1
HealtHIE3	Healthcare	HID	Early	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.3720	10	1,755	0.073	632	$235.00	36%	85%	80%	1.321	1
HealtHIE4	Healthcare	HID	Early	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.3670	10	2,570	0.102	886	$325.00	34%	85%	80%	1.339	1
HealtHIT5	Healthcare	HID	Turnover	5	Ceramic Metal Halide lamp	Replace non-ceramic lamp lamp 400 W	Lamp	$0.0926	3	2,160	0.043	378	$35.00	18%	85%	55%	1.576	1
HealtHIE7	Healthcare	HID	Early	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.8787	15	1,755	0.090	783	$688.00	45%	85%	80%	0.910	0
HealtHIT1	Healthcare	HID	Turnover	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.2110	10	1,755	0.060	524	$110.50	30%	85%	80%	2.330	1
HealtHIT2	Healthcare	HID	Turnover	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.2422	10	2,570	0.107	929	$225.00	36%	85%	80%	2.029	1
HealtHIT3	Healthcare	HID	Turnover	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.2295	10	1,755	0.073	632	$145.00	36%	85%	80%	2.142	1
HealtHIT4	Healthcare	HID	Turnover	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.2936	10	2,570	0.102	886	$260.00	34%	85%	80%	1.674	1

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
HealtHIT6	Healthcare	HID	Turnover	6	Multi Lamp Hard Wired CFL	Replace HID Fixure Drawing 400 W	Fixture	$0.3712	10	2,570	0.132	1,145	$425.00	45%	85%	55%	1.324	1
HealtHIT7	Healthcare	HID	Turnover	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.4789	15	1,755	0.090	783	$375.00	45%	85%	80%	1.670	1
InstiHIE1	Institutional	HID	Early	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.8376	10	858	0.029	256	$214.50	30%	85%	80%	0.587	0
InstiHIE2	Institutional	HID	Early	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.6607	10	1,257	0.052	454	$300.00	36%	85%	80%	0.744	0
InstiHIE3	Institutional	HID	Early	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.7608	10	858	0.035	309	$235.00	36%	85%	80%	0.646	0
InstiHIE4	Institutional	HID	Early	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.7506	10	1,257	0.050	433	$325.00	34%	85%	80%	0.655	0
InstiHIT5	Institutional	HID	Turnover	5	Ceramic Metal Halide lamp	Replace non-ceramic lamp lamp 400 W	Lamp	$0.1894	6	1,056	0.021	185	$35.00	18%	85%	55%	1.490	1
InstiHIE7	Institutional	HID	Early	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$1.7973	15	858	0.044	383	$688.00	45%	85%	80%	0.445	0
InstiHIT1	Institutional	HID	Turnover	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.4315	10	858	0.029	256	$110.50	30%	85%	80%	1.139	1
InstiHIT2	Institutional	HID	Turnover	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.4955	10	1,257	0.052	454	$225.00	36%	85%	80%	0.992	0
InstiHIT3	Institutional	HID	Turnover	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.4694	10	858	0.035	309	$145.00	36%	85%	80%	1.047	1
InstiHIT4	Institutional	HID	Turnover	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.6005	10	1,257	0.050	433	$260.00	34%	85%	80%	0.818	0
InstiHIT6	Institutional	HID	Turnover	6	Multi Lamp Hard Wired CFL	Replace HID Fixure Drawing 400 W	Fixture	$0.7594	10	1,257	0.064	560	$425.00	45%	85%	55%	0.647	0
InstiHIT7	Institutional	HID	Turnover	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.9796	15	858	0.044	383	$375.00	45%	85%	80%	0.817	0
LodgiHIE1	Lodging	HID	Early	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.4475	10	1,606	0.055	479	$214.50	30%	85%	80%	1.098	1
LodgiHIE2	Lodging	HID	Early	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.3530	10	2,352	0.098	850	$300.00	36%	85%	80%	1.392	1
LodgiHIE3	Lodging	HID	Early	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.4065	10	1,606	0.066	578	$235.00	36%	85%	80%	1.209	1
LodgiHIE4	Lodging	HID	Early	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.4011	10	2,352	0.093	810	$325.00	34%	85%	80%	1.225	1
LodgiHIT5	Lodging	HID	Turnover	5	Ceramic Metal Halide lamp	Replace non-ceramic lamp lamp 400 W	Lamp	$0.1012	3	1,976	0.040	346	$35.00	18%	85%	55%	1.442	1
LodgiHIE7	Lodging	HID	Early	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.9603	15	1,606	0.082	716	$688.00	45%	85%	80%	0.833	0
LodgiHIT1	Lodging	HID	Turnover	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.2306	10	1,606	0.055	479	$110.50	30%	85%	80%	2.132	1
LodgiHIT2	Lodging	HID	Turnover	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.2648	10	2,352	0.098	850	$225.00	36%	85%	80%	1.856	1
LodgiHIT3	Lodging	HID	Turnover	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.2508	10	1,606	0.066	578	$145.00	36%	85%	80%	1.960	1
LodgiHIT4	Lodging	HID	Turnover	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.3209	10	2,352	0.093	810	$260.00	34%	85%	80%	1.532	1
LodgiHIT6	Lodging	HID	Turnover	6	Multi Lamp Hard Wired CFL	Replace HID Fixure Drawing 400 W	Fixture	$0.4057	10	2,352	0.120	1,047	$425.00	45%	85%	55%	1.211	1
LodgiHIT7	Lodging	HID	Turnover	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.5234	15	1,606	0.082	716	$375.00	45%	85%	80%	1.528	1
OfficHIE1	Office	HID	Early	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.7875	10	913	0.031	272	$214.50	30%	85%	80%	0.624	0
OfficHIE2	Office	HID	Early	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.6211	10	1,337	0.056	483	$300.00	36%	85%	80%	0.791	0
OfficHIE3	Office	HID	Early	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.7153	10	913	0.038	329	$235.00	36%	85%	80%	0.687	0
OfficHIE4	Office	HID	Early	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.7057	10	1,337	0.053	461	$325.00	34%	85%	80%	0.696	0
OfficHIT5	Office	HID	Turnover	5	Ceramic Metal Halide lamp	Replace non-ceramic lamp lamp 400 W	Lamp	$0.1781	5	1,123	0.023	197	$35.00	18%	85%	55%	1.313	1
OfficHIE7	Office	HID	Early	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$1.6898	15	913	0.047	407	$688.00	45%	85%	80%	0.473	0
OfficHIT1	Office	HID	Turnover	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.4057	10	913	0.031	272	$110.50	30%	85%	80%	1.212	1
OfficHIT2	Office	HID	Turnover	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.4659	10	1,337	0.056	483	$225.00	36%	85%	80%	1.055	1
OfficHIT3	Office	HID	Turnover	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.4414	10	913	0.038	329	$145.00	36%	85%	80%	1.114	1
OfficHIT4	Office	HID	Turnover	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.5646	10	1,337	0.053	461	$260.00	34%	85%	80%	0.871	0
OfficHIT6	Office	HID	Turnover	6	Multi Lamp Hard Wired CFL	Replace HID Fixure Drawing 400 W	Fixture	$0.7139	10	1,337	0.068	595	$425.00	45%	85%	55%	0.688	0
OfficHIT7	Office	HID	Turnover	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.9210	15	913	0.047	407	$375.00	45%	85%	80%	0.869	0
RestaHIE1	Restaurant	HID	Early	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.5063	10	1,420	0.049	424	$214.50	30%	85%	80%	0.971	0
RestaHIE2	Restaurant	HID	Early	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.3993	10	2,079	0.086	751	$300.00	36%	85%	80%	1.231	1
RestaHIE3	Restaurant	HID	Early	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.4598	10	1,420	0.059	511	$235.00	36%	85%	80%	1.069	1
RestaHIE4	Restaurant	HID	Early	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.4537	10	2,079	0.082	716	$325.00	34%	85%	80%	1.083	1
RestaHIT5	Restaurant	HID	Turnover	5	Ceramic Metal Halide lamp	Replace non-ceramic lamp lamp 400 W	Lamp	$0.1145	3	1,747	0.035	306	$35.00	18%	85%	55%	1.274	1
RestaHIE7	Restaurant	HID	Early	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$1.0863	15	1,420	0.073	633	$688.00	45%	85%	80%	0.736	0
RestaHIT1	Restaurant	HID	Turnover	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.2608	10	1,420	0.049	424	$110.50	30%	85%	80%	1.885	1
RestaHIT2	Restaurant	HID	Turnover	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.2995	10	2,079	0.086	751	$225.00	36%	85%	80%	1.641	1
RestaHIT3	Restaurant	HID	Turnover	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.2837	10	1,420	0.059	511	$145.00	36%	85%	80%	1.732	1
RestaHIT4	Restaurant	HID	Turnover	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.3630	10	2,079	0.082	716	$260.00	34%	85%	80%	1.354	1
RestaHIT6	Restaurant	HID	Turnover	6	Multi Lamp Hard Wired CFL	Replace HID Fixure Drawing 400 W	Fixture	$0.4590	10	2,079	0.106	926	$425.00	45%	85%	55%	1.071	1
RestaHIT7	Restaurant	HID	Turnover	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.5921	15	1,420	0.073	633	$375.00	45%	85%	80%	1.351	1
RetaiHIE1	Retail	HID	Early	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.5253	10	1,368	0.047	408	$214.50	30%	85%	80%	0.936	0
RetaiHIE2	Retail	HID	Early	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.4143	10	2,004	0.083	724	$300.00	36%	85%	80%	1.186	1
RetaiHIE3	Retail	HID	Early	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.4771	10	1,368	0.057	493	$235.00	36%	85%	80%	1.030	1
RetaiHIE4	Retail	HID	Early	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.4707	10	2,004	0.079	690	$325.00	34%	85%	80%	1.044	1
RetaiHIT5	Retail	HID	Turnover	5	Ceramic Metal Halide lamp	Replace non-ceramic lamp lamp 400 W	Lamp	$0.1188	4	1,684	0.034	295	$35.00	18%	85%	55%	1.553	1
RetaiHIE7	Retail	HID	Early	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$1.1270	15	1,368	0.070	610	$688.00	45%	85%	80%	0.710	0
RetaiHIT1	Retail	HID	Turnover	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.2706	10	1,368	0.047	408	$110.50	30%	85%	80%	1.816	1
RetaiHIT2	Retail	HID	Turnover	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.3107	10	2,004	0.083	724	$225.00	36%	85%	80%	1.582	1
RetaiHIT3	Retail	HID	Turnover	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.2944	10	1,368	0.057	493	$145.00	36%	85%	80%	1.670	1
RetaiHIT4	Retail	HID	Turnover	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.3766	10	2,004	0.079	690	$260.00	34%	85%	80%	1.305	1
RetaiHIT6	Retail	HID	Turnover	6	Multi Lamp Hard Wired CFL	Replace HID Fixure Drawing 400 W	Fixture	$0.4762	10	2,004	0.103	893	$425.00	45%	85%	55%	1.032	1
RetaiHIT7	Retail	HID	Turnover	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.6143	15	1,368	0.070	610	$375.00	45%	85%	80%	1.302	1
MiscHIE1	Misc	HID	Early	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.5189	10	1,385	0.048	413	$214.50	30%	85%	80%	0.947	0
MiscHIE2	Misc	HID	Early	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.4093	10	2,028	0.084	733	$300.00	36%	85%	80%	1.201	1
MiscHIE3	Misc	HID	Early	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.4713	10	1,385	0.057	499	$235.00	36%	85%	80%	1.043	1
MiscHIE4	Misc	HID	Early	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.4650	10	2,028	0.080	699	$325.00	34%	85%	80%	1.057	1
MiscHIT5	Misc	HID	Turnover	5	Ceramic Metal Halide lamp	Replace non-ceramic lamp lamp 400 W	Lamp	$0.1173	4	1,705	0.034	298	$35.00	18%	85%	55%	1.572	1
MiscHIE7	Misc	HID	Early	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$1.1134	15	1,385	0.071	618	$688.00	45%	85%	80%	0.718	0
MiscHIT1	Misc	HID	Turnover	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.2673	10	1,385	0.048	413	$110.50	30%	85%	80%	1.839	1
MiscHIT2	Misc	HID	Turnover	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.3070	10	2,028	0.084	733	$225.00	36%	85%	80%	1.601	1
MiscHIT3	Misc	HID	Turnover	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.2908	10	1,385	0.057	499	$145.00	36%	85%	80%	1.690	1
MiscHIT4	Misc	HID	Turnover	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.3720	10	2,028	0.080	699	$260.00	34%	85%	80%	1.321	1
MiscHIT6	Misc	HID	Turnover	6	Multi Lamp Hard Wired CFL	Replace HID Fixure Drawing 400 W	Fixture	$0.4704	10	2,028	0.104	903	$425.00	45%	85%	55%	1.045	1
MiscHIT7	Misc	HID	Turnover	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.6069	15	1,385	0.071	618	$375.00	45%	85%	80%	1.318	1
GroceHIE8	Grocery	HID	Early	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1651	10	7,571	0.261	2,271	$375.00	30%	85%	85%	2.977	1
GroceHIE9	Grocery	HID	Early	9	Photocell dimming control	No prior dimming control	Photocell	$0.1453	10	7,571	0.435	3,786	$550.00	50%	85%	85%	3.383	1
GroceHIE10	Grocery	HID	Early	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1321	10	7,571	0.087	757	$100.00	10%	85%	45%	3.721	1
HealtHIE8	Healthcare	HID	Early	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1781	10	7,020	0.242	2,106	$375.00	30%	85%	85%	2.760	1
HealtHIE9	Healthcare	HID	Early	9	Photocell dimming control	No prior dimming control	Photocell	$0.1567	10	7,020	0.403	3,510	$550.00	50%	85%	85%	3.137	1
HealtHIE10	Healthcare	HID	Early	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1425	10	7,020	0.081	702	$100.00	10%	85%	45%	3.450	1
InstiHIE8	Institutional	HID	Early	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.3642	10	3,432	0.118	1,030	$375.00	30%	85%	85%	1.349	1
InstiHIE9	Institutional	HID	Early	9	Photocell dimming control	No prior dimming control	Photocell	$0.3205	10	3,432	0.197	1,716	$550.00	50%	85%	85%	1.533	1
InstiHIE10	Institutional	HID	Early	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.2914	10	3,432	0.039	343	$100.00	10%	85%	45%	1.687	1
OfficHIE8	Office	HID	Early	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.3424	10	3,650	0.126	1,095	$375.00	30%	85%	85%	1.435	1
OfficHIE9	Office	HID	Early	9	Photocell dimming control	No prior dimming control	Photocell	$0.3013	10	3,650	0.210	1,825	$550.00	50%	85%	85%	1.631	1
OfficHIE10	Office	HID	Early	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.2739	10	3,650	0.042	365	$100.00	10%	85%	45%	1.794	1
RestaHIE8	Restaurant	HID	Early	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2201	10	5,678	0.196	1,704	$375.00	30%	85%	85%	2.233	1
RestaHIE9	Restaurant	HID	Early	9	Photocell dimming control	No prior dimming control	Photocell	$0.1937	10	5,678	0.326	2,839	$550.00	50%	85%	85%	2.537	1
RestaHIE10	Restaurant	HID	Early	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1761	10	5,678	0.065	568	$100.00	10%	85%	45%	2.791	1

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
RetaiHIE8	Retail	HID	Early	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2284	10	5,473	0.189	1,642	$375.00	30%	85%	85%	2.152	1
RetaiHIE9	Retail	HID	Early	9	Photocell dimming control	No prior dimming control	Photocell	$0.2010	10	5,473	0.314	2,737	$550.00	50%	85%	85%	2.445	1
RetaiHIE10	Retail	HID	Early	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1827	10	5,473	0.063	547	$100.00	10%	85%	45%	2.690	1
MiscHIE8	Misc	HID	Early	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2256	10	5,540	0.191	1,662	$375.00	30%	85%	85%	2.178	1
MiscHIE9	Misc	HID	Early	9	Photocell dimming control	No prior dimming control	Photocell	$0.1986	10	5,540	0.318	2,770	$550.00	50%	85%	85%	2.475	1
MiscHIE10	Misc	HID	Early	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1805	10	5,540	0.064	554	$100.00	10%	85%	45%	2.723	1
LodgiHIE8	Lodging	HID	Early	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1946	10	6,423	0.221	1,927	$375.00	30%	85%	85%	2.526	1
LodgiHIE9	Lodging	HID	Early	9	Photocell dimming control	No prior dimming control	Photocell	$0.1713	10	6,423	0.369	3,212	$550.00	50%	85%	85%	2.870	1
LodgiHIE10	Lodging	HID	Early	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1557	10	6,423	0.074	642	$100.00	10%	85%	45%	3.157	1
LodgiHIT8	Lodging	HID	Turnover	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1427	10	6,423	0.221	1,927	$275.00	30%	85%	85%	3.444	1
LodgiHIT9	Lodging	HID	Turnover	9	Photocell dimming control	No prior dimming control	Photocell	$0.1713	10	6,423	0.369	3,212	$550.00	50%	85%	85%	2.870	1
LodgiHIT10	Lodging	HID	Turnover	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1168	10	6,423	0.074	642	$75.00	10%	85%	45%	4.209	1
GroceHIT8	Grocery	HID	Turnover	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1211	10	7,571	0.261	2,271	$275.00	30%	85%	85%	4.060	1
GroceHIT9	Grocery	HID	Turnover	9	Photocell dimming control	No prior dimming control	Photocell	$0.1453	10	7,571	0.435	3,786	$550.00	50%	85%	85%	3.383	1
GroceHIT10	Grocery	HID	Turnover	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.0991	10	7,571	0.087	757	$75.00	10%	85%	45%	4.962	1
HealtHIT8	Healthcare	HID	Turnover	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1306	10	7,020	0.242	2,106	$275.00	30%	85%	85%	3.764	1
HealtHIT9	Healthcare	HID	Turnover	9	Photocell dimming control	No prior dimming control	Photocell	$0.1567	10	7,020	0.403	3,510	$550.00	50%	85%	85%	3.137	1
HealtHIT10	Healthcare	HID	Turnover	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1068	10	7,020	0.081	702	$75.00	10%	85%	45%	4.600	1
InstiHIT8	Institutional	HID	Turnover	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2671	10	3,432	0.118	1,030	$275.00	30%	85%	85%	1.840	1
InstiHIT9	Institutional	HID	Turnover	9	Photocell dimming control	No prior dimming control	Photocell	$0.3205	10	3,432	0.197	1,716	$550.00	50%	85%	85%	1.533	1
InstiHIT10	Institutional	HID	Turnover	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.2185	10	3,432	0.039	343	$75.00	10%	85%	45%	2.249	1
OfficHIT8	Office	HID	Turnover	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2511	10	3,650	0.126	1,095	$275.00	30%	85%	85%	1.957	1
OfficHIT9	Office	HID	Turnover	9	Photocell dimming control	No prior dimming control	Photocell	$0.3013	10	3,650	0.210	1,825	$550.00	50%	85%	85%	1.631	1
OfficHIT10	Office	HID	Turnover	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.2055	10	3,650	0.042	365	$75.00	10%	85%	45%	2.392	1
MiscHIT8	Misc	HID	Turnover	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1655	10	5,540	0.191	1,662	$275.00	30%	85%	85%	2.970	1
MiscHIT9	Misc	HID	Turnover	9	Photocell dimming control	No prior dimming control	Photocell	$0.1986	10	5,540	0.318	2,770	$550.00	50%	85%	85%	2.475	1
MiscHIT10	Misc	HID	Turnover	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1354	10	5,540	0.064	554	$75.00	10%	85%	45%	3.630	1
RestaHIT8	Restaurant	HID	Turnover	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1614	10	5,678	0.196	1,704	$275.00	30%	85%	85%	3.045	1
RestaHIT9	Restaurant	HID	Turnover	9	Photocell dimming control	No prior dimming control	Photocell	$0.1937	10	5,678	0.326	2,839	$550.00	50%	85%	85%	2.537	1
RestaHIT10	Restaurant	HID	Turnover	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1321	10	5,678	0.065	568	$75.00	10%	85%	45%	3.721	1
RetaiHIT8	Retail	HID	Turnover	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1675	10	5,473	0.189	1,642	$275.00	30%	85%	85%	2.935	1
RetaiHIT9	Retail	HID	Turnover	9	Photocell dimming control	No prior dimming control	Photocell	$0.2010	10	5,473	0.314	2,737	$550.00	50%	85%	85%	2.445	1
RetaiHIT10	Retail	HID	Turnover	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1370	10	5,473	0.063	547	$75.00	10%	85%	45%	3.587	1
WarehHIT8	Warehouse	HID	Turnover	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1808	10	5,070	0.175	1,521	$275.00	30%	85%	85%	2.718	1
WarehHIT9	Warehouse	HID	Turnover	9	Photocell dimming control	No prior dimming control	Photocell	$0.2170	10	5,070	0.291	2,535	$550.00	50%	85%	85%	2.265	1
WarehHIT10	Warehouse	HID	Turnover	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1479	10	5,070	0.058	507	$75.00	10%	85%	45%	3.323	1
WarehHIN8	Warehouse	HID	New	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1781	10	4,680	0.161	1,404	$250.00	30%	85%	85%	2.760	1
WarehHIN9	Warehouse	HID	New	9	Photocell dimming control	No prior dimming control	Photocell	$0.1923	10	4,680	0.269	2,340	$450.00	50%	85%	85%	2.556	1
WarehHIN10	Warehouse	HID	New	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1389	10	4,680	0.054	468	$65.00	10%	25%	45%	3.539	1
GroceHIN8	Grocery	HID	New	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1192	10	6,989	0.241	2,097	$250.00	30%	85%	85%	4.122	1
GroceHIN9	Grocery	HID	New	9	Photocell dimming control	No prior dimming control	Photocell	$0.1288	10	6,989	0.402	3,494	$450.00	50%	85%	85%	3.817	1
GroceHIN10	Grocery	HID	New	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.0930	10	6,989	0.080	699	$65.00	10%	25%	45%	5.285	1
HealtHIN8	Healthcare	HID	New	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1286	10	6,480	0.223	1,944	$250.00	30%	85%	85%	3.822	1
HealtHIN9	Healthcare	HID	New	9	Photocell dimming control	No prior dimming control	Photocell	$0.1389	10	6,480	0.372	3,240	$450.00	50%	85%	85%	3.539	1
HealtHIN10	Healthcare	HID	New	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1003	10	6,480	0.074	648	$65.00	10%	25%	45%	4.900	1
InstiHIN8	Institutional	HID	New	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2630	10	3,168	0.109	950	$250.00	30%	85%	85%	1.869	1
InstiHIN9	Institutional	HID	New	9	Photocell dimming control	No prior dimming control	Photocell	$0.2841	10	3,168	0.182	1,584	$450.00	50%	85%	85%	1.730	1
InstiHIN10	Institutional	HID	New	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.2052	10	3,168	0.036	317	$65.00	10%	25%	45%	2.396	1
LodgiHIN8	Lodging	HID	New	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1405	10	5,929	0.204	1,779	$250.00	30%	85%	85%	3.497	1
LodgiHIN9	Lodging	HID	New	9	Photocell dimming control	No prior dimming control	Photocell	$0.1518	10	5,929	0.341	2,965	$450.00	50%	85%	85%	3.238	1
LodgiHIN10	Lodging	HID	New	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1096	10	5,929	0.068	593	$65.00	10%	25%	45%	4.483	1
OfficHIN8	Office	HID	New	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2473	10	3,370	0.116	1,011	$250.00	30%	85%	85%	1.987	1
OfficHIN9	Office	HID	New	9	Photocell dimming control	No prior dimming control	Photocell	$0.2671	10	3,370	0.194	1,685	$450.00	50%	85%	85%	1.840	1
OfficHIN10	Office	HID	New	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1929	10	3,370	0.039	337	$65.00	10%	25%	45%	2.548	1
RestaHIN8	Restaurant	HID	New	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1590	10	5,242	0.181	1,572	$250.00	30%	85%	85%	3.092	1
RestaHIN9	Restaurant	HID	New	9	Photocell dimming control	No prior dimming control	Photocell	$0.1717	10	5,242	0.301	2,621	$450.00	50%	85%	85%	2.863	1
RestaHIN10	Restaurant	HID	New	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1240	10	5,242	0.060	524	$65.00	10%	25%	45%	3.964	1
RetaiHIN8	Retail	HID	New	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1650	10	5,052	0.174	1,516	$250.00	30%	85%	85%	2.980	1
RetaiHIN9	Retail	HID	New	9	Photocell dimming control	No prior dimming control	Photocell	$0.1781	10	5,052	0.290	2,526	$450.00	50%	85%	85%	2.759	1
RetaiHIN10	Retail	HID	New	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1287	10	5,052	0.058	505	$65.00	10%	25%	45%	3.820	1
miscHIN8	misc	HID	New	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1630	10	5,114	0.176	1,534	$250.00	30%	85%	85%	3.016	1
MiscHIN9	Misc	HID	New	9	Photocell dimming control	No prior dimming control	Photocell	$0.1760	10	5,114	0.294	2,557	$450.00	50%	85%	85%	2.793	1
MiscHIN10	Misc	HID	New	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1271	10	5,114	0.059	511	$65.00	10%	25%	45%	3.867	1
OfficInN3	Office	Incandescent	New	3	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0464	14	3,594	0.124	1,078	$50.00	30%	95%	15%	16.072	1
OfficInN4	Office	Incandescent	New	4	Photocell dimming control	No prior dimming control	Photocell	$0.0835	9	3,594	0.207	1,797	$150.00	50%	95%	95%	5.012	1
OfficInT2	Office	Incandescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1159	14	3,594	0.124	1,078	$125.00	30%	95%	80%	6.429	1
OfficInT3	Office	Incandescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.1252	9	3,594	0.207	1,797	$225.00	50%	95%	95%	3.342	1
GroceInN3	Grocery	Incandescent	New	3	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0224	14	7,455	0.257	2,236	$50.00	30%	95%	15%	33.334	1
GroceInT2	Grocery	Incandescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0559	14	7,455	0.257	2,236	$125.00	30%	95%	80%	13.334	1
HealtInT2	Healthcare	Incandescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0603	14	6,912	0.238	2,074	$125.00	30%	95%	80%	12.363	1
GroceInN4	Grocery	Incandescent	New	4	Photocell dimming control	No prior dimming control	Photocell	$0.0402	9	7,455	0.428	3,727	$150.00	50%	95%	95%	10.396	1
HealtInN3	Healthcare	Incandescent	New	3	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0241	14	6,912	0.238	2,074	$50.00	30%	95%	15%	30.907	1
GroceInT3	Grocery	Incandescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.0604	9	7,455	0.428	3,727	$225.00	50%	95%	95%	6.931	1
HealtInT3	Healthcare	Incandescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.0651	9	6,912	0.397	3,456	$225.00	50%	95%	95%	6.426	1
HealtInN4	Healthcare	Incandescent	New	4	Photocell dimming control	No prior dimming control	Photocell	$0.0434	9	6,912	0.397	3,456	$150.00	50%	95%	95%	9.639	1
InstiInN3	Institutional	Incandescent	New	3	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0493	14	3,379	0.117	1,014	$50.00	30%	95%	15%	15.110	1
InstiInN4	Institutional	Incandescent	New	4	Photocell dimming control	No prior dimming control	Photocell	$0.0888	9	3,379	0.194	1,690	$150.00	50%	95%	95%	4.713	1
InstiInT2	Institutional	Incandescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1233	14	3,379	0.117	1,014	$125.00	30%	95%	80%	6.044	1
InstiInT3	Institutional	Incandescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.1332	9	3,379	0.194	1,690	$225.00	50%	95%	95%	3.142	1
LodgiInN3	Lodging	Incandescent	New	3	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0264	14	6,324	0.218	1,897	$50.00	30%	95%	15%	28.280	1
LodgiInN4	Lodging	Incandescent	New	4	Photocell dimming control	No prior dimming control	Photocell	$0.0474	9	6,324	0.363	3,162	$150.00	50%	95%	95%	8.820	1
LodgiInT2	Lodging	Incandescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0659	14	6,324	0.218	1,897	$125.00	30%	95%	80%	11.312	1
LodgiInT3	Lodging	Incandescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.0712	9	6,324	0.363	3,162	$225.00	50%	95%	95%	5.880	1
RestaInN3	Restaurant	Incandescent	New	3	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0298	14	5,591	0.193	1,677	$50.00	30%	95%	15%	25.000	1
RestaInN4	Restaurant	Incandescent	New	4	Photocell dimming control	No prior dimming control	Photocell	$0.0537	9	5,591	0.321	2,796	$150.00	50%	95%	95%	7.797	1
RestaInT2	Restaurant	Incandescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0745	14	5,591	0.193	1,677	$125.00	30%	95%	80%	10.000	1
RestaInT3	Restaurant	Incandescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.0805	9	5,591	0.321	2,796	$225.00	50%	95%	95%	5.198	1
RetaiInN3	Retail	Incandescent	New	3	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0309	14	5,389	0.186	1,617	$50.00	30%	95%	15%	24.096	1
RetaiInN4	Retail	Incandescent	New	4	Photocell dimming control	No prior dimming control	Photocell	$0.0557	9	5,389	0.310	2,694	$150.00	50%	95%	95%	7.515	1

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
RetailnT2	Retail	Incandescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0773	14	5,389	0.186	1,617	$125.00	30%	95%	80%	9.638	1
RetailnT3	Retail	Incandescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.0835	9	5,389	0.310	2,694	$225.00	50%	95%	95%	5.010	1
WarehInN3	Warehouse	Incandescent	New	3	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0334	14	4,992	0.172	1,498	$50.00	30%	95%	15%	22.322	1
WarehInN4	Warehouse	Incandescent	New	4	Photocell dimming control	No prior dimming control	Photocell	$0.0601	9	4,992	0.287	2,496	$150.00	50%	95%	95%	6.962	1
WarehInT2	Warehouse	Incandescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0835	14	4,992	0.172	1,498	$125.00	30%	95%	80%	8.929	1
WarehInT3	Warehouse	Incandescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.0901	9	4,992	0.287	2,496	$225.00	50%	95%	95%	4.641	1
MiscInN3	Misc	Incandescent	New	3	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0306	14	5,455	0.188	1,636	$50.00	30%	95%	15%	24.390	1
MiscInN4	Misc	Incandescent	New	4	Photocell dimming control	No prior dimming control	Photocell	$0.0550	9	5,455	0.313	2,727	$150.00	50%	95%	95%	7.607	1
MiscInT2	Misc	Incandescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0764	14	5,455	0.188	1,636	$125.00	30%	95%	80%	9.756	1
MiscInT3	Misc	Incandescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.0825	9	5,455	0.313	2,727	$225.00	50%	95%	95%	5.071	1
GroceInT4	Grocery	Incandescent	Turnover	4	LED Lamp - 12 Watt	EISA - 60 Watt equivalent - 43W	Lamp	$0.1329	5	250	0.021	181	$23.99	72%	75%	50%	1.760	1
HealthInT4	Healthcare	Incandescent	Turnover	4	LED Lamp - 12 Watt	EISA - 60 Watt equivalent - 43W	Lamp	$0.1433	5	232	0.019	167	$23.99	72%	75%	50%	1.632	1
GroceInT5	Grocery	Incandescent	Turnover	5	LED Lamp PAR - 12 Watt	Halogen PAR - 45 W	Lamp	$0.1908	5	262	0.021	181	$34.45	69%	75%	90%	1.226	1
HealthInT5	Healthcare	Incandescent	Turnover	5	LED Lamp PAR - 12 Watt	Halogen PAR - 45 W	Lamp	$0.2058	5	243	0.019	167	$34.45	69%	75%	90%	1.136	1
InstiInT1	Institutional	Incandescent	Turnover	1	CFL Lamp - 21 Watt	EISA - 75 Watt equivalent - 53W	Lamp	$0.0355	5	140	0.010	84	$3.00	60%	75%	50%	6.586	1
InstiInT4	Institutional	Incandescent	Turnover	4	LED Lamp - 12 Watt	EISA - 60 Watt equivalent - 43W	Lamp	$0.2931	5	114	0.009	82	$23.99	72%	75%	50%	0.798	0
InstiInT5	Institutional	Incandescent	Turnover	5	LED Lamp PAR - 12 Watt	Halogen PAR - 45 W	Lamp	$0.4209	5	119	0.009	82	$34.45	69%	75%	90%	0.556	0
LodgInT1	Lodging	Incandescent	Turnover	1	CFL Lamp - 21 Watt	EISA - 75 Watt equivalent - 53W	Lamp	$0.0190	5	262	0.018	158	$3.00	60%	75%	50%	12.326	1
LodgInT4	Lodging	Incandescent	Turnover	4	LED Lamp - 12 Watt	EISA - 60 Watt equivalent - 43W	Lamp	$0.1566	5	212	0.018	153	$23.99	72%	75%	50%	1.493	1
LodgInT5	Lodging	Incandescent	Turnover	5	LED Lamp PAR - 12 Watt	Halogen PAR - 45 W	Lamp	$0.2249	5	222	0.018	153	$34.45	69%	75%	90%	1.040	1
OfficInT1	Office	Incandescent	Turnover	1	CFL Lamp - 21 Watt	EISA - 75 Watt equivalent - 53W	Lamp	$0.0334	5	149	0.010	90	$3.00	60%	75%	50%	7.005	1
OfficInT4	Office	Incandescent	Turnover	4	LED Lamp - 12 Watt	EISA - 60 Watt equivalent - 43W	Lamp	$0.2756	5	121	0.010	87	$23.99	72%	75%	50%	0.849	0
OfficInT5	Office	Incandescent	Turnover	5	LED Lamp PAR - 12 Watt	Halogen PAR - 45 W	Lamp	$0.3958	5	126	0.010	87	$34.45	69%	75%	90%	0.591	0
RestaInT1	Restaurant	Incandescent	Turnover	1	CFL Lamp - 21 Watt	EISA - 75 Watt equivalent - 53W	Lamp	$0.0215	5	232	0.016	140	$3.00	60%	75%	50%	10.897	1
RestaInT4	Restaurant	Incandescent	Turnover	4	LED Lamp - 12 Watt	EISA - 60 Watt equivalent - 43W	Lamp	$0.1772	5	188	0.016	135	$23.99	72%	75%	50%	1.320	1
RestaInT5	Restaurant	Incandescent	Turnover	5	LED Lamp PAR - 12 Watt	Halogen PAR - 45 W	Lamp	$0.2544	5	197	0.016	135	$34.45	69%	75%	90%	0.919	0
RetaInT1	Retail	Incandescent	Turnover	1	CFL Lamp - 21 Watt	EISA - 75 Watt equivalent - 53W	Lamp	$0.0223	5	223	0.015	135	$3.00	60%	75%	50%	10.503	1
RetaInT4	Retail	Incandescent	Turnover	4	LED Lamp - 12 Watt	EISA - 60 Watt equivalent - 43W	Lamp	$0.1838	5	181	0.015	131	$23.99	72%	75%	50%	1.272	1
RetaInT5	Retail	Incandescent	Turnover	5	LED Lamp PAR - 12 Watt	Halogen PAR - 45 W	Lamp	$0.2640	5	189	0.015	131	$34.45	69%	75%	90%	0.886	0
miscInT1	misc	Incandescent	Turnover	1	CFL Lamp - 21 Watt	EISA - 75 Watt equivalent - 53W	Lamp	$0.0220	5	226	0.016	136	$3.00	60%	75%	50%	10.631	1
miscInT4	misc	Incandescent	Turnover	4	LED Lamp - 12 Watt	EISA - 60 Watt equivalent - 43W	Lamp	$0.1816	5	183	0.015	132	$23.99	72%	75%	50%	1.288	1
miscInT5	misc	Incandescent	Turnover	5	LED Lamp PAR - 12 Watt	Halogen PAR - 45 W	Lamp	$0.2608	5	192	0.015	132	$34.45	69%	75%	90%	0.897	0
WarehInT1	Warehouse	Incandescent	Turnover	1	CFL Lamp - 21 Watt	EISA - 75 Watt equivalent - 53W	Lamp	$0.0240	5	207	0.014	125	$3.00	60%	75%	50%	9.729	1
WarehInT4	Warehouse	Incandescent	Turnover	4	LED Lamp - 12 Watt	EISA - 60 Watt equivalent - 43W	Lamp	$0.1984	5	168	0.014	121	$23.99	72%	75%	50%	1.179	1
WarehInT5	Warehouse	Incandescent	Turnover	5	LED Lamp PAR - 12 Watt	Halogen PAR - 45 W	Lamp	$0.2849	5	176	0.014	121	$34.45	69%	75%	90%	0.821	0
LodgInN6	Lodging	Incandescent	New	6	Hotel Occupancy Sensors	No prior control	Per Room	$0.4468	10	240	0.019	168	$75.00	70%	90%	95%	1.100	1
LodgInT6	Lodging	Incandescent	Turnover	6	Hotel Occupancy Sensors	No prior control	Per Room	$0.5957	10	240	0.019	168	$100.00	70%	90%	95%	0.825	0
AllSiN1	All	Signage	New	1	Induction Street Lighting	Base HID Streetlighting	Fixture	$0.54	15	2,762	0.101	1,619	$875.00	59%	95%	95%	1.398	1
AllSiN2	All	Signage	New	2	LED or equivalent sign lighting	Replace fluorescent sign lighting	Exit Sign	$0.58	15	52	0.002	30	$17.36	58%	95%	7%	1.299	1
AllSiN3	All	Signage	New	3	LED Street Lighting	Std HID Street Lighting	Pole	$0.56	15	3,023	0.047	756	$425.00	25%	95%	95%	1.343	1
AllSiE1	All	Signage	Early	1	Dusk to Dawn	Time Clock Control	Pole	$0.17	15	3,023	0.076	1,209	$200.00	40%	95%	50%	4.567	1
OfficMoT22	Office	Motors	Turnover	22	Air Comp Improvements			$0.11	15	56148	1.148	8,928	$990.00	16%	28%	65%	7.313	1
OfficMoE2	Office	Motors	Early	2	Air Compressor Optimization			$0.16	15	56148	2.174	16,901	$2,750.00	30%	38%	65%	4.984	1
GroceMoE1	Grocery	Motors	Early	1	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.235	1
AllOtT1	All	Other	Turnover	1	Motor Improvements Bundle - Industrial Model	No Motor Improvements	Motor	$0.48	14	10000	0.128	1,092	$522.00	11%	90%	95%	1.562	1
AllOtT2	All	Other	Turnover	2	EE Transformer - CSL 3	NEMA Transformer - 75W	Motor	$0.60	15	4197	0.187	1,595	$950.00	23%	90%	95%	1.346	1
AllOtN1	All	Other	New	1	EE Transformer - CSL 3	NEMA Transformer - 75W	Motor	$0.60	15	4197	0.187	1,595	$950.00	23%	90%	95%	1.346	1
AllReN26	All	Refrigeration	New	26	Anti-sweat heat (ASH) controls - Freezer	ASH without controls	Per Door	$0.16	12	2,985	0.029	1,882	$300.00	63%	95%	85%	3.588	1
AllReN27	All	Refrigeration	New	27	Anti-sweat heat (ASH) controls - Cooler	ASH without controls	Per Door	$0.29	12	1,621	0.028	1,023	$300.00	63%	95%	85%	1.971	1
GroceMoN1	Grocery	Motors	New	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1015	15	15384	0.0282	139.5	$154	0.91%	74.4%	100%	0.777	0
GroceMoN2	Grocery	Motors	New	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.1901	15	58940	0.0231	437.7	$521	0.74%	74.4%	100%	0.642	0
GroceMoN3	Grocery	Motors	New	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0693	15	144688	0.0138	644.1	$689	0.45%	66.3%	100%	0.697	0
GroceMoN4	Grocery	Motors	New	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4499	15	290922	0.0121	1135.2	$511	0.39%	55.8%	100%	1.642	1
GroceMoN5	Grocery	Motors	New	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-500 HP	Motor	$0.3775	15	624328	0.0284	5711.1	$2,156	0.91%	55.8%	100%	1.948	1
GroceMoN6	Grocery	Motors	New	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5635	15	97600	2.511	19,520	$11,000.00	20%	55.0%	100%	1.439	1
GroceMoN7	Grocery	Motors	New	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4367	15	97600	3.941	29767.9	$13,000.00	31%	70.0%	100%	1.862	1
GroceMoN8	Grocery	Motors	New	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4149	15	97600	0.000	31329.5	$13,000.00	32%	80.0%	100%	1.765	1
GroceMoN9	Grocery	Motors	New	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.4915	15	97600	3.941	26449.5	$13,000.00	27%	70.0%	100%	1.675	1
GroceMoN10	Grocery	Motors	New	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4515	15	97600	2.798	28791.9	$13,000.00	30%	55.0%	100%	1.753	1
GroceMoN11	Grocery	Motors	New	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.4915	15	97600	3.941	26449.5	$13,000.00	27%	30.0%	100%	1.675	1
GroceMoT1	Grocery	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1015	15	15384	0.0282	139.5	$154	0.91%	74.4%	100%	0.777	0
GroceMoT2	Grocery	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.1901	15	58940	0.0231	437.7	$521	0.74%	74.4%	100%	0.642	0
GroceMoT3	Grocery	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0693	15	144688	0.0138	644.1	$689	0.45%	66.3%	100%	0.697	0
GroceMoT4	Grocery	Motors	Turnover	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4499	15	290922	0.0121	1135.2	$511	0.39%	55.8%	100%	1.642	1
GroceMoT5	Grocery	Motors	Turnover	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-250 HP	Motor	$0.3775	15	624328	0.0284	5711.1	$2,156	0.91%	55.8%	100%	1.948	1
GroceMoT6	Grocery	Motors	Turnover	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5635	15	97600	2.511	19,520	$11,000.00	20%	55.0%	80%	1.439	1
GroceMoT7	Grocery	Motors	Turnover	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4367	15	97600	3.941	29767.9	$13,000.00	31%	90.0%	80%	1.862	1
GroceMoT8	Grocery	Motors	Turnover	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4149	15	97600	0.000	31329.5	$13,000.00	32%	90.0%	80%	1.765	1
GroceMoT9	Grocery	Motors	Turnover	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.4915	15	97600	3.941	26449.5	$13,000.00	27%	90.0%	80%	1.675	1
GroceMoT10	Grocery	Motors	Turnover	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4515	15	97600	2.798	28791.9	$13,000.00	30%	80.0%	80%	1.753	1
GroceMoT11	Grocery	Motors	Turnover	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.4915	15	97600	3.941	26449.5	$13,000.00	27%	55.0%	80%	1.675	1
GroceMoT12	Grocery	Motors	Turnover	12	Motors: Rewind 125-200 HP	(E) Motor	Motor	$0.5097	15	292799	0.189	1471.4	$750	0.5%	35.0%	95%	1.591	1
GroceMoT13	Grocery	Motors	Turnover	13	Motors: Rewind 201-500 HP	(E) Motor	Motor	$0.6274	15	634398	0.410	3187.9	$2,000	0.5%	50.0%	95%	1.293	1
GroceMoT14	Grocery	Motors	Turnover	14	Motors: Rewind 20-50 HP	(E) Motor	Motor	$0.4704	15	59847	0.068	531.4	$250	0.9%	10.0%	95%	1.724	1
GroceMoT15	Grocery	Motors	Turnover	15	Motors: Rewind 500+ HP	(E) Motor	Motor	$0.5437	15	1463995	0.946	7356.8	$4,000	0.5%	70.0%	95%	1.491	1
GroceMoT16	Grocery	Motors	Turnover	16	Motors: Rewind 51-100 HP	(E) Motor	Motor	$0.5841	15	147991	0.110	856.0	$500	0.6%	20.0%	95%	1.388	1
GroceMoT17	Grocery	Motors	Turnover	17	Downsizing motor during retrofit	Larger hp standard motor	HP Reduction	$0.34	20	186,404	0.190	1,477	$500.00	0.79%	25%	95%	3.079	1
GroceMoN12	Grocery	Motors	New	12	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.635	1
GroceMoN13	Grocery	Motors	New	13	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.031	0
GroceMoN14	Grocery	Motors	New	14	Electronically Commutated Motors (ECM) on an Air Handler Unit	replaced with 85% eff. ECPM motor		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.789	1
GroceMoN15	Grocery	Motors	New	15	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.628	0
GroceMoT18	Grocery	Motors	Turnover	18	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.635	1
GroceMoT19	Grocery	Motors	Turnover	19	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.031	0
GroceMoT20	Grocery	Motors	Turnover	20	Electronically Commutated Motors (ECM) on an Air Handler Unit	replaced with 85% eff. ECPM motor		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.789	1
GroceMoT21	Grocery	Motors	Turnover	21	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.628	0
GroceMoT22	Grocery	Motors	Turnover	22	Air Comp Improvements			$0.11	15	56148	1.148	8,928	$990.00	16%	28%	65%	7.313	1
GroceMoE2	Grocery	Motors	Early	2	Air Compressor Optimization			$0.16	15	56148	2.174	16,901	$2,750.00	30%	38%	65%	4.984	1
GroceMoT23	Grocery	Motors	Turnover	23	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.235	1
HealtMoN1	Healthcare	Motors	New	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$0.8576	15	19759	0.0282	179.2	$154	0.91%	74.4%	100%	0.966	0

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
HealtMoN2	Healthcare	Motors	New	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$0.9266	15	75700	0.0231	562.2	$521	0.74%	74.4%	100%	0.817	0
HealtMoN3	Healthcare	Motors	New	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$0.8325	15	185830	0.0138	827.3	$689	0.45%	66.3%	100%	0.892	0
HealtMoN4	Healthcare	Motors	New	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.3503	15	373646	0.0121	1458.0	$511	0.39%	55.8%	100%	2.105	1
HealtMoN5	Healthcare	Motors	New	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-500 HP	Motor	$0.2939	15	801855	0.0284	7335.1	$2,156	0.91%	55.8%	100%	2.500	1
HealtMoN6	Healthcare	Motors	New	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.4388	15	125352	3.225	25,070	$11,000.00	20%	55.0%	100%	1.848	1
HealtMoN7	Healthcare	Motors	New	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.3771	15	125352	3.941	34471.8	$13,000.00	28%	70.0%	100%	2.127	1
HealtMoN8	Healthcare	Motors	New	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.3231	15	125352	0.000	40238.0	$13,000.00	32%	80.0%	100%	2.267	1
HealtMoN9	Healthcare	Motors	New	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.4490	15	125352	3.941	28956.3	$13,000.00	23%	70.0%	100%	1.816	1
HealtMoN10	Healthcare	Motors	New	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.3758	15	125352	2.798	34597.2	$13,000.00	28%	55.0%	100%	2.080	1
HealtMoN11	Healthcare	Motors	New	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.4233	15	125352	3.941	30711.3	$13,000.00	25%	30.0%	100%	1.915	1
HealtMoT1	Healthcare	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$0.8576	15	19759	0.0282	179.2	$154	0.91%	74.4%	100%	0.966	0
HealtMoT2	Healthcare	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$0.9266	15	75700	0.0231	562.2	$521	0.74%	74.4%	100%	0.817	0
HealtMoT3	Healthcare	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$0.8325	15	185830	0.0138	827.3	$689	0.45%	66.3%	100%	0.892	0
HealtMoT4	Healthcare	Motors	Turnover	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.3503	15	373646	0.0121	1458.0	$511	0.39%	55.8%	100%	2.105	1
HealtMoT5	Healthcare	Motors	Turnover	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-250 HP	Motor	$0.2939	15	801855	0.0284	7335.1	$2,156	0.91%	55.8%	100%	2.500	1
HealtMoT6	Healthcare	Motors	Turnover	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.4388	15	125352	3.225	25,070	$11,000.00	20%	55.0%	80%	1.848	1
HealtMoT7	Healthcare	Motors	Turnover	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.3771	15	125352	3.941	34471.8	$13,000.00	28%	90.0%	80%	2.127	1
HealtMoT8	Healthcare	Motors	Turnover	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.3231	15	125352	0.000	40238.0	$13,000.00	32%	90.0%	80%	2.267	1
HealtMoT9	Healthcare	Motors	Turnover	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.4490	15	125352	3.941	28956.3	$13,000.00	23%	90.0%	80%	1.816	1
HealtMoT10	Healthcare	Motors	Turnover	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.3758	15	125352	2.798	34597.2	$13,000.00	28%	80.0%	80%	2.080	1
HealtMoT11	Healthcare	Motors	Turnover	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.4233	15	125352	3.941	30711.3	$13,000.00	25%	55.0%	80%	1.915	1
HealtMoT12	Healthcare	Motors	Turnover	12	Motors: Rewind 125-200 HP	(E) Motor	Motor	$0.3969	15	376056	0.243	1889.7	$750	0.5%	35.0%	95%	2.043	1
HealtMoT13	Healthcare	Motors	Turnover	13	Motors: Rewind 201-500 HP	(E) Motor	Motor	$0.4885	15	814788	0.527	4094.4	$2,000	0.5%	50.0%	95%	1.660	1
HealtMoT14	Healthcare	Motors	Turnover	14	Motors: Rewind 20-50 HP	(E) Motor	Motor	$0.3663	15	76864	0.088	682.5	$250	0.9%	10.0%	95%	2.214	1
HealtMoT15	Healthcare	Motors	Turnover	15	Motors: Rewind 500+ HP	(E) Motor	Motor	$0.4233	15	1880281	1.216	9448.6	$4,000	0.5%	70.0%	95%	1.916	1
HealtMoT16	Healthcare	Motors	Turnover	16	Motors: Rewind 51-100 HP	(E) Motor	Motor	$0.4548	15	190072	0.141	1099.4	$500	0.6%	20.0%	95%	1.783	1
HealtMoT17	Healthcare	Motors	Turnover	17	Downsizing motor during retrofit	Larger hp standard motor	HP Reduction	$0.34	20	186,404	0.190	1,477	$500.00	0.79%	25%	95%	3.079	1
HealtMoN12	Healthcare	Motors	New	12	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.635	1
HealtMoN13	Healthcare	Motors	New	13	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.031	0
HealtMoN14	Healthcare	Motors	New	14	Electronically Commutated Motors (ECM) on an Air Handler Unit	replaced with 85% eff. ECPM motor		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.789	1
HealtMoN15	Healthcare	Motors	New	15	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.628	0
HealtMoT18	Healthcare	Motors	Turnover	18	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.635	1
HealtMoT19	Healthcare	Motors	Turnover	19	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.031	0
HealtMoT20	Healthcare	Motors	Turnover	20	Electronically Commutated Motors (ECM) on an Air Handler Unit	replaced with 85% eff. ECPM motor		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.789	1
HealtMoT21	Healthcare	Motors	Turnover	21	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.628	0
HealtMoT22	Healthcare	Motors	Turnover	22	Air Comp Improvements			$0.11	15	56148	1.148	8,928	$990.00	16%	28%	65%	7.313	1
HealtMoE2	Healthcare	Motors	Early	2	Air Compressor Optimization			$0.16	15	56148	2.174	16,901	$2,750.00	30%	38%	65%	4.984	1
HealtMoE1	Healthcare	Motors	Early	1	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.235	1
InstiMoN1	Institutional	Motors	New	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.2757	15	13284	0.0282	120.5	$154	0.91%	74.4%	100%	0.686	0
InstiMoN2	Institutional	Motors	New	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.3783	15	50893	0.0231	377.9	$521	0.74%	74.4%	100%	0.558	0
InstiMoN3	Institutional	Motors	New	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.2384	15	124933	0.0138	556.2	$689	0.45%	66.3%	100%	0.604	0
InstiMoN4	Institutional	Motors	New	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.5211	15	251201	0.0121	980.2	$511	0.39%	55.8%	100%	1.420	1
InstiMoN5	Institutional	Motors	New	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-500 HP	Motor	$0.4372	15	539086	0.0284	4931.3	$2,156	0.91%	55.8%	100%	1.683	1
InstiMoN6	Institutional	Motors	New	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.6526	15	84274	2.168	16,855	$11,000.00	20%	55.0%	100%	1.243	1
InstiMoN7	Institutional	Motors	New	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.5074	15	84274	6.136	25619.3	$13,000.00	30%	70.0%	100%	1.732	1
InstiMoN8	Institutional	Motors	New	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4806	15	84274	0.000	27051.9	$13,000.00	32%	80.0%	100%	1.524	1
InstiMoN9	Institutional	Motors	New	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5713	15	84274	6.136	22754.0	$13,000.00	27%	70.0%	100%	1.570	1
InstiMoN10	Institutional	Motors	New	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.5265	15	84274	4.452	24692.3	$13,000.00	29%	55.0%	100%	1.600	1
InstiMoN11	Institutional	Motors	New	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5713	15	84274	6.136	22754.0	$13,000.00	27%	30.0%	100%	1.570	1
InstiMoT1	Institutional	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.2757	15	13284	0.0282	120.5	$154	0.91%	74.4%	100%	0.686	0
InstiMoT10	Institutional	Motors	Turnover	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.5265	15	84274	4.452	24692.3	$13,000.00	29%	80.0%	80%	1.600	1
InstiMoT11	Institutional	Motors	Turnover	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5713	15	84274	6.136	22754.0	$13,000.00	27%	55.0%	80%	1.570	1
InstiMoT12	Institutional	Motors	Turnover	12	Motors: Rewind 125-200 HP	(E) Motor	Motor	$0.5903	15	252822	0.163	1270.5	$750	0.5%	35.0%	95%	1.374	1
InstiMoT13	Institutional	Motors	Turnover	13	Motors: Rewind 201-500 HP	(E) Motor	Motor	$0.7266	15	547781	0.354	2752.7	$2,000	0.5%	50.0%	95%	1.116	1
InstiMoT14	Institutional	Motors	Turnover	14	Motors: Rewind 20-50 HP	(E) Motor	Motor	$0.5448	15	51676	0.059	458.9	$250	0.9%	10.0%	95%	1.488	1
InstiMoT15	Institutional	Motors	Turnover	15	Motors: Rewind 500+ HP	(E) Motor	Motor	$0.6297	15	1264109	0.817	6352.3	$4,000	0.5%	70.0%	95%	1.288	1
InstiMoT16	Institutional	Motors	Turnover	16	Motors: Rewind 51-100 HP	(E) Motor	Motor	$0.6765	15	127785	0.095	739.1	$500	0.6%	20.0%	95%	1.199	1
InstiMoT17	Institutional	Motors	Turnover	17	Downsizing motor during retrofit	Larger hp standard motor	HP Reduction	$0.34	20	186,404	0.190	1,477	$500.00	0.79%	25%	95%	3.079	1
InstiMoT2	Institutional	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.3783	15	50893	0.0231	377.9	$521	0.74%	74.4%	100%	0.558	0
HealtMoT23	Healthcare	Motors	Turnover	23	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.235	1
InstiMoT3	Institutional	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.2384	15	124933	0.0138	556.2	$689	0.45%	66.3%	100%	0.604	0
InstiMoT4	Institutional	Motors	Turnover	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.5211	15	251201	0.0121	980.2	$511	0.39%	55.8%	100%	1.420	1
InstiMoT5	Institutional	Motors	Turnover	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-250 HP	Motor	$0.4372	15	539086	0.0284	4931.3	$2,156	0.91%	55.8%	100%	1.683	1
InstiMoT6	Institutional	Motors	Turnover	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.6526	15	84274	2.168	16,855	$11,000.00	20%	55.0%	80%	1.243	1
InstiMoT7	Institutional	Motors	Turnover	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.5074	15	84274	6.136	25619.3	$13,000.00	30%	90.0%	80%	1.732	1
InstiMoT8	Institutional	Motors	Turnover	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4806	15	84274	0.000	27051.9	$13,000.00	32%	90.0%	80%	1.524	1
InstiMoN12	Institutional	Motors	New	12	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.635	1
InstiMoN13	Institutional	Motors	New	13	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.031	0
InstiMoN14	Institutional	Motors	New	14	Electronically Commutated Motors (ECM) on an Air Handler Unit	replaced with 85% eff. ECPM motor		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.789	1
InstiMoN15	Institutional	Motors	New	15	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.628	0
InstiMoT18	Institutional	Motors	Turnover	18	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.635	1
InstiMoT19	Institutional	Motors	Turnover	19	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.031	0
InstiMoT20	Institutional	Motors	Turnover	20	Electronically Commutated Motors (ECM) on an Air Handler Unit	replaced with 85% eff. ECPM motor		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.789	1
InstiMoT21	Institutional	Motors	Turnover	21	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.628	0
InstiMoT22	Institutional	Motors	Turnover	22	Air Comp Improvements			$0.11	15	56148	1.148	8,928	$990.00	16%	28%	65%	7.313	1
InstiMoE2	Institutional	Motors	Early	2	Air Compressor Optimization			$0.16	15	56148	2.174	16,901	$2,750.00	30%	38%	65%	4.984	1
InstiMoE1	Institutional	Motors	Early	1	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.235	1
LodgiMoN1	Lodging	Motors	New	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1114	15	15247	0.0282	138.3	$154	0.91%	74.4%	100%	0.771	0
LodgiMoN2	Lodging	Motors	New	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.2008	15	58416	0.0231	433.8	$521	0.74%	74.4%	100%	0.637	0
LodgiMoN3	Lodging	Motors	New	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0789	15	143401	0.0138	638.4	$689	0.45%	66.3%	100%	0.691	0
LodgiMoN4	Lodging	Motors	New	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4540	15	288334	0.0121	1125.1	$511	0.39%	55.8%	100%	1.628	1
LodgiMoN5	Lodging	Motors	New	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-500 HP	Motor	$0.3809	15	618773	0.0284	5660.3	$2,156	0.91%	55.8%	100%	1.931	1
LodgiMoN6	Lodging	Motors	New	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5686	15	96731	2.489	19,346	$11,000.00	20%	55.0%	100%	1.426	1
LodgiMoN7	Lodging	Motors	New	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4477	15	96731	4.693	29035.5	$13,000.00	30%	70.0%	100%	1.856	1
LodgiMoN8	Lodging	Motors	New	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4187	15	96731	0.000	31050.8	$13,000.00	32%	80.0%	100%	1.749	1
LodgiMoN9	Lodging	Motors	New	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5087	15	96731	4.693	25553.2	$13,000.00	26%	70.0%	100%	1.660	1
LodgiMoN10	Lodging	Motors	New	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4616	15	96731	3.364	28164.9	$13,000.00	29%	55.0%	100%	1.745	1
LodgiMoN11	Lodging	Motors	New	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5043	15	96731	4.693	25778.9	$13,000.00	27%	30.0%	100%	1.673	1
LodgiMoT1	Lodging	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1114	15	15247	0.0282	138.3	$154	0.91%	74.4%	100%	0.771	0

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
LodgiMoT2	Lodging	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.2008	15	58416	0.0231	433.8	$521	0.74%	74.4%	100%	0.637	0
LodgiMoT3	Lodging	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0789	15	143401	0.0138	638.4	$689	0.45%	66.3%	100%	0.691	0
LodgiMoT4	Lodging	Motors	Turnover	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4540	15	288334	0.0121	1125.1	$511	0.39%	55.8%	100%	1.628	1
LodgiMoT5	Lodging	Motors	Turnover	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-250 HP	Motor	$0.3809	15	618773	0.0284	5660.3	$2,156	0.91%	55.8%	100%	1.931	1
LodgiMoT6	Lodging	Motors	Turnover	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5686	15	96731	2.489	19,346	$11,000.00	20%	55.0%	80%	1.426	1
LodgiMoT7	Lodging	Motors	Turnover	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4477	15	96731	4.693	29035.5	$13,000.00	30%	90.0%	80%	1.856	1
LodgiMoT8	Lodging	Motors	Turnover	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4187	15	96731	0.000	31050.8	$13,000.00	32%	90.0%	80%	1.749	1
LodgiMoT9	Lodging	Motors	Turnover	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5087	15	96731	4.693	25553.2	$13,000.00	26%	90.0%	80%	1.660	1
LodgiMoT10	Lodging	Motors	Turnover	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4616	15	96731	3.364	28164.9	$13,000.00	29%	80.0%	80%	1.745	1
LodgiMoT11	Lodging	Motors	Turnover	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5043	15	96731	4.693	25778.9	$13,000.00	27%	55.0%	80%	1.673	1
LodgiMoT12	Lodging	Motors	Turnover	12	Motors: Rewind 125-200 HP	(E) Motor	Motor	$0.5143	15	290194	0.188	1458.3	$750	0.5%	35.0%	95%	1.577	1
LodgiMoT13	Lodging	Motors	Turnover	13	Motors: Rewind 201-500 HP	(E) Motor	Motor	$0.6330	15	628754	0.406	3159.6	$2,000	0.5%	50.0%	95%	1.281	1
LodgiMoT14	Lodging	Motors	Turnover	14	Motors: Rewind 20-50 HP	(E) Motor	Motor	$0.4747	15	59314	0.068	526.7	$250	0.9%	10.0%	95%	1.708	1
LodgiMoT15	Lodging	Motors	Turnover	15	Motors: Rewind 500+ HP	(E) Motor	Motor	$0.5486	15	1450970	0.938	7291.3	$4,000	0.5%	70.0%	95%	1.478	1
LodgiMoT16	Lodging	Motors	Turnover	16	Motors: Rewind 51-100 HP	(E) Motor	Motor	$0.5894	15	146674	0.109	848.4	$500	0.6%	20.0%	95%	1.376	1
LodgiMoT17	Lodging	Motors	Turnover	17	Downsizing motor during retrofit	Larger hp standard motor	HP Reduction	$0.34	20	186,404	0.190	1,477	$500.00	0.79%	25%	95%	3.079	1
LodgiMoN12	Lodging	Motors	New	12	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.635	1
LodgiMoN13	Lodging	Motors	New	13	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.031	0
LodgiMoN14	Lodging	Motors	New	14	Electronically Commutated Motors (ECM) on an Air Handler Unit	replaced with 85% eff. ECPM motor		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.789	1
LodgiMoN15	Lodging	Motors	New	15	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.628	0
LodgiMoT18	Lodging	Motors	Turnover	18	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.635	1
LodgiMoT19	Lodging	Motors	Turnover	19	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.031	0
LodgiMoT20	Lodging	Motors	Turnover	20	Electronically Commutated Motors (ECM) on an Air Handler Unit	replaced with 85% eff. ECPM motor		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.789	1
LodgiMoT21	Lodging	Motors	Turnover	21	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.628	0
LodgiMoT22	Lodging	Motors	Turnover	22	Air Comp Improvements			$0.11	15	56148	1.148	8,928	$990.00	16%	28%	65%	7.313	1
LodgiMoE2	Lodging	Motors	Early	2	Air Compressor Optimization			$0.16	15	56148	2.174	16,901	$2,750.00	30%	38%	65%	4.984	1
InstiMoT23	Institutional	Motors	Turnover	23	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.235	1
miscMoN1	misc	Motors	New	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1114	15	15247	0.0282	138.3	$154	0.91%	74.4%	100%	0.771	0
miscMoN2	misc	Motors	New	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.2008	15	58416	0.0231	433.8	$521	0.74%	74.4%	100%	0.637	0
miscMoN3	misc	Motors	New	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0789	15	143401	0.0138	638.4	$689	0.45%	66.3%	100%	0.691	0
miscMoN4	misc	Motors	New	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4540	15	288334	0.0121	1125.1	$511	0.39%	55.8%	100%	1.628	1
miscMoN5	misc	Motors	New	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-500 HP	Motor	$0.3809	15	618773	0.0284	5660.3	$2,156	0.91%	55.8%	100%	1.931	1
miscMoN6	misc	Motors	New	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5686	15	96731	2.489	19,346	$11,000.00	20%	55.0%	100%	1.426	1
miscMoN7	misc	Motors	New	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4477	15	96731	4.693	29035.5	$13,000.00	30%	70.0%	100%	1.856	1
miscMoN8	misc	Motors	New	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4187	15	96731	0.000	31050.8	$13,000.00	32%	80.0%	100%	1.749	1
miscMoN9	misc	Motors	New	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5087	15	96731	4.693	25553.2	$13,000.00	26%	70.0%	100%	1.660	1
miscMoN10	misc	Motors	New	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4616	15	96731	3.364	28164.9	$13,000.00	29%	55.0%	100%	1.745	1
miscMoN11	misc	Motors	New	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5043	15	96731	4.693	25778.9	$13,000.00	27%	30.0%	100%	1.673	1
miscMoT1	misc	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1114	15	15247	0.0282	138.3	$154	0.91%	74.4%	100%	0.771	0
miscMoT2	misc	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.2008	15	58416	0.0231	433.8	$521	0.74%	74.4%	100%	0.637	0
miscMoT3	misc	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0789	15	143401	0.0138	638.4	$689	0.45%	66.3%	100%	0.691	0
miscMoT4	misc	Motors	Turnover	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4540	15	288334	0.0121	1125.1	$511	0.39%	55.8%	100%	1.628	1
miscMoT5	misc	Motors	Turnover	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-250 HP	Motor	$0.3809	15	618773	0.0284	5660.3	$2,156	0.91%	55.8%	100%	1.931	1
miscMoT6	misc	Motors	Turnover	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5686	15	96731	2.489	19,346	$11,000.00	20%	55.0%	80%	1.426	1
miscMoT7	misc	Motors	Turnover	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4477	15	96731	4.693	29035.5	$13,000.00	30%	90.0%	80%	1.856	1
miscMoT8	misc	Motors	Turnover	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4187	15	96731	0.000	31050.8	$13,000.00	32%	90.0%	80%	1.749	1
miscMoT9	misc	Motors	Turnover	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5087	15	96731	4.693	25553.2	$13,000.00	26%	90.0%	80%	1.660	1
miscMoT10	misc	Motors	Turnover	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4616	15	96731	3.364	28164.9	$13,000.00	29%	80.0%	80%	1.745	1
miscMoT11	misc	Motors	Turnover	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5043	15	96731	4.693	25778.9	$13,000.00	27%	55.0%	80%	1.673	1
miscMoT12	misc	Motors	Turnover	12	Motors: Rewind 125-200 HP	(E) Motor	Motor	$0.5143	15	290194	0.188	1458.3	$750	0.5%	35.0%	95%	1.577	1
miscMoT13	misc	Motors	Turnover	13	Motors: Rewind 201-500 HP	(E) Motor	Motor	$0.6330	15	628754	0.406	3159.6	$2,000	0.5%	50.0%	95%	1.281	1
miscMoT14	misc	Motors	Turnover	14	Motors: Rewind 20-50 HP	(E) Motor	Motor	$0.4747	15	59314	0.068	526.7	$250	0.9%	10.0%	95%	1.708	1
miscMoT15	misc	Motors	Turnover	15	Motors: Rewind 500+ HP	(E) Motor	Motor	$0.5486	15	1450970	0.938	7291.3	$4,000	0.5%	70.0%	95%	1.478	1
miscMoT16	misc	Motors	Turnover	16	Motors: Rewind 51-100 HP	(E) Motor	Motor	$0.5894	15	146674	0.109	848.4	$500	0.6%	20.0%	95%	1.376	1
miscMoT17	misc	Motors	Turnover	17	Downsizing motor during retrofit	Larger hp standard motor	HP Reduction	$0.34	20	186,404	0.190	1,477	$500.00	0.79%	25%	95%	3.079	1
miscMoN12	misc	Motors	New	12	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.635	1
miscMoN13	misc	Motors	New	13	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.031	0
miscMoN14	misc	Motors	New	14	Electronically Commutated Motors (ECM) on an Air Handler Unit	replaced with 85% eff. ECPM motor		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.789	1
miscMoN15	misc	Motors	New	15	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.628	0
miscMoT18	misc	Motors	Turnover	18	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.635	1
miscMoT19	misc	Motors	Turnover	19	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.031	0
miscMoT20	misc	Motors	Turnover	20	Electronically Commutated Motors (ECM) on an Air Handler Unit	replaced with 85% eff. ECPM motor		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.789	1
miscMoT21	misc	Motors	Turnover	21	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.628	0
miscMoT22	misc	Motors	Turnover	22	Air Comp Improvements			$0.11	15	56148	1.148	8,928	$990.00	16%	28%	65%	7.313	1
miscMoE2	misc	Motors	Early	2	Air Compressor Optimization			$0.16	15	56148	2.174	16,901	$2,750.00	30%	38%	65%	4.984	1
LodgiMoE1	Lodging	Motors	Early	1	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.235	1
RetaiMoN1	Retail	Motors	New	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1015	15	15384	0.0282	139.5	$154	0.91%	74.4%	100%	0.777	0
RetaiMoN2	Retail	Motors	New	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.1901	15	58940	0.0231	437.7	$521	0.74%	74.4%	100%	0.642	0
RetaiMoN3	Retail	Motors	New	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0693	15	144688	0.0138	644.1	$689	0.45%	66.3%	100%	0.697	0
RetaiMoN4	Retail	Motors	New	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4499	15	290922	0.0121	1135.2	$511	0.39%	55.8%	100%	1.642	1
RetaiMoN5	Retail	Motors	New	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-500 HP	Motor	$0.3775	15	624328	0.0284	5711.1	$2,156	0.91%	55.8%	100%	1.948	1
RetaiMoN6	Retail	Motors	New	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5635	15	97600	2.511	19,520	$11,000.00	20%	55.0%	100%	1.439	1
RetaiMoN7	Retail	Motors	New	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4367	15	97600	3.941	29767.9	$13,000.00	31%	70.0%	100%	1.862	1
RetaiMoN8	Retail	Motors	New	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4149	15	97600	0.000	31329.5	$13,000.00	32%	80.0%	100%	1.765	1
RetaiMoN9	Retail	Motors	New	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.4915	15	97600	3.941	26449.5	$13,000.00	27%	70.0%	100%	1.675	1
RetaiMoN10	Retail	Motors	New	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4515	15	97600	2.798	28791.9	$13,000.00	30%	55.0%	100%	1.753	1
RetaiMoN11	Retail	Motors	New	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.4915	15	97600	3.941	26449.5	$13,000.00	27%	30.0%	100%	1.675	1
RetaiMoT1	Retail	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1015	15	15384	0.0282	139.5	$154	0.91%	74.4%	100%	0.777	0
RetaiMoT2	Retail	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.1901	15	58940	0.0231	437.7	$521	0.74%	74.4%	100%	0.642	0
RetaiMoT3	Retail	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0693	15	144688	0.0138	644.1	$689	0.45%	66.3%	100%	0.697	0
RetaiMoT4	Retail	Motors	Turnover	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4499	15	290922	0.0121	1135.2	$511	0.39%	55.8%	100%	1.642	1
RetaiMoT5	Retail	Motors	Turnover	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-250 HP	Motor	$0.3775	15	624328	0.0284	5711.1	$2,156	0.91%	55.8%	100%	1.948	1
RetaiMoT6	Retail	Motors	Turnover	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5635	15	97600	2.511	19,520	$11,000.00	20%	55.0%	80%	1.439	1
RetaiMoT7	Retail	Motors	Turnover	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4367	15	97600	3.941	29767.9	$13,000.00	31%	90.0%	80%	1.862	1
RetaiMoT8	Retail	Motors	Turnover	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4149	15	97600	0.000	31329.5	$13,000.00	32%	90.0%	80%	1.765	1
RetaiMoT9	Retail	Motors	Turnover	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.4915	15	97600	3.941	26449.5	$13,000.00	27%	90.0%	80%	1.675	1
RetaiMoT10	Retail	Motors	Turnover	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4515	15	97600	2.798	28791.9	$13,000.00	30%	80.0%	80%	1.753	1
RetaiMoT11	Retail	Motors	Turnover	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.4915	15	97600	3.941	26449.5	$13,000.00	27%	55.0%	80%	1.675	1
RetaiMoT12	Retail	Motors	Turnover	12	Motors: Rewind 125-200 HP	(E) Motor	Motor	$0.5097	15	292799	0.189	1471.4	$750	0.5%	35.0%	95%	1.591	1

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
RetaiMoT13	Retail	Motors	Turnover	13	Motors: Rewind 201-500 HP	(E) Motor	Motor	$0.6274	15	634398	0.410	3187.9	$2,000	0.5%	50.0%	95%	1.293	1
RetaiMoT14	Retail	Motors	Turnover	14	Motors: Rewind 20-50 HP	(E) Motor	Motor	$0.4704	15	59847	0.068	531.4	$250	0.9%	10.0%	95%	1.724	1
RetaiMoT15	Retail	Motors	Turnover	15	Motors: Rewind 500+ HP	(E) Motor	Motor	$0.5437	15	1463995	0.946	7356.8	$4,000	0.5%	70.0%	95%	1.491	1
RetaiMoT16	Retail	Motors	Turnover	16	Motors: Rewind 51-100 HP	(E) Motor	Motor	$0.5841	15	147991	0.110	856.0	$500	0.6%	20.0%	95%	1.388	1
RetaiMoT17	Retail	Motors	Turnover	17	Downsizing motor during retrofit	Larger hp standard motor	HP Reduction	$0.34	20	186,404	0.190	1,477	$500.00	0.79%	25%	95%	3.079	1
RetaiMoN12	Retail	Motors	New	12	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.635	1
RetaiMoN13	Retail	Motors	New	13	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.031	0
RetaiMoN14	Retail	Motors	New	14	Electronically Commutated Motors (ECM) on an Air Handler Unit	replaced with 85% eff. ECPM motor		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.789	1
RetaiMoN15	Retail	Motors	New	15	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.628	0
RetaiMoT18	Retail	Motors	Turnover	18	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.635	1
RetaiMoT19	Retail	Motors	Turnover	19	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.031	0
RetaiMoT20	Retail	Motors	Turnover	20	Electronically Commutated Motors (ECM) on an Air Handler Unit	replaced with 85% eff. ECPM motor		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.789	1
RetaiMoT21	Retail	Motors	Turnover	21	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.628	0
RetaiMoT22	Retail	Motors	Turnover	22	Air Comp Improvements			$0.11	15	56148	1.148	8,928	$990.00	16%	28%	65%	7.313	1
RetaiMoE2	Retail	Motors	Early	2	Air Compressor Optimization			$0.16	15	56148	2.174	16,901	$2,750.00	30%	38%	65%	4.984	1
LodgiMoT23	Lodging	Motors	Turnover	23	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.235	1
RestaMoN1	Restaurant	Motors	New	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1487	15	14753	0.0282	133.8	$154	0.91%	74.4%	100%	0.749	0
RestaMoN2	Restaurant	Motors	New	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.2410	15	56520	0.0231	419.7	$521	0.74%	74.4%	100%	0.617	0
RestaMoN3	Restaurant	Motors	New	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.1151	15	138748	0.0138	617.7	$689	0.45%	66.3%	100%	0.669	0
RestaMoN4	Restaurant	Motors	New	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4692	15	278979	0.0121	1088.6	$511	0.39%	55.8%	100%	1.575	1
RestaMoN5	Restaurant	Motors	New	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-500 HP	Motor	$0.3937	15	598698	0.0284	5476.7	$2,156	0.91%	55.8%	100%	1.868	1
RestaMoN6	Restaurant	Motors	New	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5877	15	93593	2.408	18,719	$11,000.00	20%	55.0%	100%	1.380	1
RestaMoN7	Restaurant	Motors	New	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4524	15	93593	3.941	28733.0	$13,000.00	31%	70.0%	100%	1.804	1
RestaMoN8	Restaurant	Motors	New	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4327	15	93593	0.000	30043.3	$13,000.00	32%	80.0%	100%	1.692	1
RestaMoN9	Restaurant	Motors	New	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5107	15	93593	3.941	25457.3	$13,000.00	27%	70.0%	100%	1.619	1
RestaMoN10	Restaurant	Motors	New	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4708	15	93593	2.798	27609.9	$13,000.00	30%	55.0%	100%	1.687	1
RestaMoN11	Restaurant	Motors	New	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5107	15	93593	3.941	25457.3	$13,000.00	27%	30.0%	100%	1.619	1
RestaMoT1	Restaurant	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1487	15	14753	0.0282	133.8	$154	0.91%	74.4%	100%	0.749	0
RestaMoT2	Restaurant	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.2410	15	56520	0.0231	419.7	$521	0.74%	74.4%	100%	0.617	0
RestaMoT3	Restaurant	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.1151	15	138748	0.0138	617.7	$689	0.45%	66.3%	100%	0.669	0
RestaMoT4	Restaurant	Motors	Turnover	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4692	15	278979	0.0121	1088.6	$511	0.39%	55.8%	100%	1.575	1
RestaMoT5	Restaurant	Motors	Turnover	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-250 HP	Motor	$0.3937	15	598698	0.0284	5476.7	$2,156	0.91%	55.8%	100%	1.868	1
RestaMoT6	Restaurant	Motors	Turnover	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5877	15	93593	2.408	18,719	$11,000.00	20%	55.0%	80%	1.380	1
RestaMoT7	Restaurant	Motors	Turnover	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4524	15	93593	3.941	28733.0	$13,000.00	31%	90.0%	80%	1.804	1
RestaMoT8	Restaurant	Motors	Turnover	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4327	15	93593	0.000	30043.3	$13,000.00	32%	90.0%	80%	1.692	1
RestaMoT9	Restaurant	Motors	Turnover	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5107	15	93593	3.941	25457.3	$13,000.00	27%	90.0%	80%	1.619	1
RestaMoT10	Restaurant	Motors	Turnover	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4708	15	93593	2.798	27609.9	$13,000.00	30%	80.0%	80%	1.687	1
RestaMoT11	Restaurant	Motors	Turnover	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5107	15	93593	3.941	25457.3	$13,000.00	27%	55.0%	80%	1.619	1
RestaMoT12	Restaurant	Motors	Turnover	12	Motors: Rewind 125-200 HP	(E) Motor	Motor	$0.5316	15	280779	0.182	1410.9	$750	0.5%	35.0%	95%	1.526	1
RestaMoT13	Restaurant	Motors	Turnover	13	Motors: Rewind 201-500 HP	(E) Motor	Motor	$0.6542	15	608354	0.393	3057.1	$2,000	0.5%	50.0%	95%	1.240	1
RestaMoT14	Restaurant	Motors	Turnover	14	Motors: Rewind 20-50 HP	(E) Motor	Motor	$0.4906	15	57390	0.066	509.6	$250	0.9%	10.0%	95%	1.653	1
RestaMoT15	Restaurant	Motors	Turnover	15	Motors: Rewind 500+ HP	(E) Motor	Motor	$0.5670	15	1403894	0.908	7054.7	$4,000	0.5%	70.0%	95%	1.430	1
RestaMoT16	Restaurant	Motors	Turnover	16	Motors: Rewind 51-100 HP	(E) Motor	Motor	$0.6091	15	141915	0.106	820.8	$500	0.6%	20.0%	95%	1.331	1
RestaMoT17	Restaurant	Motors	Turnover	17	Downsizing motor during retrofit	Larger hp standard motor	HP Reduction	$0.34	20	186,404	0.190	1,477	$500.00	0.79%	25%	95%	3.079	1
RestaMoN12	Restaurant	Motors	New	12	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.635	1
RestaMoN13	Restaurant	Motors	New	13	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.031	0
RestaMoN14	Restaurant	Motors	New	14	Electronically Commutated Motors (ECM) on an Air Handler Unit	replaced with 85% eff. ECPM motor		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.789	1
RestaMoN15	Restaurant	Motors	New	15	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.628	0
RestaMoT18	Restaurant	Motors	Turnover	18	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.635	1
RestaMoT19	Restaurant	Motors	Turnover	19	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.031	0
RestaMoT20	Restaurant	Motors	Turnover	20	Electronically Commutated Motors (ECM) on an Air Handler Unit	replaced with 85% eff. ECPM motor		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.789	1
RestaMoT21	Restaurant	Motors	Turnover	21	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.628	0
RestaMoT22	Restaurant	Motors	Turnover	22	Air Comp Improvements			$0.11	15	56148	1.148	8,928	$990.00	16%	28%	65%	7.313	1
RestaMoE2	Restaurant	Motors	Early	2	Air Compressor Optimization			$0.16	15	56148	2.174	16,901	$2,750.00	30%	38%	65%	4.984	1
miscMoE1	misc	Motors	Early	1	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.235	1
WarehMoN1	Warehouse	Motors	New	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1114	15	15247	0.0282	138.3	$154	0.91%	74.4%	100%	0.771	0
WarehMoN2	Warehouse	Motors	New	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.2008	15	58416	0.0231	433.8	$521	0.74%	74.4%	100%	0.637	0
WarehMoN3	Warehouse	Motors	New	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0789	15	143401	0.0138	638.4	$689	0.45%	66.3%	100%	0.691	0
WarehMoN4	Warehouse	Motors	New	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4540	15	288334	0.0121	1125.1	$511	0.39%	55.8%	100%	1.628	1
WarehMoN5	Warehouse	Motors	New	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-500 HP	Motor	$0.3809	15	618773	0.0284	5660.3	$2,156	0.91%	55.8%	100%	1.931	1
WarehMoN6	Warehouse	Motors	New	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5686	15	96731	2.489	19,346	$11,000.00	20%	55.0%	100%	1.426	1
WarehMoN7	Warehouse	Motors	New	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4477	15	96731	4.693	29035.5	$13,000.00	30%	70.0%	100%	1.856	1
WarehMoN8	Warehouse	Motors	New	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4187	15	96731	0.000	31050.8	$13,000.00	32%	80.0%	100%	1.749	1
WarehMoN9	Warehouse	Motors	New	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5087	15	96731	4.693	25553.2	$13,000.00	26%	70.0%	100%	1.660	1
WarehMoN10	Warehouse	Motors	New	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4616	15	96731	3.364	28164.9	$13,000.00	29%	55.0%	100%	1.745	1
WarehMoN11	Warehouse	Motors	New	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5043	15	96731	4.693	25778.9	$13,000.00	27%	30.0%	100%	1.673	1
WarehMoT1	Warehouse	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1114	15	15247	0.0282	138.3	$154	0.91%	74.4%	100%	0.771	0
WarehMoT2	Warehouse	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.2008	15	58416	0.0231	433.8	$521	0.74%	74.4%	100%	0.637	0
WarehMoT3	Warehouse	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0789	15	143401	0.0138	638.4	$689	0.45%	66.3%	100%	0.691	0
WarehMoT4	Warehouse	Motors	Turnover	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4540	15	288334	0.0121	1125.1	$511	0.39%	55.8%	100%	1.628	1
WarehMoT5	Warehouse	Motors	Turnover	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-250 HP	Motor	$0.3809	15	618773	0.0284	5660.3	$2,156	0.91%	55.8%	100%	1.931	1
WarehMoT6	Warehouse	Motors	Turnover	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5686	15	96731	2.489	19,346	$11,000.00	20%	55.0%	80%	1.426	1
WarehMoT7	Warehouse	Motors	Turnover	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4477	15	96731	4.693	29035.5	$13,000.00	30%	90.0%	80%	1.856	1
WarehMoT8	Warehouse	Motors	Turnover	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4187	15	96731	0.000	31050.8	$13,000.00	32%	90.0%	80%	1.749	1
WarehMoT9	Warehouse	Motors	Turnover	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5087	15	96731	4.693	25553.2	$13,000.00	26%	90.0%	80%	1.660	1
WarehMoT10	Warehouse	Motors	Turnover	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4616	15	96731	3.364	28164.9	$13,000.00	29%	80.0%	80%	1.745	1
WarehMoT11	Warehouse	Motors	Turnover	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5043	15	96731	4.693	25778.9	$13,000.00	27%	55.0%	80%	1.673	1
WarehMoT12	Warehouse	Motors	Turnover	12	Motors: Rewind 125-200 HP	(E) Motor	Motor	$0.5143	15	290194	0.188	1458.3	$750	0.5%	35.0%	95%	1.577	1
WarehMoT13	Warehouse	Motors	Turnover	13	Motors: Rewind 201-500 HP	(E) Motor	Motor	$0.6330	15	628754	0.406	3159.6	$2,000	0.5%	50.0%	95%	1.281	1
WarehMoT14	Warehouse	Motors	Turnover	14	Motors: Rewind 20-50 HP	(E) Motor	Motor	$0.4747	15	59314	0.068	526.7	$250	0.9%	10.0%	95%	1.708	1
WarehMoT15	Warehouse	Motors	Turnover	15	Motors: Rewind 500+ HP	(E) Motor	Motor	$0.5486	15	1450970	0.938	7291.3	$4,000	0.5%	70.0%	95%	1.478	1
WarehMoT16	Warehouse	Motors	Turnover	16	Motors: Rewind 51-100 HP	(E) Motor	Motor	$0.5894	15	146674	0.109	848.4	$500	0.6%	20.0%	95%	1.376	1
WarehMoT17	Warehouse	Motors	Turnover	17	Downsizing motor during retrofit	Larger hp standard motor	HP Reduction	$0.34	20	186,404	0.190	1,477	$500.00	0.79%	25%	95%	3.079	1
WarehMoN12	Warehouse	Motors	New	12	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.635	1
WarehMoN13	Warehouse	Motors	New	13	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.031	0
WarehMoN14	Warehouse	Motors	New	14	Electronically Commutated Motors (ECM) on an Air Handler Unit	replaced with 85% eff. ECPM motor		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.789	1
WarehMoN15	Warehouse	Motors	New	15	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.628	0
WarehMoT18	Warehouse	Motors	Turnover	18	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.635	1
WarehMoT19	Warehouse	Motors	Turnover	19	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.031	0

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
WarehMoT20	Warehouse	Motors	Turnover	20	Electronically Commutated Motors (ECM) on an Air Handler Unit	replaced with 85% eff. ECPM motor		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.789	1
WarehMoT21	Warehouse	Motors	Turnover	21	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.628	0
WarehMoT22	Warehouse	Motors	Turnover	22	Air Comp Improvements			$0.11	15	56148	1.148	8,928	$990.00	16%	28%	65%	7.313	1
WarehMoE2	Warehouse	Motors	Early	2	Air Compressor Optimization			$0.16	15	56148	2.174	16,901	$2,750.00	30%	38%	65%	4.984	1
MiscMoT23	Misc	Motors	Turnover	23	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.235	1
HealtHeN2	Healthcare	Heating	New	2	Ground Source HP Open - Water	Air Source Heat Pump	ton	$41.47	15	298	0.23	18	$ 750.0	6%	20%	95%	0.209	0
HealtHen3	Healthcare	Heating	new	3	Ground Source HP Closed	Air Source Heat Pump	ton	$41.47	15	298	0.000	18	$750.00	6%	100%	95%	0.018	0
GrocePaE1	Grocery	Packaged DX	Early	1	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$3.13	20	970	0.05	64	$200.00	7%	15%	9%	0.475	0
GrocePaE2	Grocery	Packaged DX	Early	2	Adding window shade film	No shade film	q ft window are	$7.05	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.033	0
GrocePaE3	Grocery	Packaged DX	Early	3	Adding window shade screen	No shade screen	q ft window are	$3.90	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.206	0
GrocePaE4	Grocery	Packaged DX	Early	4	Windows U<0.40, .55 SHGC	Existing window specifications	q ft window are	$1.40	30	2	0.000	0	$0.28	13%	50%	95%	0.951	0
GrocePaE5	Grocery	Packaged DX	Early	5	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$3.48	20	970	0.05	65	$225.00	7%	95%	95%	0.425	0
GrocePaE7	Grocery	Packaged DX	Early	7	Automated control system	Baseline DX	ton	$0.49	10	1,025	0.006	51	$25.00	5%	100%	65%	1.013	1
GrocePaE8	Grocery	Packaged DX	Early	8	Duct Sealing, down to 15%	Leakage of 29%	ton	$7.92	15	970	0.05	12	$95.00	1%	45%	80%	0.400	0
GrocePaE9	Grocery	Packaged DX	Early	9	Hotel Keycard Sensors	No prior controls	oom Controlle	$0.29	10	870	0.041	342	$100.00	39%	95%	80%	1.690	1
GrocePaE10	Grocery	Packaged DX	Early	10	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	ton	$0.55	1	1,054	0.05	64	$35.00	6%	100%	45%	0.202	0
GrocePaE11	Grocery	Packaged DX	Early	11	7 day, two stage setback thermostat	Manual Thermostat	ton	$0.44	10	970	0.015	125	$55.00	13%	100%	45%	1.123	1
GrocePaE13	Grocery	Packaged DX	Early	13	Re-commissioning	economizer not functioning	ton	$0.36	7	970	0.05	155	$55.15	16%	95%	75%	1.125	1
GrocePaN1	Grocery	Packaged DX	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	ton	$1.36	20	970	0.05	64	$87.00	7%	100%	95%	1.091	1
GrocePaN2	Grocery	Packaged DX	New	2	Adding reflective roof treatment	Std color roof	ton	$4.50	20	970	0.05	10	$45.00	1%	100%	95%	0.972	0
GrocePaN3	Grocery	Packaged DX	New	3	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$1.93	20	970	0.05	65	$125.00	7%	100%	95%	0.764	0
GrocePaN4	Grocery	Packaged DX	New	4	Green Roof (New construction or roof replacement)	Std Roof	ton	$1.97	20	970	0.05	65	$127.43	7%	45%	95%	0.750	0
GrocePaN5	Grocery	Packaged DX	New	5	Duct Insulation, Add R8	No Insulation	ton	$10.42	20	970	0.05	12	$125.00	1%	100%	95%	0.365	0
GrocePaN6	Grocery	Packaged DX	New	6	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$1.51	20	835	0.04	60	$90.40	7%	100%	95%	0.975	0
GrocePaN7	Grocery	Packaged DX	New	7	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$1.62	20	835	0.08	111	$180.81	13%	100%	95%	0.910	0
GrocePaN8	Grocery	Packaged DX	New	8	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$1.73	20	835	0.12	157	$271.21	19%	100%	95%	0.853	0
GrocePaN9	Grocery	Packaged DX	New	9	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$0.85	20	970	0.05	65	$55.00	7%	100%	95%	1.737	1
GrocePaN10	Grocery	Packaged DX	New	10	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$0.85	20	987	0.06	82	$70.00	8%	100%	95%	1.737	1
GrocePaN11	Grocery	Packaged DX	New	11	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.43	20	1,086	0.06	80	$115.13	7%	100%	95%	1.033	1
GrocePaN12	Grocery	Packaged DX	New	12	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$1.79	20	1,120	0.04	55	$98.39	5%	100%	95%	0.824	0
GrocePaN13	Grocery	Packaged DX	New	13	Ground Source HP Open - Water	Air Source Heat Pump	ton	$2.37	15	987	0.23	317	$ 750.0	32%	20%	95%	0.500	0
GrocePaN14	Grocery	Packaged DX	New	14	Ground Source HP Closed	Air Source Heat Pump	ton	$4.24	15	987	0.021	177	$750.00	18%	100%	95%	0.189	0
GrocePaN15	Grocery	Packaged DX	New	15	Air-side Economizer	No Economizer	ton	$1.17	15	970	0.017	145	$170.00	15%	75%	45%	0.687	0
GrocePaN16	Grocery	Packaged DX	New	16	Energy Recovery Units	No Energy Recovery	ton	$0.92	15	970	0.023	194	$179.00	20%	100%	95%	0.870	0
GrocePaN17	Grocery	Packaged DX	New	17	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$2.40	15	1,025	0.006	46	$110.89	5%	100%	95%	0.334	0
GrocePaT1	Grocery	Packaged DX	Turnover	1	Duct Insulation, Add R8	No Insulation	ton	$10.42	15	970	0.05	12	$125.00	1%	100%	95%	0.304	0
GrocePaT2	Grocery	Packaged DX	Turnover	2	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$1.51	20	835	0.04	60	$90.40	7%	100%	95%	0.975	0
GrocePaT3	Grocery	Packaged DX	Turnover	3	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$1.62	20	835	0.08	111	$180.81	13%	100%	95%	0.910	0
GrocePaT4	Grocery	Packaged DX	Turnover	4	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$1.73	20	835	0.12	157	$271.21	19%	100%	95%	0.853	0
GrocePaT5	Grocery	Packaged DX	Turnover	5	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$0.85	20	970	0.05	65	$55.00	7%	100%	95%	1.737	1
GrocePaT6	Grocery	Packaged DX	Turnover	6	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$0.85	20	987	0.06	82	$70.00	8%	100%	95%	1.737	1
GrocePaT7	Grocery	Packaged DX	Turnover	7	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.43	20	1,086	0.06	80	$115.13	7%	100%	95%	1.033	1
GrocePaT8	Grocery	Packaged DX	Turnover	8	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$1.79	20	1,120	0.04	55	$98.39	5%	100%	95%	0.824	0
GrocePaT9	Grocery	Packaged DX	Turnover	9	Ground Source HP Open - Water	Air Source Heat Pump	ton	$2.37	15	987	0.23	317	$ 750.0	32%	5%	95%	0.500	0
GrocePaT10	Grocery	Packaged DX	Turnover	10	Ground Source HP Closed	Air Source Heat Pump	ton	$4.24	15	987	0.021	177	$750.00	18%	100%	95%	0.189	0
GrocePaT11	Grocery	Packaged DX	Turnover	11	Air-side Economizer	No Economizer	ton	$1.17	15	970	0.017	145	$170.00	15%	75%	45%	0.687	0
GrocePaT12	Grocery	Packaged DX	Turnover	12	Energy Recovery Units	No Energy Recovery	ton	$0.92	15	970	0.023	194	$179.00	20%	100%	95%	0.870	0
GrocePaT13	Grocery	Packaged DX	Turnover	13	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$2.40	15	1,025	0.006	46	$110.89	5%	100%	95%	0.334	0
GrocePaN18	Grocery	Packaged DX	New	18	Automated control system	Baseline DX	ton	$0.49	10	1,025	0.006	51	$25.00	5%	100%	65%	1.013	1
GrocePaN19	Grocery	Packaged DX	New	19	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$0.91	10	870	0.006	47	$43.00	5%	100%	95%	0.546	0
GrocePaT15	Grocery	Packaged DX	Turnover	15	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$0.91	10	870	0.006	47	$43.00	5%	100%	95%	0.546	0
InstiPaE1	Institutional	Packaged DX	Early	1	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$3.13	20	722	0.05	64	$200.00	9%	15%	9%	0.475	0
InstiPaE2	Institutional	Packaged DX	Early	2	Adding window shade film	No shade film	q ft window are	$7.05	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.033	0
InstiPaE3	Institutional	Packaged DX	Early	3	Adding window shade screen	No shade screen	q ft window are	$3.90	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.206	0
InstiPaE4	Institutional	Packaged DX	Early	4	Windows U<0.40, .55 SHGC	Existing window specifications	q ft window are	$1.40	30	2	0.000	0	$0.28	13%	50%	95%	0.951	0
InstiPaE5	Institutional	Packaged DX	Early	5	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$4.67	20	722	0.05	48	$225.00	7%	95%	95%	0.355	0
InstiPaE7	Institutional	Packaged DX	Early	7	Automated control system	Baseline DX	ton	$0.66	10	763	0.005	38	$25.00	5%	100%	65%	0.754	0
InstiPaE8	Institutional	Packaged DX	Early	8	Duct Sealing, down to 15%	Leakage of 29%	ton	$7.92	15	722	0.05	12	$95.00	2%	45%	80%	0.400	0
InstiPaE9	Institutional	Packaged DX	Early	9	Hotel Keycard Sensors	No prior controls	oom Controlle	$0.29	10	648	0.041	342	$100.00	53%	95%	80%	1.690	1
InstiPaE10	Institutional	Packaged DX	Early	10	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	ton	$0.55	1	785	0.05	64	$35.00	8%	100%	45%	0.202	0
InstiPaE11	Institutional	Packaged DX	Early	11	7 day, two stage setback thermostat	Manual Thermostat	ton	$0.44	10	722	0.015	125	$55.00	17%	100%	45%	1.123	1
InstiPaE13	Institutional	Packaged DX	Early	13	Re-commissioning	economizer not functioning	ton	$0.48	7	722	0.05	116	$55.15	16%	95%	75%	0.918	0
InstiPaN1	Institutional	Packaged DX	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	ton	$1.36	20	722	0.05	64	$87.00	9%	100%	95%	1.091	1
InstiPaN2	Institutional	Packaged DX	New	2	Adding reflective roof treatment	Std color roof	ton	$4.50	20	722	0.05	10	$45.00	1%	100%	95%	0.972	0
InstiPaN3	Institutional	Packaged DX	New	3	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$2.60	20	722	0.05	48	$125.00	7%	100%	95%	0.639	0
InstiPaN4	Institutional	Packaged DX	New	4	Green Roof (New construction or roof replacement)	Std Roof	ton	$2.65	20	722	0.05	48	$127.43	7%	45%	95%	0.627	0
InstiPaN5	Institutional	Packaged DX	New	5	Duct Insulation, Add R8	No Insulation	ton	$10.42	20	722	0.05	12	$125.00	2%	100%	95%	0.365	0
InstiPaN6	Institutional	Packaged DX	New	6	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$2.03	20	622	0.04	44	$90.40	7%	100%	95%	0.816	0
InstiPaN7	Institutional	Packaged DX	New	7	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$2.18	20	622	0.08	83	$180.81	13%	100%	95%	0.761	0
InstiPaN8	Institutional	Packaged DX	New	8	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$2.32	20	622	0.12	117	$271.21	19%	100%	95%	0.714	0
InstiPaN9	Institutional	Packaged DX	New	9	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.14	20	722	0.05	48	$55.00	7%	100%	95%	1.452	1
InstiPaN10	Institutional	Packaged DX	New	10	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.14	20	735	0.06	61	$70.00	8%	100%	95%	1.452	1
InstiPaN11	Institutional	Packaged DX	New	11	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.92	20	809	0.06	60	$115.13	7%	100%	95%	0.863	0
InstiPaN12	Institutional	Packaged DX	New	12	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$2.41	20	834	0.04	41	$98.39	5%	100%	95%	0.689	0
InstiPaN13	Institutional	Packaged DX	New	13	Ground Source HP Open - Water	Air Source Heat Pump	ton	$3.18	15	735	0.23	236	$ 750.0	32%	20%	95%	0.421	0
InstiPaN14	Institutional	Packaged DX	New	14	Ground Source HP Closed	Air Source Heat Pump	ton	$5.70	15	735	0.016	132	$750.00	18%	100%	95%	0.141	0
InstiPaN15	Institutional	Packaged DX	New	15	Air-side Economizer	No Economizer	ton	$1.57	15	722	0.013	108	$170.00	15%	75%	45%	0.512	0
InstiPaN16	Institutional	Packaged DX	New	16	Energy Recovery Units	No Energy Recovery	ton	$1.24	15	722	0.017	144	$179.00	20%	100%	95%	0.648	0
InstiPaN17	Institutional	Packaged DX	New	17	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$3.23	15	763	0.004	34	$110.89	5%	100%	95%	0.249	0
InstiPaT1	Institutional	Packaged DX	Turnover	1	Duct Insulation, Add R8	No Insulation	ton	$10.42	15	722	0.05	12	$125.00	2%	100%	95%	0.304	0
InstiPaT2	Institutional	Packaged DX	Turnover	2	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$2.03	20	622	0.04	44	$90.40	7%	100%	95%	0.816	0
InstiPaT3	Institutional	Packaged DX	Turnover	3	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$2.18	20	622	0.08	83	$180.81	13%	100%	95%	0.761	0
InstiPaT4	Institutional	Packaged DX	Turnover	4	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$2.32	20	622	0.12	117	$271.21	19%	100%	95%	0.714	0
InstiPaT5	Institutional	Packaged DX	Turnover	5	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.14	20	722	0.05	48	$55.00	7%	100%	95%	1.452	1
InstiPaT6	Institutional	Packaged DX	Turnover	6	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.14	20	735	0.06	61	$70.00	8%	100%	95%	1.452	1
InstiPaT7	Institutional	Packaged DX	Turnover	7	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.92	20	809	0.06	60	$115.13	7%	100%	95%	0.863	0
InstiPaT8	Institutional	Packaged DX	Turnover	8	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$2.41	20	834	0.04	41	$98.39	5%	100%	95%	0.689	0
InstiPaT9	Institutional	Packaged DX	Turnover	9	Ground Source HP Open - Water	Air Source Heat Pump	ton	$3.18	15	735	0.23	236	$ 750.0	32%	5%	95%	0.421	0
InstiPaT10	Institutional	Packaged DX	Turnover	10	Ground Source HP Closed	Air Source Heat Pump	ton	$5.70	15	735	0.016	132	$750.00	18%	100%	95%	0.141	0

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
InstiPaT11	Institutional	Packaged DX	Turnover	11	Air-side Economizer	No Economizer	ton	$1.57	15	722	0.013	108	$170.00	15%	75%	45%	0.512	0
InstiPaT12	Institutional	Packaged DX	Turnover	12	Energy Recovery Units	No Energy Recovery	ton	$1.24	15	722	0.017	144	$179.00	20%	100%	95%	0.648	0
InstiPaT13	Institutional	Packaged DX	Turnover	13	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$3.23	15	763	0.004	34	$110.89	5%	100%	95%	0.249	0
InstiPaN18	Institutional	Packaged DX	New	18	Automated control system	Baseline DX	ton	$0.66	10	763	0.005	38	$25.00	5%	100%	65%	0.754	0
InstiPaN19	Institutional	Packaged DX	New	19	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.22	10	648	0.004	35	$43.00	5%	100%	95%	0.406	0
InstiPaT15	Institutional	Packaged DX	Turnover	15	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.22	10	648	0.004	35	$43.00	5%	100%	95%	0.406	0
LodgiPaE1	Lodging	Packaged DX	Early	1	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$3.13	20	863	0.05	64	$200.00	7%	15%	9%	0.475	0
LodgiPaE2	Lodging	Packaged DX	Early	2	Adding window shade film	No shade film	q ft window are	$7.05	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.033	0
LodgiPaE3	Lodging	Packaged DX	Early	3	Adding window shade screen	No shade screen	q ft window are	$3.90	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.206	0
LodgiPaE4	Lodging	Packaged DX	Early	4	Windows U<0.40, .55 SHGC	Existing window specifications	q ft window are	$1.40	30	2	0.000	0	$0.28	13%	50%	95%	0.951	0
LodgiPaE5	Lodging	Packaged DX	Early	5	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$3.91	20	863	0.05	58	$225.00	7%	95%	95%	0.394	0
LodgiPaE7	Lodging	Packaged DX	Early	7	Automated control system	Baseline DX	ton	$0.55	10	911	0.005	46	$25.00	5%	100%	65%	0.901	0
LodgiPaE8	Lodging	Packaged DX	Early	8	Duct Sealing, down to 15%	Leakage of 29%	ton	$7.92	15	863	0.05	12	$95.00	1%	45%	80%	0.400	0
LodgiPaE9	Lodging	Packaged DX	Early	9	Hotel Keycard Sensors	No prior controls	oom Controlle	$0.29	10	774	0.041	342	$100.00	44%	95%	80%	1.690	1
LodgiPaE10	Lodging	Packaged DX	Early	10	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	ton	$0.55	1	938	0.05	64	$35.00	7%	100%	45%	0.202	0
LodgiPaE11	Lodging	Packaged DX	Early	11	7 day, two stage setback thermostat	Manual Thermostat	ton	$0.44	10	863	0.015	125	$55.00	14%	100%	45%	1.123	1
LodgiPaE13	Lodging	Packaged DX	Early	13	Re-commissioning	economizer not functioning	ton	$0.40	7	863	0.05	138	$55.15	16%	95%	75%	1.035	1
LodgiPaN1	Lodging	Packaged DX	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	ton	$1.36	20	863	0.05	64	$87.00	7%	100%	95%	1.091	1
LodgiPaN2	Lodging	Packaged DX	New	2	Adding reflective roof treatment	Std color roof	ton	$4.50	20	863	0.05	10	$45.00	1%	100%	95%	0.972	0
LodgiPaN3	Lodging	Packaged DX	New	3	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$2.17	20	863	0.05	58	$125.00	7%	100%	95%	0.710	0
LodgiPaN4	Lodging	Packaged DX	New	4	Green Roof (New construction or roof replacement)	Std Roof	ton	$2.22	20	863	0.05	58	$127.43	7%	45%	95%	0.697	0
LodgiPaN5	Lodging	Packaged DX	New	5	Duct Insulation, Add R8	No Insulation	ton	$10.42	20	863	0.05	12	$125.00	1%	100%	95%	0.365	0
LodgiPaN6	Lodging	Packaged DX	New	6	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$1.70	20	743	0.04	53	$90.40	7%	100%	95%	0.906	0
LodgiPaN7	Lodging	Packaged DX	New	7	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$1.82	20	743	0.08	99	$180.81	13%	100%	95%	0.846	0
LodgiPaN8	Lodging	Packaged DX	New	8	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$1.95	20	743	0.12	139	$271.21	19%	100%	95%	0.793	0
LodgiPaN9	Lodging	Packaged DX	New	9	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$0.96	20	863	0.05	58	$55.00	7%	100%	95%	1.614	1
LodgiPaN10	Lodging	Packaged DX	New	10	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$0.96	20	878	0.06	73	$70.00	8%	100%	95%	1.614	1
LodgiPaN11	Lodging	Packaged DX	New	11	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.61	20	966	0.06	72	$115.13	7%	100%	95%	0.959	0
LodgiPaN12	Lodging	Packaged DX	New	12	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$2.02	20	996	0.04	49	$98.39	5%	100%	95%	0.766	0
LodgiPaN13	Lodging	Packaged DX	New	13	Ground Source HP Open - Water	Air Source Heat Pump	ton	$2.66	15	878	0.23	282	$ 750.0	32%	20%	95%	0.466	0
LodgiPaN14	Lodging	Packaged DX	New	14	Ground Source HP Closed	Air Source Heat Pump	ton	$4.77	15	878	0.019	157	$750.00	18%	100%	95%	0.168	0
LodgiPaN15	Lodging	Packaged DX	New	15	Air-side Economizer	No Economizer	ton	$1.31	15	863	0.015	129	$170.00	15%	75%	45%	0.611	0
LodgiPaN16	Lodging	Packaged DX	New	16	Energy Recovery Units	No Energy Recovery	ton	$1.04	15	863	0.021	173	$179.00	20%	100%	95%	0.774	0
LodgiPaN17	Lodging	Packaged DX	New	17	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$2.70	15	911	0.005	41	$110.89	5%	100%	95%	0.297	0
LodgiPaT1	Lodging	Packaged DX	Turnover	1	Duct Insulation, Add R8	No Insulation	ton	$10.42	15	863	0.05	12	$125.00	1%	100%	95%	0.304	0
LodgiPaT2	Lodging	Packaged DX	Turnover	2	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$1.70	20	743	0.04	53	$90.40	7%	100%	95%	0.906	0
LodgiPaT3	Lodging	Packaged DX	Turnover	3	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$1.82	20	743	0.08	99	$180.81	13%	100%	95%	0.846	0
LodgiPaT4	Lodging	Packaged DX	Turnover	4	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$1.95	20	743	0.12	139	$271.21	19%	100%	95%	0.793	0
LodgiPaT5	Lodging	Packaged DX	Turnover	5	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$0.96	20	863	0.05	58	$55.00	7%	100%	95%	1.614	1
LodgiPaT6	Lodging	Packaged DX	Turnover	6	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$0.96	20	878	0.06	73	$70.00	8%	100%	95%	1.614	1
LodgiPaT7	Lodging	Packaged DX	Turnover	7	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.61	20	966	0.06	72	$115.13	7%	100%	95%	0.959	0
LodgiPaT8	Lodging	Packaged DX	Turnover	8	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$2.02	20	996	0.04	49	$98.39	5%	100%	95%	0.766	0
LodgiPaT9	Lodging	Packaged DX	Turnover	9	Ground Source HP Open - Water	Air Source Heat Pump	ton	$2.66	15	878	0.23	282	$ 750.0	32%	5%	95%	0.466	0
LodgiPaT10	Lodging	Packaged DX	Turnover	10	Ground Source HP Closed	Air Source Heat Pump	ton	$4.77	15	878	0.019	157	$750.00	18%	100%	95%	0.168	0
LodgiPaT11	Lodging	Packaged DX	Turnover	11	Air-side Economizer	No Economizer	ton	$1.31	15	863	0.015	129	$170.00	15%	75%	45%	0.611	0
LodgiPaT12	Lodging	Packaged DX	Turnover	12	Energy Recovery Units	No Energy Recovery	ton	$1.04	15	863	0.021	173	$179.00	20%	100%	95%	0.774	0
LodgiPaT13	Lodging	Packaged DX	Turnover	13	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$2.70	15	911	0.005	41	$110.89	5%	100%	95%	0.297	0
LodgiPaN18	Lodging	Packaged DX	New	18	Automated control system	Baseline DX	ton	$0.55	10	911	0.005	46	$25.00	5%	100%	65%	0.901	0
LodgiPaN19	Lodging	Packaged DX	New	19	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.02	10	774	0.005	42	$43.00	5%	100%	95%	0.485	0
LodgiPaT15	Lodging	Packaged DX	Turnover	15	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.02	10	774	0.005	42	$43.00	5%	100%	95%	0.485	0
MiscPaE1	Misc	Packaged DX	Early	1	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$3.13	20	995	0.05	64	$200.00	6%	15%	9%	0.475	0
MiscPaE2	Misc	Packaged DX	Early	2	Adding window shade film	No shade film	q ft window are	$7.05	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.033	0
MiscPaE3	Misc	Packaged DX	Early	3	Adding window shade screen	No shade screen	q ft window are	$3.90	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.206	0
MiscPaE4	Misc	Packaged DX	Early	4	Windows U<0.40, .55 SHGC	Existing window specifications	q ft window are	$1.40	30	2	0.000	0	$0.28	13%	50%	95%	0.951	0
MiscPaE5	Misc	Packaged DX	Early	5	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$3.39	20	995	0.05	66	$225.00	7%	95%	95%	0.432	0
MiscPaE7	Misc	Packaged DX	Early	7	Automated control system	Baseline DX	ton	$0.48	10	1,051	0.006	53	$25.00	5%	100%	65%	1.039	1
MiscPaE8	Misc	Packaged DX	Early	8	Duct Sealing, down to 15%	Leakage of 29%	ton	$7.92	15	995	0.05	12	$95.00	1%	45%	80%	0.400	0
MiscPaE9	Misc	Packaged DX	Early	9	Hotel Keycard Sensors	No prior controls	oom Controlle	$0.29	10	893	0.041	342	$100.00	38%	95%	80%	1.690	1
MiscPaE10	Misc	Packaged DX	Early	10	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	ton	$0.55	1	1,081	0.05	64	$35.00	6%	100%	45%	0.202	0
MiscPaE11	Misc	Packaged DX	Early	11	7 day, two stage setback thermostat	Manual Thermostat	ton	$0.44	10	995	0.015	125	$55.00	13%	100%	45%	1.123	1
MiscPaE13	Misc	Packaged DX	Early	13	Re-commissioning	economizer not functioning	ton	$0.35	7	995	0.05	159	$55.15	16%	95%	75%	1.146	1
MiscPaN1	Misc	Packaged DX	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	ton	$1.36	20	995	0.05	64	$87.00	6%	100%	95%	1.091	1
MiscPaN2	Misc	Packaged DX	New	2	Adding reflective roof treatment	Std color roof	ton	$4.50	20	995	0.05	10	$45.00	1%	100%	95%	0.972	0
MiscPaN3	Misc	Packaged DX	New	3	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$1.89	20	995	0.05	66	$125.00	7%	100%	95%	0.777	0
MiscPaN4	Misc	Packaged DX	New	4	Green Roof (New construction or roof replacement)	Std Roof	ton	$1.92	20	995	0.05	66	$127.43	7%	45%	95%	0.762	0
MiscPaN5	Misc	Packaged DX	New	5	Duct Insulation, Add R8	No Insulation	ton	$10.42	20	995	0.05	12	$125.00	1%	100%	95%	0.365	0
MiscPaN6	Misc	Packaged DX	New	6	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$1.48	20	857	0.04	61	$90.40	7%	100%	95%	0.992	0
MiscPaN7	Misc	Packaged DX	New	7	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$1.58	20	857	0.08	114	$180.81	13%	100%	95%	0.925	0
MiscPaN8	Misc	Packaged DX	New	8	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$1.69	20	857	0.12	161	$271.21	19%	100%	95%	0.868	0
MiscPaN9	Misc	Packaged DX	New	9	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$0.83	20	995	0.05	66	$55.00	7%	100%	95%	1.765	1
MiscPaN10	Misc	Packaged DX	New	10	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$0.83	20	1,013	0.06	84	$70.00	8%	100%	95%	1.765	1
MiscPaN11	Misc	Packaged DX	New	11	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.40	20	1,114	0.06	83	$115.13	7%	100%	95%	1.050	1
MiscPaN12	Misc	Packaged DX	New	12	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$1.75	20	1,148	0.04	56	$98.39	5%	100%	95%	0.838	0
MiscPaN13	Misc	Packaged DX	New	13	Ground Source HP Open - Water	Air Source Heat Pump	ton	$2.31	15	1,013	0.23	325	$ 750.0	32%	20%	95%	0.508	0
MiscPaN14	Misc	Packaged DX	New	14	Ground Source HP Closed	Air Source Heat Pump	ton	$4.14	15	1,013	0.022	181	$750.00	18%	100%	95%	0.194	0
MiscPaN15	Misc	Packaged DX	New	15	Air-side Economizer	No Economizer	ton	$1.14	15	995	0.018	149	$170.00	15%	75%	45%	0.705	0
MiscPaN16	Misc	Packaged DX	New	16	Energy Recovery Units	No Energy Recovery	ton	$0.90	15	995	0.024	199	$179.00	20%	100%	95%	0.893	0
MiscPaN17	Misc	Packaged DX	New	17	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$2.34	15	1,051	0.006	47	$110.89	5%	100%	95%	0.343	0
MiscPaT1	Misc	Packaged DX	Turnover	1	Duct Insulation, Add R8	No Insulation	ton	$10.42	15	995	0.05	12	$125.00	1%	100%	95%	0.304	0
MiscPaT2	Misc	Packaged DX	Turnover	2	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$1.48	20	857	0.04	61	$90.40	7%	100%	95%	0.992	0
MiscPaT3	Misc	Packaged DX	Turnover	3	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$1.58	20	857	0.08	114	$180.81	13%	100%	95%	0.925	0
MiscPaT4	Misc	Packaged DX	Turnover	4	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$1.69	20	857	0.12	161	$271.21	19%	100%	95%	0.868	0
MiscPaT5	Misc	Packaged DX	Turnover	5	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$0.83	20	995	0.05	66	$55.00	7%	100%	95%	1.765	1
MiscPaT6	Misc	Packaged DX	Turnover	6	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$0.83	20	1,013	0.06	84	$70.00	8%	100%	95%	1.765	1
MiscPaT7	Misc	Packaged DX	Turnover	7	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.40	20	1,114	0.06	83	$115.13	7%	100%	95%	1.050	1
MiscPaT8	Misc	Packaged DX	Turnover	8	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$1.75	20	1,148	0.04	56	$98.39	5%	100%	95%	0.838	0
MiscPaT9	Misc	Packaged DX	Turnover	9	Ground Source HP Open - Water	Air Source Heat Pump	ton	$2.31	15	1,013	0.23	325	$ 750.0	32%	5%	95%	0.508	0
MiscPaT10	Misc	Packaged DX	Turnover	10	Ground Source HP Closed	Air Source Heat Pump	ton	$4.14	15	1,013	0.022	181	$750.00	18%	100%	95%	0.194	0
MiscPaT11	Misc	Packaged DX	Turnover	11	Air-side Economizer	No Economizer	ton	$1.14	15	995	0.018	149	$170.00	15%	75%	45%	0.705	0

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
MiscPaT12	Misc	Packaged DX	Turnover	12	Energy Recovery Units	No Energy Recovery	ton	$0.90	15	995	0.024	199	$179.00	20%	100%	95%	0.893	0
MiscPaT13	Misc	Packaged DX	Turnover	13	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$2.34	15	1,051	0.006	47	$110.89	5%	100%	95%	0.343	0
MiscPaN18	Misc	Packaged DX	New	18	Automated control system	Baseline DX	ton	$0.48	10	1,051	0.006	53	$25.00	5%	100%	65%	1.039	1
MiscPaN19	Misc	Packaged DX	New	19	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$0.88	10	893	0.006	49	$43.00	5%	100%	95%	0.560	0
MiscPaT15	Misc	Packaged DX	Turnover	15	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$0.88	10	893	0.006	49	$43.00	5%	100%	95%	0.560	0
OfficPaE1	Office	Packaged DX	Early	1	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$3.13	20	970	0.05	64	$200.00	7%	15%	9%	0.475	0
OfficPaE2	Office	Packaged DX	Early	2	Adding window shade film	No shade film	q ft window are	$7.05	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.033	0
OfficPaE3	Office	Packaged DX	Early	3	Adding window shade screen	No shade screen	q ft window are	$3.90	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.206	0
OfficPaE4	Office	Packaged DX	Early	4	Windows U<0.40, .55 SHGC	Existing window specifications	q ft window are	$1.40	30	2	0.000	0	$0.28	13%	50%	95%	0.951	0
OfficPaE5	Office	Packaged DX	Early	5	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$3.48	20	970	0.05	65	$225.00	7%	95%	95%	0.425	0
OfficPaE7	Office	Packaged DX	Early	7	Automated control system	Baseline DX	ton	$0.49	10	1,025	0.006	51	$25.00	5%	100%	65%	1.013	1
OfficPaE8	Office	Packaged DX	Early	8	Duct Sealing, down to 15%	Leakage of 29%	ton	$7.92	15	970	0.05	12	$95.00	1%	45%	80%	0.400	0
OfficPaE9	Office	Packaged DX	Early	9	Hotel Keycard Sensors	No prior controls	oom Controlle	$0.29	10	870	0.041	342	$100.00	39%	95%	80%	1.690	1
OfficPaE10	Office	Packaged DX	Early	10	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	ton	$0.55	1	1,054	0.05	64	$35.00	6%	100%	45%	0.202	0
OfficPaE11	Office	Packaged DX	Early	11	7 day, two stage setback thermostat	Manual Thermostat	ton	$0.44	10	970	0.015	125	$55.00	13%	100%	45%	1.123	1
OfficPaE13	Office	Packaged DX	Early	13	Re-commissioning	economizer not functioning	ton	$0.36	7	970	0.05	155	$55.15	16%	95%	75%	1.125	1
OfficPaN1	Office	Packaged DX	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	ton	$1.36	20	970	0.05	64	$87.00	7%	100%	95%	1.091	1
OfficPaN2	Office	Packaged DX	New	2	Adding reflective roof treatment	Std color roof	ton	$4.50	20	970	0.05	10	$45.00	1%	100%	95%	0.972	0
OfficPaN3	Office	Packaged DX	New	3	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$1.93	20	970	0.05	65	$125.00	7%	100%	95%	0.764	0
OfficPaN4	Office	Packaged DX	New	4	Green Roof (New construction or roof replacement)	Std Roof	ton	$1.97	20	970	0.05	65	$127.43	7%	45%	95%	0.750	0
OfficPaN5	Office	Packaged DX	New	5	Duct Insulation, Add R8	No Insulation	ton	$10.42	20	970	0.05	12	$125.00	1%	100%	95%	0.365	0
OfficPaN6	Office	Packaged DX	New	6	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$1.51	20	835	0.04	60	$90.40	7%	100%	95%	0.975	0
OfficPaN7	Office	Packaged DX	New	7	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$1.62	20	835	0.08	111	$180.81	13%	100%	95%	0.910	0
OfficPaN8	Office	Packaged DX	New	8	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$1.73	20	835	0.12	157	$271.21	19%	100%	95%	0.853	0
OfficPaN9	Office	Packaged DX	New	9	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$0.85	20	970	0.05	65	$55.00	7%	100%	95%	1.737	1
OfficPaN10	Office	Packaged DX	New	10	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$0.85	20	987	0.06	82	$70.00	8%	100%	95%	1.737	1
OfficPaN11	Office	Packaged DX	New	11	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.43	20	1,086	0.06	80	$115.13	7%	100%	95%	1.033	1
OfficPaN12	Office	Packaged DX	New	12	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$1.79	20	1,120	0.04	55	$98.39	5%	100%	95%	0.824	0
OfficPaN13	Office	Packaged DX	New	13	Ground Source HP Open - Water	Air Source Heat Pump	ton	$2.37	15	987	0.23	317	$ 750.0	32%	20%	95%	0.500	0
OfficPaN14	Office	Packaged DX	New	14	Ground Source HP Closed	Air Source Heat Pump	ton	$4.24	15	987	0.021	177	$750.00	18%	100%	95%	0.189	0
OfficPaN15	Office	Packaged DX	New	15	Air-side Economizer	No Economizer	ton	$1.17	15	970	0.017	145	$170.00	15%	75%	45%	0.687	0
OfficPaN16	Office	Packaged DX	New	16	Energy Recovery Units	No Energy Recovery	ton	$0.92	15	970	0.023	194	$179.00	20%	100%	95%	0.870	0
OfficPaN17	Office	Packaged DX	New	17	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$2.40	15	1,025	0.006	46	$110.89	5%	100%	95%	0.334	0
OfficPaT1	Office	Packaged DX	Turnover	1	Duct Insulation, Add R8	No Insulation	ton	$10.42	15	970	0.05	12	$125.00	1%	100%	95%	0.304	0
OfficPaT2	Office	Packaged DX	Turnover	2	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$1.51	20	835	0.04	60	$90.40	7%	100%	95%	0.975	0
OfficPaT3	Office	Packaged DX	Turnover	3	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$1.62	20	835	0.08	111	$180.81	13%	100%	95%	0.910	0
OfficPaT4	Office	Packaged DX	Turnover	4	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$1.73	20	835	0.12	157	$271.21	19%	100%	95%	0.853	0
OfficPaT5	Office	Packaged DX	Turnover	5	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$0.85	20	970	0.05	65	$55.00	7%	100%	95%	1.737	1
OfficPaT6	Office	Packaged DX	Turnover	6	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$0.85	20	987	0.06	82	$70.00	8%	100%	95%	1.737	1
OfficPaT7	Office	Packaged DX	Turnover	7	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.43	20	1,086	0.06	80	$115.13	7%	100%	95%	1.033	1
OfficPaT8	Office	Packaged DX	Turnover	8	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$1.79	20	1,120	0.04	55	$98.39	5%	100%	95%	0.824	0
OfficPaT9	Office	Packaged DX	Turnover	9	Ground Source HP Open - Water	Air Source Heat Pump	ton	$2.37	15	987	0.23	317	$ 750.0	32%	5%	95%	0.500	0
OfficPaT10	Office	Packaged DX	Turnover	10	Ground Source HP Closed	Air Source Heat Pump	ton	$4.24	15	987	0.021	177	$750.00	18%	100%	95%	0.189	0
OfficPaT11	Office	Packaged DX	Turnover	11	Air-side Economizer	No Economizer	ton	$1.17	15	970	0.017	145	$170.00	15%	75%	45%	0.687	0
OfficPaT12	Office	Packaged DX	Turnover	12	Energy Recovery Units	No Energy Recovery	ton	$0.92	15	970	0.023	194	$179.00	20%	100%	95%	0.870	0
OfficPaT13	Office	Packaged DX	Turnover	13	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$2.40	15	1,025	0.006	46	$110.89	5%	100%	95%	0.334	0
OfficPaN18	Office	Packaged DX	New	18	Automated control system	Baseline DX	ton	$0.49	10	1,025	0.006	51	$25.00	5%	100%	65%	1.013	1
OfficPaN19	Office	Packaged DX	New	19	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$0.91	10	870	0.006	47	$43.00	5%	100%	95%	0.546	0
OfficPaT15	Office	Packaged DX	Turnover	15	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$0.91	10	870	0.006	47	$43.00	5%	100%	95%	0.546	0
RestaPaE1	Restaurant	Packaged DX	Early	1	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$3.13	20	1,038	0.05	64	$200.00	6%	15%	9%	0.475	0
RestaPaE2	Restaurant	Packaged DX	Early	2	Adding window shade film	No shade film	q ft window are	$7.05	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.033	0
RestaPaE3	Restaurant	Packaged DX	Early	3	Adding window shade screen	No shade screen	q ft window are	$3.90	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.206	0
RestaPaE4	Restaurant	Packaged DX	Early	4	Windows U<0.40, .55 SHGC	Existing window specifications	q ft window are	$1.40	30	2	0.000	0	$0.28	13%	50%	95%	0.951	0
RestaPaE5	Restaurant	Packaged DX	Early	5	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$3.25	20	1,038	0.05	69	$225.00	7%	95%	95%	0.444	0
RestaPaE7	Restaurant	Packaged DX	Early	7	Automated control system	Baseline DX	ton	$0.46	10	1,097	0.007	55	$25.00	5%	100%	65%	1.084	1
RestaPaE8	Restaurant	Packaged DX	Early	8	Duct Sealing, down to 15%	Leakage of 29%	ton	$7.92	15	1,038	0.05	12	$95.00	1%	45%	80%	0.400	0
RestaPaE9	Restaurant	Packaged DX	Early	9	Hotel Keycard Sensors	No prior controls	oom Controlle	$0.29	10	932	0.041	342	$100.00	37%	95%	80%	1.690	1
RestaPaE10	Restaurant	Packaged DX	Early	10	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	ton	$0.55	1	1,129	0.05	64	$35.00	6%	100%	45%	0.202	0
RestaPaE11	Restaurant	Packaged DX	Early	11	7 day, two stage setback thermostat	Manual Thermostat	ton	$0.44	10	1,038	0.015	125	$55.00	12%	100%	45%	1.123	1
RestaPaE13	Restaurant	Packaged DX	Early	13	Re-commissioning	economizer not functioning	ton	$0.33	7	1,038	0.05	166	$55.15	16%	95%	75%	1.182	1
RestaPaN1	Restaurant	Packaged DX	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	ton	$1.36	20	1,038	0.05	64	$87.00	6%	100%	95%	1.091	1
RestaPaN2	Restaurant	Packaged DX	New	2	Adding reflective roof treatment	Std color roof	ton	$4.50	20	1,038	0.05	10	$45.00	1%	100%	95%	0.972	0
RestaPaN3	Restaurant	Packaged DX	New	3	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$1.81	20	1,038	0.05	69	$125.00	7%	100%	95%	0.799	0
RestaPaN4	Restaurant	Packaged DX	New	4	Green Roof (New construction or roof replacement)	Std Roof	ton	$1.84	20	1,038	0.05	69	$127.43	7%	45%	95%	0.784	0
RestaPaN5	Restaurant	Packaged DX	New	5	Duct Insulation, Add R8	No Insulation	ton	$10.42	20	1,038	0.05	12	$125.00	1%	100%	95%	0.365	0
RestaPaN6	Restaurant	Packaged DX	New	6	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$1.41	20	894	0.04	64	$90.40	7%	100%	95%	1.020	1
RestaPaN7	Restaurant	Packaged DX	New	7	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$1.52	20	894	0.08	119	$180.81	13%	100%	95%	0.952	0
RestaPaN8	Restaurant	Packaged DX	New	8	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$1.62	20	894	0.12	168	$271.21	19%	100%	95%	0.892	0
RestaPaN9	Restaurant	Packaged DX	New	9	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$0.79	20	1,038	0.05	69	$55.00	7%	100%	95%	1.816	1
RestaPaN10	Restaurant	Packaged DX	New	10	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$0.79	20	1,057	0.06	88	$70.00	8%	100%	95%	1.816	1
RestaPaN11	Restaurant	Packaged DX	New	11	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.34	20	1,163	0.06	86	$115.13	7%	100%	95%	1.079	1
RestaPaN12	Restaurant	Packaged DX	New	12	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$1.67	20	1,199	0.04	59	$98.39	5%	100%	95%	0.862	0
RestaPaN13	Restaurant	Packaged DX	New	13	Ground Source HP Open - Water	Air Source Heat Pump	ton	$2.21	15	1,057	0.23	339	$ 750.0	32%	20%	95%	0.522	0
RestaPaN14	Restaurant	Packaged DX	New	14	Ground Source HP Closed	Air Source Heat Pump	ton	$3.96	15	1,057	0.023	189	$750.00	18%	100%	95%	0.203	0
RestaPaN15	Restaurant	Packaged DX	New	15	Air-side Economizer	No Economizer	ton	$1.09	15	1,038	0.019	156	$170.00	15%	75%	45%	0.736	0
RestaPaN16	Restaurant	Packaged DX	New	16	Energy Recovery Units	No Energy Recovery	ton	$0.86	15	1,038	0.025	208	$179.00	20%	100%	95%	0.932	0
RestaPaN17	Restaurant	Packaged DX	New	17	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$2.24	15	1,097	0.006	49	$110.89	5%	100%	95%	0.358	0
RestaPaT1	Restaurant	Packaged DX	Turnover	1	Duct Insulation, Add R8	No Insulation	ton	$10.42	15	1,038	0.05	12	$125.00	1%	100%	95%	0.304	0
RestaPaT2	Restaurant	Packaged DX	Turnover	2	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$1.41	20	894	0.04	64	$90.40	7%	100%	95%	1.020	1
RestaPaT3	Restaurant	Packaged DX	Turnover	3	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$1.52	20	894	0.08	119	$180.81	13%	100%	95%	0.952	0
RestaPaT4	Restaurant	Packaged DX	Turnover	4	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$1.62	20	894	0.12	168	$271.21	19%	100%	95%	0.892	0
RestaPaT5	Restaurant	Packaged DX	Turnover	5	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$0.79	20	1,038	0.05	69	$55.00	7%	100%	95%	1.816	1
RestaPaT6	Restaurant	Packaged DX	Turnover	6	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$0.79	20	1,057	0.06	88	$70.00	8%	100%	95%	1.816	1
RestaPaT7	Restaurant	Packaged DX	Turnover	7	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.34	20	1,163	0.06	86	$115.13	7%	100%	95%	1.079	1
RestaPaT8	Restaurant	Packaged DX	Turnover	8	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$1.67	20	1,199	0.04	59	$98.39	5%	100%	95%	0.862	0
RestaPaT9	Restaurant	Packaged DX	Turnover	9	Ground Source HP Open - Water	Air Source Heat Pump	ton	$2.21	15	1,057	0.23	339	$ 750.0	32%	5%	95%	0.522	0
RestaPaT10	Restaurant	Packaged DX	Turnover	10	Ground Source HP Closed	Air Source Heat Pump	ton	$3.96	15	1,057	0.023	189	$750.00	18%	100%	95%	0.203	0
RestaPaT11	Restaurant	Packaged DX	Turnover	11	Air-side Economizer	No Economizer	ton	$1.09	15	1,038	0.019	156	$170.00	15%	75%	45%	0.736	0
RestaPaT12	Restaurant	Packaged DX	Turnover	12	Energy Recovery Units	No Energy Recovery	ton	$0.86	15	1,038	0.025	208	$179.00	20%	100%	95%	0.932	0

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
RestaPaT13	Restaurant	Packaged DX	Turnover	13	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$2.24	15	1,097	0.006	49	$110.89	5%	100%	95%	0.358	0
RestaPaN18	Restaurant	Packaged DX	New	18	Automated control system	Baseline DX	ton	$0.46	10	1,097	0.007	55	$25.00	5%	100%	65%	1.084	1
RestaPaN19	Restaurant	Packaged DX	New	19	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$0.85	10	932	0.006	51	$43.00	5%	100%	95%	0.584	0
RestaPaT15	Restaurant	Packaged DX	Turnover	15	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$0.85	10	932	0.006	51	$43.00	5%	100%	95%	0.584	0
RetaiPaE1	Retail	Packaged DX	Early	1	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$3.13	20	1,018	0.05	64	$200.00	6%	15%	9%	0.475	0
RetaiPaE2	Retail	Packaged DX	Early	2	Adding window shade film	No shade film	q ft window are	$7.05	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.033	0
RetaiPaE3	Retail	Packaged DX	Early	3	Adding window shade screen	No shade screen	q ft window are	$3.90	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.206	0
RetaiPaE4	Retail	Packaged DX	Early	4	Windows U<0.40, .55 SHGC	Existing window specifications	q ft window are	$1.40	30	2	0.000	0	$0.28	13%	50%	95%	0.951	0
RetaiPaE5	Retail	Packaged DX	Early	5	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$3.32	20	1,018	0.05	68	$225.00	7%	95%	95%	0.438	0
RetaiPaE7	Retail	Packaged DX	Early	7	Automated control system	Baseline DX	ton	$0.46	10	1,075	0.006	54	$25.00	5%	100%	65%	1.063	1
RetaiPaE8	Retail	Packaged DX	Early	8	Duct Sealing, down to 15%	Leakage of 29%	ton	$7.92	15	1,018	0.05	12	$95.00	1%	45%	80%	0.400	0
RetaiPaE9	Retail	Packaged DX	Early	9	Hotel Keycard Sensors	No prior controls	oom Controlle	$0.29	10	913	0.041	342	$100.00	37%	95%	80%	1.690	1
RetaiPaE10	Retail	Packaged DX	Early	10	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	ton	$0.55	1	1,107	0.05	64	$35.00	6%	100%	45%	0.202	0
RetaiPaE11	Retail	Packaged DX	Early	11	7 day, two stage setback thermostat	Manual Thermostat	ton	$0.44	10	1,018	0.015	125	$55.00	12%	100%	45%	1.123	1
RetaiPaE13	Retail	Packaged DX	Early	13	Re-commissioning	economizer not functioning	ton	$0.34	7	1,018	0.05	163	$55.15	16%	95%	75%	1.165	1
RetaiPaN1	Retail	Packaged DX	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	ton	$1.36	20	1,018	0.05	64	$87.00	6%	100%	95%	1.091	1
RetaiPaN2	Retail	Packaged DX	New	2	Adding reflective roof treatment	Std color roof	ton	$4.50	20	1,018	0.05	10	$45.00	1%	100%	95%	0.972	0
RetaiPaN3	Retail	Packaged DX	New	3	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$1.84	20	1,018	0.05	68	$125.00	7%	100%	95%	0.789	0
RetaiPaN4	Retail	Packaged DX	New	4	Green Roof (New construction or roof replacement)	Std Roof	ton	$1.88	20	1,018	0.05	68	$127.43	7%	45%	95%	0.774	0
RetaiPaN5	Retail	Packaged DX	New	5	Duct Insulation, Add R8	No Insulation	ton	$10.42	20	1,018	0.05	12	$125.00	1%	100%	95%	0.365	0
RetaiPaN6	Retail	Packaged DX	New	6	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$1.44	20	877	0.04	63	$90.40	7%	100%	95%	1.007	1
RetaiPaN7	Retail	Packaged DX	New	7	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$1.55	20	877	0.08	117	$180.81	13%	100%	95%	0.939	0
RetaiPaN8	Retail	Packaged DX	New	8	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$1.65	20	877	0.12	164	$271.21	19%	100%	95%	0.881	0
RetaiPaN9	Retail	Packaged DX	New	9	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$0.81	20	1,018	0.05	68	$55.00	7%	100%	95%	1.792	1
RetaiPaN10	Retail	Packaged DX	New	10	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$0.81	20	1,036	0.06	86	$70.00	8%	100%	95%	1.792	1
RetaiPaN11	Retail	Packaged DX	New	11	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.36	20	1,140	0.06	84	$115.13	7%	100%	95%	1.066	1
RetaiPaN12	Retail	Packaged DX	New	12	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$1.71	20	1,175	0.04	58	$98.39	5%	100%	95%	0.851	0
RetaiPaN13	Retail	Packaged DX	New	13	Ground Source HP Open - Water	Air Source Heat Pump	ton	$2.25	15	1,036	0.23	333	$ 750.0	32%	20%	95%	0.515	0
RetaiPaN14	Retail	Packaged DX	New	14	Ground Source HP Closed	Air Source Heat Pump	ton	$4.04	15	1,036	0.022	186	$750.00	18%	100%	95%	0.199	0
RetaiPaN15	Retail	Packaged DX	New	15	Air-side Economizer	No Economizer	ton	$1.11	15	1,018	0.018	153	$170.00	15%	75%	45%	0.721	0
RetaiPaN16	Retail	Packaged DX	New	16	Energy Recovery Units	No Energy Recovery	ton	$0.88	15	1,018	0.024	204	$179.00	20%	100%	95%	0.914	0
RetaiPaN17	Retail	Packaged DX	New	17	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$2.29	15	1,075	0.006	48	$110.89	5%	100%	95%	0.351	0
RetaiPaT1	Retail	Packaged DX	Turnover	1	Duct Insulation, Add R8	No Insulation	ton	$10.42	15	1,018	0.05	12	$125.00	1%	100%	95%	0.304	0
RetaiPaT2	Retail	Packaged DX	Turnover	2	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$1.44	20	877	0.04	63	$90.40	7%	100%	95%	1.007	1
RetaiPaT3	Retail	Packaged DX	Turnover	3	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$1.55	20	877	0.08	117	$180.81	13%	100%	95%	0.939	0
RetaiPaT4	Retail	Packaged DX	Turnover	4	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$1.65	20	877	0.12	164	$271.21	19%	100%	95%	0.881	0
RetaiPaT5	Retail	Packaged DX	Turnover	5	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$0.81	20	1,018	0.05	68	$55.00	7%	100%	95%	1.792	1
RetaiPaT6	Retail	Packaged DX	Turnover	6	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$0.81	20	1,036	0.06	86	$70.00	8%	100%	95%	1.792	1
RetaiPaT7	Retail	Packaged DX	Turnover	7	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.36	20	1,140	0.06	84	$115.13	7%	100%	95%	1.066	1
RetaiPaT8	Retail	Packaged DX	Turnover	8	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$1.71	20	1,175	0.04	58	$98.39	5%	100%	95%	0.851	0
RetaiPaT9	Retail	Packaged DX	Turnover	9	Ground Source HP Open - Water	Air Source Heat Pump	ton	$2.25	15	1,036	0.23	333	$ 750.0	32%	5%	95%	0.515	0
RetaiPaT10	Retail	Packaged DX	Turnover	10	Ground Source HP Closed	Air Source Heat Pump	ton	$4.04	15	1,036	0.022	186	$750.00	18%	100%	95%	0.199	0
RetaiPaT11	Retail	Packaged DX	Turnover	11	Air-side Economizer	No Economizer	ton	$1.11	15	1,018	0.018	153	$170.00	15%	75%	45%	0.721	0
RetaiPaT12	Retail	Packaged DX	Turnover	12	Energy Recovery Units	No Energy Recovery	ton	$0.88	15	1,018	0.024	204	$179.00	20%	100%	95%	0.914	0
RetaiPaT13	Retail	Packaged DX	Turnover	13	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$2.29	15	1,075	0.006	48	$110.89	5%	100%	95%	0.351	0
RetaiPaN18	Retail	Packaged DX	New	18	Automated control system	Baseline DX	ton	$0.46	10	1,075	0.006	54	$25.00	5%	100%	65%	1.063	1
RetaiPaN19	Retail	Packaged DX	New	19	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$0.86	10	913	0.006	50	$43.00	5%	100%	95%	0.573	0
RetaiPaT15	Retail	Packaged DX	Turnover	15	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$0.86	10	913	0.006	50	$43.00	5%	100%	95%	0.573	0
WarehPaE1	Warehouse	Packaged DX	Early	1	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$3.13	20	788	0.05	64	$200.00	8%	15%	9%	0.475	0
WarehPaE2	Warehouse	Packaged DX	Early	2	Adding window shade film	No shade film	q ft window are	$7.05	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.033	0
WarehPaE3	Warehouse	Packaged DX	Early	3	Adding window shade screen	No shade screen	q ft window are	$3.90	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.206	0
WarehPaE4	Warehouse	Packaged DX	Early	4	Windows U<0.40, .55 SHGC	Existing window specifications	q ft window are	$1.40	30	2	0.000	0	$0.28	13%	50%	95%	0.951	0
WarehPaE5	Warehouse	Packaged DX	Early	5	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$4.29	20	788	0.05	53	$225.00	7%	95%	95%	0.373	0
WarehPaE7	Warehouse	Packaged DX	Early	7	Automated control system	Baseline DX	ton	$0.60	10	832	0.005	42	$25.00	5%	100%	65%	0.823	0
WarehPaE8	Warehouse	Packaged DX	Early	8	Duct Sealing, down to 15%	Leakage of 29%	ton	$7.92	15	788	0.05	12	$95.00	2%	45%	80%	0.400	0
WarehPaE9	Warehouse	Packaged DX	Early	9	Hotel Keycard Sensors	No prior controls	oom Controlle	$0.29	10	707	0.041	342	$100.00	48%	95%	80%	1.690	1
WarehPaE10	Warehouse	Packaged DX	Early	10	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	ton	$0.55	1	856	0.05	64	$35.00	7%	100%	45%	0.202	0
WarehPaE11	Warehouse	Packaged DX	Early	11	7 day, two stage setback thermostat	Manual Thermostat	ton	$0.44	10	788	0.015	125	$55.00	16%	100%	45%	1.123	1
WarehPaE13	Warehouse	Packaged DX	Early	13	Re-commissioning	economizer not functioning	ton	$0.44	7	788	0.05	126	$55.15	16%	95%	75%	0.973	0
WarehPaN1	Warehouse	Packaged DX	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	ton	$1.36	20	788	0.05	64	$87.00	8%	100%	95%	1.091	1
WarehPaN2	Warehouse	Packaged DX	New	2	Adding reflective roof treatment	Std color roof	ton	$4.50	20	788	0.05	10	$45.00	1%	100%	95%	0.972	0
WarehPaN3	Warehouse	Packaged DX	New	3	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$2.38	20	788	0.05	53	$125.00	7%	100%	95%	0.672	0
WarehPaN4	Warehouse	Packaged DX	New	4	Green Roof (New construction or roof replacement)	Std Roof	ton	$2.43	20	788	0.05	53	$127.43	7%	45%	95%	0.659	0
WarehPaN5	Warehouse	Packaged DX	New	5	Duct Insulation, Add R8	No Insulation	ton	$10.42	20	788	0.05	12	$125.00	2%	100%	95%	0.365	0
WarehPaN6	Warehouse	Packaged DX	New	6	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$1.87	20	678	0.04	48	$90.40	7%	100%	95%	0.858	0
WarehPaN7	Warehouse	Packaged DX	New	7	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$2.00	20	678	0.08	90	$180.81	13%	100%	95%	0.801	0
WarehPaN8	Warehouse	Packaged DX	New	8	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$2.13	20	678	0.12	127	$271.21	19%	100%	95%	0.751	0
WarehPaN9	Warehouse	Packaged DX	New	9	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.05	20	788	0.05	53	$55.00	7%	100%	95%	1.528	1
WarehPaN10	Warehouse	Packaged DX	New	10	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.05	20	802	0.06	67	$70.00	8%	100%	95%	1.528	1
WarehPaN11	Warehouse	Packaged DX	New	11	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.76	20	882	0.06	65	$115.13	7%	100%	95%	0.908	0
WarehPaN12	Warehouse	Packaged DX	New	12	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$2.21	20	909	0.04	45	$98.39	5%	100%	95%	0.725	0
WarehPaN13	Warehouse	Packaged DX	New	13	Ground Source HP Open - Water	Air Source Heat Pump	ton	$2.91	15	802	0.23	257	$ 750.0	32%	20%	95%	0.442	0
WarehPaN14	Warehouse	Packaged DX	New	14	Ground Source HP Closed	Air Source Heat Pump	ton	$5.22	15	802	0.017	144	$750.00	18%	100%	95%	0.154	0
WarehPaN15	Warehouse	Packaged DX	New	15	Air-side Economizer	No Economizer	ton	$1.44	15	788	0.014	118	$170.00	15%	75%	45%	0.558	0
WarehPaN16	Warehouse	Packaged DX	New	16	Energy Recovery Units	No Energy Recovery	ton	$1.14	15	788	0.019	158	$179.00	20%	100%	95%	0.707	0
WarehPaN17	Warehouse	Packaged DX	New	17	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$2.96	15	832	0.004	37	$110.89	5%	100%	95%	0.272	0
WarehPaT1	Warehouse	Packaged DX	Turnover	1	Duct Insulation, Add R8	No Insulation	ton	$10.42	15	788	0.05	12	$125.00	2%	100%	95%	0.304	0
WarehPaT2	Warehouse	Packaged DX	Turnover	2	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$1.87	20	678	0.04	48	$90.40	7%	100%	95%	0.858	0
WarehPaT3	Warehouse	Packaged DX	Turnover	3	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$2.00	20	678	0.08	90	$180.81	13%	100%	95%	0.801	0
WarehPaT4	Warehouse	Packaged DX	Turnover	4	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$2.13	20	678	0.12	127	$271.21	19%	100%	95%	0.751	0
WarehPaT5	Warehouse	Packaged DX	Turnover	5	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.05	20	788	0.05	53	$55.00	7%	100%	95%	1.528	1
WarehPaT6	Warehouse	Packaged DX	Turnover	6	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.05	20	802	0.06	67	$70.00	8%	100%	95%	1.528	1
WarehPaT7	Warehouse	Packaged DX	Turnover	7	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.76	20	882	0.06	65	$115.13	7%	100%	95%	0.908	0
WarehPaT8	Warehouse	Packaged DX	Turnover	8	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$2.21	20	909	0.04	45	$98.39	5%	100%	95%	0.725	0
WarehPaT9	Warehouse	Packaged DX	Turnover	9	Ground Source HP Open - Water	Air Source Heat Pump	ton	$2.91	15	802	0.23	257	$ 750.0	32%	5%	95%	0.442	0
WarehPaT10	Warehouse	Packaged DX	Turnover	10	Ground Source HP Closed	Air Source Heat Pump	ton	$5.22	15	802	0.017	144	$750.00	18%	100%	95%	0.154	0
WarehPaT11	Warehouse	Packaged DX	Turnover	11	Air-side Economizer	No Economizer	ton	$1.44	15	788	0.014	118	$170.00	15%	75%	45%	0.558	0
WarehPaT12	Warehouse	Packaged DX	Turnover	12	Energy Recovery Units	No Energy Recovery	ton	$1.14	15	788	0.019	158	$179.00	20%	100%	95%	0.707	0
WarehPaT13	Warehouse	Packaged DX	Turnover	13	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$2.96	15	832	0.004	37	$110.89	5%	100%	95%	0.272	0

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
WarehPaN18	Warehouse	Packaged DX	New	18	Automated control system	Baseline DX	ton	$0.60	10	832	0.005	42	$25.00	5%	100%	65%	0.823	0
WarehPaN19	Warehouse	Packaged DX	New	19	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.12	10	707	0.005	39	$43.00	5%	100%	95%	0.443	0
WarehPaT15	Warehouse	Packaged DX	Turnover	15	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.12	10	707	0.005	39	$43.00	5%	100%	95%	0.443	0
HealtHeN4	Healthcare	Heating	New	4	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$6.13	15	298	0.000	18	$110.89	6%	100%	95%	0.121	0
HealtHeT1	Healthcare	Heating	Turnover	1	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$6.13	15	298	0.000	18	$110.89	6%	100%	95%	0.121	0
GroceHeE1	Grocery	Heating	Early	1	Re-commissioning	economizer not functioning	sq ft	$0.2710	7	125,500	0.297	20,080	$5,441.68	16%	95%	75%	1.078	1
GroceHeE2	Grocery	Heating	Early	2	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$4.44	20	1,282	0.05	45	$200.00	4%	10%	95%	0.385	0
GroceHeE3	Grocery	Heating	Early	3	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.67	20	1,282	0.05	75	$125.00	6%	10%	95%	0.844	0
GroceHeE4	Grocery	Heating	Early	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.75	20	1,282	0.05	34	$127.43	3%	10%	95%	0.522	0
GroceHeE5	Grocery	Heating	Early	5	Humidification with High pressure, Ultrasonic devices	Electric Resistive Elements	unit	$0.1893	10	2,794	0.039	2,641	$500.00	95%	100%	95%	2.354	1
GroceHeN1	Grocery	Heating	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5 - Electric Heat	sq ft	$1.93	20	1,282	0.05	45	$87.00	4%	10%	95%	0.885	0
GroceHeN2	Grocery	Heating	New	2	Ground Source HP Open - Water	Air Source Heat Pump	ton	$9.65	15	1,282	0.23	78	$ 750.0	6%	20%	95%	0.267	0
GroceHen3	Grocery	Heating	new	3	Ground Source HP Closed	Air Source Heat Pump	ton	$9.65	15	1,282	0.001	78	$750.00	6%	100%	95%	0.077	0
GroceHeN4	Grocery	Heating	New	4	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.43	15	1,282	0.001	78	$110.89	6%	100%	95%	0.519	0
GroceHeT1	Grocery	Heating	Turnover	1	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.43	15	1,282	0.001	78	$110.89	6%	100%	95%	0.519	0
InstiHeE1	Institutional	Heating	Early	1	Re-commissioning	economizer not functioning	sq ft	$0.2710	7	125,500	0.297	20,080	$5,441.68	16%	95%	75%	1.078	1
InstiHeE2	Institutional	Heating	Early	2	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$4.44	20	913	0.05	45	$200.00	5%	10%	95%	0.385	0
InstiHeE3	Institutional	Heating	Early	3	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.67	20	913	0.05	75	$125.00	8%	10%	95%	0.844	0
InstiHeE4	Institutional	Heating	Early	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.75	20	913	0.05	34	$127.43	4%	10%	95%	0.522	0
InstiHeE5	Institutional	Heating	Early	5	Humidification with High pressure, Ultrasonic devices	Electric Resistive Elements	unit	$0.1893	10	2,794	0.039	2,641	$500.00	95%	100%	95%	2.354	1
InstiHeN1	Institutional	Heating	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5 - Electric Heat	sq ft	$1.93	20	913	0.05	45	$87.00	5%	10%	95%	0.885	0
InstiHeN2	Institutional	Heating	New	2	Ground Source HP Open - Water	Air Source Heat Pump	ton	$13.55	15	913	0.23	55	$ 750.0	6%	20%	95%	0.245	0
InstiHen3	Institutional	Heating	new	3	Ground Source HP Closed	Air Source Heat Pump	ton	$13.55	15	913	0.001	55	$750.00	6%	100%	95%	0.055	0
InstiHeN4	Institutional	Heating	New	4	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$2.00	15	913	0.001	55	$110.89	6%	100%	95%	0.370	0
InstiHeT1	Institutional	Heating	Turnover	1	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$2.00	15	913	0.001	55	$110.89	6%	100%	95%	0.370	0
LodgiHeE1	Lodging	Heating	Early	1	Re-commissioning	economizer not functioning	sq ft	$0.2710	7	125,500	0.297	20,080	$5,441.68	16%	95%	75%	1.078	1
LodgiHeE2	Lodging	Heating	Early	2	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$4.44	20	1,553	0.05	45	$200.00	3%	10%	95%	0.385	0
LodgiHeE3	Lodging	Heating	Early	3	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.67	20	1,553	0.05	75	$125.00	5%	10%	95%	0.844	0
LodgiHeE4	Lodging	Heating	Early	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.75	20	1,553	0.05	34	$127.43	2%	10%	95%	0.522	0
LodgiHeE5	Lodging	Heating	Early	5	Humidification with High pressure, Ultrasonic devices	Electric Resistive Elements	unit	$0.1893	10	2,794	0.039	2,641	$500.00	95%	100%	95%	2.354	1
LodgiHeN1	Lodging	Heating	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5 - Electric Heat	sq ft	$1.93	20	1,553	0.05	45	$87.00	3%	10%	95%	0.885	0
LodgiHeN2	Lodging	Heating	New	2	Ground Source HP Open - Water	Air Source Heat Pump	ton	$7.97	15	1,553	0.23	94	$ 750.0	6%	20%	95%	0.283	0
LodgiHen3	Lodging	Heating	new	3	Ground Source HP Closed	Air Source Heat Pump	ton	$7.97	15	1,553	0.001	94	$750.00	6%	100%	95%	0.093	0
LodgiHeN4	Lodging	Heating	New	4	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.18	15	1,553	0.001	94	$110.89	6%	100%	95%	0.629	0
LodgiHeT1	Lodging	Heating	Turnover	1	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.18	15	1,553	0.001	94	$110.89	6%	100%	95%	0.629	0
MiscHeE1	Misc	Heating	Early	1	Re-commissioning	economizer not functioning	sq ft	$0.2710	7	125,500	0.297	20,080	$5,441.68	16%	95%	75%	1.078	1
MiscHeE2	Misc	Heating	Early	2	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$4.44	20	1,062	0.05	45	$200.00	4%	10%	95%	0.385	0
MiscHeE3	Misc	Heating	Early	3	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.67	20	1,062	0.05	75	$125.00	7%	10%	95%	0.844	0
MiscHeE4	Misc	Heating	Early	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.75	20	1,062	0.05	34	$127.43	3%	10%	95%	0.522	0
MiscHeE5	Misc	Heating	Early	5	Humidification with High pressure, Ultrasonic devices	Electric Resistive Elements	unit	$0.1893	10	2,794	0.039	2,641	$500.00	95%	100%	95%	2.354	1
MiscHeN1	Misc	Heating	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5 - Electric Heat	sq ft	$1.93	20	1,062	0.05	45	$87.00	4%	10%	95%	0.885	0
MiscHeN2	Misc	Heating	New	2	Ground Source HP Open - Water	Air Source Heat Pump	ton	$11.65	15	1,062	0.23	64	$ 750.0	6%	20%	95%	0.254	0
MiscHen3	Misc	Heating	new	3	Ground Source HP Closed	Air Source Heat Pump	ton	$11.65	15	1,062	0.001	64	$750.00	6%	100%	95%	0.064	0
MiscHeN4	Misc	Heating	New	4	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.72	15	1,062	0.001	64	$110.89	6%	100%	95%	0.430	0
MiscHeT1	Misc	Heating	Turnover	1	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.72	15	1,062	0.001	64	$110.89	6%	100%	95%	0.430	0
OfficHeE1	Office	Heating	Early	1	Re-commissioning	economizer not functioning	sq ft	$0.2710	7	125,500	0.297	20,080	$5,441.68	16%	95%	75%	1.078	1
OfficHeE2	Office	Heating	Early	2	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$4.44	20	819	0.05	45	$200.00	5%	10%	95%	0.385	0
OfficHeE3	Office	Heating	Early	3	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.67	20	819	0.05	75	$125.00	9%	10%	95%	0.844	0
OfficHeE4	Office	Heating	Early	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.75	20	819	0.05	34	$127.43	4%	10%	95%	0.522	0
OfficHeE5	Office	Heating	Early	5	Humidification with High pressure, Ultrasonic devices	Electric Resistive Elements	unit	$0.1893	10	2,794	0.039	2,641	$500.00	95%	100%	95%	2.354	1
OfficHeN1	Office	Heating	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5 - Electric Heat	sq ft	$1.93	20	819	0.05	45	$87.00	5%	10%	95%	0.885	0
OfficHeN2	Office	Heating	New	2	Ground Source HP Open - Water	Air Source Heat Pump	ton	$15.11	15	819	0.23	50	$ 750.0	6%	20%	95%	0.240	0
OfficHen3	Office	Heating	new	3	Ground Source HP Closed	Air Source Heat Pump	ton	$15.11	15	819	0.001	50	$750.00	6%	100%	95%	0.049	0
OfficHeN4	Office	Heating	New	4	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$2.23	15	819	0.001	50	$110.89	6%	100%	95%	0.332	0
OfficHeT1	Office	Heating	Turnover	1	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$2.23	15	819	0.001	50	$110.89	6%	100%	95%	0.332	0
RestaHeE1	Restaurant	Heating	Early	1	Re-commissioning	economizer not functioning	sq ft	$0.2710	7	125,500	0.297	20,080	$5,441.68	16%	95%	75%	1.078	1
RestaHeE2	Restaurant	Heating	Early	2	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$4.44	20	1,248	0.05	45	$200.00	4%	10%	95%	0.385	0
RestaHeE3	Restaurant	Heating	Early	3	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.67	20	1,248	0.05	75	$125.00	6%	10%	95%	0.844	0
RestaHeE4	Restaurant	Heating	Early	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.75	20	1,248	0.05	34	$127.43	3%	10%	95%	0.522	0
RestaHeE5	Restaurant	Heating	Early	5	Humidification with High pressure, Ultrasonic devices	Electric Resistive Elements	unit	$0.1893	10	2,794	0.039	2,641	$500.00	95%	100%	95%	2.354	1
RestaHeN1	Restaurant	Heating	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5 - Electric Heat	sq ft	$1.93	20	1,248	0.05	45	$87.00	4%	10%	95%	0.885	0
RestaHeN2	Restaurant	Heating	New	2	Ground Source HP Open - Water	Air Source Heat Pump	ton	$9.92	15	1,248	0.23	76	$ 750.0	6%	20%	95%	0.265	0
RestaHen3	Restaurant	Heating	new	3	Ground Source HP Closed	Air Source Heat Pump	ton	$9.92	15	1,248	0.001	76	$750.00	6%	100%	95%	0.075	0
RestaHeN4	Restaurant	Heating	New	4	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.47	15	1,248	0.001	76	$110.89	6%	100%	95%	0.506	0
RestaHeT1	Restaurant	Heating	Turnover	1	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.47	15	1,248	0.001	76	$110.89	6%	100%	95%	0.506	0
RetaiHeE1	Retail	Heating	Early	1	Re-commissioning	economizer not functioning	sq ft	$0.2710	7	125,500	0.297	20,080	$5,441.68	16%	95%	75%	1.078	1
RetaiHeE2	Retail	Heating	Early	2	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$4.44	20	1,282	0.05	45	$200.00	4%	10%	95%	0.385	0
RetaiHeE3	Retail	Heating	Early	3	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.67	20	1,282	0.05	75	$125.00	6%	10%	95%	0.844	0
RetaiHeE4	Retail	Heating	Early	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.75	20	1,282	0.05	34	$127.43	3%	10%	95%	0.522	0
RetaiHeE5	Retail	Heating	Early	5	Humidification with High pressure, Ultrasonic devices	Electric Resistive Elements	unit	$0.1893	10	2,794	0.039	2,641	$500.00	95%	100%	95%	2.354	1
RetaiHeN1	Retail	Heating	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5 - Electric Heat	sq ft	$1.93	20	1,282	0.05	45	$87.00	4%	10%	95%	0.885	0
RetaiHeN2	Retail	Heating	New	2	Ground Source HP Open - Water	Air Source Heat Pump	ton	$9.65	15	1,282	0.23	78	$ 750.0	6%	20%	95%	0.267	0
RetaiHen3	Retail	Heating	new	3	Ground Source HP Closed	Air Source Heat Pump	ton	$9.65	15	1,282	0.001	78	$750.00	6%	100%	95%	0.077	0
RetaiHeN4	Retail	Heating	New	4	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.43	15	1,282	0.001	78	$110.89	6%	100%	95%	0.519	0
RetaiHeT1	Retail	Heating	Turnover	1	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.43	15	1,282	0.001	78	$110.89	6%	100%	95%	0.519	0
WarehHeE1	Warehouse	Heating	Early	1	Re-commissioning	economizer not functioning	sq ft	$0.2710	7	125,500	0.297	20,080	$5,441.68	16%	95%	75%	1.078	1
WarehHeE2	Warehouse	Heating	Early	2	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$4.44	20	1,102	0.05	45	$200.00	4%	10%	95%	0.385	0
WarehHeE3	Warehouse	Heating	Early	3	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.67	20	1,102	0.05	75	$125.00	7%	10%	95%	0.844	0
WarehHeE4	Warehouse	Heating	Early	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.75	20	1,102	0.05	34	$127.43	3%	10%	95%	0.522	0
WarehHeE5	Warehouse	Heating	Early	5	Humidification with High pressure, Ultrasonic devices	Electric Resistive Elements	unit	$0.1893	10	2,794	0.039	2,641	$500.00	95%	100%	95%	2.354	1
WarehHeN1	Warehouse	Heating	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5 - Electric Heat	sq ft	$1.93	20	1,102	0.05	45	$87.00	4%	10%	95%	0.885	0
WarehHeN2	Warehouse	Heating	New	2	Ground Source HP Open - Water	Air Source Heat Pump	ton	$11.23	15	1,102	0.23	67	$ 750.0	6%	20%	95%	0.256	0
WarehHen3	Warehouse	Heating	new	3	Ground Source HP Closed	Air Source Heat Pump	ton	$11.23	15	1,102	0.001	67	$750.00	6%	100%	95%	0.066	0
WarehHeN4	Warehouse	Heating	New	4	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.66	15	1,102	0.001	67	$110.89	6%	100%	95%	0.447	0
WarehHeT1	Warehouse	Heating	Turnover	1	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.66	15	1,102	0.001	67	$110.89	6%	100%	95%	0.447	0
GroceChE1	Grocery	Chiller	Early	1	Duct Sealing, down to 15%	Leakage of 29%	ton	$1.4368	15	6,612	0.013	66.1200	$95.00	1%	40%	$0.90	0.587	0
GroceChE2	Grocery	Chiller	Early	2	Duct Insulation, Add R8	No Insulation	ton	$1.8905	15	6,612	0.013	66.1200	$125.00	1%	50%	95%	0.446	0
GroceChE3	Grocery	Chiller	Early	3	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton	ton	$0.3781	15	6,612	0.065	330.6000	$125.00	5%	75%	75%	2.232	1
GroceChE4	Grocery	Chiller	Early	4	Energy Recovery Units	No Energy Recovery	ton	$0.3403	15	6,612	0.261	1,322.4	$450.00	20%	75%	75%	2.480	1

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
GroceChE5	Grocery	Chiller	Early	5	Re-commissioning	economizer not functioning	ton	$0.3447	7	6,612	0.209	1,058	$364.67	16%	75%	75%	1.033	1
GroceChE6	Grocery	Chiller	Early	6	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$0.82	15	6,612	0.05	245	$200.00	4%	15%	95%	1.032	1
GroceChE7	Grocery	Chiller	Early	7	Adding window shade film	No shade film	sq ft window are	$7.0453	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.036	0
GroceChE8	Grocery	Chiller	Early	8	Adding window shade screen	No shade screen	sq ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.216	0
GroceChE9	Grocery	Chiller	Early	9	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.13	20	6,612	0.05	198	$225.00	3%	75%	95%	0.981	0
GroceChN1	Grocery	Chiller	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	sq ft	$0.38	20	6,612	0.05	231	$87.00	4%	15%	95%	2.893	1
GroceChN2	Grocery	Chiller	New	2	Adding window shade screen	No shade screen	sq ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.216	0
GroceChN3	Grocery	Chiller	New	3	Adding reflective roof treatment	Std color roof	sq ft roof area	$4.50	20	6,612	0.05	10	$45.00	0%	100%	95%	0.970	0
GroceChN4	Grocery	Chiller	New	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$1.97	20	6,612	0.05	65	$127.43	1%	45%	95%	0.745	0
GroceChN5	Grocery	Chiller	New	5	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.3195	15	6,612	0.76	798	$255.00	12%	95%	95%	4.074	1
GroceChN6	Grocery	Chiller	New	6	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.1767	15	6,612	1.944	2,052	$362.50	31%	95%	95%	7.369	1
GroceChN7	Grocery	Chiller	New	7	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.0916	15	15,846	1.728	1,824	$167.00	12%	95%	95%	14.219	1
GroceChN8	Grocery	Chiller	New	8	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.3479	15	6,612	0.065	330.6000	$115.00	5%	95%	75%	2.426	1
GroceChN9	Grocery	Chiller	New	9	Energy Recovery Units	No Energy Recovery	ton	$0.1891	15	6,612	0.261	1,322.4	$250.00	20%	95%	75%	4.463	1
GroceChN10	Grocery	Chiller	New	10	Duct Insulation, Add R8	No Insulation	ton	$1.8905	15	6,612	0.013	66.1200	$125.00	1%	100%	95%	0.446	0
GroceChT1	Grocery	Chiller	Turnover	1	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.3697	15	6,612	0.76	798	$295.00	12%	95%	95%	3.522	1
GroceChT2	Grocery	Chiller	Turnover	2	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2254	15	6,612	1.944	2,052	$462.50	31%	95%	95%	5.776	1
GroceChT3	Grocery	Chiller	Turnover	3	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.3595	15	6,612	1.944	1,157	$416.00	18%	95%	95%	4.866	1
GroceChN11	Grocery	Chiller	New	11	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.3595	15	6,612	1.944	1,157	$416.00	18%	95%	95%	4.866	1
GroceChT5	Grocery	Chiller	Turnover	5	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.3842	15	6,612	0.065	330.6000	$127.00	5%	95%	75%	2.197	1
GroceChT4	Grocery	Chiller	Turnover	4	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1135	15	15,846	1.728	1,824	$207.00	12%	95%	95%	11.471	1
InstiChE1	Institutional	Chiller	Early	1	Duct Sealing, down to 15%	Leakage of 29%	ton	$2.0251	15	4,691	0.009	46.9104	$95.00	1%	40%	$0.90	0.417	0
InstiChE2	Institutional	Chiller	Early	2	Duct Insulation, Add R8	No Insulation	ton	$2.6647	15	4,691	0.009	46.9104	$125.00	1%	50%	95%	0.317	0
InstiChE3	Institutional	Chiller	Early	3	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton	ton	$0.5329	15	4,691	0.046	234.5520	$125.00	5%	75%	75%	1.583	1
InstiChE4	Institutional	Chiller	Early	4	Energy Recovery Units	No Energy Recovery	ton	$0.4796	15	4,691	0.185	938.2	$450.00	20%	75%	75%	1.759	1
InstiChE5	Institutional	Chiller	Early	5	Re-commissioning	economizer not functioning	ton	$0.4859	7	4,691	0.148	751	$364.67	16%	75%	75%	0.733	0
InstiChE6	Institutional	Chiller	Early	6	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$0.82	15	4,691	0.05	245	$200.00	5%	15%	95%	1.032	1
InstiChE7	Institutional	Chiller	Early	7	Adding window shade film	No shade film	sq ft window are	$7.0453	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.036	0
InstiChE8	Institutional	Chiller	Early	8	Adding window shade screen	No shade screen	sq ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.216	0
InstiChE9	Institutional	Chiller	Early	9	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.60	20	4,691	0.05	141	$225.00	3%	75%	95%	0.740	0
InstiChN1	Institutional	Chiller	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	sq ft	$0.53	20	4,691	0.05	164	$87.00	4%	15%	95%	2.167	1
InstiChN2	Institutional	Chiller	New	2	Adding window shade screen	No shade screen	sq ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.216	0
InstiChN3	Institutional	Chiller	New	3	Adding reflective roof treatment	Std color roof	sq ft roof area	$4.50	20	4,691	0.05	10	$45.00	0%	100%	95%	0.970	0
InstiChN4	Institutional	Chiller	New	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$2.65	20	4,691	0.05	48	$127.43	1%	45%	95%	0.624	0
InstiChN5	Institutional	Chiller	New	5	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.4504	15	4,691	0.76	566	$255.00	12%	95%	95%	3.416	1
InstiChN6	Institutional	Chiller	New	6	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2490	15	4,691	1.944	1,456	$362.50	31%	95%	95%	6.180	1
InstiChN7	Institutional	Chiller	New	7	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1290	15	11,242	1.728	1,294	$167.00	12%	95%	95%	11.924	1
InstiChN8	Institutional	Chiller	New	8	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.4903	15	4,691	0.046	234.5520	$115.00	5%	95%	75%	1.721	1
InstiChN9	Institutional	Chiller	New	9	Energy Recovery Units	No Energy Recovery	ton	$0.2665	15	4,691	0.185	938.2	$250.00	20%	95%	75%	3.167	1
InstiChN10	Institutional	Chiller	New	10	Duct Insulation, Add R8	No Insulation	ton	$2.6647	15	4,691	0.009	46.9104	$125.00	1%	100%	95%	0.317	0
InstiChT1	Institutional	Chiller	Turnover	1	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.5211	15	4,691	0.76	566	$295.00	12%	95%	95%	2.953	1
InstiChT2	Institutional	Chiller	Turnover	2	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.3177	15	4,691	1.944	1,456	$462.50	31%	95%	95%	4.844	1
InstiChT3	Institutional	Chiller	Turnover	3	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.5067	15	4,691	1.944	821	$416.00	18%	95%	95%	4.281	1
InstiChN11	Institutional	Chiller	New	11	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.5067	15	4,691	1.944	821	$416.00	18%	95%	95%	4.281	1
InstiChT5	Institutional	Chiller	Turnover	5	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.5415	15	4,691	0.046	234.5520	$127.00	5%	95%	75%	1.558	1
InstiChT4	Institutional	Chiller	Turnover	4	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1600	15	11,242	1.728	1,294	$207.00	12%	95%	95%	9.620	1
LodgiChE1	Lodging	Chiller	Early	1	Duct Sealing, down to 15%	Leakage of 29%	ton	$1.6956	15	5,603	0.011	56.0280	$95.00	1%	40%	$0.90	0.498	0
LodgiChE2	Lodging	Chiller	Early	2	Duct Insulation, Add R8	No Insulation	ton	$2.2310	15	5,603	0.011	56.0280	$125.00	1%	50%	95%	0.378	0
LodgiChE3	Lodging	Chiller	Early	3	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton	ton	$0.4462	15	5,603	0.055	280.1400	$125.00	5%	75%	75%	1.891	1
LodgiChE4	Lodging	Chiller	Early	4	Energy Recovery Units	No Energy Recovery	ton	$0.4016	15	5,603	0.221	1,120.6	$450.00	20%	75%	75%	2.101	1
LodgiChE5	Lodging	Chiller	Early	5	Re-commissioning	economizer not functioning	ton	$0.4068	7	5,603	0.177	896	$364.67	16%	75%	75%	0.875	0
LodgiChE6	Lodging	Chiller	Early	6	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$0.82	15	5,603	0.05	245	$200.00	4%	15%	95%	1.032	1
LodgiChE7	Lodging	Chiller	Early	7	Adding window shade film	No shade film	sq ft window are	$7.0453	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.036	0
LodgiChE8	Lodging	Chiller	Early	8	Adding window shade screen	No shade screen	sq ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.216	0
LodgiChE9	Lodging	Chiller	Early	9	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.34	20	5,603	0.05	168	$225.00	3%	75%	95%	0.854	0
LodgiChN1	Lodging	Chiller	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	sq ft	$0.44	20	5,603	0.05	196	$87.00	4%	15%	95%	2.512	1
LodgiChN2	Lodging	Chiller	New	2	Adding window shade screen	No shade screen	sq ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.216	0
LodgiChN3	Lodging	Chiller	New	3	Adding reflective roof treatment	Std color roof	sq ft roof area	$4.50	20	5,603	0.05	10	$45.00	0%	100%	95%	0.970	0
LodgiChN4	Lodging	Chiller	New	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$2.22	20	5,603	0.05	58	$127.43	1%	45%	95%	0.693	0
LodgiChN5	Lodging	Chiller	New	5	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.3771	15	5,603	0.76	676	$255.00	12%	95%	95%	3.729	1
LodgiChN6	Lodging	Chiller	New	6	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2085	15	5,603	1.944	1,739	$362.50	31%	95%	95%	6.744	1
LodgiChN7	Lodging	Chiller	New	7	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1080	15	13,427	1.728	1,546	$167.00	12%	95%	95%	13.013	1
LodgiChN8	Lodging	Chiller	New	8	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.4105	15	5,603	0.055	280.1400	$115.00	5%	95%	75%	2.056	1
LodgiChN9	Lodging	Chiller	New	9	Energy Recovery Units	No Energy Recovery	ton	$0.2231	15	5,603	0.221	1,120.6	$250.00	20%	95%	75%	3.782	1
LodgiChN10	Lodging	Chiller	New	10	Duct Insulation, Add R8	No Insulation	ton	$2.2310	15	5,603	0.011	56.0280	$125.00	1%	100%	95%	0.378	0
LodgiChT1	Lodging	Chiller	Turnover	1	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.4363	15	5,603	0.76	676	$295.00	12%	95%	95%	3.223	1
LodgiChT2	Lodging	Chiller	Turnover	2	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2660	15	5,603	1.944	1,739	$462.50	31%	95%	95%	5.286	1
LodgiChT3	Lodging	Chiller	Turnover	3	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.4243	15	5,603	1.944	980	$416.00	18%	95%	95%	4.559	1
LodgiChN11	Lodging	Chiller	New	11	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.4243	15	5,603	1.944	980	$416.00	18%	95%	95%	4.559	1
LodgiChT5	Lodging	Chiller	Turnover	5	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.4533	15	5,603	0.055	280.1400	$127.00	5%	95%	75%	1.861	1
LodgiChT4	Lodging	Chiller	Turnover	4	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1339	15	13,427	1.728	1,546	$207.00	12%	95%	95%	10.499	1
MiscChE1	Misc	Chiller	Early	1	Duct Sealing, down to 15%	Leakage of 29%	ton	$1.4616	15	6,500	0.013	64.9977	$95.00	1%	40%	$0.90	0.577	0
MiscChE2	Misc	Chiller	Early	2	Duct Insulation, Add R8	No Insulation	ton	$1.9231	15	6,500	0.013	64.9977	$125.00	1%	50%	95%	0.439	0
MiscChE3	Misc	Chiller	Early	3	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton	ton	$0.3846	15	6,500	0.064	324.9885	$125.00	5%	75%	75%	2.194	1
MiscChE4	Misc	Chiller	Early	4	Energy Recovery Units	No Energy Recovery	ton	$0.3462	15	6,500	0.257	1,300.0	$450.00	20%	75%	75%	2.438	1
MiscChE5	Misc	Chiller	Early	5	Re-commissioning	economizer not functioning	ton	$0.3507	7	6,500	0.205	1,040	$364.67	16%	75%	75%	1.015	1
MiscChE6	Misc	Chiller	Early	6	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$0.82	15	6,500	0.05	245	$200.00	4%	15%	95%	1.032	1
MiscChE7	Misc	Chiller	Early	7	Adding window shade film	No shade film	sq ft window are	$7.0453	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.036	0
MiscChE8	Misc	Chiller	Early	8	Adding window shade screen	No shade screen	sq ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.216	0
MiscChE9	Misc	Chiller	Early	9	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.15	20	6,500	0.05	195	$225.00	3%	75%	95%	0.967	0
MiscChN1	Misc	Chiller	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	sq ft	$0.38	20	6,500	0.05	227	$87.00	4%	15%	95%	2.851	1
MiscChN2	Misc	Chiller	New	2	Adding window shade screen	No shade screen	sq ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.216	0
MiscChN3	Misc	Chiller	New	3	Adding reflective roof treatment	Std color roof	sq ft roof area	$4.50	20	6,500	0.05	10	$45.00	0%	100%	95%	0.970	0
MiscChN4	Misc	Chiller	New	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$1.92	20	6,500	0.05	66	$127.43	1%	45%	95%	0.758	0
MiscChN5	Misc	Chiller	New	5	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.3251	15	6,500	0.76	784	$255.00	12%	95%	95%	4.036	1
MiscChN6	Misc	Chiller	New	6	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.1797	15	6,500	1.944	2,017	$362.50	31%	95%	95%	7.300	1
MiscChN7	Misc	Chiller	New	7	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.0931	15	15,577	1.728	1,793	$167.00	12%	95%	95%	14.085	1
MiscChN8	Misc	Chiller	New	8	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.3539	15	6,500	0.064	324.9885	$115.00	5%	95%	75%	2.385	1
MiscChN9	Misc	Chiller	New	9	Energy Recovery Units	No Energy Recovery	ton	$0.1923	15	6,500	0.257	1,300.0	$250.00	20%	95%	75%	4.388	1

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
MiscChN10	Misc	Chiller	New	10	Duct Insulation, Add R8	No Insulation	ton	$1.9231	15	6,500	0.013	64.9977	$125.00	1%	100%	95%	0.439	0
MiscChT1	Misc	Chiller	Turnover	1	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.3761	15	6,500	0.76	784	$295.00	12%	95%	95%	3.488	1
MiscChT2	Misc	Chiller	Turnover	2	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2293	15	6,500	1.944	2,017	$462.50	31%	95%	95%	5.722	1
MiscChT3	Misc	Chiller	Turnover	3	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.3657	15	6,500	1.944	1,137	$416.00	18%	95%	95%	4.832	1
MiscChN11	Misc	Chiller	New	11	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.3657	15	6,500	1.944	1,137	$416.00	18%	95%	95%	4.832	1
MiscChT5	Misc	Chiller	Turnover	5	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.3908	15	6,500	0.064	324.9885	$127.00	5%	95%	75%	2.159	1
MiscChT4	Misc	Chiller	Turnover	4	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1154	15	15,577	1.728	1,793	$207.00	12%	95%	95%	11.363	1
OffieChE1	Office	Chiller	Early	1	Duct Sealing, down to 15%	Leakage of 29%	ton	$1.5082	15	6,299	0.012	62.9880	$95.00	1%	40%	$0.90	0.559	0
OffieChE2	Office	Chiller	Early	2	Duct Insulation, Add R8	No Insulation	ton	$1.9845	15	6,299	0.012	62.9880	$125.00	1%	50%	95%	0.425	0
OffieChE3	Office	Chiller	Early	3	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton	ton	$0.3969	15	6,299	0.062	314.9400	$125.00	5%	75%	75%	2.126	1
OffieChE4	Office	Chiller	Early	4	Energy Recovery Units	No Energy Recovery	ton	$0.3572	15	6,299	0.249	1,259.8	$450.00	20%	75%	75%	2.362	1
OffieChE5	Office	Chiller	Early	5	Re-commissioning	economizer not functioning	ton	$0.3618	7	6,299	0.199	1,008	$364.67	16%	75%	75%	0.984	0
OffieChE6	Office	Chiller	Early	6	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$0.82	15	6,299	0.05	245	$200.00	4%	15%	95%	1.032	1
OffieChE7	Office	Chiller	Early	7	Adding window shade film	No shade film	q ft window are	$7.0453	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.036	0
OffieChE8	Office	Chiller	Early	8	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.216	0
OffieChE9	Office	Chiller	Early	9	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.19	20	6,299	0.05	189	$225.00	3%	75%	95%	0.941	0
OffieChN1	Office	Chiller	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	sq ft	$0.39	20	6,299	0.05	220	$87.00	4%	15%	95%	2.775	1
OffieChN2	Office	Chiller	New	2	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.216	0
OffieChN3	Office	Chiller	New	3	Adding reflective roof treatment	Std color roof	sq ft roof area	$4.50	20	6,299	0.05	10	$45.00	0%	100%	95%	0.970	0
OffieChN4	Office	Chiller	New	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$1.97	20	6,299	0.05	65	$127.43	1%	45%	95%	0.745	0
OffieChN5	Office	Chiller	New	5	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.3354	15	6,299	0.76	760	$255.00	12%	95%	95%	3.967	1
OffieChN6	Office	Chiller	New	6	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.1854	15	6,299	1.944	1,955	$362.50	31%	95%	95%	7.175	1
OffieChN7	Office	Chiller	New	7	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.0961	15	15,095	1.728	1,738	$167.00	12%	95%	95%	13.845	1
OffieChN8	Office	Chiller	New	8	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.3651	15	6,299	0.062	314.9400	$115.00	5%	95%	75%	2.311	1
OffieChN9	Office	Chiller	New	9	Energy Recovery Units	No Energy Recovery	ton	$0.1985	15	6,299	0.249	1,259.8	$250.00	20%	95%	75%	4.252	1
OffieChN10	Office	Chiller	New	10	Duct Insulation, Add R8	No Insulation	ton	$1.9845	15	6,299	0.012	62.9880	$125.00	1%	100%	95%	0.425	0
OffieChT1	Office	Chiller	Turnover	1	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.3881	15	6,299	0.76	760	$295.00	12%	95%	95%	3.429	1
OffieChT2	Office	Chiller	Turnover	2	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2366	15	6,299	1.944	1,955	$462.50	31%	95%	95%	5.624	1
OffieChT3	Office	Chiller	Turnover	3	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.3774	15	6,299	1.944	1,102	$416.00	18%	95%	95%	4.770	1
OffieChN11	Office	Chiller	New	11	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.3774	15	6,299	1.944	1,102	$416.00	18%	95%	95%	4.770	1
OffieChT5	Office	Chiller	Turnover	5	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.4033	15	6,299	0.062	314.9400	$127.00	5%	95%	75%	2.093	1
OffieChT4	Office	Chiller	Turnover	4	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1191	15	15,095	1.728	1,738	$207.00	12%	95%	95%	11.169	1
RestaChE1	Restaurant	Chiller	Early	1	Duct Sealing, down to 15%	Leakage of 29%	ton	$1.4086	15	6,744	0.013	67.4424	$95.00	1%	40%	$0.90	0.599	0
RestaChE2	Restaurant	Chiller	Early	2	Duct Insulation, Add R8	No Insulation	ton	$1.8534	15	6,744	0.013	67.4424	$125.00	1%	50%	95%	0.455	0
RestaChE3	Restaurant	Chiller	Early	3	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton	ton	$0.3707	15	6,744	0.067	337.2120	$125.00	5%	75%	75%	2.276	1
RestaChE4	Restaurant	Chiller	Early	4	Energy Recovery Units	No Energy Recovery	ton	$0.3336	15	6,744	0.266	1,348.8	$450.00	20%	75%	75%	2.529	1
RestaChE5	Restaurant	Chiller	Early	5	Re-commissioning	economizer not functioning	ton	$0.3379	7	6,744	0.213	1,079	$364.67	16%	75%	75%	1.053	1
RestaChE6	Restaurant	Chiller	Early	6	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$0.82	15	6,744	0.05	245	$200.00	4%	15%	95%	1.032	1
RestaChE7	Restaurant	Chiller	Early	7	Adding window shade film	No shade film	q ft window are	$7.0453	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.036	0
RestaChE8	Restaurant	Chiller	Early	8	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.216	0
RestaChE9	Restaurant	Chiller	Early	9	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.11	20	6,744	0.05	202	$225.00	3%	75%	95%	0.997	0
RestaChN1	Restaurant	Chiller	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	sq ft	$0.37	20	6,744	0.05	236	$87.00	4%	15%	95%	2.943	1
RestaChN2	Restaurant	Chiller	New	2	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.216	0
RestaChN3	Restaurant	Chiller	New	3	Adding reflective roof treatment	Std color roof	sq ft roof area	$4.50	20	6,744	0.05	10	$45.00	0%	100%	95%	0.970	0
RestaChN4	Restaurant	Chiller	New	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$1.84	20	6,744	0.05	69	$127.43	1%	45%	95%	0.779	0
RestaChN5	Restaurant	Chiller	New	5	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.3133	15	6,744	0.76	814	$255.00	12%	95%	95%	4.119	1
RestaChN6	Restaurant	Chiller	New	6	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.1732	15	6,744	1.944	2,093	$362.50	31%	95%	95%	7.451	1
RestaChN7	Restaurant	Chiller	New	7	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.0898	15	16,163	1.728	1,860	$167.00	12%	95%	95%	14.377	1
RestaChN8	Restaurant	Chiller	New	8	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.3410	15	6,744	0.067	337.2120	$115.00	5%	95%	75%	2.474	1
RestaChN9	Restaurant	Chiller	New	9	Energy Recovery Units	No Energy Recovery	ton	$0.1853	15	6,744	0.266	1,348.8	$250.00	20%	95%	75%	4.553	1
RestaChN10	Restaurant	Chiller	New	10	Duct Insulation, Add R8	No Insulation	ton	$1.8534	15	6,744	0.013	67.4424	$125.00	1%	100%	95%	0.455	0
RestaChT1	Restaurant	Chiller	Turnover	1	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.3624	15	6,744	0.76	814	$295.00	12%	95%	95%	3.561	1
RestaChT2	Restaurant	Chiller	Turnover	2	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2210	15	6,744	1.944	2,093	$462.50	31%	95%	95%	5.840	1
RestaChT3	Restaurant	Chiller	Turnover	3	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.3525	15	6,744	1.944	1,180	$416.00	18%	95%	95%	4.906	1
RestaChN11	Restaurant	Chiller	New	11	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.3525	15	6,744	1.944	1,180	$416.00	18%	95%	95%	4.906	1
RestaChT5	Restaurant	Chiller	Turnover	5	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.3766	15	6,744	0.067	337.2120	$127.00	5%	95%	75%	2.240	1
RestaChT4	Restaurant	Chiller	Turnover	4	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1113	15	16,163	1.728	1,860	$207.00	12%	95%	95%	11.599	1
RetaiChE1	Retail	Chiller	Early	1	Duct Sealing, down to 15%	Leakage of 29%	ton	$1.4368	15	6,612	0.013	66.1200	$95.00	1%	40%	$0.90	0.587	0
RetaiChE2	Retail	Chiller	Early	2	Duct Insulation, Add R8	No Insulation	ton	$1.8905	15	6,612	0.013	66.1200	$125.00	1%	50%	95%	0.446	0
RetaiChE3	Retail	Chiller	Early	3	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton	ton	$0.3781	15	6,612	0.065	330.6000	$125.00	5%	75%	75%	2.232	1
RetaiChE4	Retail	Chiller	Early	4	Energy Recovery Units	No Energy Recovery	ton	$0.3403	15	6,612	0.261	1,322.4	$450.00	20%	75%	75%	2.480	1
RetaiChE5	Retail	Chiller	Early	5	Re-commissioning	economizer not functioning	ton	$0.3447	7	6,612	0.209	1,058	$364.67	16%	75%	75%	1.033	1
RetaiChE6	Retail	Chiller	Early	6	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$0.82	15	6,612	0.05	245	$200.00	4%	15%	95%	1.032	1
RetaiChE7	Retail	Chiller	Early	7	Adding window shade film	No shade film	q ft window are	$7.0453	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.036	0
RetaiChE8	Retail	Chiller	Early	8	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.216	0
RetaiChE9	Retail	Chiller	Early	9	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.13	20	6,612	0.05	198	$225.00	3%	75%	95%	0.981	0
RetaiChN1	Retail	Chiller	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	sq ft	$0.38	20	6,612	0.05	231	$87.00	4%	15%	95%	2.893	1
RetaiChN2	Retail	Chiller	New	2	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.216	0
RetaiChN3	Retail	Chiller	New	3	Adding reflective roof treatment	Std color roof	sq ft roof area	$4.50	20	6,612	0.05	10	$45.00	0%	100%	95%	0.970	0
RetaiChN4	Retail	Chiller	New	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$1.88	20	6,612	0.05	68	$127.43	1%	45%	95%	0.769	0
RetaiChN5	Retail	Chiller	New	5	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.3195	15	6,612	0.76	798	$255.00	12%	95%	95%	4.074	1
RetaiChN6	Retail	Chiller	New	6	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.1767	15	6,612	1.944	2,052	$362.50	31%	95%	95%	7.369	1
RetaiChN7	Retail	Chiller	New	7	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.0916	15	15,846	1.728	1,824	$167.00	12%	95%	95%	14.219	1
RetaiChN8	Retail	Chiller	New	8	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.3479	15	6,612	0.065	330.6000	$115.00	5%	95%	75%	2.426	1
RetaiChN9	Retail	Chiller	New	9	Energy Recovery Units	No Energy Recovery	ton	$0.1891	15	6,612	0.261	1,322.4	$250.00	20%	95%	75%	4.463	1
RetaiChN10	Retail	Chiller	New	10	Duct Insulation, Add R8	No Insulation	ton	$1.8905	15	6,612	0.013	66.1200	$125.00	1%	100%	95%	0.446	0
RetaiChT1	Retail	Chiller	Turnover	1	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.3697	15	6,612	0.76	798	$295.00	12%	95%	95%	3.522	1
RetaiChT2	Retail	Chiller	Turnover	2	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2254	15	6,612	1.944	2,052	$462.50	31%	95%	95%	5.776	1
RetaiChT3	Retail	Chiller	Turnover	3	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.3595	15	6,612	1.944	1,157	$416.00	18%	95%	95%	4.866	1
RetaiChN11	Retail	Chiller	New	11	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.3595	15	6,612	1.944	1,157	$416.00	18%	95%	95%	4.866	1
RetaiChT5	Retail	Chiller	Turnover	5	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.3842	15	6,612	0.065	330.6000	$127.00	5%	95%	75%	2.197	1
RetaiChT4	Retail	Chiller	Turnover	4	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1135	15	15,846	1.728	1,824	$207.00	12%	95%	95%	11.471	1
WarehChE1	Warehouse	Chiller	Early	1	Duct Sealing, down to 15%	Leakage of 29%	ton	$1.8571	15	5,116	0.010	51.1560	$95.00	1%	40%	$0.90	0.454	0
WarehChE2	Warehouse	Chiller	Early	2	Duct Insulation, Add R8	No Insulation	ton	$2.4435	15	5,116	0.010	51.1560	$125.00	1%	50%	95%	0.345	0
WarehChE3	Warehouse	Chiller	Early	3	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton	ton	$0.4887	15	5,116	0.050	255.7800	$125.00	5%	75%	75%	1.727	1
WarehChE4	Warehouse	Chiller	Early	4	Energy Recovery Units	No Energy Recovery	ton	$0.4398	15	5,116	0.202	1,023.1	$450.00	20%	75%	75%	1.918	1
WarehChE5	Warehouse	Chiller	Early	5	Re-commissioning	economizer not functioning	ton	$0.4455	7	5,116	0.162	818	$364.67	16%	75%	75%	0.799	0
WarehChE6	Warehouse	Chiller	Early	6	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$0.82	15	5,116	0.05	245	$200.00	5%	15%	95%	1.032	1
WarehChE7	Warehouse	Chiller	Early	7	Adding window shade film	No shade film	q ft window are	$7.0453	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.036	0

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
WarehChE8	Warehouse	Chiller	Early	8	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.216	0
WarehChE9	Warehouse	Chiller	Early	9	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.47	20	5,116	0.05	153	$225.00	3%	75%	95%	0.793	0
WarehChN1	Warehouse	Chiller	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	sq ft	$0.49	20	5,116	0.05	179	$87.00	4%	15%	95%	2.328	1
WarehChN2	Warehouse	Chiller	New	2	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.216	0
WarehChN3	Warehouse	Chiller	New	3	Adding reflective roof treatment	Std color roof	sq ft roof area	$4.50	20	5,116	0.05	10	$45.00	0%	100%	95%	0.970	0
WarehChN4	Warehouse	Chiller	New	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$2.43	20	5,116	0.05	53	$127.43	1%	45%	95%	0.656	0
WarehChN5	Warehouse	Chiller	New	5	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.4130	15	5,116	0.76	617	$255.00	12%	95%	95%	3.562	1
WarehChN6	Warehouse	Chiller	New	6	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2283	15	5,116	1.944	1,588	$362.50	31%	95%	95%	6.443	1
WarehChN7	Warehouse	Chiller	New	7	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1183	15	12,260	1.728	1,411	$167.00	12%	95%	95%	12.431	1
WarehChN8	Warehouse	Chiller	New	8	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.4496	15	5,116	0.050	255.7800	$115.00	5%	95%	75%	1.877	1
WarehChN9	Warehouse	Chiller	New	9	Energy Recovery Units	No Energy Recovery	ton	$0.2444	15	5,116	0.202	1,023.1	$250.00	20%	95%	75%	3.453	1
WarehChN10	Warehouse	Chiller	New	10	Duct Insulation, Add R8	No Insulation	ton	$2.4435	15	5,116	0.010	51.1560	$125.00	1%	100%	95%	0.345	0
WarehChT1	Warehouse	Chiller	Turnover	1	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.4778	15	5,116	0.76	617	$295.00	12%	95%	95%	3.079	1
WarehChT2	Warehouse	Chiller	Turnover	2	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2913	15	5,116	1.944	1,588	$462.50	31%	95%	95%	5.050	1
WarehChT3	Warehouse	Chiller	Turnover	3	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.4647	15	5,116	1.944	895	$416.00	18%	95%	95%	4.410	1
WarehChN11	Warehouse	Chiller	New	11	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.4647	15	5,116	1.944	895	$416.00	18%	95%	95%	4.410	1
WarehChT5	Warehouse	Chiller	Turnover	5	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.4965	15	5,116	0.050	255.7800	$127.00	5%	95%	75%	1.699	1
WarehChT4	Warehouse	Chiller	Turnover	4	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1467	15	12,260	1.728	1,411	$207.00	12%	95%	95%	10.029	1
WarehHeT2	Warehouse	Heating	Turnover	2	7 day, two stage setback thermostat	Manual Thermostat - hp	ton	$0.10	10	3,761	0.008	564	$55.00	15%	100%	45%	4.571	1
GrocHeT2	Grocery	Heating	Turnover	2	7 day, two stage setback thermostat	Manual Thermostat - hp	ton	$0.08	10	4,374	0.010	656	$55.00	15%	100%	45%	5.317	1
HealtHeT2	Healthcare	Heating	Turnover	2	7 day, two stage setback thermostat	Manual Thermostat - hp	ton	$0.36	10	1,018	0.002	153	$55.00	15%	100%	45%	1.237	1
InstiHeT2	Institutional	Heating	Turnover	2	7 day, two stage setback thermostat	Manual Thermostat - hp	ton	$0.12	10	3,116	0.007	467	$55.00	15%	100%	45%	3.788	1
MiscHeT2	Misc	Heating	Turnover	2	7 day, two stage setback thermostat	Manual Thermostat - hp	ton	$0.10	10	3,624	0.008	544	$55.00	15%	100%	45%	4.405	1
OfficHeT2	Office	Heating	Turnover	2	7 day, two stage setback thermostat	Manual Thermostat - hp	ton	$0.13	10	2,795	0.006	419	$55.00	15%	100%	45%	3.397	1
RestaHeT2	Restaurant	Heating	Turnover	2	7 day, two stage setback thermostat	Manual Thermostat - hp	ton	$0.09	10	4,258	0.009	639	$55.00	15%	100%	45%	5.176	1
RetaiHeT2	Retail	Heating	Turnover	2	7 day, two stage setback thermostat	Manual Thermostat - hp	ton	$0.08	10	4,374	0.010	656	$55.00	15%	100%	45%	5.317	1
LodgiHeT2	Lodging	Heating	Turnover	2	7 day, two stage setback thermostat	Manual Thermostat - hp	ton	$0.07	10	5,299	0.012	795	$55.00	15%	100%	45%	6.441	1
OfficMoE1	Office	Motors	Early	1	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.235	1
OfficMoT23	Office	Motors	Turnover	23	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.235	1
RestaMoE1	Restaurant	Motors	Early	1	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.235	1
InstiMoT9	Institutional	Motors	Turnover	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5713	15	84274	6.136	22754.0	$13,000.00	27%	90.0%	80%	1.570	1
RestaMoT23	Restaurant	Motors	Turnover	23	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.235	1
RetaiMoE1	Retail	Motors	Early	1	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.235	1
RetaiMoT23	Retail	Motors	Turnover	23	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.235	1
WarehMoE1	Warehouse	Motors	Early	1	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.235	1
WarehMoT23	Warehouse	Motors	Turnover	23	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.235	1

`	New Commerical Segment	New End Use	Vintage	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	PJM Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
HealtChE1	Healthcare	Chiller	Early	Duct Sealing, down to 15%	Leakage of 29%	ton	$1.2975	15	7,322	0.014	73.2192	$95.00	1%	40%	$0.90	0.61019782	0
HealtChE2	Healthcare	Chiller	Early	Duct Insulation, Add R8	No Insulation	ton	$1.7072	15	7,322	0.014	73.2192	$125.00	1%	50%	95%	0.463750343	0
HealtChE3	Healthcare	Chiller	Early	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton	ton	$0.3414	15	7,322	0.072	366.0960	$125.00	5%	75%	75%	2.318751714	1
HealtChE4	Healthcare	Chiller	Early	Energy Recovery Units	No Energy Recovery	ton	$0.3073	15	7,322	0.289	1,464.4	$450.00	20%	75%	75%	2.576390794	1
HealtChE5	Healthcare	Chiller	Early	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.3113	7	7,322	0.231	1,172	$364.67	16%	75%	75%	1.042183918	1
HealtChE6	Healthcare	Chiller	Early	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$0.82	15	7,322	0.05	245	$200.00	3%	15%	95%	0.968658422	0
HealtChE7	Healthcare	Chiller	Early	Adding window shade film	No shade film	sq ft window area	$7.0453	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.032529568	0
HealtChE8	Healthcare	Chiller	Early	Adding window shade screen	No shade screen	sq ft window area	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.202998871	0
HealtChE9	Healthcare	Chiller	Early	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.02	20	7,322	0.05	220	$225.00	3%	75%	95%	1.006325827	1
HealtChN1	Healthcare	Chiller	New	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	sq ft	$0.34	20	7,322	0.05	256	$87.00	4%	15%	95%	2.984316179	1
HealtChN2	Healthcare	Chiller	New	Adding window shade screen	No shade screen	sq ft window area	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.202998871	0
HealtChN3	Healthcare	Chiller	New	Adding reflective roof treatment	Std color roof	sq ft roof area	$4.50	20	7,322	0.05	10	$45.00	0%	100%	95%	0.804929318	0
HealtChN4	Healthcare	Chiller	New	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$1.70	20	7,322	0.05	75	$127.43	1%	45%	95%	0.748014249	0
HealtChN5	Healthcare	Chiller	New	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2886	15	7,322	0.76	884	$255.00	12%	95%	95%	3.824197608	1
HealtChN6	Healthcare	Chiller	New	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.1595	15	7,322	1.944	2,272	$362.50	31%	95%	95%	6.917464837	1
HealtChN7	Healthcare	Chiller	New	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.0827	15	17,547	1.728	2,020	$167.00	12%	95%	95%	13.34707121	1
HealtChN8	Healthcare	Chiller	New	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.3141	15	7,322	0.072	366.0960	$115.00	5%	95%	75%	2.520382298	1
HealtChN9	Healthcare	Chiller	New	Energy Recovery Units	No Energy Recovery	ton	$0.1707	15	7,322	0.289	1,464.4	$250.00	20%	95%	75%	4.637503429	1
HealtChN10	Healthcare	Chiller	New	Duct Insulation, Add R8	No Insulation	ton	$1.7072	15	7,322	0.014	73.2192	$125.00	1%	100%	95%	0.463750343	0
HealtChT1	Healthcare	Chiller	Turnover	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.3338	15	7,322	0.76	884	$295.00	12%	95%	95%	3.305662339	1
HealtChT2	Healthcare	Chiller	Turnover	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2035	15	7,322	1.944	2,272	$462.50	31%	95%	95%	5.421796764	1
HealtChT3	Healthcare	Chiller	Turnover	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.3247	15	7,322	1.944	1,281	$416.00	18%	95%	95%	4.364625074	1
HealtChN11	Healthcare	Chiller	New	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.3247	15	7,322	1.944	1,281	$416.00	18%	95%	95%	4.364625074	1
HealtChT5	Healthcare	Chiller	Turnover	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.3469	15	7,322	0.072	366.0960	$127.00	5%	95%	75%	2.282235939	1
HealtChT4	Healthcare	Chiller	Turnover	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1025	15	17,547	1.728	2,020	$207.00	12%	95%	95%	10.76792701	1
OfficChE1	Office	Chiller	Early	Duct Sealing, down to 15%	Leakage of 29%	ton	$2.1261	15	4,468	0.009	44.6832	$95.00	1%	40%	$0.90	0.37238308	0
GroceFlT6	Grocery	Fluorescent	Turnover	LED Retrofit Tube	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$1.0146	6	163	0.007	64	$65.00	39%	40%	95%	0.25776312	0
OfficChE2	Office	Chiller	Early	Duct Insulation, Add R8	No Insulation	ton	$2.7975	15	4,468	0.009	44.6832	$125.00	1%	50%	95%	0.283011141	0
OfficChE3	Office	Chiller	Early	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton	ton	$0.5595	15	4,468	0.044	223.4160	$125.00	5%	75%	75%	1.415055704	1
LodgiInE6	Lodging	Incandescent	Early	Hotel Occupancy Sensors	No prior control	Per Room	$0.7447	10	240	0.019	168	$125.00	70%	90%	95%	0.620907651	0
OfficChE4	Office	Chiller	Early	Energy Recovery Units	No Energy Recovery	ton	$0.5035	15	4,468	0.176	893.7	$450.00	20%	75%	75%	1.572284116	1
OfficChE5	Office	Chiller	Early	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.5101	7	4,468	0.141	715	$364.67	16%	75%	75%	0.636009577	0
HealtHeE1	Healthcare	Heating	Early	Re-commissioning	Current Controls not working properly, setpoints not optimized,	sq ft	$0.2710	7	125,500	0.297	20,080	$5,441.68	16%	95%	75%	1.034942818	1
HealtHeE2	Healthcare	Heating	Early	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$4.44	20	314	0.05	45	$200.00	14%	10%	95%	0.342229633	0
HealtHeE3	Healthcare	Heating	Early	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.67	20	314	0.05	75	$125.00	24%	10%	95%	0.767813348	0
HealtHeE4	Healthcare	Heating	Early	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.75	20	314	0.05	34	$127.43	11%	10%	95%	0.457908822	0
HealtHeE5	Healthcare	Heating	Early	Humidification with High pressure, Ultrasonic devices	Electric Resistive Elements	unit	$0.1893	10	2,794	0.039	2,641	$500.00	95%	100%	95%	2.264366625	1
HealtHeN1	Healthcare	Heating	New	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5 - Electric Heat	sq ft	$1.93	20	314	0.05	45	$87.00	14%	10%	95%	0.786734788	0
WarehHIE1	Warehouse	HID	Early	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.5670	10	1,268	0.043	378	$214.50	30%	85%	80%	0.815460938	0
WarehHIE2	Warehouse	HID	Early	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.4472	10	1,856	0.077	671	$300.00	36%	85%	80%	1.033869961	1
WarehHIE3	Warehouse	HID	Early	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.5150	10	1,268	0.052	456	$235.00	36%	85%	80%	0.897794053	0
WarehHIE4	Warehouse	HID	Early	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.5081	10	1,856	0.074	640	$325.00	34%	85%	80%	0.909953525	0
WarehHIT5	Warehouse	HID	Turnover	Ceramic Metal Halide lamp	Replace non-ceramic lamp lamp 400 W	Lamp	$0.1282	4	1,560	0.031	273	$35.00	18%	85%	55%	1.309566203	1
WarehHIE8	Warehouse	HID	Early	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2465	10	5,070	0.175	1,521	$375.00	30%	85%	85%	1.875392022	1
WarehHIE9	Warehouse	HID	Early	Photocell dimming control	No prior dimming control	Photocell	$0.2170	10	5,070	0.291	2,535	$550.00	50%	85%	85%	2.131127298	1
WarehHIE10	Warehouse	HID	Early	Central lighting control system	Replace manual switches or no control	Control Point	$0.1972	10	5,070	0.058	507	$100.00	10%	85%	45%	2.344240027	1
WarehHIE7	Warehouse	HID	Early	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$1.2166	15	1,268	0.065	566	$688.00	45%	85%	80%	0.623810512	0
WarehHIT1	Warehouse	HID	Turnover	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.2921	10	1,268	0.043	378	$110.50	30%	85%	80%	1.582953586	1
WarehHIT2	Warehouse	HID	Turnover	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.3354	10	1,856	0.077	671	$225.00	36%	85%	80%	1.378493281	1
WarehHIT3	Warehouse	HID	Turnover	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.3178	10	1,268	0.052	456	$145.00	36%	85%	80%	1.455045534	1
WarehHIT4	Warehouse	HID	Turnover	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.4065	10	1,856	0.074	640	$260.00	34%	85%	80%	1.137441907	1
WarehHIT6	Warehouse	HID	Turnover	Multi Lamp Hard Wired CFL	Replace HID Fixure Drawing 400 W	Fixture	$0.5140	10	1,856	0.095	827	$425.00	45%	85%	55%	0.899509296	0
WarehHIT7	Warehouse	HID	Turnover	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.6631	15	1,268	0.065	566	$375.00	45%	85%	80%	1.144484353	1
OfficChE6	Office	Chiller	Early	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$0.82	15	4,468	0.05	245	$200.00	5%	15%	95%	0.968658422	0
OfficChE7	Office	Chiller	Early	Adding window shade film	No shade film	sq ft window area	$7.0453	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.032529568	0
GroceInN1	Grocery	Incandescent	New	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0572	15	9,629	0.111	963	$55.11	10%	95%	100%	13.2602325	1
HealtInN1	Healthcare	Incandescent	New	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0842	15	49,948	0.574	4,995	$420.44	10%	95%	100%	9.016229516	1
OfficChE8	Office	Chiller	Early	Adding window shade screen	No shade screen	sq ft window area	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.202998871	0
OfficChE9	Office	Chiller	Early	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.68	20	4,468	0.05	134	$225.00	3%	75%	95%	0.661154159	0
OfficChN1	Office	Chiller	New	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	sq ft	$0.56	20	4,468	0.05	156	$87.00	4%	15%	95%	1.942850548	1
OfficChN2	Office	Chiller	New	Adding window shade screen	No shade screen	sq ft window area	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.202998871	0
OfficChN3	Office	Chiller	New	Adding reflective roof treatment	Std color roof	sq ft roof area	$4.50	20	4,468	0.05	10	$45.00	0%	100%	95%	0.804929318	0
OfficChN4	Office	Chiller	New	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$2.78	20	4,468	0.05	46	$127.43	1%	45%	95%	0.539523184	0
OfficChN5	Office	Chiller	New	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.4729	15	4,468	0.76	539	$255.00	12%	95%	95%	2.881227882	1
OfficChN6	Office	Chiller	New	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2614	15	4,468	1.944	1,387	$362.50	31%	95%	95%	5.211758021	1
OfficChN7	Office	Chiller	New	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1355	15	10,709	1.728	1,233	$167.00	12%	95%	95%	10.0559536	1
OfficChN8	Office	Chiller	New	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.5147	15	4,468	0.044	223.4160	$115.00	5%	95%	75%	1.538104026	1
OfficChN9	Office	Chiller	New	Energy Recovery Units	No Energy Recovery	ton	$0.2797	15	4,468	0.176	893.7	$250.00	20%	95%	75%	2.830111408	1
OfficChN10	Office	Chiller	New	Duct Insulation, Add R8	No Insulation	ton	$2.7975	15	4,468	0.009	44.6832	$125.00	1%	100%	95%	0.283011141	0
OfficChT1	Office	Chiller	Turnover	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.5470	15	4,468	0.76	539	$295.00	12%	95%	95%	2.490552915	1
OfficChT2	Office	Chiller	Turnover	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.3335	15	4,468	1.944	1,387	$462.50	31%	95%	95%	4.084891422	1
OfficChT3	Office	Chiller	Turnover	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.5320	15	4,468	1.944	782	$416.00	18%	95%	95%	3.526492727	1
OfficChN11	Office	Chiller	New	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.5320	15	4,468	1.944	782	$416.00	18%	95%	95%	3.526492727	1
OfficChT5	Office	Chiller	Turnover	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.5684	15	4,468	0.044	223.4160	$127.00	5%	95%	75%	1.392771362	1
OfficChT4	Office	Chiller	Turnover	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1679	15	10,709	1.728	1,233	$207.00	12%	95%	95%	8.112774161	1
AllCoN1	All	Cooking	New	Commercial Hot Food Holding Cabinets (Energy Star)	Standard Cabinet	Each	$0.94	12	23,411	0.187	1,592	$1,500.00	7%	40%	95%	0.628736815	0
AllCoN2	All	Cooking	New	High Efficiency Fryers (Energy Star)	Standard Fryer	Each	$5.45	12	18,196	0.027	233	$1,271.00	1%	40%	95%	0.108599408	0
AllCoN3	All	Cooking	New	High Efficiency Griddle	Standard Griddle	Each	$0.66	12	17,056	0.304	2,595	$1,700.00	15%	40%	95%	0.904285417	0
AllCoN4	All	Cooking	New	High Efficiency Induction Cooking	Standard Cooking	Each	$1.04	12	29,376	0.248	2,118	$2,213.00	7%	40%	95%	0.566972022	0
AllCoN5	All	Cooking	New	Electric Steam cooker	Standard Cooker	Each	$0.40	12	46,813	0.439	3,745	$1,500.00	8%	40%	95%	1.479032269	1
AllCoN6	All	Cooking	New	Electric convection oven	Standard Oven	Each	$1.20	15	12,193	0.265	2,262	$2,713.00	19%	40%	95%	0.633790837	0
AllCoN7	All	Cooking	New	Electric combination oven	Standard Oven	Each	$1.12	12	39,353	1.769	15,095	$16,884.00	38%	40%	95%	0.529632784	0
AllCoT1	All	Cooking	Turnover	Commercial Hot Food Holding Cabinets (Energy Star)	Standard Cabinet	Each	$0.94	12	23,411	0.187	1,592	$1,500.00	7%	40%	95%	0.628736815	0
AllCoT2	All	Cooking	Turnover	High Efficiency Fryers (Energy Star)	Standard Fryer	Each	$5.45	12	18,196	0.027	233	$1,271.00	1%	40%	95%	0.108599408	0
AllCoT3	All	Cooking	Turnover	High Efficiency Griddle	Standard Griddle	Each	$0.66	12	17,056	0.304	2,595	$1,700.00	15%	40%	95%	0.904285417	0
AllCoT4	All	Cooking	Turnover	High Efficiency Induction Cooking	Standard Cooking	Each	$1.04	12	29,376	0.248	2,118	$2,213.00	7%	40%	95%	0.566972022	0
AllCoT5	All	Cooking	Turnover	Electric Steam cooker	Standard Cooker	Each	$0.40	12	46,813	0.439	3,745	$1,500.00	8%	40%	95%	1.479032269	1
AllCoT6	All	Cooking	Turnover	Electric convection oven	Standard Oven	Each	$1.20	15	12,193	0.265	2,262	$2,713.00	19%	40%	95%	0.633790837	0
AllCoT7	All	Cooking	Turnover	Electric combination oven	Standard Oven	Each	$1.12	12	39,353	1.769	15,095	$16,884.00	38%	40%	95%	0.529632784	0
OfficHE1	Office	Fluorescent	Early	Premium Efficiency T8 Lighting Replacement (32W lamps with low	Replace (E) T12 Lamp - Bundle	Fixture	$0.5712	14	394	0.011	97	$55.38	25%	95%	41%	1.236529983	1
OfficHE2	Office	Fluorescent	Early	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2641	14	1,578	0.054	473	$125.00	30%	95%	80%	2.674561731	1
OfficHE3	Office	Fluorescent	Early	Photocell dimming control	No prior dimming control	Photocell	$0.2852	9	1,578	0.091	789	$225.00	50%	95%	95%	1.374601349	1
OfficHN1	Office	Fluorescent	New	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1781	15	20,340	0.234	2,034	$362.18	10%	95%	100%	4.262217589	1
OfficHN2	Office	Fluorescent	New	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.3561	15	20,340	0.584	5,085	$1,810.90	25%	75%	100%	2.131108795	1
OfficHN4	Office	Fluorescent	New	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1056	14	1,578	0.054	473	$50.00	30%	95%	15%	6.686404328	1
OfficHN3	Office	Fluorescent	New	Photocell dimming control	No prior dimming control	Photocell	$0.1901	9	1,578	0.091	789	$150.00	50%	95%	75%	2.061902023	1
OfficHT2	Office	Fluorescent	Turnover	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1056	14	1,578	0.054	473	$50.00	30%	95%	80%	6.686404328	1
OfficHT3	Office	Fluorescent	Turnover	Photocell dimming control	No prior dimming control	Photocell	$0.1901	9	1,578	0.091	789	$150.00	50%	95%	95%	2.061902023	1
OfficHT6	Office	Fluorescent	Turnover	LED Retrofit Tube	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$2.1044	14	79	0.004	31	$65.00	39%	40%	95%	0.335650854	0

`	New Commerical Segment	New End Use	Vintage	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	PJM Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
OfficHT1	Office	Fluorescent	Turnover	Premium Efficiency T8 Lighting Replacement (28W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.1348	14	79	0.002	17	$2.32	22%	90%	95%	5.241198561	1
OfficHT4	Office	Fluorescent	Turnover	Premium Efficiency T8 Lighting Replacement (25W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.2053	14	79	0.001	10	$2.02	13%	60%	95%	3.44024382	1
OfficHT5	Office	Fluorescent	Turnover	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.0637	11	281	0.005	40	$2.55	14%	75%	95%	8.302092031	1
OfficHE4	Office	Fluorescent	Early	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.8726	11	281	0.005	40	$35.00	14%	75%	95%	0.605870255	0
OfficHeE1	Office	Heating	Early	Re-commissioning	Current Controls not working properly, setpoints not optimized,	sq ft	$0.2710	7	125,500	0.297	20,080	$5,441.68	16%	95%	75%	1.034942818	1
OfficHeE2	Office	Heating	Early	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$4.44	20	865	0.05	45	$200.00	5%	10%	95%	0.342229633	0
OfficHeE3	Office	Heating	Early	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.67	20	865	0.05	75	$125.00	9%	10%	95%	0.767813348	0
OfficHeE4	Office	Heating	Early	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.75	20	865	0.05	34	$127.43	4%	10%	95%	0.457908822	0
OfficHeE5	Office	Heating	Early	Humidification with High pressure, Ultrasonic devices	Electric Resistive Elements	unit	$0.1893	10	2,794	0.039	2,641	$500.00	95%	100%	95%	2.264366625	1
OfficHeN1	Office	Heating	New	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5 - Electric Heat	sq ft	$1.93	20	865	0.05	45	$87.00	5%	10%	95%	0.786734788	0
OfficHeN2	Office	Heating	New	Ground Source HP Open - Water	Air Source Heat Pump	ton	$14.31	15	865	0.23	52	$ 750.0	6%	20%	95%	0.197590252	0
OfficHen3	Office	Heating	new	Ground Source HP Closed	Air Source Heat Pump	ton	$14.31	15	865	0.001	52	$750.00	6%	100%	95%	0.049867019	0
OfficHeN4	Office	Heating	New	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$2.12	15	865	0.001	52	$110.89	6%	100%	95%	0.337273553	0
OfficHeT1	Office	Heating	Turnover	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$2.12	15	865	0.001	52	$110.89	6%	100%	95%	0.337273553	0
OfficHeT2	Office	Heating	Turnover	7 day, two stage setback thermostat	Manual Thermostat - hp	ton	$0.12	10	2,950	0.007	442	$55.00	15%	100%	45%	3.448485624	1
OfficHIN1	Office	HID	New	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1781	15	621	0.007	62	$11.06	10%	95%	100%	4.262217589	1
OfficHIN2	Office	HID	New	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.3561	15	621	0.018	155	$55.32	25%	85%	100%	2.131108795	1
OfficHIE1	Office	HID	Early	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.7875	10	913	0.031	272	$214.50	30%	85%	80%	0.587131876	0
OfficHIE2	Office	HID	Early	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.6211	10	1,337	0.056	483	$300.00	36%	85%	80%	0.744386372	0
OfficHIE3	Office	HID	Early	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.7153	10	913	0.038	329	$235.00	36%	85%	80%	0.646411718	0
OfficHIE4	Office	HID	Early	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.7057	10	1,337	0.053	461	$325.00	34%	85%	80%	0.655166538	0
OfficHIT5	Office	HID	Turnover	Ceramic Metal Halide lamp	Replace non-ceramic lamp lamp 400 W	Lamp	$0.1781	5	1,123	0.023	197	$35.00	18%	85%	55%	1.208997618	1
OfficHIE7	Office	HID	Early	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$1.6898	15	913	0.047	407	$688.00	45%	85%	80%	0.449143569	0
OfficHIT1	Office	HID	Turnover	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.4057	10	913	0.031	272	$110.50	30%	85%	80%	1.139726582	1
HealtPaE1	Healthcare	Packaged DX	Early	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$3.13	20	1,127	0.05	64	$200.00	6%	15%	95%	0.428582596	0
HealtPaE2	Healthcare	Packaged DX	Early	Adding window shade film	No shade film	sq ft window area	$7.05	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.030776812	0
HealtPaE3	Healthcare	Packaged DX	Early	Adding window shade screen	No shade screen	sq ft window area	$3.90	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.195291286	0
HealtPaE4	Healthcare	Packaged DX	Early	Windows U<0.40, .55 SHGC	Existing window specifications	sq ft window area	$1.40	30	2	0.000	0	$0.28	13%	50%	95%	0.906343104	0
HealtPaE5	Healthcare	Packaged DX	Early	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$2.99	20	1,127	0.05	75	$225.00	7%	95%	95%	0.426281783	0
HealtPaE7	Healthcare	Packaged DX	Early	Automated control system	Baseline DX	ton	$0.42	10	1,191	0.007	60	$25.00	5%	100%	65%	1.106610421	1
HealtPaE8	Healthcare	Packaged DX	Early	Duct Sealing, down to 15%	Leakage of 29%	ton	$7.92	15	1,127	0.05	12	$95.00	1%	45%	80%	0.327748911	0
HealtPaE9	Healthcare	Packaged DX	Early	Hotel Keycard Sensors	No prior controls	Room Controlled	$0.29	10	1,012	0.041	342	$100.00	34%	95%	80%	1.588911636	1
HealtPaE10	Healthcare	Packaged DX	Early	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	ton	$0.55	1	1,226	0.05	64	$35.00	5%	100%	45%	0.089753801	0
HealtPaE11	Healthcare	Packaged DX	Early	7 day, two stage setback thermostat	Manual Thermostat	ton	$0.44	10	1,127	0.015	125	$55.00	11%	100%	45%	1.055895558	1
HealtPaE13	Healthcare	Packaged DX	Early	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.31	7	1,127	0.05	180	$55.15	16%	95%	75%	1.128540654	1
HealtPaN1	Healthcare	Packaged DX	New	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	ton	$1.36	20	1,127	0.05	64	$87.00	6%	100%	95%	0.985247348	0
HealtPaN2	Healthcare	Packaged DX	New	Adding reflective roof treatment	Std color roof	ton	$4.50	20	1,127	0.05	10	$45.00	1%	100%	95%	0.80668581	0
HealtPaN3	Healthcare	Packaged DX	New	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$1.66	20	1,127	0.05	75	$125.00	7%	100%	95%	0.767307209	0
HealtPaN4	Healthcare	Packaged DX	New	Green Roof (New construction or roof replacement)	Std Roof	ton	$1.70	20	1,127	0.05	75	$127.43	7%	45%	95%	0.752675203	0
HealtPaN5	Healthcare	Packaged DX	New	Duct Insulation, Add R8	No Insulation	ton	$10.42	20	1,127	0.05	12	$125.00	1%	100%	95%	0.305048568	0
HealtPaN6	Healthcare	Packaged DX	New	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$1.30	20	971	0.04	69	$90.40	7%	100%	95%	0.979374415	0
HealtPaN7	Healthcare	Packaged DX	New	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$1.40	20	971	0.08	129	$180.81	13%	100%	95%	0.914032233	0
HealtPaN8	Healthcare	Packaged DX	New	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$1.49	20	971	0.12	182	$271.21	19%	100%	95%	0.856921016	0
HealtPaN9	Healthcare	Packaged DX	New	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$0.73	20	1,127	0.05	75	$55.00	7%	100%	95%	1.743880019	1
HealtPaN10	Healthcare	Packaged DX	New	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$0.73	20	1,148	0.06	96	$70.00	8%	100%	95%	1.743880019	1
HealtPaN11	Healthcare	Packaged DX	New	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.23	20	1,262	0.06	94	$115.13	7%	100%	95%	1.036731513	1
HealtPaN12	Healthcare	Packaged DX	New	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$1.54	20	1,301	0.04	64	$98.39	5%	100%	95%	0.827629021	0
HealtPaN13	Healthcare	Packaged DX	New	Ground Source HP Open - Water	Air Source Heat Pump	ton	$2.04	15	1,148	0.23	368	$ 750.0	32%	20%	95%	0.494547136	0
HealtPaN14	Healthcare	Packaged DX	New	Ground Source HP Closed	Air Source Heat Pump	ton	$3.65	15	1,148	0.025	206	$750.00	18%	100%	95%	0.208741116	0
HealtPaN15	Healthcare	Packaged DX	New	Air-side Economizer	No Economizer	ton	$1.01	15	1,127	0.020	169	$170.00	15%	75%	45%	0.75749509	0
HealtPaN16	Healthcare	Packaged DX	New	Energy Recovery Units	No Energy Recovery	ton	$0.79	15	1,127	0.027	225	$179.00	20%	100%	95%	0.959211659	0
HealtPaN17	Healthcare	Packaged DX	New	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$2.07	15	1,191	0.006	54	$110.89	5%	100%	95%	0.368471824	0
HealtPaT1	Healthcare	Packaged DX	Turnover	Duct Insulation, Add R8	No Insulation	ton	$10.42	15	1,127	0.05	12	$125.00	1%	100%	95%	0.249089173	0
HealtPaT2	Healthcare	Packaged DX	Turnover	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$1.30	20	971	0.04	69	$90.40	7%	100%	95%	0.979374415	0
HealtPaT3	Healthcare	Packaged DX	Turnover	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$1.40	20	971	0.08	129	$180.81	13%	100%	95%	0.914032233	0
HealtPaT4	Healthcare	Packaged DX	Turnover	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$1.49	20	971	0.12	182	$271.21	19%	100%	95%	0.856921016	0
HealtPaT5	Healthcare	Packaged DX	Turnover	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$0.73	20	1,127	0.05	75	$55.00	7%	100%	95%	1.743880019	1
HealtPaT6	Healthcare	Packaged DX	Turnover	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$0.73	20	1,148	0.06	96	$70.00	8%	100%	95%	1.743880019	1
HealtPaT7	Healthcare	Packaged DX	Turnover	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.23	20	1,262	0.06	94	$115.13	7%	100%	95%	1.036731513	1
HealtPaT8	Healthcare	Packaged DX	Turnover	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$1.54	20	1,301	0.04	64	$98.39	5%	100%	95%	0.827629021	0
HealtPaT9	Healthcare	Packaged DX	Turnover	Ground Source HP Open - Water	Air Source Heat Pump	ton	$2.04	15	1,148	0.23	368	$ 750.0	32%	5%	95%	0.494547136	0
HealtPaT10	Healthcare	Packaged DX	Turnover	Ground Source HP Closed	Air Source Heat Pump	ton	$3.65	15	1,148	0.025	206	$750.00	18%	100%	95%	0.208741116	0
HealtPaT11	Healthcare	Packaged DX	Turnover	Air-side Economizer	No Economizer	ton	$1.01	15	1,127	0.020	169	$170.00	15%	75%	45%	0.75749509	0
HealtPaT12	Healthcare	Packaged DX	Turnover	Energy Recovery Units	No Energy Recovery	ton	$0.79	15	1,127	0.027	225	$179.00	20%	100%	95%	0.959211659	0
HealtPaT13	Healthcare	Packaged DX	Turnover	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$2.07	15	1,191	0.006	54	$110.89	5%	100%	95%	0.368471824	0
OfficHIT2	Office	HID	Turnover	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.4659	10	1,337	0.056	483	$225.00	36%	85%	80%	0.992515162	0
OfficHIT3	Office	HID	Turnover	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.4414	10	913	0.038	329	$145.00	36%	85%	80%	1.047632785	1
OfficHIT4	Office	HID	Turnover	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.5646	10	1,337	0.053	461	$260.00	34%	85%	80%	0.818958173	0
OfficHIT6	Office	HID	Turnover	Multi Lamp Hard Wired CFL	Replace HID Fixure Drawing 400 W	Fixture	$0.7139	10	1,337	0.068	595	$425.00	45%	85%	55%	0.647646693	0
OfficHIT7	Office	HID	Turnover	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.9210	15	913	0.047	407	$375.00	45%	85%	80%	0.824028734	0
OfficHIE8	Office	HID	Early	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.3424	10	3,650	0.126	1,095	$375.00	30%	85%	85%	1.350282256	1
OfficHIE9	Office	HID	Early	Photocell dimming control	No prior dimming control	Photocell	$0.3013	10	3,650	0.210	1,825	$550.00	50%	85%	85%	1.534411654	1
OfficHIE10	Office	HID	Early	Central lighting control system	Replace manual switches or no control	Control Point	$0.2739	10	3,650	0.042	365	$100.00	10%	85%	45%	1.68785282	1
OfficHIT8	Office	HID	Turnover	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2511	10	3,650	0.126	1,095	$275.00	30%	85%	85%	1.841293985	1
OfficHIT9	Office	HID	Turnover	Photocell dimming control	No prior dimming control	Photocell	$0.3013	10	3,650	0.210	1,825	$550.00	50%	85%	85%	1.534411654	1
OfficHIT10	Office	HID	Turnover	Central lighting control system	Replace manual switches or no control	Control Point	$0.2055	10	3,650	0.042	365	$75.00	10%	85%	45%	2.250470426	1
OfficHIN8	Office	HID	New	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2473	10	3,370	0.116	1,011	$250.00	30%	85%	85%	1.869621585	1
OfficHIN9	Office	HID	New	Photocell dimming control	No prior dimming control	Photocell	$0.2671	10	3,370	0.194	1,685	$450.00	50%	85%	85%	1.731131097	1
OfficHIN10	Office	HID	New	Central lighting control system	Replace manual switches or no control	Control Point	$0.1929	10	3,370	0.039	337	$65.00	10%	25%	45%	2.39695075	1
OfficInE2	Office	Incandescent	Early	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1159	14	3,594	0.124	1,078	$125.00	30%	95%	80%	6.092978407	1
OfficInE3	Office	Incandescent	Early	Photocell dimming control	No prior dimming control	Photocell	$0.1252	9	3,594	0.207	1,797	$225.00	50%	95%	95%	3.131509824	1
OfficInN1	Office	Incandescent	New	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1781	15	2,727	0.031	273	$48.56	10%	95%	100%	4.262217589	1
OfficInN2	Office	Incandescent	New	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.3561	15	2,727	0.078	682	$242.78	25%	75%	100%	2.131108795	1
OfficInN3	Office	Incandescent	New	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0464	14	3,594	0.124	1,078	$50.00	30%	95%	15%	15.23244602	1
OfficInN4	Office	Incandescent	New	Photocell dimming control	No prior dimming control	Photocell	$0.0835	9	3,594	0.207	1,797	$150.00	50%	95%	95%	4.697264737	1
OfficInT2	Office	Incandescent	Turnover	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1159	14	3,594	0.124	1,078	$125.00	30%	95%	80%	6.092978407	1
OfficInT3	Office	Incandescent	Turnover	Photocell dimming control	No prior dimming control	Photocell	$0.1252	9	3,594	0.207	1,797	$225.00	50%	95%	95%	3.131509824	1
OfficInT1	Office	Incandescent	Turnover	CFL Lamp - 21 Watt	EISA - 75 Watt equivalent - 53W	Lamp	$0.0334	5	149	0.010	90	$3.00	60%	75%	50%	6.447987294	1
OfficInT4	Office	Incandescent	Turnover	LED Lamp - 12 Watt	EISA - 60 Watt equivalent - 43W	Lamp	$0.2756	5	121	0.010	87	$23.99	72%	75%	50%	0.781136435	0
OfficInT5	Office	Incandescent	Turnover	LED Lamp PAR - 12 Watt	Halogen PAR - 45 W	Lamp	$0.3958	5	126	0.010	87	$34.45	69%	75%	90%	0.543961192	0
AllLaN1	All	Large Appliances	New	EnergyStar vending machine	Standard vending machine	machine	$0.2672	15	3,619	0.140	1,310	$350.00	36%	100%	50%	2.816338569	1
AllLaN2	All	Large Appliances	New	Beverage machine control	Vending machine with no sensor	machine	$0.1021	5	3,619	0.178	1,665	$170.00	46%	100%	50%	2.070599809	1
AllLaN3	All	Large Appliances	New	Other cold product control	Vending machine with no sensor	machine	$0.1111	5	3,504	0.172	1,612	$179.00	46%	100%	50%	1.903705442	1
AllLaN4	All	Large Appliances	New	Non-cooled snack control	Vending machine with no sensor	machine	$0.4671	5	745	0.037	343	$160.00	46%	100%	50%	0.452576223	0
AllLaN5	All	Large Appliances	New	EnergyStar dishwasher	Std Dishwasher	dishwasher	$0.4015	12	250	0.015	137	$55.00	55%	100%	50%	1.45854493	1
AllLaN6	All	Large Appliances	New	EnergyStar refrigerator	Std Refrigerator	refrigerator	$0.3000	12	750	0.011	100	$30.00	13%	100%	50%	1.951824115	1
AllLaN7	All	Large Appliances	New	Low-temperature dish machine	High temp dish machine with booster heater	removed kW	$0.0634	15	17,451	0.894	8,362	$530.00	48%	100%	50%	11.87359454	1
AllLaN8	All	Large Appliances	New	High-efficiency washer	Standard washer, electric hot water	washer	$0.4380	10	2,262	0.102	959	$420.00	42%	100%	50%	1.043665122	1
AllLaN9	All	Large Appliances	New	High-efficiency coin-op washer w/o Electric Water Heat	Coin-op wash, w/out electric hot water	washer	$1.7872	10	1,180	0.025	235	$420.00	20%	100%	50%	0.255746928	0

`	New Commerical Segment	New End Use	Vintage	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	PJM Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
AllLaN10	All	Large Appliances	New	High-efficiency coin-op washer w/ Electric water heat	Coin-op wash, electric hot water	washer	$0.4380	10	2,262	0.102	959	$420.00	42%	100%	50%	1.043665122	1
AllLaT1	All	Large Appliances	Turnover	EnergyStar vending machine	Standard vending machine	machine	$0.2672	15	3,619	0.140	1,310	$350.00	36%	100%	50%	2.816338569	1
AllLaT2	All	Large Appliances	Turnover	Beverage machine control	Vending machine with no sensor	machine	$0.1021	5	3,619	0.178	1,665	$170.00	46%	100%	50%	2.070599809	1
AllLaT3	All	Large Appliances	Turnover	Other cold product control	Vending machine with no sensor	machine	$0.1111	5	3,504	0.172	1,612	$179.00	46%	100%	50%	1.903705442	1
AllLaT4	All	Large Appliances	Turnover	Non-cooled snack control	Vending machine with no sensor	machine	$0.4671	5	745	0.037	343	$160.00	46%	100%	50%	0.452576223	0
AllLaT5	All	Large Appliances	Turnover	EnergyStar dishwasher	Std Dishwasher	dishwasher	$0.4015	12	250	0.015	137	$55.00	55%	100%	50%	1.45854493	1
AllLaT6	All	Large Appliances	Turnover	EnergyStar refrigerator	Std Refrigerator	refrigerator	$0.3000	12	750	0.011	100	$30.00	13%	100%	50%	1.951824115	1
AllLaT7	All	Large Appliances	Turnover	Low-temperature dish machine	High temp dish machine with booster heater	removed kW	$0.0634	15	17,451	0.894	8,362	$530.00	48%	100%	50%	11.87359454	1
AllLaT8	All	Large Appliances	Turnover	High-efficiency washer	Standard washer, electric hot water	washer	$0.4380	10	2,262	0.102	959	$420.00	42%	100%	50%	1.043665122	1
AllLaT9	All	Large Appliances	Turnover	High-efficiency coin-op washer w/o Electric Water Heat	Coin-op wash, w/out electric hot water	washer	$1.7872	10	1,180	0.025	235	$420.00	20%	100%	50%	0.255746928	0
AllLaT10	All	Large Appliances	Turnover	High-efficiency coin-op washer w/ Electric water heat	Coin-op wash, electric hot water	washer	$0.4380	10	2,262	0.102	959	$420.00	42%	100%	50%	1.043665122	1
OfficMoN1	Office	Motors	New	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.3115	15	12921	0.0282	117.2	$154	0.91%	74.4%	100%	0.625869883	0
OfficMoN2	Office	Motors	New	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.4170	15	49501	0.0231	367.6	$521	0.74%	74.4%	100%	0.519902994	0
OfficMoN3	Office	Motors	New	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.2732	15	121517	0.0138	541.0	$689	0.45%	66.3%	100%	0.564801541	0
OfficMoN4	Office	Motors	New	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.5357	15	244333	0.0121	953.4	$511	0.39%	55.8%	100%	1.330859489	1
OfficMoN5	Office	Motors	New	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-500 HP	Motor	$0.4495	15	524346	0.0284	4796.5	$2,156	0.91%	55.8%	100%	1.579075855	1
OfficMoN6	Office	Motors	New	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.6710	15	81970	2.109	16,394	$11,000.00	20%	55.0%	100%	1.144489571	1
OfficMoN7	Office	Motors	New	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.5200	15	81970	6.257	25000.8	$13,000.00	31%	70.0%	100%	1.587649836	1
OfficMoN8	Office	Motors	New	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4941	15	81970	0.000	26312.3	$13,000.00	32%	80.0%	100%	1.430938923	1
OfficMoN9	Office	Motors	New	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5874	15	81970	6.257	22131.8	$13,000.00	27%	70.0%	100%	1.431628458	1
OfficMoN10	Office	Motors	New	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.5413	15	81970	4.542	24017.1	$13,000.00	29%	55.0%	100%	1.471666439	1
OfficMoN11	Office	Motors	New	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5874	15	81970	6.257	22131.8	$13,000.00	27%	30.0%	100%	1.431628458	1
OfficMoT1	Office	Motors	Turnover	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.3115	15	12921	0.0282	117.2	$154	0.91%	74.4%	100%	0.625869883	0
OfficMoT2	Office	Motors	Turnover	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.4170	15	49501	0.0231	367.6	$521	0.74%	74.4%	100%	0.519902994	0
OfficMoT3	Office	Motors	Turnover	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.2732	15	121517	0.0138	541.0	$689	0.45%	66.3%	100%	0.564801541	0
OfficMoT4	Office	Motors	Turnover	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.5357	15	244333	0.0121	953.4	$511	0.39%	55.8%	100%	1.330859489	1
OfficMoT5	Office	Motors	Turnover	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-250 HP	Motor	$0.4495	15	524346	0.0284	4796.5	$2,156	0.91%	55.8%	100%	1.579075855	1
OfficMoT6	Office	Motors	Turnover	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.6710	15	81970	2.109	16,394	$11,000.00	20%	55.0%	80%	1.144489571	1
OfficMoT7	Office	Motors	Turnover	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.5200	15	81970	6.257	25000.8	$13,000.00	31%	90.0%	80%	1.587649836	1
OfficMoT8	Office	Motors	Turnover	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4941	15	81970	0.000	26312.3	$13,000.00	32%	90.0%	80%	1.430938923	1
OfficMoT9	Office	Motors	Turnover	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5874	15	81970	6.257	22131.8	$13,000.00	27%	90.0%	80%	1.431628458	1
OfficMoT10	Office	Motors	Turnover	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.5413	15	81970	4.542	24017.1	$13,000.00	29%	80.0%	80%	1.471666439	1
OfficMoT11	Office	Motors	Turnover	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5874	15	81970	6.257	22131.8	$13,000.00	27%	55.0%	80%	1.431628458	1
OfficMoT12	Office	Motors	Turnover	Motors: Rewind 125-200 HP	(E) Motor	Motor	$0.6069	15	245909	0.159	1235.7	$750	0.5%	35.0%	95%	1.265264853	1
OfficMoT13	Office	Motors	Turnover	Motors: Rewind 201-500 HP	(E) Motor	Motor	$0.7470	15	532803	0.344	2677.4	$2,000	0.5%	50.0%	95%	1.028027693	1
OfficMoT14	Office	Motors	Turnover	Motors: Rewind 20-50 HP	(E) Motor	Motor	$0.5601	15	50263	0.057	446.3	$250	0.9%	10.0%	95%	1.370935387	1
OfficMoT15	Office	Motors	Turnover	Motors: Rewind 500+ HP	(E) Motor	Motor	$0.6474	15	1229546	0.795	6178.6	$4,000	0.5%	70.0%	95%	1.186185799	1
OfficMoT16	Office	Motors	Turnover	Motors: Rewind 51-100 HP	(E) Motor	Motor	$0.6955	15	124291	0.092	718.9	$500	0.6%	20.0%	95%	1.104118527	1
OfficMoT17	Office	Motors	Turnover	Downsizing motor during retrofit	Larger hp standard motor	HP Reduction	$0.34	20	186,404	0.190	1,477	$500.00	0.79%	25%	95%	2.925124127	1
OfficMoN12	Office	Motors	New	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.472196051	1
OfficMoN13	Office	Motors	New	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.028977005	0
OfficMoN14	Office	Motors	New	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.588451679	1
OfficMoN15	Office	Motors	New	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.589344322	0
OfficMoT18	Office	Motors	Turnover	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.472196051	1
OfficMoT19	Office	Motors	Turnover	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.028977005	0
OfficMoT20	Office	Motors	Turnover	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.588451679	1
OfficMoT21	Office	Motors	Turnover	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.589344322	0
OfficMoT22	Office	Motors	Turnover	Air Comp Improvements			$0.11	15	56148	1.148	8,928	$990.00	16%	28%	65%	6.924957253	1
OfficMoE2	Office	Motors	Early	Air Compressor Optimization			$0.16	15	56148	2.174	16,901	$2,750.00	30%	38%	65%	4.719423698	1
OfficMoE1	Office	Motors	Early	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.145921749	1
OfficMoT23	Office	Motors	Turnover	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.145921749	1
AllOfE1	All	Office Equipment	Early	PC network power management	No central control	PC	$0.14	5	410	0.023	215	$30.00	52.44%	75%	80%	1.515123584	1
HealtPaN18	Healthcare	Packaged DX	New	Automated control system	Baseline DX	ton	$0.42	10	1,191	0.007	60	$25.00	5%	100%	65%	1.106610421	1
HealtPaN19	Healthcare	Packaged DX	New	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$0.78	10	1,012	0.007	55	$43.00	5%	100%	95%	0.596137099	0
HealtPaT15	Healthcare	Packaged DX	Turnover	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$0.78	10	1,012	0.007	55	$43.00	5%	100%	95%	0.596137099	0
AllOfE2	All	Office Equipment	Early	Occupancy sensor controls/Smart Strip	Computers, other plug loads	sensor	$0.60	5	413	0.010	124	$75.00	30.02%	55%	95%	0.341965931	0
AllOfN1	All	Office Equipment	New	ENERGY STAR® Office Equipment	Std Office Equipment	PC	$1.09	5	4,000	0.021	200	$218.00	5.00%	90%	80%	0.193956507	0
AllOfN2	All	Office Equipment	New	Energy Star - Water Cooler	Std Water Cooler	unit	$1.06	5	453	0.022	204	$215.67	45.08%	35%	80%	0.199972963	0
AllOfN3	All	Office Equipment	New	80 Plus® PC-desktop	Standard personal computer, desktop	PC	$0.19	5	410	0.014	130	$25.00	31.71%	100%	55%	1.099345484	1
AllOfN6	All	Office Equipment	New	Data Center - Server/Storage Virtualization	No Virtualization	unit	$1.76	5	4,818	0.452	4,227	$7,434	87.73%	70%	80%	0.120200601	0
AllOfT1	All	Office Equipment	Turnover	ENERGY STAR® Office Equipment	Std Office Equipment	PC	$1.09	5	4,000	0.021	200	$218.00	5.00%	90%	80%	0.193956507	0
AllOfT2	All	Office Equipment	Turnover	Energy Star - Water Cooler	Std Water Cooler	unit	$1.06	5	453	0.022	204	$215.67	45.08%	35%	80%	0.199972963	0
AllOfT3	All	Office Equipment	Turnover	80 Plus® PC-desktop	Standard personal computer, desktop	PC	$0.19	5	410	0.014	130	$25.00	31.71%	100%	55%	1.099345484	1
AllOfT6	All	Office Equipment	Turnover	Data Center - Server/Storage Virtualization	No Virtualization	unit	$1.76	5	4,818	0.452	4,227	$7,434	87.73%	70%	80%	0.120200601	0
AllOrT1	All	Other	Turnover	Motor Improvements Bundle - Industrial Model	No Motor Improvements	Motor	$0.48	14	10000	0.128	1,092	$522.00	11%	90%	95%	1.480082701	1
AllOrT2	All	Other	Turnover	EE Transformer - CSL 3	NEMA Transformer - 75W	Motor	$0.60	15	4197	0.187	1,595	$950.00	23%	90%	95%	1.27634317	1
AllOrN1	All	Other	New	EE Transformer - CSL 3	NEMA Transformer - 75W	Motor	$0.60	15	4197	0.187	1,595	$950.00	23%	90%	95%	1.27634317	1
OfficPaE1	Office	Packaged DX	Early	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$3.13	20	688	0.05	64	$200.00	9%	15%	9%	0.428582596	0
OfficPaE2	Office	Packaged DX	Early	Adding window shade film	No shade film	sq ft window area	$7.05	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.030778812	0
InstiFIE1	Institutional	Fluorescent	Early	Premium Efficiency T8 Lighting Replacement (32W lamps with low	Replace (E) T12 Lamp - Bundle	Fixture	$0.6076	15	371	0.010	91	$55.38	25%	95%	11%	1.249132961	1
InstiFIE2	Institutional	Fluorescent	Early	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2809	14	1,483	0.051	445	$125.00	30%	95%	80%	2.514545217	1
InstiFIE3	Institutional	Fluorescent	Early	Photocell dimming control	No prior dimming control	Photocell	$0.3034	9	1,483	0.085	742	$225.00	50%	95%	95%	1.292360243	1
GroceFIE1	Grocery	Fluorescent	Early	Premium Efficiency T8 Lighting Replacement (32W lamps with low	Replace (E) T12 Lamp - Bundle	Fixture	$0.2754	11	818	0.023	201	$55.38	25%	95%	55%	1.919624418	1
GroceFIE2	Grocery	Fluorescent	Early	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1273	14	3,272	0.113	982	$125.00	30%	95%	80%	5.547239146	1
GroceFIE3	Grocery	Fluorescent	Early	Photocell dimming control	No prior dimming control	Photocell	$0.1375	9	3,272	0.188	1,636	$225.00	50%	95%	95%	2.85102502	1
LodgiFIE1	Lodging	Fluorescent	Early	Premium Efficiency T8 Lighting Replacement (32W lamps with low	Replace (E) T12 Lamp - Bundle	Fixture	$0.3246	10	694	0.020	171	$55.38	25%	95%	55%	1.424312204	1
LodgiFIE2	Lodging	Fluorescent	Early	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1501	14	2,776	0.096	833	$125.00	30%	95%	80%	4.706199969	1
LodgiFIE3	Lodging	Fluorescent	Early	Photocell dimming control	No prior dimming control	Photocell	$0.1621	9	2,776	0.160	1,388	$225.00	50%	95%	95%	2.418769681	1
HealtFIE1	Healthcare	Fluorescent	Early	Premium Efficiency T8 Lighting Replacement (32W lamps with low	Replace (E) T12 Lamp - Bundle	Fixture	$0.2970	11	759	0.021	186	$55.38	25%	95%	44%	1.779871541	1
HealtFIE2	Healthcare	Fluorescent	Early	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1373	14	3,034	0.105	910	$125.00	30%	95%	80%	5.143387944	1
HealtFIE3	Healthcare	Fluorescent	Early	Photocell dimming control	No prior dimming control	Photocell	$0.1483	9	3,034	0.174	1,517	$225.00	50%	95%	95%	2.643464132	1
RestaFIE1	Restaurant	Fluorescent	Early	Premium Efficiency T8 Lighting Replacement (32W lamps with low	Replace (E) T12 Lamp - Bundle	Fixture	$0.3672	11	614	0.017	151	$55.38	25%	95%	49%	1.439718313	1
RestaFIE2	Restaurant	Fluorescent	Early	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1698	14	2,454	0.085	736	$125.00	30%	95%	80%	4.160429359	1
RestaFIE3	Restaurant	Fluorescent	Early	Photocell dimming control	No prior dimming control	Photocell	$0.1834	9	2,454	0.141	1,227	$225.00	50%	95%	95%	2.138268765	1
RetaiFIE1	Retail	Fluorescent	Early	Premium Efficiency T8 Lighting Replacement (32W lamps with low	Replace (E) T12 Lamp - Bundle	Fixture	$0.5810	11	591	0.017	145	$55.38	25%	95%	55%	1.38764059	1
RetaiFIE2	Retail	Fluorescent	Early	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1761	14	2,365	0.082	710	$125.00	30%	95%	80%	4.009937638	1
RetaiFIE3	Retail	Fluorescent	Early	Photocell dimming control	No prior dimming control	Photocell	$0.1902	9	2,365	0.136	1,183	$225.00	50%	95%	95%	2.060922962	1
WarehFIE1	Warehouse	Fluorescent	Early	Premium Efficiency T8 Lighting Replacement (32W lamps with low	Replace (E) T12 Lamp - Bundle	Fixture	$0.4113	12	548	0.015	135	$55.38	25%	95%	35%	1.437729113	1
WarehFIE2	Warehouse	Fluorescent	Early	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1901	14	2,191	0.076	657	$125.00	30%	95%	80%	3.714669071	1
WarehFIE3	Warehouse	Fluorescent	Early	Photocell dimming control	No prior dimming control	Photocell	$0.2054	9	2,191	0.126	1,096	$225.00	50%	95%	95%	1.90916854	1
MiscFIE1	Misc	Fluorescent	Early	Premium Efficiency T8 Lighting Replacement (32W lamps with low	Replace (E) T12 Lamp - Bundle	Fixture	$0.3764	11	599	0.017	147	$55.38	25%	95%	44%	1.40457409	1
OfficPaE3	Office	Packaged DX	Early	Adding window shade screen	No shade screen	sq ft window area	$3.90	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.195291286	0
OfficPaE4	Office	Packaged DX	Early	Windows U<0.40, .55 SHGC	Existing window specifications	sq ft window area	$1.40	30	2	0.000	0	$0.28	13%	50%	95%	0.906343104	0
OfficPaE5	Office	Packaged DX	Early	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$4.91	20	688	0.05	46	$225.00	7%	95%	95%	0.307172907	0
OfficPaE7	Office	Packaged DX	Early	Automated control system	Baseline DX	ton	$0.69	10	727	0.004	36	$25.00	5%	100%	65%	0.675326892	0
InstiFIN1	Institutional	Fluorescent	New	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1722	15	62,741	0.721	6,274	$1,080.26	10%	95%	100%	4.40793443	1
InstiFIN2	Institutional	Fluorescent	New	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.3444	15	62,741	1.803	15,685	$5,401.30	25%	75%	100%	2.203967215	1
HealtFIN1	Healthcare	Fluorescent	New	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0842	15	441,728	5.077	44,173	$3,718.25	10%	95%	100%	9.016229516	1
HealtFIN2	Healthcare	Fluorescent	New	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1684	15	441,728	12.691	110,432	$18,591.24	25%	75%	100%	4.508114758	1

`	New Commerical Segment	New End Use	Vintage	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	PJM Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
GroceFlN1	Grocery	Fluorescent	New	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0572	15	60,020	0.690	6,002	$343.52	10%	95%	100%	13.2602325	1
GroceFlN2	Grocery	Fluorescent	New	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1145	15	60,020	1.724	15,005	$1,717.60	25%	75%	100%	6.63011625	1
LodgiFlN1	Lodging	Fluorescent	New	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1012	15	303,563	3.489	30,356	$3,071.87	10%	95%	100%	7.499863643	1
LodgiFlN2	Lodging	Fluorescent	New	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.2024	15	303,563	8.722	75,891	$15,359.37	25%	75%	100%	3.749931821	1
RestaFlN1	Restaurant	Fluorescent	New	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0763	15	13,140	0.151	1,314	$100.27	10%	95%	100%	9.945174375	1
RestaFlN2	Restaurant	Fluorescent	New	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1526	15	13,140	0.378	3,285	$501.37	25%	75%	100%	4.972587188	1
RetaiFlN1	Retail	Fluorescent	New	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0792	15	60,011	0.690	6,001	$475.15	10%	95%	100%	9.585435925	1
RetaiFlN2	Retail	Fluorescent	New	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1584	15	60,011	1.724	15,003	$2,375.74	25%	75%	100%	4.792717962	1
WarehFlN1	Warehouse	Fluorescent	New	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1603	15	44,747	0.514	4,475	$717.11	10%	95%	100%	4.735797322	1
WarehFlN2	Warehouse	Fluorescent	New	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.3205	15	44,747	1.286	11,187	$3,585.53	25%	75%	100%	2.367898661	1
GroceHIN1	Grocery	HID	New	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0572	15	3,937	0.045	394	$22.53	10%	95%	100%	13.2602325	1
GroceHIN2	Grocery	HID	New	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1145	15	3,937	0.113	984	$112.66	25%	85%	100%	6.63011625	1
InstiHIN1	Institutional	HID	New	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1722	15	2,159	0.025	216	$37.18	10%	95%	100%	4.40793443	1
InstiHIN2	Institutional	HID	New	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.3444	15	2,159	0.062	540	$185.89	25%	85%	100%	2.203967215	1
HealtHIN1	Healthcare	HID	New	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0842	15	15,203	0.175	1,520	$127.97	10%	95%	100%	9.016229516	1
HealtHIN2	Healthcare	HID	New	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1684	15	15,203	0.437	3,801	$639.84	25%	85%	100%	4.508114758	1
LodgiHIN1	Lodging	HID	New	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1012	15	10,539	0.121	1,054	$106.65	10%	95%	100%	7.499863643	1
LodgiHIN2	Lodging	HID	New	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.2024	15	10,539	0.303	2,635	$533.27	25%	85%	100%	3.749931821	1
RestaHIN1	Restaurant	HID	New	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0763	15	459	0.005	46	$3.51	10%	95%	100%	9.945174375	1
RestaHIN2	Restaurant	HID	New	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1526	15	459	0.013	115	$17.53	25%	85%	100%	4.972587188	1
RetaiHIN1	Retail	HID	New	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0792	15	10,313	0.119	1,031	$81.65	10%	95%	100%	9.585435925	1
RetaiHIN2	Retail	HID	New	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1584	15	10,313	0.296	2,578	$408.25	25%	85%	100%	4.792717962	1
WarehHIN1	Warehouse	HID	New	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1603	15	7,843	0.090	784	$125.69	10%	95%	100%	4.735797322	1
WarehHIN2	Warehouse	HID	New	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.3205	15	7,843	0.225	1,961	$628.45	25%	85%	100%	2.367898661	1
MiscHIN1	Misc	HID	New	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0988	15	4,211	0.048	421	$41.61	10%	95%	100%	7.681072875	1
MiscHIN2	Misc	HID	New	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1976	15	4,211	0.121	1,053	$208.03	25%	85%	100%	3.840536437	1
MiscFlN1	Misc	Fluorescent	New	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0988	15	121,285	1.394	12,128	$1,198.38	10%	95%	100%	7.681072875	1
MiscFlN2	Misc	Fluorescent	New	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1976	15	121,285	3.485	30,321	$5,991.88	25%	75%	100%	3.840536437	1
InstiInN1	Institutional	Incandescent	New	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1722	15	7,094	0.082	709	$122.15	10%	95%	100%	4.40793443	1
InstiInN2	Institutional	Incandescent	New	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.3444	15	7,094	0.204	1,774	$610.75	25%	75%	100%	2.203967215	1
GroceInT1	Grocery	Incandescent	Turnover	CFL Lamp - 21 Watt	EISA - 75 Watt equivalent - 53W	Lamp	$0.0161	5	309	0.021	186	$3.00	60%	75%	50%	13.37360328	1
HealtInT1	Healthcare	Incandescent	Turnover	CFL Lamp - 21 Watt	EISA - 75 Watt equivalent - 53W	Lamp	$0.0174	5	286	0.020	173	$3.00	60%	75%	50%	12.39997557	1
GroceInN2	Grocery	Incandescent	New	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1145	15	9,629	0.277	2,407	$275.57	25%	75%	100%	6.63011625	1
HealtInN2	Healthcare	Incandescent	New	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1684	15	49,948	1.435	12,487	$2,102.19	25%	75%	100%	4.508114758	1
LodgiInN1	Lodging	Incandescent	New	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1012	15	72,424	0.832	7,242	$732.89	10%	95%	100%	7.499863643	1
LodgiInN2	Lodging	Incandescent	New	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.2024	15	72,424	2.081	18,106	$3,664.46	25%	75%	100%	3.749931821	1
RestaInN1	Restaurant	Incandescent	New	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0763	15	8,649	0.099	865	$66.01	10%	95%	100%	9.945174375	1
RestaInN2	Restaurant	Incandescent	New	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1526	15	8,649	0.249	2,162	$330.03	25%	75%	100%	4.972587188	1
RetaiInN1	Retail	Incandescent	New	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0792	15	9,628	0.111	963	$76.23	10%	95%	100%	9.585435925	1
RetaiInN2	Retail	Incandescent	New	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1584	15	9,628	0.277	2,407	$381.16	25%	75%	100%	4.792717962	1
WarehInN1	Warehouse	Incandescent	New	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1603	15	5,975	0.069	598	$95.76	10%	95%	100%	4.735797322	1
WarehInN2	Warehouse	Incandescent	New	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.3205	15	5,975	0.172	1,494	$478.78	25%	75%	100%	2.367898661	1
MiscInN1	Misc	Incandescent	New	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0988	15	28,936	0.333	2,894	$285.91	10%	95%	100%	7.681072875	1
MiscInN2	Misc	Incandescent	New	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1976	15	28,936	0.831	7,234	$1,429.55	25%	75%	100%	3.840536437	1
MiscFlE2	Misc	Fluorescent	Early	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1740	14	2,394	0.083	718	$125.00	30%	95%	80%	4.05887126	1
MiscFlE3	Misc	Fluorescent	Early	Photocell dimming control	No prior dimming control	Photocell	$0.1879	9	2,394	0.138	1,197	$225.00	50%	95%	95%	2.086072587	1
MiscFlN4	Misc	Fluorescent	New	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0696	14	2,394	0.083	718	$50.00	30%	95%	15%	10.14717815	1
MiscFlN3	Misc	Fluorescent	New	Photocell dimming control	No prior dimming control	Photocell	$0.1253	9	2,394	0.138	1,197	$150.00	50%	95%	75%	3.12910888	1
InstiFlN4	Institutional	Fluorescent	New	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1124	14	1,483	0.051	445	$50.00	30%	95%	15%	6.286363043	1
InstiFlN3	Institutional	Fluorescent	New	Photocell dimming control	No prior dimming control	Photocell	$0.2022	9	1,483	0.085	742	$150.00	50%	95%	75%	1.938540364	1
GroceFlN4	Grocery	Fluorescent	New	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0509	14	3,272	0.113	982	$50.00	30%	95%	15%	13.86809786	1
GroceFlN3	Grocery	Fluorescent	New	Photocell dimming control	No prior dimming control	Photocell	$0.0917	9	3,272	0.188	1,636	$150.00	50%	95%	75%	4.27653753	1
HealtFlN4	Healthcare	Fluorescent	New	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0549	14	3,034	0.105	910	$50.00	30%	95%	15%	12.85846986	1
HealtFlN3	Healthcare	Fluorescent	New	Photocell dimming control	No prior dimming control	Photocell	$0.0989	9	3,034	0.174	1,517	$150.00	50%	95%	75%	3.965196199	1
LodgiFlN4	Lodging	Fluorescent	New	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0600	14	2,776	0.096	833	$50.00	30%	95%	15%	11.76549992	1
LodgiFlN3	Lodging	Fluorescent	New	Photocell dimming control	No prior dimming control	Photocell	$0.1081	9	2,776	0.160	1,388	$150.00	50%	95%	75%	3.628154522	1
OfficPaE8	Office	Packaged DX	Early	Duct Sealing, down to 15%	Leakage of 29%	ton	$7.92	15	688	0.05	12	$95.00	2%	45%	80%	0.327748911	0
OfficPaE9	Office	Packaged DX	Early	Hotel Keycard Sensors	No prior controls	Room Controlled	$0.29	10	617	0.041	342	$100.00	55%	95%	80%	1.588911636	1
RestaFlN4	Restaurant	Fluorescent	New	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0679	14	2,454	0.085	736	$50.00	30%	95%	15%	10.4010734	1
RestaFlN3	Restaurant	Fluorescent	New	Photocell dimming control	No prior dimming control	Photocell	$0.1222	9	2,454	0.141	1,227	$150.00	50%	95%	75%	3.207403147	1
RetaiFlN4	Retail	Fluorescent	New	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0705	14	2,365	0.082	710	$50.00	30%	95%	15%	10.0248441	1
RetaiFlN3	Retail	Fluorescent	New	Photocell dimming control	No prior dimming control	Photocell	$0.1268	9	2,365	0.136	1,183	$150.00	50%	95%	75%	3.091384444	1
WarehFlN4	Warehouse	Fluorescent	New	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0761	14	2,191	0.076	657	$50.00	30%	95%	15%	9.286672677	1
WarehFlN3	Warehouse	Fluorescent	New	Photocell dimming control	No prior dimming control	Photocell	$0.1369	9	2,191	0.126	1,096	$150.00	50%	95%	75%	2.86375281	1
MiscFlT2	Misc	Fluorescent	Turnover	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0696	14	2,394	0.083	718	$50.00	30%	95%	80%	10.14717815	1
MiscFlT3	Misc	Fluorescent	Turnover	Photocell dimming control	No prior dimming control	Photocell	$0.1253	9	2,394	0.138	1,197	$150.00	50%	95%	95%	3.12910888	1
InstiFlT2	Institutional	Fluorescent	Turnover	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1124	14	1,483	0.051	445	$50.00	30%	95%	80%	6.286363043	1
InstiFlT3	Institutional	Fluorescent	Turnover	Photocell dimming control	No prior dimming control	Photocell	$0.2022	9	1,483	0.085	742	$150.00	50%	95%	95%	1.938540364	1
GroceFlT2	Grocery	Fluorescent	Turnover	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0509	14	3,272	0.113	982	$50.00	30%	95%	80%	13.86809786	1
GroceFlT3	Grocery	Fluorescent	Turnover	Photocell dimming control	No prior dimming control	Photocell	$0.0917	9	3,272	0.188	1,636	$150.00	50%	95%	95%	4.27653753	1
HealtFlT2	Healthcare	Fluorescent	Turnover	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0549	14	3,034	0.105	910	$50.00	30%	95%	80%	12.85846986	1
HealtFlT3	Healthcare	Fluorescent	Turnover	Photocell dimming control	No prior dimming control	Photocell	$0.0989	9	3,034	0.174	1,517	$150.00	50%	95%	95%	3.965196199	1
LodgiFlT2	Lodging	Fluorescent	Turnover	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0600	14	2,776	0.096	833	$50.00	30%	95%	80%	11.76549992	1
LodgiFlT3	Lodging	Fluorescent	Turnover	Photocell dimming control	No prior dimming control	Photocell	$0.1081	9	2,776	0.160	1,388	$150.00	50%	95%	95%	3.628154522	1
OfficPaE10	Office	Packaged DX	Early	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	ton	$0.55	1	748	0.05	64	$35.00	9%	100%	45%	0.089753801	0
OfficPaE11	Office	Packaged DX	Early	7 day, two stage setback thermostat	Manual Thermostat	ton	$0.44	10	688	0.015	125	$55.00	18%	100%	45%	1.055895558	1
RestaFlT2	Restaurant	Fluorescent	Turnover	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0679	14	2,454	0.085	736	$50.00	30%	95%	80%	10.4010734	1
RestaFlT3	Restaurant	Fluorescent	Turnover	Photocell dimming control	No prior dimming control	Photocell	$0.1222	9	2,454	0.141	1,227	$150.00	50%	95%	95%	3.207403147	1
RetaiFlT2	Retail	Fluorescent	Turnover	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0705	14	2,365	0.082	710	$50.00	30%	95%	80%	10.0248441	1
RetaiFlT3	Retail	Fluorescent	Turnover	Photocell dimming control	No prior dimming control	Photocell	$0.1268	9	2,365	0.136	1,183	$150.00	50%	95%	95%	3.091384444	1
WarehFlT2	Warehouse	Fluorescent	Turnover	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0761	14	2,191	0.076	657	$50.00	30%	95%	80%	9.286672677	1
WarehFlT3	Warehouse	Fluorescent	Turnover	Photocell dimming control	No prior dimming control	Photocell	$0.1369	9	2,191	0.126	1,096	$150.00	50%	95%	95%	2.86375281	1
GroceFlT1	Grocery	Fluorescent	Turnover	Premium Efficiency T8 Lighting Replacement (28W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.0650	6	163	0.004	36	$2.32	22%	90%	95%	4.024979166	1
GroceFlT4	Grocery	Fluorescent	Turnover	Premium Efficiency T8 Lighting Replacement (25W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.0990	6	163	0.002	20	$2.02	13%	60%	95%	2.641935721	1
GroceFlT5	Grocery	Fluorescent	Turnover	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.0307	11	582	0.010	83	$2.55	14%	75%	95%	17.21915384	1
GroceFlE4	Grocery	Fluorescent	Early	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.7257	11	582	0.010	83	$60.38	14%	75%	95%	0.728475239	0
HealtFlT6	Healthcare	Fluorescent	Turnover	LED Retrofit Tube	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$1.0943	7	151	0.007	59	$65.00	39%	40%	95%	0.280002963	0
HealtFlT1	Healthcare	Fluorescent	Turnover	Premium Efficiency T8 Lighting Replacement (28W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.0701	7	151	0.004	33	$2.32	22%	90%	95%	4.372255003	1
HealtFlT4	Healthcare	Fluorescent	Turnover	Premium Efficiency T8 Lighting Replacement (25W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.1068	7	151	0.002	19	$2.02	13%	60%	95%	2.869882352	1
HealtFlT5	Healthcare	Fluorescent	Turnover	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.0331	11	540	0.009	77	$2.55	14%	75%	95%	15.9655616	1
HealtFlE4	Healthcare	Fluorescent	Early	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.7769	11	540	0.009	77	$59.93	14%	75%	95%	0.680474934	0
InstiFlT6	Institutional	Fluorescent	Turnover	LED Retrofit Tube	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$2.2383	15	74	0.003	29	$65.00	39%	40%	95%	0.339071879	0
InstiFlT1	Institutional	Fluorescent	Turnover	Premium Efficiency T8 Lighting Replacement (28W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.1433	15	74	0.002	16	$2.32	22%	90%	95%	5.29461798	1
InstiFlT4	Institutional	Fluorescent	Turnover	Premium Efficiency T8 Lighting Replacement (25W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.2184	15	74	0.001	9	$2.02	13%	60%	95%	3.475307523	1
InstiFlT5	Institutional	Fluorescent	Turnover	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.0677	11	264	0.004	38	$2.55	14%	75%	95%	7.805385671	1
InstiFlE4	Institutional	Fluorescent	Early	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.9281	11	264	0.004	38	$35.00	14%	75%	95%	0.569621607	0
LodgiFlT6	Lodging	Fluorescent	Turnover	LED Retrofit Tube	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$1.1959	8	138	0.006	54	$65.00	39%	40%	95%	0.292599509	0
LodgiFlT1	Lodging	Fluorescent	Turnover	Premium Efficiency T8 Lighting Replacement (28W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.0766	8	138	0.003	30	$2.32	22%	90%	95%	4.568950474	1
LodgiFlT4	Lodging	Fluorescent	Turnover	Premium Efficiency T8 Lighting Replacement (25W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.1167	8	138	0.002	17	$2.02	13%	60%	95%	2.998990298	1

`	New Commerical Segment	New End Use	Vintage	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	PJM Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
LodgiHT5	Lodging	Fluorescent	Turnover	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.0362	11	494	0.008	71	$2.55	14%	75%	95%	14.60848886	1
LodgiHE4	Lodging	Fluorescent	Early	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.4959	11	494	0.008	71	$35.00	14%	75%	95%	1.066098621	1
MiscHT6	Misc	Fluorescent	Turnover	LED Retrofit Tube	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$1.3867	9	119	0.005	47	$65.00	39%	40%	95%	0.282740682	0
MiscHT1	Misc	Fluorescent	Turnover	Premium Efficiency T8 Lighting Replacement (28W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.0888	9	119	0.003	26	$2.32	22%	90%	95%	4.415004579	1
MiscHT4	Misc	Fluorescent	Turnover	Premium Efficiency T8 Lighting Replacement (25W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.1353	9	119	0.002	15	$2.02	13%	60%	95%	2.89794253	1
MiscHT5	Misc	Fluorescent	Turnover	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.0420	11	426	0.007	61	$2.55	14%	75%	95%	12.59911946	1
MiscHE4	Misc	Fluorescent	Early	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.5750	11	426	0.007	61	$35.00	14%	75%	95%	0.919458817	0
OfficPaE13	Office	Packaged DX	Early	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.50	7	688	0.05	110	$55.15	16%	95%	75%	0.774091925	0
OfficPaN1	Office	Packaged DX	New	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	ton	$1.36	20	688	0.05	64	$87.00	9%	100%	95%	0.985247348	0
OfficPaN2	Office	Packaged DX	New	Adding reflective roof treatment	Std color roof	ton	$4.50	20	688	0.05	10	$45.00	1%	100%	95%	0.80668581	0
OfficPaN3	Office	Packaged DX	New	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$2.73	20	688	0.05	46	$125.00	7%	100%	95%	0.552911233	0
OfficPaN4	Office	Packaged DX	New	Green Roof (New construction or roof replacement)	Std Roof	ton	$2.78	20	688	0.05	46	$127.43	7%	45%	95%	0.542367607	0
RestaHT6	Restaurant	Fluorescent	Turnover	LED Retrofit Tube	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$1.3528	9	122	0.006	48	$65.00	39%	40%	95%	0.289815212	0
RestaHT1	Restaurant	Fluorescent	Turnover	Premium Efficiency T8 Lighting Replacement (28W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.0866	9	122	0.003	27	$2.32	22%	90%	95%	4.525473585	1
RestaHT4	Restaurant	Fluorescent	Turnover	Premium Efficiency T8 Lighting Replacement (25W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.1320	9	122	0.002	15	$2.02	13%	60%	95%	2.970452723	1
RestaHT5	Restaurant	Fluorescent	Turnover	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.0409	11	437	0.007	62	$2.55	14%	75%	95%	12.91436538	1
RestaHE4	Restaurant	Fluorescent	Early	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.5610	11	437	0.007	62	$35.00	14%	75%	95%	0.942464841	0
RetaiHT6	Retail	Fluorescent	Turnover	LED Retrofit Tube	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$1.4036	9	118	0.005	46	$65.00	39%	40%	95%	0.27933197	0
RetaiHT1	Retail	Fluorescent	Turnover	Premium Efficiency T8 Lighting Replacement (28W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.0899	9	118	0.003	26	$2.32	22%	90%	95%	4.361777425	1
RetaiHT4	Retail	Fluorescent	Turnover	Premium Efficiency T8 Lighting Replacement (25W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.1369	9	118	0.002	15	$2.02	13%	60%	95%	2.863005028	1
RetaiHT5	Retail	Fluorescent	Turnover	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.0425	11	421	0.007	60	$2.55	14%	75%	95%	12.44722488	1
RetaiHE4	Retail	Fluorescent	Early	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.5820	11	421	0.007	60	$35.00	14%	75%	95%	0.908373851	0
WarehHT6	Warehouse	Fluorescent	Turnover	LED Retrofit Tube	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$1.5152	10	109	0.005	43	$65.00	39%	40%	95%	0.305167341	0
WarehHT1	Warehouse	Fluorescent	Turnover	Premium Efficiency T8 Lighting Replacement (28W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.0970	10	109	0.003	24	$2.32	22%	90%	95%	4.765197555	1
WarehHT4	Warehouse	Fluorescent	Turnover	Premium Efficiency T8 Lighting Replacement (25W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.1478	10	109	0.002	14	$2.02	13%	60%	95%	3.127803927	1
WarehHT5	Warehouse	Fluorescent	Turnover	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.0459	11	390	0.006	56	$2.55	14%	75%	95%	11.53068338	1
WarehHE4	Warehouse	Fluorescent	Early	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.6283	11	390	0.006	56	$35.00	14%	75%	95%	0.841486465	0
GroceHIE1	Grocery	HID	Early	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.3797	10	1,893	0.065	565	$214.50	30%	85%	80%	1.217755001	1
GroceHIE2	Grocery	HID	Early	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.2995	10	2,772	0.115	1,002	$300.00	36%	85%	80%	1.543912475	1
GroceHIE3	Grocery	HID	Early	4' T5 HO fixture - 54 W - 4 lamp	Replace HID fixture drawing 250 W	Fixture	$0.3449	10	1,893	0.078	681	$235.00	36%	85%	80%	1.340705786	1
GroceHIE4	Grocery	HID	Early	4' T5 HO fixture - 54 W - 6 lamp	Replace HID fixture drawing 400 W	Fixture	$0.3403	10	2,772	0.110	955	$325.00	34%	85%	80%	1.358863931	1
GroceHIT5	Grocery	HID	Turnover	Ceramic Metal Halide lamp	Replace non-ceramic lamp lamp 400 W	Lamp	$0.0859	3	2,330	0.047	408	$35.00	18%	85%	55%	1.527013968	1
GroceHIE7	Grocery	HID	Early	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.8147	15	1,893	0.097	844	$688.00	45%	85%	80%	0.931557031	0
GroceHIT1	Grocery	HID	Turnover	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.1956	10	1,893	0.065	565	$110.50	30%	85%	80%	2.363877355	1
GroceHIT2	Grocery	HID	Turnover	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.2246	10	2,772	0.115	1,002	$225.00	36%	85%	80%	2.058549966	1
GroceHIT3	Grocery	HID	Turnover	4' T5 HO fixture - 54 W - 4 lamp	Replace HID fixture drawing 250 W	Fixture	$0.2128	10	1,893	0.078	681	$145.00	36%	85%	80%	2.172867998	1
GroceHIT4	Grocery	HID	Turnover	4' T5 HO fixture - 54 W - 6 lamp	Replace HID fixture drawing 400 W	Fixture	$0.2722	10	2,772	0.110	955	$260.00	34%	85%	80%	1.698579914	1
GroceHIT6	Grocery	HID	Turnover	Multi Lamp Hard Wired CFL	Replace HID Fixure Drawing 400 W	Fixture	$0.3442	10	2,772	0.142	1,235	$425.00	45%	85%	55%	1.343267215	1
GroceHIT7	Grocery	HID	Turnover	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.4441	15	1,893	0.097	844	$375.00	45%	85%	80%	1.709096633	1
HealtHIE1	Healthcare	HID	Early	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.4095	10	1,755	0.060	524	$214.50	30%	85%	80%	1.129099761	1
HealtHIE2	Healthcare	HID	Early	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.3230	10	2,570	0.107	929	$300.00	36%	85%	80%	1.431512253	1
HealtHIE3	Healthcare	HID	Early	4' T5 HO fixture - 54 W - 4 lamp	Replace HID fixture drawing 250 W	Fixture	$0.3720	10	1,755	0.073	632	$235.00	36%	85%	80%	1.243099458	1
HealtHIE4	Healthcare	HID	Early	4' T5 HO fixture - 54 W - 6 lamp	Replace HID fixture drawing 400 W	Fixture	$0.3670	10	2,570	0.102	886	$325.00	34%	85%	80%	1.259935651	1
HealtHIT5	Healthcare	HID	Turnover	Ceramic Metal Halide lamp	Replace non-ceramic lamp lamp 400 W	Lamp	$0.0926	3	2,160	0.043	378	$35.00	18%	85%	55%	1.415843995	1
HealtHIE7	Healthcare	HID	Early	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.8787	15	1,755	0.090	783	$688.00	45%	85%	80%	0.863737632	0
HealtHIT1	Healthcare	HID	Turnover	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.2110	10	1,755	0.060	524	$110.50	30%	85%	80%	2.191781889	1
HealtHIT2	Healthcare	HID	Turnover	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.2422	10	2,570	0.107	929	$225.00	36%	85%	80%	1.908683005	1
HealtHIT3	Healthcare	HID	Turnover	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.2295	10	1,755	0.073	632	$145.00	36%	85%	80%	2.014678432	1
HealtHIT4	Healthcare	HID	Turnover	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.2936	10	2,570	0.102	886	$260.00	34%	85%	80%	1.574919563	1
HealtHIT6	Healthcare	HID	Turnover	Multi Lamp Hard Wired CFL	Replace HID Fixure Drawing 400 W	Fixture	$0.3712	10	2,570	0.132	1,145	$425.00	45%	85%	55%	1.245474409	1
HealtHIT7	Healthcare	HID	Turnover	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.4789	15	1,755	0.090	783	$375.00	45%	85%	80%	1.584670642	1
InstiHIE1	Institutional	HID	Early	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.8376	10	858	0.029	256	$214.50	30%	85%	80%	0.552004328	0
InstiHIE2	Institutional	HID	Early	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.6607	10	1,257	0.052	454	$300.00	36%	85%	80%	0.699850435	0
InstiHIE3	Institutional	HID	Early	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.7608	10	858	0.035	309	$235.00	36%	85%	80%	0.607737513	0
InstiHIE4	Institutional	HID	Early	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.7506	10	1,257	0.050	433	$325.00	34%	85%	80%	0.61596854	0
InstiHIT5	Institutional	HID	Turnover	Ceramic Metal Halide lamp	Replace non-ceramic lamp lamp 400 W	Lamp	$0.1894	6	1,056	0.021	185	$35.00	18%	85%	55%	1.380873857	1
InstiHIE7	Institutional	HID	Early	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$1.7973	15	858	0.044	383	$688.00	45%	85%	80%	0.422271731	0
InstiHIT1	Institutional	HID	Turnover	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.4315	10	858	0.029	256	$110.50	30%	85%	80%	1.071537812	1
InstiHIT2	Institutional	HID	Turnover	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.4955	10	1,257	0.052	454	$225.00	36%	85%	80%	0.933133913	0
InstiHIT3	Institutional	HID	Turnover	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.4694	10	858	0.035	309	$145.00	36%	85%	80%	0.9849539	0
InstiHIT4	Institutional	HID	Turnover	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.6005	10	1,257	0.050	433	$260.00	34%	85%	80%	0.769960675	0
InstiHIT6	Institutional	HID	Turnover	Multi Lamp Hard Wired CFL	Replace HID Fixure Drawing 400 W	Fixture	$0.7594	10	1,257	0.064	560	$425.00	45%	85%	55%	0.6088986	0
InstiHIT7	Institutional	HID	Turnover	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.9796	15	858	0.044	383	$375.00	45%	85%	80%	0.77472787	0
LodgiHIE1	Lodging	HID	Early	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.4475	10	1,606	0.055	479	$214.50	30%	85%	80%	1.033126281	1
LodgiHIE2	Lodging	HID	Early	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.3530	10	2,352	0.098	850	$300.00	36%	85%	80%	1.309833712	1
LodgiHIE3	Lodging	HID	Early	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.4065	10	1,606	0.066	578	$235.00	36%	85%	80%	1.137436004	1
LodgiHIE4	Lodging	HID	Early	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.4011	10	2,352	0.093	810	$325.00	34%	85%	80%	1.15284112	1
LodgiHIT5	Lodging	HID	Turnover	Ceramic Metal Halide lamp	Replace non-ceramic lamp lamp 400 W	Lamp	$0.1012	3	1,976	0.040	346	$35.00	18%	85%	55%	1.295497255	1
LodgiHIE7	Lodging	HID	Early	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.9603	15	1,606	0.082	716	$688.00	45%	85%	80%	0.790319933	0
LodgiHIT1	Lodging	HID	Turnover	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.2306	10	1,606	0.055	479	$110.50	30%	85%	80%	2.005480428	1
LodgiHIT2	Lodging	HID	Turnover	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.2648	10	2,352	0.098	850	$225.00	36%	85%	80%	1.746444949	1
LodgiHIT3	Lodging	HID	Turnover	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.2508	10	1,606	0.066	578	$145.00	36%	85%	80%	1.843430765	1
LodgiHIT4	Lodging	HID	Turnover	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.3209	10	2,352	0.093	810	$260.00	34%	85%	80%	1.4410514	1
LodgiHIT6	Lodging	HID	Turnover	Multi Lamp Hard Wired CFL	Replace HID Fixure Drawing 400 W	Fixture	$0.4057	10	2,352	0.120	1,047	$425.00	45%	85%	55%	1.139609085	1
LodgiHIT7	Lodging	HID	Turnover	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.5234	15	1,606	0.082	716	$375.00	45%	85%	80%	1.449973638	1
OfficPaN5	Office	Packaged DX	New	Duct Insulation, Add R8	No Insulation	ton	$10.42	20	688	0.05	12	$125.00	2%	100%	95%	0.305048568	0
OfficPaN6	Office	Packaged DX	New	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$2.14	20	593	0.04	42	$90.40	7%	100%	95%	0.705724004	0
OfficPaN7	Office	Packaged DX	New	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$2.29	20	593	0.08	79	$180.81	13%	100%	95%	0.658639308	0
OfficPaN8	Office	Packaged DX	New	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$2.44	20	593	0.12	111	$271.21	19%	100%	95%	0.617485735	0
OfficPaN9	Office	Packaged DX	New	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.20	20	688	0.05	46	$55.00	7%	100%	95%	1.256616438	1
OfficPaN10	Office	Packaged DX	New	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.20	20	700	0.06	58	$70.00	8%	100%	95%	1.256616438	1
OfficPaN11	Office	Packaged DX	New	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$2.02	20	770	0.06	57	$115.13	7%	100%	95%	0.747054755	0
OfficPaN12	Office	Packaged DX	New	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$2.53	20	794	0.04	39	$98.39	5%	100%	95%	0.596378318	0
OfficPaN13	Office	Packaged DX	New	Ground Source HP Open - Water	Air Source Heat Pump	ton	$3.34	15	700	0.23	225	$ 750.0	32%	20%	95%	0.359568798	0
OfficPaN14	Office	Packaged DX	New	Ground Source HP Closed	Air Source Heat Pump	ton	$5.98	15	700	0.015	125	$750.00	18%	100%	95%	0.127387639	0
OfficPaN15	Office	Packaged DX	New	Air-side Economizer	No Economizer	ton	$1.65	15	688	0.012	103	$170.00	15%	75%	45%	0.462273619	0
OfficPaN16	Office	Packaged DX	New	Energy Recovery Units	No Energy Recovery	ton	$1.30	15	688	0.016	138	$179.00	20%	100%	95%	0.585374416	0
RestaHIE1	Restaurant	HID	Early	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.5063	10	1,420	0.049	424	$214.50	30%	85%	80%	0.913316251	0
RestaHIE2	Restaurant	HID	Early	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.3993	10	2,079	0.086	751	$300.00	36%	85%	80%	1.157934356	1
RestaHIE3	Restaurant	HID	Early	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.4598	10	1,420	0.059	511	$235.00	36%	85%	80%	1.005529339	1
RestaHIE4	Restaurant	HID	Early	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.4537	10	2,079	0.082	716	$325.00	34%	85%	80%	1.019147949	1
RestaHIT5	Restaurant	HID	Turnover	Ceramic Metal Halide lamp	Replace non-ceramic lamp lamp 400 W	Lamp	$0.1145	3	1,747	0.035	306	$35.00	18%	85%	55%	1.145260476	1
RestaHIE7	Restaurant	HID	Early	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$1.0863	15	1,420	0.073	633	$688.00	45%	85%	80%	0.698667773	0
RestaHIT1	Restaurant	HID	Turnover	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.2608	10	1,420	0.049	424	$110.50	30%	85%	80%	1.772908017	1
RestaHIT2	Restaurant	HID	Turnover	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.2995	10	2,079	0.086	751	$225.00	36%	85%	80%	1.543912475	1
RestaHIT3	Restaurant	HID	Turnover	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.2837	10	1,420	0.059	511	$145.00	36%	85%	80%	1.629650998	1
RestaHIT4	Restaurant	HID	Turnover	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.3630	10	2,079	0.082	716	$260.00	34%	85%	80%	1.273934936	1
RestaHIT6	Restaurant	HID	Turnover	Multi Lamp Hard Wired CFL	Replace HID Fixure Drawing 400 W	Fixture	$0.4590	10	2,079	0.106	926	$425.00	45%	85%	55%	1.007450411	1
RestaHIT7	Restaurant	HID	Turnover	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.5921	15	1,420	0.073	633	$375.00	45%	85%	80%	1.281822475	1

`	New Commerical Segment	New End Use	Vintage	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	PJM Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
RetaiHIE1	Retail	HID	Early	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.5253	10	1,368	0.047	408	$214.50	30%	85%	80%	0.880279628	0
RetaiHIE2	Retail	HID	Early	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.4143	10	2,004	0.083	724	$300.00	36%	85%	80%	1.116049368	1
RetaiHIE3	Retail	HID	Early	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.4771	10	1,368	0.057	493	$235.00	36%	85%	80%	0.96915717	0
RetaiHIE4	Retail	HID	Early	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.4707	10	2,004	0.079	690	$325.00	34%	85%	80%	0.982283165	0
RetaiHIT5	Retail	HID	Turnover	Ceramic Metal Halide lamp	Replace non-ceramic lamp lamp 400 W	Lamp	$0.1188	4	1,684	0.034	295	$35.00	18%	85%	55%	1.413659927	1
RetaiHIE7	Retail	HID	Early	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$1.1270	15	1,368	0.070	610	$688.00	45%	85%	80%	0.67339545	0
RetaiHIT1	Retail	HID	Turnover	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.2706	10	1,368	0.047	408	$110.50	30%	85%	80%	1.708778102	1
RetaiHIT2	Retail	HID	Turnover	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.3107	10	2,004	0.083	724	$225.00	36%	85%	80%	1.488065824	1
RetaiHIT3	Retail	HID	Turnover	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.2944	10	1,368	0.057	493	$145.00	36%	85%	80%	1.570703	1
RetaiHIT4	Retail	HID	Turnover	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.3766	10	2,004	0.079	690	$260.00	34%	85%	80%	1.227853956	1
RetaiHIT6	Retail	HID	Turnover	Multi Lamp Hard Wired CFL	Replace HID Fixure Drawing 400 W	Fixture	$0.4762	10	2,004	0.103	893	$425.00	45%	85%	55%	0.971008752	0
RetaiHIT7	Retail	HID	Turnover	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.6143	15	1,368	0.070	610	$375.00	45%	85%	80%	1.235456186	1
MiscHIE1	Misc	HID	Early	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.5189	10	1,385	0.048	413	$214.50	30%	85%	80%	0.891021758	0
MiscHIE2	Misc	HID	Early	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.4093	10	2,028	0.084	733	$300.00	36%	85%	80%	1.129668616	1
MiscHIE3	Misc	HID	Early	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.4713	10	1,385	0.057	499	$235.00	36%	85%	80%	0.98098388	0
MiscHIE4	Misc	HID	Early	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.4650	10	2,028	0.080	699	$325.00	34%	85%	80%	0.994270052	0
MiscHIT5	Misc	HID	Turnover	Ceramic Metal Halide lamp	Replace non-ceramic lamp lamp 400 W	Lamp	$0.1173	4	1,705	0.034	298	$35.00	18%	85%	55%	1.430910943	1
MiscHIE7	Misc	HID	Early	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$1.1134	15	1,385	0.071	618	$688.00	45%	85%	80%	0.681612954	0
MiscHIT1	Misc	HID	Turnover	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.2673	10	1,385	0.048	413	$110.50	30%	85%	80%	1.729630471	1
MiscHIT2	Misc	HID	Turnover	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.3070	10	2,028	0.084	733	$225.00	36%	85%	80%	1.506224822	1
MiscHIT3	Misc	HID	Turnover	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.2908	10	1,385	0.057	499	$145.00	36%	85%	80%	1.589870427	1
MiscHIT4	Misc	HID	Turnover	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.3720	10	2,028	0.080	699	$260.00	34%	85%	80%	1.242837566	1
MiscHIT6	Misc	HID	Turnover	Multi Lamp Hard Wired CFL	Replace HID Fixure Drawing 400 W	Fixture	$0.4704	10	2,028	0.104	903	$425.00	45%	85%	55%	0.982858058	0
MiscHIT7	Misc	HID	Turnover	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.6069	15	1,385	0.071	618	$375.00	45%	85%	80%	1.250532566	1
GroceHIE8	Grocery	HID	Early	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1651	10	7,571	0.261	2,271	$375.00	30%	85%	85%	2.800585419	1
GroceHIE9	Grocery	HID	Early	Photocell dimming control	No prior dimming control	Photocell	$0.1453	10	7,571	0.435	3,786	$550.00	50%	85%	85%	3.182483431	1
GroceHIE10	Grocery	HID	Early	Central lighting control system	Replace manual switches or no control	Control Point	$0.1321	10	7,571	0.087	757	$100.00	10%	85%	45%	3.500731774	1
HealtHIE8	Healthcare	HID	Early	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1781	10	7,020	0.242	2,106	$375.00	30%	85%	85%	2.596696646	1
HealtHIE9	Healthcare	HID	Early	Photocell dimming control	No prior dimming control	Photocell	$0.1567	10	7,020	0.403	3,510	$550.00	50%	85%	85%	2.950791643	1
HealtHIE10	Healthcare	HID	Early	Central lighting control system	Replace manual switches or no control	Control Point	$0.1425	10	7,020	0.081	702	$100.00	10%	85%	45%	3.245870807	1
InstiHIE8	Institutional	HID	Early	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.3642	10	3,432	0.118	1,030	$375.00	30%	85%	85%	1.269496138	1
InstiHIE9	Institutional	HID	Early	Photocell dimming control	No prior dimming control	Photocell	$0.3205	10	3,432	0.197	1,716	$550.00	50%	85%	85%	1.442609248	1
InstiHIE10	Institutional	HID	Early	Central lighting control system	Replace manual switches or no control	Control Point	$0.2914	10	3,432	0.039	343	$100.00	10%	85%	45%	1.586870172	1
OfficPaN17	Office	Packaged DX	New	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$3.39	15	727	0.004	33	$110.89	5%	100%	95%	0.224865885	0
OfficPaT1	Office	Packaged DX	Turnover	Duct Insulation, Add R8	No Insulation	ton	$10.42	15	688	0.05	12	$125.00	2%	100%	95%	0.249089173	0
OfficPaT2	Office	Packaged DX	Turnover	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$2.14	20	593	0.04	42	$90.40	7%	100%	95%	0.705724004	0
RestaHIE8	Restaurant	HID	Early	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2201	10	5,678	0.196	1,704	$375.00	30%	85%	85%	2.100439065	1
RestaHIE9	Restaurant	HID	Early	Photocell dimming control	No prior dimming control	Photocell	$0.1937	10	5,678	0.326	2,839	$550.00	50%	85%	85%	2.386862573	1
RestaHIE10	Restaurant	HID	Early	Central lighting control system	Replace manual switches or no control	Control Point	$0.1761	10	5,678	0.065	568	$100.00	10%	85%	45%	2.625548831	1
RetaiHIE8	Retail	HID	Early	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2284	10	5,473	0.189	1,642	$375.00	30%	85%	85%	2.024461644	1
RetaiHIE9	Retail	HID	Early	Photocell dimming control	No prior dimming control	Photocell	$0.2010	10	5,473	0.314	2,737	$550.00	50%	85%	85%	2.300524596	1
RetaiHIE10	Retail	HID	Early	Central lighting control system	Replace manual switches or no control	Control Point	$0.1827	10	5,473	0.063	547	$100.00	10%	85%	45%	2.530577055	1
MiscHIE8	Misc	HID	Early	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2256	10	5,540	0.191	1,662	$375.00	30%	85%	85%	2.049166328	1
MiscHIE9	Misc	HID	Early	Photocell dimming control	No prior dimming control	Photocell	$0.1986	10	5,540	0.318	2,770	$550.00	50%	85%	85%	2.3285981	1
MiscHIE10	Misc	HID	Early	Central lighting control system	Replace manual switches or no control	Control Point	$0.1805	10	5,540	0.064	554	$100.00	10%	85%	45%	2.561457909	1
LodgiHIE8	Lodging	HID	Early	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1946	10	6,423	0.221	1,927	$375.00	30%	85%	85%	2.375977431	1
LodgiHIE9	Lodging	HID	Early	Photocell dimming control	No prior dimming control	Photocell	$0.1713	10	6,423	0.369	3,212	$550.00	50%	85%	85%	2.699974353	1
LodgiHIE10	Lodging	HID	Early	Central lighting control system	Replace manual switches or no control	Control Point	$0.1557	10	6,423	0.074	642	$100.00	10%	85%	45%	2.969971789	1
LodgiHIT8	Lodging	HID	Turnover	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1427	10	6,423	0.221	1,927	$275.00	30%	85%	85%	3.239969224	1
LodgiHIT9	Lodging	HID	Turnover	Photocell dimming control	No prior dimming control	Photocell	$0.1713	10	6,423	0.369	3,212	$550.00	50%	85%	85%	2.699974353	1
LodgiHIT10	Lodging	HID	Turnover	Central lighting control system	Replace manual switches or no control	Control Point	$0.1168	10	6,423	0.074	642	$75.00	10%	85%	45%	3.959962385	1
GroceHIT8	Grocery	HID	Turnover	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1211	10	7,571	0.261	2,271	$275.00	30%	85%	85%	3.818980117	1
GroceHIT9	Grocery	HID	Turnover	Photocell dimming control	No prior dimming control	Photocell	$0.1453	10	7,571	0.435	3,786	$550.00	50%	85%	85%	3.182483431	1
GroceHIT10	Grocery	HID	Turnover	Central lighting control system	Replace manual switches or no control	Control Point	$0.0991	10	7,571	0.087	757	$75.00	10%	85%	45%	4.667642366	1
HealtHIT8	Healthcare	HID	Turnover	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1306	10	7,020	0.242	2,106	$275.00	30%	85%	85%	3.540949972	1
HealtHIT9	Healthcare	HID	Turnover	Photocell dimming control	No prior dimming control	Photocell	$0.1567	10	7,020	0.403	3,510	$550.00	50%	85%	85%	2.950791643	1
HealtHIT10	Healthcare	HID	Turnover	Central lighting control system	Replace manual switches or no control	Control Point	$0.1068	10	7,020	0.081	702	$75.00	10%	85%	45%	4.327827743	1
InstiHIT8	Institutional	HID	Turnover	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2671	10	3,432	0.118	1,030	$275.00	30%	85%	85%	1.731131097	1
InstiHIT9	Institutional	HID	Turnover	Photocell dimming control	No prior dimming control	Photocell	$0.3205	10	3,432	0.197	1,716	$550.00	50%	85%	85%	1.442609248	1
InstiHIT10	Institutional	HID	Turnover	Central lighting control system	Replace manual switches or no control	Control Point	$0.2185	10	3,432	0.039	343	$75.00	10%	85%	45%	2.115826897	1
OfficPaT3	Office	Packaged DX	Turnover	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$2.29	20	593	0.08	79	$180.81	13%	100%	95%	0.658639308	0
OfficPaT4	Office	Packaged DX	Turnover	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$2.44	20	593	0.12	111	$271.21	19%	100%	95%	0.617485735	0
OfficPaT5	Office	Packaged DX	Turnover	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.20	20	688	0.05	46	$55.00	7%	100%	95%	1.256616438	1
MiscHIT8	Misc	HID	Turnover	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1655	10	5,540	0.191	1,662	$275.00	30%	85%	85%	2.794317719	1
MiscHIT9	Misc	HID	Turnover	Photocell dimming control	No prior dimming control	Photocell	$0.1986	10	5,540	0.318	2,770	$550.00	50%	85%	85%	2.3285981	1
MiscHIT10	Misc	HID	Turnover	Central lighting control system	Replace manual switches or no control	Control Point	$0.1354	10	5,540	0.064	554	$75.00	10%	85%	45%	3.415277213	1
RestaHIT8	Restaurant	HID	Turnover	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1614	10	5,678	0.196	1,704	$275.00	30%	85%	85%	2.864235088	1
RestaHIT9	Restaurant	HID	Turnover	Photocell dimming control	No prior dimming control	Photocell	$0.1937	10	5,678	0.326	2,839	$550.00	50%	85%	85%	2.386862573	1
RestaHIT10	Restaurant	HID	Turnover	Central lighting control system	Replace manual switches or no control	Control Point	$0.1321	10	5,678	0.065	568	$75.00	10%	85%	45%	3.500731774	1
RetaiHIT8	Retail	HID	Turnover	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1675	10	5,473	0.189	1,642	$275.00	30%	85%	85%	2.760629515	1
RetaiHIT9	Retail	HID	Turnover	Photocell dimming control	No prior dimming control	Photocell	$0.2010	10	5,473	0.314	2,737	$550.00	50%	85%	85%	2.300524596	1
RetaiHIT10	Retail	HID	Turnover	Central lighting control system	Replace manual switches or no control	Control Point	$0.1370	10	5,473	0.063	547	$75.00	10%	85%	45%	3.37410274	1
WarehHIT8	Warehouse	HID	Turnover	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1808	10	5,070	0.175	1,521	$275.00	30%	85%	85%	2.557352757	1
WarehHIT9	Warehouse	HID	Turnover	Photocell dimming control	No prior dimming control	Photocell	$0.2170	10	5,070	0.291	2,535	$550.00	50%	85%	85%	2.131127298	1
WarehHIT10	Warehouse	HID	Turnover	Central lighting control system	Replace manual switches or no control	Control Point	$0.1479	10	5,070	0.058	507	$75.00	10%	85%	45%	3.12565337	1
WarehHIN8	Warehouse	HID	New	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1781	10	4,680	0.161	1,404	$250.00	30%	85%	85%	2.596696646	1
WarehHIN9	Warehouse	HID	New	Photocell dimming control	No prior dimming control	Photocell	$0.1923	10	4,680	0.269	2,340	$450.00	50%	85%	85%	2.404348746	1
WarehHIN10	Warehouse	HID	New	Central lighting control system	Replace manual switches or no control	Control Point	$0.1389	10	4,680	0.054	468	$65.00	10%	25%	45%	3.329098264	1
GroceHIN8	Grocery	HID	New	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1192	10	6,989	0.241	2,097	$250.00	30%	85%	85%	3.877733658	1
GroceHIN9	Grocery	HID	New	Photocell dimming control	No prior dimming control	Photocell	$0.1288	10	6,989	0.402	3,494	$450.00	50%	85%	85%	3.590494128	1
GroceHIN10	Grocery	HID	New	Central lighting control system	Replace manual switches or no control	Control Point	$0.0930	10	6,989	0.080	699	$65.00	10%	25%	45%	4.971453407	1
HealtHIN8	Healthcare	HID	New	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1286	10	6,480	0.223	1,944	$250.00	30%	85%	85%	3.595426125	1
HealtHIN9	Healthcare	HID	New	Photocell dimming control	No prior dimming control	Photocell	$0.1389	10	6,480	0.372	3,240	$450.00	50%	85%	85%	3.329098264	1
HealtHIN10	Healthcare	HID	New	Central lighting control system	Replace manual switches or no control	Control Point	$0.1003	10	6,480	0.074	648	$65.00	10%	25%	45%	4.609520673	1
InstiHIN8	Institutional	HID	New	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2630	10	3,168	0.109	950	$250.00	30%	85%	85%	1.757763883	1
InstiHIN9	Institutional	HID	New	Photocell dimming control	No prior dimming control	Photocell	$0.2841	10	3,168	0.182	1,584	$450.00	50%	85%	85%	1.627559151	1
InstiHIN10	Institutional	HID	New	Central lighting control system	Replace manual switches or no control	Control Point	$0.2052	10	3,168	0.036	317	$65.00	10%	25%	45%	2.25354344	1
LodgiHIN8	Lodging	HID	New	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1405	10	5,929	0.204	1,779	$250.00	30%	85%	85%	3.289814904	1
LodgiHIN9	Lodging	HID	New	Photocell dimming control	No prior dimming control	Photocell	$0.1518	10	5,929	0.341	2,965	$450.00	50%	85%	85%	3.046124911	1
LodgiHIN10	Lodging	HID	New	Central lighting control system	Replace manual switches or no control	Control Point	$0.1096	10	5,929	0.068	593	$65.00	10%	25%	45%	4.217711416	1
OfficPaT6	Office	Packaged DX	Turnover	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.20	20	700	0.06	58	$70.00	8%	100%	95%	1.256616438	1
OfficPaT7	Office	Packaged DX	Turnover	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$2.02	20	770	0.06	57	$115.13	7%	100%	95%	0.747054755	0
OfficPaT8	Office	Packaged DX	Turnover	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$2.53	20	794	0.04	39	$98.39	5%	100%	95%	0.596378318	0
RestaHIN8	Restaurant	HID	New	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1590	10	5,242	0.181	1,572	$250.00	30%	85%	85%	2.908300243	1
RestaHIN9	Restaurant	HID	New	Photocell dimming control	No prior dimming control	Photocell	$0.1717	10	5,242	0.301	2,621	$450.00	50%	85%	85%	2.692870596	1
RestaHIN10	Restaurant	HID	New	Central lighting control system	Replace manual switches or no control	Control Point	$0.1240	10	5,242	0.060	524	$65.00	10%	25%	45%	3.728590056	1
RetaiHIN8	Retail	HID	New	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1650	10	5,052	0.174	1,516	$250.00	30%	85%	85%	2.803100738	1
RetaiHIN9	Retail	HID	New	Photocell dimming control	No prior dimming control	Photocell	$0.1781	10	5,052	0.290	2,526	$450.00	50%	85%	85%	2.595463646	1
RetaiHIN10	Retail	HID	New	Central lighting control system	Replace manual switches or no control	Control Point	$0.1287	10	5,052	0.058	505	$65.00	10%	25%	45%	3.593718895	1

`	New Commerical Segment	New End Use	Vintage	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	PJM Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
miscHIN8	misc	HID	New	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1630	10	5,114	0.176	1,534	$250.00	30%	85%	85%	2.837307223	1
MiscHIN9	Misc	HID	New	Photocell dimming control	No prior dimming control	Photocell	$0.1760	10	5,114	0.294	2,557	$450.00	50%	85%	85%	2.627136317	1
MiscHIN10	Misc	HID	New	Central lighting control system	Replace manual switches or no control	Control Point	$0.1271	10	5,114	0.059	511	$65.00	10%	25%	45%	3.637573363	1
OfficPaT9	Office	Packaged DX	Turnover	Ground Source HP Open - Water	Air Source Heat Pump	ton	$3.34	15	700	0.23	225	$ 750.0	32%	5%	95%	0.359568798	0
OfficPaT10	Office	Packaged DX	Turnover	Ground Source HP Closed	Air Source Heat Pump	ton	$5.98	15	700	0.015	125	$750.00	18%	100%	95%	0.127387639	0
OfficPaT11	Office	Packaged DX	Turnover	Air-side Economizer	No Economizer	ton	$1.65	15	688	0.012	103	$170.00	15%	75%	45%	0.462273619	0
OfficPaT12	Office	Packaged DX	Turnover	Energy Recovery Units	No Energy Recovery	ton	$1.30	15	688	0.016	138	$179.00	20%	100%	95%	0.585374416	0
GroceInN3	Grocery	Incandescent	New	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0224	14	7,455	0.257	2,236	$50.00	30%	95%	15%	31.59322137	1
GroceInT2	Grocery	Incandescent	Turnover	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0559	14	7,455	0.257	2,236	$125.00	30%	95%	80%	12.63728855	1
HealtInT2	Healthcare	Incandescent	Turnover	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0603	14	6,912	0.238	2,074	$125.00	30%	95%	80%	11.71726617	1
GroceInN4	Grocery	Incandescent	New	Photocell dimming control	No prior dimming control	Photocell	$0.0402	9	7,455	0.428	3,727	$150.00	50%	95%	95%	9.74247501	1
HealtInN3	Healthcare	Incandescent	New	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0241	14	6,912	0.238	2,074	$50.00	30%	95%	15%	29.29316542	1
GroceInT3	Grocery	Incandescent	Turnover	Photocell dimming control	No prior dimming control	Photocell	$0.0604	9	7,455	0.428	3,727	$225.00	50%	95%	95%	6.49498334	1
HealtInT3	Healthcare	Incandescent	Turnover	Photocell dimming control	No prior dimming control	Photocell	$0.0651	9	6,912	0.397	3,456	$225.00	50%	95%	95%	6.022134278	1
HealtInN4	Healthcare	Incandescent	New	Photocell dimming control	No prior dimming control	Photocell	$0.0434	9	6,912	0.397	3,456	$150.00	50%	95%	95%	9.033201417	1
InstiInN3	Institutional	Incandescent	New	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0493	14	3,379	0.117	1,014	$50.00	30%	95%	15%	14.32110309	1
InstiInN4	Institutional	Incandescent	New	Photocell dimming control	No prior dimming control	Photocell	$0.0888	9	3,379	0.194	1,690	$150.00	50%	95%	95%	4.416231804	1
InstiInT2	Institutional	Incandescent	Turnover	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1233	14	3,379	0.117	1,014	$125.00	30%	95%	80%	5.728441238	1
InstiInT3	Institutional	Incandescent	Turnover	Photocell dimming control	No prior dimming control	Photocell	$0.1332	9	3,379	0.194	1,690	$225.00	50%	95%	95%	2.944154536	1
LodgiInN3	Lodging	Incandescent	New	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0264	14	6,324	0.218	1,897	$50.00	30%	95%	15%	26.80324636	1
LodgiInN4	Lodging	Incandescent	New	Photocell dimming control	No prior dimming control	Photocell	$0.0474	9	6,324	0.363	3,162	$150.00	50%	95%	95%	8.265379296	1
LodgiInT2	Lodging	Incandescent	Turnover	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0659	14	6,324	0.218	1,897	$125.00	30%	95%	80%	10.72129854	1
LodgiInT3	Lodging	Incandescent	Turnover	Photocell dimming control	No prior dimming control	Photocell	$0.0712	9	6,324	0.363	3,162	$225.00	50%	95%	95%	5.510252864	1
RestaInN3	Restaurant	Incandescent	New	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0298	14	5,591	0.193	1,677	$50.00	30%	95%	15%	23.69491603	1
RestaInN4	Restaurant	Incandescent	New	Photocell dimming control	No prior dimming control	Photocell	$0.0537	9	5,591	0.321	2,796	$150.00	50%	95%	95%	7.306856257	1
RestaInT2	Restaurant	Incandescent	Turnover	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0745	14	5,591	0.193	1,677	$125.00	30%	95%	80%	9.477966411	1
RestaInT3	Restaurant	Incandescent	Turnover	Photocell dimming control	No prior dimming control	Photocell	$0.0805	9	5,591	0.321	2,796	$225.00	50%	95%	95%	4.871237505	1
RetaiInN3	Retail	Incandescent	New	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0309	14	5,389	0.186	1,617	$50.00	30%	95%	15%	22.83781971	1
RetaiInN4	Retail	Incandescent	New	Photocell dimming control	No prior dimming control	Photocell	$0.0557	9	5,389	0.310	2,694	$150.00	50%	95%	95%	7.042551475	1
RetaiInT2	Retail	Incandescent	Turnover	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0773	14	5,389	0.186	1,617	$125.00	30%	95%	80%	9.135127883	1
RetaiInT3	Retail	Incandescent	Turnover	Photocell dimming control	No prior dimming control	Photocell	$0.0835	9	5,389	0.310	2,694	$225.00	50%	95%	95%	4.695034317	1
WarehInN3	Warehouse	Incandescent	New	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0334	14	4,992	0.172	1,498	$50.00	30%	95%	15%	21.15617502	1
WarehInN4	Warehouse	Incandescent	New	Photocell dimming control	No prior dimming control	Photocell	$0.0601	9	4,992	0.287	2,496	$150.00	50%	95%	95%	6.523978801	1
WarehInT2	Warehouse	Incandescent	Turnover	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0835	14	4,992	0.172	1,498	$125.00	30%	95%	80%	8.46247001	1
WarehInT3	Warehouse	Incandescent	Turnover	Photocell dimming control	No prior dimming control	Photocell	$0.0901	9	4,992	0.287	2,496	$225.00	50%	95%	95%	4.349319201	1
MiscInN3	Misc	Incandescent	New	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0306	14	5,455	0.188	1,636	$50.00	30%	95%	15%	23.11651163	1
MiscInN4	Misc	Incandescent	New	Photocell dimming control	No prior dimming control	Photocell	$0.0550	9	5,455	0.313	2,727	$150.00	50%	95%	95%	7.12849235	1
MiscInT2	Misc	Incandescent	Turnover	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0764	14	5,455	0.188	1,636	$125.00	30%	95%	80%	9.246604651	1
MiscInT3	Misc	Incandescent	Turnover	Photocell dimming control	No prior dimming control	Photocell	$0.0825	9	5,455	0.313	2,727	$225.00	50%	95%	95%	4.752328233	1
GroceInT4	Grocery	Incandescent	Turnover	LED Lamp - 12 Watt	EISA - 60 Watt equivalent - 43W	Lamp	$0.1329	5	250	0.021	181	$23.99	72%	75%	50%	1.620134828	1
HealtInT4	Healthcare	Incandescent	Turnover	LED Lamp - 12 Watt	EISA - 60 Watt equivalent - 43W	Lamp	$0.1433	5	232	0.019	167	$23.99	72%	75%	50%	1.502185452	1
GroceInT5	Grocery	Incandescent	Turnover	LED Lamp PAR - 12 Watt	Halogen PAR - 45 W	Lamp	$0.1908	5	262	0.021	181	$34.45	69%	75%	90%	1.128215806	1
HealtInT5	Healthcare	Incandescent	Turnover	LED Lamp PAR - 12 Watt	Halogen PAR - 45 W	Lamp	$0.2058	5	243	0.019	167	$34.45	69%	75%	90%	1.046079216	1
InstiInT1	Institutional	Incandescent	Turnover	CFL Lamp - 21 Watt	EISA - 75 Watt equivalent - 53W	Lamp	$0.0355	5	140	0.010	84	$3.00	60%	75%	50%	6.062210277	1
InstiInT4	Institutional	Incandescent	Turnover	LED Lamp - 12 Watt	EISA - 60 Watt equivalent - 43W	Lamp	$0.2931	5	114	0.009	82	$23.99	72%	75%	50%	0.734401776	0
InstiInT5	Institutional	Incandescent	Turnover	LED Lamp PAR - 12 Watt	Halogen PAR - 45 W	Lamp	$0.4209	5	119	0.009	82	$34.45	69%	75%	90%	0.511416506	0
LodgiInT1	Lodging	Incandescent	Turnover	CFL Lamp - 21 Watt	EISA - 75 Watt equivalent - 53W	Lamp	$0.0190	5	262	0.018	158	$3.00	60%	75%	50%	11.34597764	1
LodgiInT4	Lodging	Incandescent	Turnover	LED Lamp - 12 Watt	EISA - 60 Watt equivalent - 43W	Lamp	$0.1566	5	212	0.018	153	$23.99	72%	75%	50%	1.374499688	1
LodgiInT5	Lodging	Incandescent	Turnover	LED Lamp PAR - 12 Watt	Halogen PAR - 45 W	Lamp	$0.2249	5	222	0.018	153	$34.45	69%	75%	90%	0.957162483	0
OfficPaT13	Office	Packaged DX	Turnover	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$3.39	15	727	0.004	33	$110.89	5%	100%	95%	0.224865885	0
OfficPaN18	Office	Packaged DX	New	Automated control system	Baseline DX	ton	$0.69	10	727	0.004	36	$25.00	5%	100%	65%	0.675326892	0
OfficPaN19	Office	Packaged DX	New	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.28	10	617	0.004	34	$43.00	5%	100%	95%	0.363802298	0
RestaInT1	Restaurant	Incandescent	Turnover	CFL Lamp - 21 Watt	EISA - 75 Watt equivalent - 53W	Lamp	$0.0215	5	232	0.016	140	$3.00	60%	75%	50%	10.03020246	1
RestaInT4	Restaurant	Incandescent	Turnover	LED Lamp - 12 Watt	EISA - 60 Watt equivalent - 43W	Lamp	$0.1772	5	188	0.016	135	$23.99	72%	75%	50%	1.215101121	1
RestaInT5	Restaurant	Incandescent	Turnover	LED Lamp PAR - 12 Watt	Halogen PAR - 45 W	Lamp	$0.2544	5	197	0.016	135	$34.45	69%	75%	90%	0.846161855	0
RetaiInT1	Retail	Incandescent	Turnover	CFL Lamp - 21 Watt	EISA - 75 Watt equivalent - 53W	Lamp	$0.0223	5	223	0.015	135	$3.00	60%	75%	50%	9.667388358	1
RetaiInT4	Retail	Incandescent	Turnover	LED Lamp - 12 Watt	EISA - 60 Watt equivalent - 43W	Lamp	$0.1838	5	181	0.015	131	$23.99	72%	75%	50%	1.171148287	1
RetaiInT5	Retail	Incandescent	Turnover	LED Lamp PAR - 12 Watt	Halogen PAR - 45 W	Lamp	$0.2640	5	189	0.015	131	$34.45	69%	75%	90%	0.815554352	0
miscInT1	misc	Incandescent	Turnover	CFL Lamp - 21 Watt	EISA - 75 Watt equivalent - 53W	Lamp	$0.0220	5	226	0.016	136	$3.00	60%	75%	50%	9.785360348	1
miscInT4	misc	Incandescent	Turnover	LED Lamp - 12 Watt	EISA - 60 Watt equivalent - 43W	Lamp	$0.1816	5	183	0.015	132	$23.99	72%	75%	50%	1.185439913	1
miscInT5	misc	Incandescent	Turnover	LED Lamp PAR - 12 Watt	Halogen PAR - 45 W	Lamp	$0.2608	5	192	0.015	132	$34.45	69%	75%	90%	0.825506633	0
WarehInT1	Warehouse	Incandescent	Turnover	CFL Lamp - 21 Watt	EISA - 75 Watt equivalent - 53W	Lamp	$0.0240	5	207	0.014	125	$3.00	60%	75%	50%	8.955537909	1
WarehInT4	Warehouse	Incandescent	Turnover	LED Lamp - 12 Watt	EISA - 60 Watt equivalent - 43W	Lamp	$0.1984	5	168	0.014	121	$23.99	72%	75%	50%	1.084911715	1
WarehInT5	Warehouse	Incandescent	Turnover	LED Lamp PAR - 12 Watt	Halogen PAR - 45 W	Lamp	$0.2849	5	176	0.014	121	$34.45	69%	75%	90%	0.755501656	0
LodgiInN6	Lodging	Incandescent	New	Hotel Occupancy Sensors	No prior control	Per Room	$0.4468	10	240	0.019	168	$75.00	70%	90%	95%	1.034846085	1
LodgiInT6	Lodging	Incandescent	Turnover	Hotel Occupancy Sensors	No prior control	Per Room	$0.5957	10	240	0.019	168	$100.00	70%	90%	95%	0.776134564	0
OfficPaT15	Office	Packaged DX	Turnover	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.28	10	617	0.004	34	$43.00	5%	100%	95%	0.363802298	0
AllReT1	All	Refrigeration	Turnover	Vertical night covers	No covers present	linear ft	$0.34	5	4,380	0.006	44	$15.00	1.00%	50%	95%	0.637718125	0
AllReT2	All	Refrigeration	Turnover	eCube	No eCube	unit	$0.33	9	5,431	0.162	1,222	$399.00	22.50%	95%	95%	1.216215726	1
AllReT3	All	Refrigeration	Turnover	Anti-sweat heat (ASH) controls - Freezer	ASH without controls	Per Door	$0.16	12	2,985	0.029	1,882	$300.00	63%	95%	85%	3.453029472	1
AllReT4	All	Refrigeration	Turnover	Anti-sweat heat (ASH) controls - Cooler	ASH without controls	Per Door	$0.29	12	1,621	0.028	1,023	$300.00	63%	95%	85%	1.892941356	1
AllReT5	All	Refrigeration	Turnover	Floating head pressure controller	Standard head pressure control	ton	$0.46	14	18,314	0.085	641	$296.00	4%	50%	95%	1.545130614	1
GroceMoE1	Grocery	Motors	Early	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.145921749	1
AllReN1	All	Refrigeration	New	Efficient, low-temp reach-in	Standard low-temp reach-in	unit	$0.07	12	5,431	0.222	1,671	$123.33	30.77%	95%	95%	8.098144868	1
AllReN2	All	Refrigeration	New	No-heat glass doors	Standard low-temp reach-in	door	$0.67	10	3,986	0.106	797	$537.50	20.00%	95%	95%	0.69394608	0
AllReN3	All	Refrigeration	New	High Efficiency Ice Makers	Standard Ice Maker	Each	$0.16	10	11,815	0.042	318	$50.00	3%	85%	85%	2.975882726	1
AllReN4	All	Refrigeration	New	Compressor VSD	Base Refrigeration System - Grocery		$0.35	13	5,436	0.101	761	$267.00	14%	75%	86%	1.87342009	1
AllReN5	All	Refrigeration	New	VFD on cooling tower fans	Base single-speed fan		$0.29	15	7158	0.681	5,132	$1,507.40	72%	25%	95%	2.60937005	1
GroceMoN1	Grocery	Motors	New	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1015	15	15384	0.0282	139.5	$154	0.91%	74.4%	100%	0.728655117	0
GroceMoN2	Grocery	Motors	New	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.1901	15	58940	0.0231	437.7	$521	0.74%	74.4%	100%	0.61503802	0
GroceMoN3	Grocery	Motors	New	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0693	15	144688	0.0138	644.1	$689	0.45%	66.3%	100%	0.670683986	0
GroceMoN4	Grocery	Motors	New	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4499	15	290922	0.0121	1135.2	$511	0.39%	55.8%	100%	1.582483169	1
GroceMoN5	Grocery	Motors	New	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-500 HP	Motor	$0.3775	15	624328	0.0284	5711.1	$2,156	0.91%	55.8%	100%	1.878982021	1
GroceMoN6	Grocery	Motors	New	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5635	15	97600	2.511	19,520	$11,000.00	20%	55.0%	100%	1.362719583	1
GroceMoN7	Grocery	Motors	New	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4367	15	97600	3.941	29767.9	$13,000.00	31%	70.0%	100%	1.762482909	1
GroceMoN8	Grocery	Motors	New	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4149	15	97600	0.000	31329.5	$13,000.00	32%	80.0%	100%	1.703788781	1
GroceMoN9	Grocery	Motors	New	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.4915	15	97600	3.941	26449.5	$13,000.00	27%	70.0%	100%	1.5820193	1
GroceMoN10	Grocery	Motors	New	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4515	15	97600	2.798	28791.9	$13,000.00	30%	55.0%	100%	1.667745142	1
GroceMoN11	Grocery	Motors	New	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.4915	15	97600	3.941	26449.5	$13,000.00	27%	30.0%	100%	1.5820193	1
GroceMoT1	Grocery	Motors	Turnover	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1015	15	15384	0.0282	139.5	$154	0.91%	74.4%	100%	0.728655117	0
GroceMoT2	Grocery	Motors	Turnover	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.1901	15	58940	0.0231	437.7	$521	0.74%	74.4%	100%	0.61503802	0
GroceMoT3	Grocery	Motors	Turnover	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0693	15	144688	0.0138	644.1	$689	0.45%	66.3%	100%	0.670683986	0
GroceMoT4	Grocery	Motors	Turnover	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4499	15	290922	0.0121	1135.2	$511	0.39%	55.8%	100%	1.582483169	1
GroceMoT5	Grocery	Motors	Turnover	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-250 HP	Motor	$0.3775	15	624328	0.0284	5711.1	$2,156	0.91%	55.8%	100%	1.878982021	1
GroceMoT6	Grocery	Motors	Turnover	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5635	15	97600	2.511	19,520	$11,000.00	20%	55.0%	80%	1.362719583	1
GroceMoT7	Grocery	Motors	Turnover	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4367	15	97600	3.941	29767.9	$13,000.00	31%	90.0%	80%	1.762482909	1
GroceMoT8	Grocery	Motors	Turnover	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4149	15	97600	0.000	31329.5	$13,000.00	32%	90.0%	80%	1.703788781	1
GroceMoT9	Grocery	Motors	Turnover	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.4915	15	97600	3.941	26449.5	$13,000.00	27%	90.0%	80%	1.5820193	1
GroceMoT10	Grocery	Motors	Turnover	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4515	15	97600	2.798	28791.9	$13,000.00	30%	80.0%	80%	1.667745142	1

`	New Commerical Segment	New End Use	Vintage	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	PJM Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
GroceMoT11	Grocery	Motors	Turnover	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.4915	15	97600	3.941	26449.5	$13,000.00	27%	55.0%	80%	1.5820193	1
GroceMoT12	Grocery	Motors	Turnover	Motors: Rewind 125-200 HP	(E) Motor	Motor	$0.5097	15	292799	0.189	1471.4	$750	0.5%	35.0%	95%	1.506524162	1
GroceMoT13	Grocery	Motors	Turnover	Motors: Rewind 201-500 HP	(E) Motor	Motor	$0.6274	15	634398	0.410	3187.9	$2,000	0.5%	50.0%	95%	1.224050881	1
GroceMoT14	Grocery	Motors	Turnover	Motors: Rewind 20-50 HP	(E) Motor	Motor	$0.4704	15	59847	0.068	531.4	$250	0.9%	10.0%	95%	1.632343838	1
GroceMoT15	Grocery	Motors	Turnover	Motors: Rewind 500+ HP	(E) Motor	Motor	$0.5437	15	1463995	0.946	7356.8	$4,000	0.5%	70.0%	95%	1.412366402	1
GroceMoT16	Grocery	Motors	Turnover	Motors: Rewind 51-100 HP	(E) Motor	Motor	$0.5841	15	147991	0.110	856.0	$500	0.6%	20.0%	95%	1.314650633	1
GroceMoT17	Grocery	Motors	Turnover	Downsizing motor during retrofit	Larger hp standard motor	HP Reduction	$0.34	20	186,404	0.190	1,477	$500.00	0.79%	25%	95%	2.925124127	1
GroceMoN12	Grocery	Motors	New	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.472196051	1
GroceMoN13	Grocery	Motors	New	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.028977005	0
GroceMoN14	Grocery	Motors	New	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.588451679	1
GroceMoN15	Grocery	Motors	New	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.589344322	0
GroceMoT18	Grocery	Motors	Turnover	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.472196051	1
GroceMoT19	Grocery	Motors	Turnover	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.028977005	0
GroceMoT20	Grocery	Motors	Turnover	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.588451679	1
GroceMoT21	Grocery	Motors	Turnover	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.589344322	0
GroceMoT22	Grocery	Motors	Turnover	Air Comp Improvements			$0.11	15	56148	1.148	8,928	$990.00	16%	28%	65%	6.924957253	1
GroceMoE2	Grocery	Motors	Early	Air Compressor Optimization			$0.16	15	56148	2.174	16,901	$2,750.00	30%	38%	65%	4.719423698	1
GroceMoT23	Grocery	Motors	Turnover	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.145921749	1
HealtMoN1	Healthcare	Motors	New	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$0.8576	15	19759	0.0282	179.2	$154	0.91%	74.4%	100%	0.91116023	0
HealtMoN2	Healthcare	Motors	New	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$0.9266	15	75700	0.0231	562.2	$521	0.74%	74.4%	100%	0.78395945	0
HealtMoN3	Healthcare	Motors	New	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$0.8325	15	185830	0.0138	827.3	$689	0.45%	66.3%	100%	0.858688498	0
HealtMoN4	Healthcare	Motors	New	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.3503	15	373646	0.0121	1458.0	$511	0.39%	55.8%	100%	2.029265321	1
HealtMoN5	Healthcare	Motors	New	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-500 HP	Motor	$0.2939	15	801855	0.0284	7335.1	$2,156	0.91%	55.8%	100%	2.411494394	1
HealtMoN6	Healthcare	Motors	New	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.4388	15	125352	3.225	25,070	$11,000.00	20%	55.0%	100%	1.750208052	1
HealtMoN7	Healthcare	Motors	New	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.3771	15	125352	3.941	34471.8	$13,000.00	28%	70.0%	100%	2.018295805	1
HealtMoN8	Healthcare	Motors	New	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.3231	15	125352	0.000	40238.0	$13,000.00	32%	80.0%	100%	2.188260065	1
HealtMoN9	Healthcare	Motors	New	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.4490	15	125352	3.941	28956.3	$13,000.00	23%	70.0%	100%	1.718347385	1
HealtMoN10	Healthcare	Motors	New	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.3758	15	125352	2.798	34597.2	$13,000.00	28%	55.0%	100%	1.98345258	1
HealtMoN11	Healthcare	Motors	New	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.4233	15	125352	3.941	30711.3	$13,000.00	25%	30.0%	100%	1.813785519	1
HealtMoT1	Healthcare	Motors	Turnover	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$0.8576	15	19759	0.0282	179.2	$154	0.91%	74.4%	100%	0.91116023	0
HealtMoT2	Healthcare	Motors	Turnover	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$0.9266	15	75700	0.0231	562.2	$521	0.74%	74.4%	100%	0.78395945	0
HealtMoT3	Healthcare	Motors	Turnover	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$0.8325	15	185830	0.0138	827.3	$689	0.45%	66.3%	100%	0.858688498	0
HealtMoT4	Healthcare	Motors	Turnover	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.3503	15	373646	0.0121	1458.0	$511	0.39%	55.8%	100%	2.029265321	1
HealtMoT5	Healthcare	Motors	Turnover	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-250 HP	Motor	$0.2939	15	801855	0.0284	7335.1	$2,156	0.91%	55.8%	100%	2.411494394	1
HealtMoT6	Healthcare	Motors	Turnover	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.4388	15	125352	3.225	25,070	$11,000.00	20%	55.0%	80%	1.750208052	1
HealtMoT7	Healthcare	Motors	Turnover	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.3771	15	125352	3.941	34471.8	$13,000.00	28%	90.0%	80%	2.018295805	1
HealtMoT8	Healthcare	Motors	Turnover	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.3231	15	125352	0.000	40238.0	$13,000.00	32%	90.0%	80%	2.188260065	1
HealtMoT9	Healthcare	Motors	Turnover	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.4490	15	125352	3.941	28956.3	$13,000.00	23%	90.0%	80%	1.718347385	1
HealtMoT10	Healthcare	Motors	Turnover	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.3758	15	125352	2.798	34597.2	$13,000.00	28%	80.0%	80%	1.98345258	1
HealtMoT11	Healthcare	Motors	Turnover	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.4233	15	125352	3.941	30711.3	$13,000.00	25%	55.0%	80%	1.813785519	1
HealtMoT12	Healthcare	Motors	Turnover	Motors: Rewind 125-200 HP	(E) Motor	Motor	$0.3969	15	376056	0.243	1889.7	$750	0.5%	35.0%	95%	1.934903374	1
HealtMoT13	Healthcare	Motors	Turnover	Motors: Rewind 201-500 HP	(E) Motor	Motor	$0.4885	15	814788	0.527	4094.4	$2,000	0.5%	50.0%	95%	1.572108991	1
HealtMoT14	Healthcare	Motors	Turnover	Motors: Rewind 20-50 HP	(E) Motor	Motor	$0.3663	15	76864	0.088	682.5	$250	0.9%	10.0%	95%	2.096499797	1
HealtMoT15	Healthcare	Motors	Turnover	Motors: Rewind 500+ HP	(E) Motor	Motor	$0.4233	15	1880281	1.216	9448.6	$4,000	0.5%	70.0%	95%	1.813971913	1
HealtMoT16	Healthcare	Motors	Turnover	Motors: Rewind 51-100 HP	(E) Motor	Motor	$0.4548	15	190072	0.141	1099.4	$500	0.6%	20.0%	95%	1.688470726	1
HealtMoT17	Healthcare	Motors	Turnover	Downsizing motor during retrofit	Larger hp standard motor	HP Reduction	$0.34	20	186,404	0.190	1,477	$500.00	0.79%	25%	95%	2.925124127	1
HealtMoN12	Healthcare	Motors	New	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.472196051	1
HealtMoN13	Healthcare	Motors	New	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.028977005	0
HealtMoN14	Healthcare	Motors	New	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.588451679	1
HealtMoN15	Healthcare	Motors	New	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.589344322	0
HealtMoT18	Healthcare	Motors	Turnover	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.472196051	1
HealtMoT19	Healthcare	Motors	Turnover	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.028977005	0
HealtMoT20	Healthcare	Motors	Turnover	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.588451679	1
HealtMoT21	Healthcare	Motors	Turnover	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.589344322	0
HealtMoT22	Healthcare	Motors	Turnover	Air Comp Improvements			$0.11	15	56148	1.148	8,928	$990.00	16%	28%	65%	6.924957253	1
HealtMoE2	Healthcare	Motors	Early	Air Compressor Optimization			$0.16	15	56148	2.174	16,901	$2,750.00	30%	38%	65%	4.719423698	1
HealtMoE1	Healthcare	Motors	Early	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.145921749	1
InstiMoN1	Institutional	Motors	New	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.2757	15	13284	0.0282	120.5	$154	0.91%	74.4%	100%	0.641022595	0
InstiMoN2	Institutional	Motors	New	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.3783	15	50893	0.0231	377.9	$521	0.74%	74.4%	100%	0.533927904	0
InstiMoN3	Institutional	Motors	New	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.2384	15	124933	0.0138	556.2	$689	0.45%	66.3%	100%	0.580410847	0
InstiMoN4	Institutional	Motors	New	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.5211	15	251201	0.0121	980.2	$511	0.39%	55.8%	100%	1.367954127	1
InstiMoN5	Institutional	Motors	New	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-500 HP	Motor	$0.4372	15	539086	0.0284	4931.3	$2,156	0.91%	55.8%	100%	1.62328835	1
InstiMoN6	Institutional	Motors	New	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.6526	15	84274	2.168	16,855	$11,000.00	20%	55.0%	100%	1.176661278	1
InstiMoN7	Institutional	Motors	New	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.5074	15	84274	6.136	25619.3	$13,000.00	30%	70.0%	100%	1.616900385	1
InstiMoN8	Institutional	Motors	New	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4806	15	84274	0.000	27051.9	$13,000.00	32%	80.0%	100%	1.471162747	1
InstiMoN9	Institutional	Motors	New	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5713	15	84274	6.136	22754.0	$13,000.00	27%	70.0%	100%	1.461076293	1
InstiMoN10	Institutional	Motors	New	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.5265	15	84274	4.452	24692.3	$13,000.00	29%	55.0%	100%	1.505092677	1
InstiMoN11	Institutional	Motors	New	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5713	15	84274	6.136	22754.0	$13,000.00	27%	30.0%	100%	1.461076293	1
InstiMoT1	Institutional	Motors	Turnover	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.2757	15	13284	0.0282	120.5	$154	0.91%	74.4%	100%	0.641022595	0
InstiMoT10	Institutional	Motors	Turnover	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.5265	15	84274	4.452	24692.3	$13,000.00	29%	80.0%	80%	1.505092677	1
InstiMoT11	Institutional	Motors	Turnover	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5713	15	84274	6.136	22754.0	$13,000.00	27%	55.0%	80%	1.461076293	1
InstiMoT12	Institutional	Motors	Turnover	Motors: Rewind 125-200 HP	(E) Motor	Motor	$0.5903	15	252822	0.163	1270.5	$750	0.5%	35.0%	95%	1.300831564	1
InstiMoT13	Institutional	Motors	Turnover	Motors: Rewind 201-500 HP	(E) Motor	Motor	$0.7266	15	547781	0.354	2752.7	$2,000	0.5%	50.0%	95%	1.056925646	1
InstiMoT14	Institutional	Motors	Turnover	Motors: Rewind 20-50 HP	(E) Motor	Motor	$0.5448	15	51676	0.059	458.9	$250	0.9%	10.0%	95%	1.409472507	1
InstiMoT15	Institutional	Motors	Turnover	Motors: Rewind 500+ HP	(E) Motor	Motor	$0.6297	15	1264109	0.817	6352.3	$4,000	0.5%	70.0%	95%	1.219529591	1
InstiMoT16	Institutional	Motors	Turnover	Motors: Rewind 51-100 HP	(E) Motor	Motor	$0.6765	15	127785	0.095	739.1	$500	0.6%	20.0%	95%	1.1351554	1
InstiMoT17	Institutional	Motors	Turnover	Downsizing motor during retrofit	Larger hp standard motor	HP Reduction	$0.34	20	186,404	0.190	1,477	$500.00	0.79%	25%	95%	2.925124127	1
InstiMoT2	Institutional	Motors	Turnover	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.3783	15	50893	0.0231	377.9	$521	0.74%	74.4%	100%	0.533927904	0
HealtMoT23	Healthcare	Motors	Turnover	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.145921749	1
InstiMoT3	Institutional	Motors	Turnover	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.2384	15	124933	0.0138	556.2	$689	0.45%	66.3%	100%	0.580410847	0
InstiMoT4	Institutional	Motors	Turnover	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.5211	15	251201	0.0121	980.2	$511	0.39%	55.8%	100%	1.367954127	1
InstiMoT5	Institutional	Motors	Turnover	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-250 HP	Motor	$0.4372	15	539086	0.0284	4931.3	$2,156	0.91%	55.8%	100%	1.62328835	1
InstiMoT6	Institutional	Motors	Turnover	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.6526	15	84274	2.168	16,855	$11,000.00	20%	55.0%	80%	1.176661278	1
InstiMoT7	Institutional	Motors	Turnover	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.5074	15	84274	6.136	25619.3	$13,000.00	30%	90.0%	80%	1.616900385	1
InstiMoT8	Institutional	Motors	Turnover	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4806	15	84274	0.000	27051.9	$13,000.00	32%	90.0%	80%	1.471162747	1
InstiMoN12	Institutional	Motors	New	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.472196051	1
InstiMoN13	Institutional	Motors	New	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.028977005	0
InstiMoN14	Institutional	Motors	New	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.588451679	1
InstiMoN15	Institutional	Motors	New	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.589344322	0
InstiMoT18	Institutional	Motors	Turnover	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.472196051	1
InstiMoT19	Institutional	Motors	Turnover	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.028977005	0
InstiMoT20	Institutional	Motors	Turnover	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.588451679	1
InstiMoT21	Institutional	Motors	Turnover	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.589344322	0
InstiMoT22	Institutional	Motors	Turnover	Air Comp Improvements			$0.11	15	56148	1.148	8,928	$990.00	16%	28%	65%	6.924957253	1
InstiMoE2	Institutional	Motors	Early	Air Compressor Optimization			$0.16	15	56148	2.174	16,901	$2,750.00	30%	38%	65%	4.719423698	1
InstiMoE1	Institutional	Motors	Early	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.145921749	1
LodgiMoN1	Lodging	Motors	New	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1114	15	15247	0.0282	138.3	$154	0.91%	74.4%	100%	0.722944826	0
LodgiMoN2	Lodging	Motors	New	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.2008	15	58416	0.0231	433.8	$521	0.74%	74.4%	100%	0.609752741	0
LodgiMoN3	Lodging	Motors	New	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0789	15	143401	0.0138	638.4	$689	0.45%	66.3%	100%	0.664801628	0

	New Commerical Segment	New End Use	Vintage	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	PJM Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
LodgiMoN4	Lodging	Motors	New	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4540	15	288334	0.0121	1125.1	$511	0.39%	55.8%	100%	1.568504075	1
LodgiMoN5	Lodging	Motors	New	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-500 HP	Motor	$0.3809	15	618773	0.0284	5660.3	$2,156	0.91%	55.8%	100%	1.862320567	1
LodgiMoN6	Lodging	Motors	New	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5686	15	96731	2.489	19,346	$11,000.00	20%	55.0%	100%	1.350595693	1
LodgiMoN7	Lodging	Motors	New	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4477	15	96731	4.693	29035.5	$13,000.00	30%	70.0%	100%	1.750062288	1
LodgiMoN8	Lodging	Motors	New	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4187	15	96731	0.000	31050.8	$13,000.00	32%	80.0%	100%	1.688630456	1
LodgiMoN9	Lodging	Motors	New	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5087	15	96731	4.693	25553.2	$13,000.00	26%	70.0%	100%	1.560683172	1
LodgiMoN10	Lodging	Motors	New	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4616	15	96731	3.364	28164.9	$13,000.00	29%	55.0%	100%	1.654296622	1
LodgiMoN11	Lodging	Motors	New	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5043	15	96731	4.693	25778.9	$13,000.00	27%	30.0%	100%	1.572957744	1
LodgiMoT1	Lodging	Motors	Turnover	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1114	15	15247	0.0282	138.3	$154	0.91%	74.4%	100%	0.722944826	0
LodgiMoT2	Lodging	Motors	Turnover	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.2008	15	58416	0.0231	433.8	$521	0.74%	74.4%	100%	0.609752741	0
LodgiMoT3	Lodging	Motors	Turnover	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0789	15	143401	0.0138	638.4	$689	0.45%	66.3%	100%	0.664801628	0
LodgiMoT4	Lodging	Motors	Turnover	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4540	15	288334	0.0121	1125.1	$511	0.39%	55.8%	100%	1.568504075	1
LodgiMoT5	Lodging	Motors	Turnover	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-250 HP	Motor	$0.3809	15	618773	0.0284	5660.3	$2,156	0.91%	55.8%	100%	1.862320567	1
LodgiMoT6	Lodging	Motors	Turnover	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5686	15	96731	2.489	19,346	$11,000.00	20%	55.0%	80%	1.350595693	1
LodgiMoT7	Lodging	Motors	Turnover	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4477	15	96731	4.693	29035.5	$13,000.00	30%	90.0%	80%	1.750062288	1
LodgiMoT8	Lodging	Motors	Turnover	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4187	15	96731	0.000	31050.8	$13,000.00	32%	90.0%	80%	1.688630456	1
LodgiMoT9	Lodging	Motors	Turnover	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5087	15	96731	4.693	25553.2	$13,000.00	26%	90.0%	80%	1.560683172	1
LodgiMoT10	Lodging	Motors	Turnover	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4616	15	96731	3.364	28164.9	$13,000.00	29%	80.0%	80%	1.654296622	1
LodgiMoT11	Lodging	Motors	Turnover	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5043	15	96731	4.693	25778.9	$13,000.00	27%	55.0%	80%	1.572957744	1
LodgiMoT12	Lodging	Motors	Turnover	Motors: Rewind 125-200 HP	(E) Motor	Motor	$0.5143	15	290194	0.188	1458.3	$750	0.5%	35.0%	95%	1.493120867	1
LodgiMoT13	Lodging	Motors	Turnover	Motors: Rewind 201-500 HP	(E) Motor	Motor	$0.6330	15	628754	0.406	3159.6	$2,000	0.5%	50.0%	95%	1.213160704	1
LodgiMoT14	Lodging	Motors	Turnover	Motors: Rewind 20-50 HP	(E) Motor	Motor	$0.4747	15	59314	0.068	526.7	$250	0.9%	10.0%	95%	1.617821146	1
LodgiMoT15	Lodging	Motors	Turnover	Motors: Rewind 500+ HP	(E) Motor	Motor	$0.5486	15	1450970	0.938	7291.3	$4,000	0.5%	70.0%	95%	1.399800813	1
LodgiMoT16	Lodging	Motors	Turnover	Motors: Rewind 51-100 HP	(E) Motor	Motor	$0.5894	15	146674	0.109	848.4	$500	0.6%	20.0%	95%	1.302954404	1
LodgiMoT17	Lodging	Motors	Turnover	Downsizing motor during retrofit	Larger hp standard motor	HP Reduction	$0.34	20	186,404	0.190	1,477	$500.00	0.79%	25%	95%	2.925124127	1
LodgiMoN12	Lodging	Motors	New	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.472196051	1
LodgiMoN13	Lodging	Motors	New	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.028977005	0
LodgiMoN14	Lodging	Motors	New	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.588451679	1
LodgiMoN15	Lodging	Motors	New	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.589344322	0
LodgiMoT18	Lodging	Motors	Turnover	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.472196051	1
LodgiMoT19	Lodging	Motors	Turnover	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.028977005	0
LodgiMoT20	Lodging	Motors	Turnover	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.588451679	1
LodgiMoT21	Lodging	Motors	Turnover	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.589344322	0
LodgiMoT22	Lodging	Motors	Turnover	Air Comp Improvements			$0.11	15	56148	1.148	8,928	$990.00	16%	28%	65%	6.924957253	1
LodgiMoE2	Lodging	Motors	Early	Air Compressor Optimization			$0.16	15	56148	2.174	16,901	$2,750.00	30%	38%	65%	4.719423698	1
InstiMoT23	Institutional	Motors	Turnover	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.145921749	1
miscMoN1	misc	Motors	New	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1114	15	15247	0.0282	138.3	$154	0.91%	74.4%	100%	0.722944826	0
miscMoN2	misc	Motors	New	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.2008	15	58416	0.0231	433.8	$521	0.74%	74.4%	100%	0.609752741	0
miscMoN3	misc	Motors	New	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0789	15	143401	0.0138	638.4	$689	0.45%	66.3%	100%	0.664801628	0
miscMoN4	misc	Motors	New	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4540	15	288334	0.0121	1125.1	$511	0.39%	55.8%	100%	1.568504075	1
miscMoN5	misc	Motors	New	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-500 HP	Motor	$0.3809	15	618773	0.0284	5660.3	$2,156	0.91%	55.8%	100%	1.862320567	1
miscMoN6	misc	Motors	New	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5686	15	96731	2.489	19,346	$11,000.00	20%	55.0%	100%	1.350595693	1
miscMoN7	misc	Motors	New	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4477	15	96731	4.693	29035.5	$13,000.00	30%	70.0%	100%	1.750062288	1
miscMoN8	misc	Motors	New	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4187	15	96731	0.000	31050.8	$13,000.00	32%	80.0%	100%	1.688630456	1
miscMoN9	misc	Motors	New	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5087	15	96731	4.693	25553.2	$13,000.00	26%	70.0%	100%	1.560683172	1
miscMoN10	misc	Motors	New	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4616	15	96731	3.364	28164.9	$13,000.00	29%	55.0%	100%	1.654296622	1
miscMoN11	misc	Motors	New	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5043	15	96731	4.693	25778.9	$13,000.00	27%	30.0%	100%	1.572957744	1
miscMoT1	misc	Motors	Turnover	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1114	15	15247	0.0282	138.3	$154	0.91%	74.4%	100%	0.722944826	0
miscMoT2	misc	Motors	Turnover	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.2008	15	58416	0.0231	433.8	$521	0.74%	74.4%	100%	0.609752741	0
miscMoT3	misc	Motors	Turnover	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0789	15	143401	0.0138	638.4	$689	0.45%	66.3%	100%	0.664801628	0
miscMoT4	misc	Motors	Turnover	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4540	15	288334	0.0121	1125.1	$511	0.39%	55.8%	100%	1.568504075	1
miscMoT5	misc	Motors	Turnover	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-250 HP	Motor	$0.3809	15	618773	0.0284	5660.3	$2,156	0.91%	55.8%	100%	1.862320567	1
miscMoT6	misc	Motors	Turnover	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5686	15	96731	2.489	19,346	$11,000.00	20%	55.0%	80%	1.350595693	1
miscMoT7	misc	Motors	Turnover	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4477	15	96731	4.693	29035.5	$13,000.00	30%	90.0%	80%	1.750062288	1
miscMoT8	misc	Motors	Turnover	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4187	15	96731	0.000	31050.8	$13,000.00	32%	90.0%	80%	1.688630456	1
miscMoT9	misc	Motors	Turnover	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5087	15	96731	4.693	25553.2	$13,000.00	26%	90.0%	80%	1.560683172	1
miscMoT10	misc	Motors	Turnover	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4616	15	96731	3.364	28164.9	$13,000.00	29%	80.0%	80%	1.654296622	1
miscMoT11	misc	Motors	Turnover	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5043	15	96731	4.693	25778.9	$13,000.00	27%	55.0%	80%	1.572957744	1
miscMoT12	misc	Motors	Turnover	Motors: Rewind 125-200 HP	(E) Motor	Motor	$0.5143	15	290194	0.188	1458.3	$750	0.5%	35.0%	95%	1.493120867	1
miscMoT13	misc	Motors	Turnover	Motors: Rewind 201-500 HP	(E) Motor	Motor	$0.6330	15	628754	0.406	3159.6	$2,000	0.5%	50.0%	95%	1.213160704	1
miscMoT14	misc	Motors	Turnover	Motors: Rewind 20-50 HP	(E) Motor	Motor	$0.4747	15	59314	0.068	526.7	$250	0.9%	10.0%	95%	1.617821146	1
miscMoT15	misc	Motors	Turnover	Motors: Rewind 500+ HP	(E) Motor	Motor	$0.5486	15	1450970	0.938	7291.3	$4,000	0.5%	70.0%	95%	1.399800813	1
miscMoT16	misc	Motors	Turnover	Motors: Rewind 51-100 HP	(E) Motor	Motor	$0.5894	15	146674	0.109	848.4	$500	0.6%	20.0%	95%	1.302954404	1
miscMoT17	misc	Motors	Turnover	Downsizing motor during retrofit	Larger hp standard motor	HP Reduction	$0.34	20	186,404	0.190	1,477	$500.00	0.79%	25%	95%	2.925124127	1
miscMoN12	misc	Motors	New	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.472196051	1
miscMoN13	misc	Motors	New	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.028977005	0
miscMoN14	misc	Motors	New	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.588451679	1
miscMoN15	misc	Motors	New	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.589344322	0
miscMoT18	misc	Motors	Turnover	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.472196051	1
miscMoT19	misc	Motors	Turnover	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.028977005	0
miscMoT20	misc	Motors	Turnover	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.588451679	1
miscMoT21	misc	Motors	Turnover	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.589344322	0
miscMoT22	misc	Motors	Turnover	Air Comp Improvements			$0.11	15	56148	1.148	8,928	$990.00	16%	28%	65%	6.924957253	1
miscMoE2	misc	Motors	Early	Air Compressor Optimization			$0.16	15	56148	2.174	16,901	$2,750.00	30%	38%	65%	4.719423698	1
LodgiMoE1	Lodging	Motors	Early	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.145921749	1
RetaiMoN1	Retail	Motors	New	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1015	15	15384	0.0282	139.5	$154	0.91%	74.4%	100%	0.728655117	0
RetaiMoN2	Retail	Motors	New	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.1901	15	58940	0.0231	437.7	$521	0.74%	74.4%	100%	0.61503802	0
RetaiMoN3	Retail	Motors	New	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0693	15	144688	0.0138	644.1	$689	0.45%	66.3%	100%	0.670683986	0
RetaiMoN4	Retail	Motors	New	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4499	15	290922	0.0121	1135.2	$511	0.39%	55.8%	100%	1.582483169	1
RetaiMoN5	Retail	Motors	New	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-500 HP	Motor	$0.3775	15	624328	0.0284	5711.1	$2,156	0.91%	55.8%	100%	1.878982021	1
RetaiMoN6	Retail	Motors	New	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5635	15	97600	2.511	19,520	$11,000.00	20%	55.0%	100%	1.362719583	1
RetaiMoN7	Retail	Motors	New	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4367	15	97600	3.941	29767.9	$13,000.00	31%	70.0%	100%	1.762482909	1
RetaiMoN8	Retail	Motors	New	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4149	15	97600	0.000	31329.5	$13,000.00	32%	80.0%	100%	1.703788781	1
RetaiMoN9	Retail	Motors	New	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.4915	15	97600	3.941	26449.5	$13,000.00	27%	70.0%	100%	1.5820193	1
RetaiMoN10	Retail	Motors	New	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4515	15	97600	2.798	28791.9	$13,000.00	30%	55.0%	100%	1.667745142	1
RetaiMoN11	Retail	Motors	New	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.4915	15	97600	3.941	26449.5	$13,000.00	27%	30.0%	100%	1.5820193	1
RetaiMoT1	Retail	Motors	Turnover	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1015	15	15384	0.0282	139.5	$154	0.91%	74.4%	100%	0.728655117	0
RetaiMoT2	Retail	Motors	Turnover	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.1901	15	58940	0.0231	437.7	$521	0.74%	74.4%	100%	0.61503802	0
RetaiMoT3	Retail	Motors	Turnover	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0693	15	144688	0.0138	644.1	$689	0.45%	66.3%	100%	0.670683986	0
RetaiMoT4	Retail	Motors	Turnover	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4499	15	290922	0.0121	1135.2	$511	0.39%	55.8%	100%	1.582483169	1
RetaiMoT5	Retail	Motors	Turnover	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-250 HP	Motor	$0.3775	15	624328	0.0284	5711.1	$2,156	0.91%	55.8%	100%	1.878982021	1
RetaiMoT6	Retail	Motors	Turnover	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5635	15	97600	2.511	19,520	$11,000.00	20%	55.0%	80%	1.362719583	1
RetaiMoT7	Retail	Motors	Turnover	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4367	15	97600	3.941	29767.9	$13,000.00	31%	90.0%	80%	1.762482909	1
RetaiMoT8	Retail	Motors	Turnover	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4149	15	97600	0.000	31329.5	$13,000.00	32%	90.0%	80%	1.703788781	1
RetaiMoT9	Retail	Motors	Turnover	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.4915	15	97600	3.941	26449.5	$13,000.00	27%	90.0%	80%	1.5820193	1
RetaiMoT10	Retail	Motors	Turnover	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4515	15	97600	2.798	28791.9	$13,000.00	30%	80.0%	80%	1.667745142	1
RetaiMoT11	Retail	Motors	Turnover	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.4915	15	97600	3.941	26449.5	$13,000.00	27%	55.0%	80%	1.5820193	1
RetaiMoT12	Retail	Motors	Turnover	Motors: Rewind 125-200 HP	(E) Motor	Motor	$0.5097	15	292799	0.189	1471.4	$750	0.5%	35.0%	95%	1.506524162	1
RetaiMoT13	Retail	Motors	Turnover	Motors: Rewind 201-500 HP	(E) Motor	Motor	$0.6274	15	634398	0.410	3187.9	$2,000	0.5%	50.0%	95%	1.224050881	1

	New Commerical Segment	New End Use	Vintage	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	PJM Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
RetaiMoT14	Retail	Motors	Turnover	Motors: Rewind 20-50 HP	(E) Motor	Motor	$0.4704	15	59847	0.068	531.4	$250	0.9%	10.0%	95%	1.632343838	1
RetaiMoT15	Retail	Motors	Turnover	Motors: Rewind 500+ HP	(E) Motor	Motor	$0.5437	15	1463995	0.946	7356.8	$4,000	0.5%	70.0%	95%	1.412366402	1
RetaiMoT16	Retail	Motors	Turnover	Motors: Rewind 51-100 HP	(E) Motor	Motor	$0.5841	15	147991	0.110	856.0	$500	0.6%	20.0%	95%	1.314650633	1
RetaiMoT17	Retail	Motors	Turnover	Downsizing motor during retrofit	Larger hp standard motor	HP Reduction	$0.34	20	186,404	0.190	1,477	$500.00	0.79%	25%	95%	2.925124127	1
RetaiMoN12	Retail	Motors	New	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.472196051	1
RetaiMoN13	Retail	Motors	New	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.028977005	0
RetaiMoN14	Retail	Motors	New	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.588451679	1
RetaiMoN15	Retail	Motors	New	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.589344322	0
RetaiMoT18	Retail	Motors	Turnover	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.472196051	1
RetaiMoT19	Retail	Motors	Turnover	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.028977005	0
RetaiMoT20	Retail	Motors	Turnover	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.588451679	1
RetaiMoT21	Retail	Motors	Turnover	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.589344322	0
RetaiMoT22	Retail	Motors	Turnover	Air Comp Improvements			$0.11	15	56148	1.148	8,928	$990.00	16%	28%	65%	6.924957253	1
RetaiMoE2	Retail	Motors	Early	Air Compressor Optimization			$0.16	15	56148	2.174	16,901	$2,750.00	30%	38%	65%	4.719423698	1
LodgiMoT23	Lodging	Motors	Turnover	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.145921749	1
RestaMoN1	Restaurant	Motors	New	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1487	15	14753	0.0282	133.8	$154	0.91%	74.4%	100%	0.702306015	0
RestaMoN2	Restaurant	Motors	New	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.2410	15	56520	0.0231	419.7	$521	0.74%	74.4%	100%	0.590650058	0
RestaMoN3	Restaurant	Motors	New	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.1151	15	138748	0.0138	617.7	$689	0.45%	66.3%	100%	0.643540911	0
RestaMoN4	Restaurant	Motors	New	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4692	15	278979	0.0121	1088.6	$511	0.39%	55.8%	100%	1.517979177	1
RestaMoN5	Restaurant	Motors	New	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-500 HP	Motor	$0.3937	15	598698	0.0284	5476.7	$2,156	0.91%	55.8%	100%	1.802100764	1
RestaMoN6	Restaurant	Motors	New	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5877	15	93593	2.408	18,719	$11,000.00	20%	55.0%	100%	1.306776092	1
RestaMoN7	Restaurant	Motors	New	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4524	15	93593	3.941	28733.0	$13,000.00	31%	70.0%	100%	1.706203646	1
RestaMoN8	Restaurant	Motors	New	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4327	15	93593	0.000	30043.3	$13,000.00	32%	80.0%	100%	1.633843436	1
RestaMoN9	Restaurant	Motors	New	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5107	15	93593	3.941	25457.3	$13,000.00	27%	70.0%	100%	1.528058723	1
RestaMoN10	Restaurant	Motors	New	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4708	15	93593	2.798	27609.9	$13,000.00	30%	55.0%	100%	1.603465152	1
RestaMoN11	Restaurant	Motors	New	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5107	15	93593	3.941	25457.3	$13,000.00	27%	30.0%	100%	1.528058723	1
RestaMoT1	Restaurant	Motors	Turnover	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1487	15	14753	0.0282	133.8	$154	0.91%	74.4%	100%	0.702306015	0
RestaMoT2	Restaurant	Motors	Turnover	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.2410	15	56520	0.0231	419.7	$521	0.74%	74.4%	100%	0.590650058	0
RestaMoT3	Restaurant	Motors	Turnover	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.1151	15	138748	0.0138	617.7	$689	0.45%	66.3%	100%	0.643540911	0
RestaMoT4	Restaurant	Motors	Turnover	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4692	15	278979	0.0121	1088.6	$511	0.39%	55.8%	100%	1.517979177	1
RestaMoT5	Restaurant	Motors	Turnover	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-250 HP	Motor	$0.3937	15	598698	0.0284	5476.7	$2,156	0.91%	55.8%	100%	1.802100764	1
RestaMoT6	Restaurant	Motors	Turnover	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5877	15	93593	2.408	18,719	$11,000.00	20%	55.0%	80%	1.306776092	1
RestaMoT7	Restaurant	Motors	Turnover	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4524	15	93593	3.941	28733.0	$13,000.00	31%	90.0%	80%	1.706203646	1
RestaMoT8	Restaurant	Motors	Turnover	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4327	15	93593	0.000	30043.3	$13,000.00	32%	90.0%	80%	1.633843436	1
RestaMoT9	Restaurant	Motors	Turnover	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5107	15	93593	3.941	25457.3	$13,000.00	27%	90.0%	80%	1.528058723	1
RestaMoT10	Restaurant	Motors	Turnover	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4708	15	93593	2.798	27609.9	$13,000.00	30%	80.0%	80%	1.603465152	1
RestaMoT11	Restaurant	Motors	Turnover	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5107	15	93593	3.941	25457.3	$13,000.00	27%	55.0%	80%	1.528058723	1
RestaMoT12	Restaurant	Motors	Turnover	Motors: Rewind 125-200 HP	(E) Motor	Motor	$0.5316	15	280779	0.182	1410.9	$750	0.5%	35.0%	95%	1.444677087	1
RestaMoT13	Restaurant	Motors	Turnover	Motors: Rewind 201-500 HP	(E) Motor	Motor	$0.6542	15	608354	0.393	3057.1	$2,000	0.5%	50.0%	95%	1.173800133	1
RestaMoT14	Restaurant	Motors	Turnover	Motors: Rewind 20-50 HP	(E) Motor	Motor	$0.4906	15	57390	0.066	509.6	$250	0.9%	10.0%	95%	1.56533151	1
RestaMoT15	Restaurant	Motors	Turnover	Motors: Rewind 500+ HP	(E) Motor	Motor	$0.5670	15	1403894	0.908	7054.7	$4,000	0.5%	70.0%	95%	1.354384769	1
RestaMoT16	Restaurant	Motors	Turnover	Motors: Rewind 51-100 HP	(E) Motor	Motor	$0.6091	15	141915	0.106	820.8	$500	0.6%	20.0%	95%	1.260680509	1
RestaMoT17	Restaurant	Motors	Turnover	Downsizing motor during retrofit	Larger hp standard motor	HP Reduction	$0.34	20	186,404	0.190	1,477	$500.00	0.79%	25%	95%	2.925124127	1
RestaMoN12	Restaurant	Motors	New	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.472196051	1
RestaMoN13	Restaurant	Motors	New	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.028977005	0
RestaMoN14	Restaurant	Motors	New	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.588451679	1
RestaMoN15	Restaurant	Motors	New	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.589344322	0
RestaMoT18	Restaurant	Motors	Turnover	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.472196051	1
RestaMoT19	Restaurant	Motors	Turnover	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.028977005	0
RestaMoT20	Restaurant	Motors	Turnover	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.588451679	1
RestaMoT21	Restaurant	Motors	Turnover	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.589344322	0
RestaMoT22	Restaurant	Motors	Turnover	Air Comp Improvements			$0.11	15	56148	1.148	8,928	$990.00	16%	28%	65%	6.924957253	1
RestaMoE2	Restaurant	Motors	Early	Air Compressor Optimization			$0.16	15	56148	2.174	16,901	$2,750.00	30%	38%	65%	4.719423698	1
misc MoE1	misc	Motors	Early	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.145921749	1
WarehMoN1	Warehouse	Motors	New	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1114	15	15247	0.0282	138.3	$154	0.91%	74.4%	100%	0.722944826	0
WarehMoN2	Warehouse	Motors	New	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.2008	15	58416	0.0231	433.8	$521	0.74%	74.4%	100%	0.609752741	0
WarehMoN3	Warehouse	Motors	New	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0789	15	143401	0.0138	638.4	$689	0.45%	66.3%	100%	0.664801628	0
WarehMoN4	Warehouse	Motors	New	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4540	15	288334	0.0121	1125.1	$511	0.39%	55.8%	100%	1.568504075	1
WarehMoN5	Warehouse	Motors	New	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-500 HP	Motor	$0.3809	15	618773	0.0284	5660.3	$2,156	0.91%	55.8%	100%	1.862320567	1
WarehMoN6	Warehouse	Motors	New	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5686	15	96731	2.489	19,346	$11,000.00	20%	55.0%	100%	1.350595693	1
WarehMoN7	Warehouse	Motors	New	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4477	15	96731	4.693	29035.5	$13,000.00	30%	70.0%	100%	1.750062288	1
WarehMoN8	Warehouse	Motors	New	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4187	15	96731	0.000	31050.8	$13,000.00	32%	80.0%	100%	1.688630456	1
WarehMoN9	Warehouse	Motors	New	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5087	15	96731	4.693	25553.2	$13,000.00	26%	70.0%	100%	1.560683172	1
WarehMoN10	Warehouse	Motors	New	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4616	15	96731	3.364	28164.9	$13,000.00	29%	55.0%	100%	1.654296622	1
WarehMoN11	Warehouse	Motors	New	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5043	15	96731	4.693	25778.9	$13,000.00	27%	30.0%	100%	1.572957744	1
WarehMoT1	Warehouse	Motors	Turnover	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1114	15	15247	0.0282	138.3	$154	0.91%	74.4%	100%	0.722944826	0
WarehMoT2	Warehouse	Motors	Turnover	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.2008	15	58416	0.0231	433.8	$521	0.74%	74.4%	100%	0.609752741	0
WarehMoT3	Warehouse	Motors	Turnover	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0789	15	143401	0.0138	638.4	$689	0.45%	66.3%	100%	0.664801628	0
WarehMoT4	Warehouse	Motors	Turnover	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4540	15	288334	0.0121	1125.1	$511	0.39%	55.8%	100%	1.568504075	1
WarehMoT5	Warehouse	Motors	Turnover	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-250 HP	Motor	$0.3809	15	618773	0.0284	5660.3	$2,156	0.91%	55.8%	100%	1.862320567	1
WarehMoT6	Warehouse	Motors	Turnover	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5686	15	96731	2.489	19,346	$11,000.00	20%	55.0%	80%	1.350595693	1
WarehMoT7	Warehouse	Motors	Turnover	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4477	15	96731	4.693	29035.5	$13,000.00	30%	90.0%	80%	1.750062288	1
WarehMoT8	Warehouse	Motors	Turnover	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4187	15	96731	0.000	31050.8	$13,000.00	32%	90.0%	80%	1.688630456	1
WarehMoT9	Warehouse	Motors	Turnover	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5087	15	96731	4.693	25553.2	$13,000.00	26%	90.0%	80%	1.560683172	1
WarehMoT10	Warehouse	Motors	Turnover	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4616	15	96731	3.364	28164.9	$13,000.00	29%	80.0%	80%	1.654296622	1
WarehMoT11	Warehouse	Motors	Turnover	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5043	15	96731	4.693	25778.9	$13,000.00	27%	55.0%	80%	1.572957744	1
WarehMoT12	Warehouse	Motors	Turnover	Motors: Rewind 125-200 HP	(E) Motor	Motor	$0.5143	15	290194	0.188	1458.3	$750	0.5%	35.0%	95%	1.493120867	1
WarehMoT13	Warehouse	Motors	Turnover	Motors: Rewind 201-500 HP	(E) Motor	Motor	$0.6330	15	628754	0.406	3159.6	$2,000	0.5%	50.0%	95%	1.213160704	1
WarehMoT14	Warehouse	Motors	Turnover	Motors: Rewind 20-50 HP	(E) Motor	Motor	$0.4747	15	59314	0.068	526.7	$250	0.9%	10.0%	95%	1.617821146	1
WarehMoT15	Warehouse	Motors	Turnover	Motors: Rewind 500+ HP	(E) Motor	Motor	$0.5486	15	1450970	0.938	7291.3	$4,000	0.5%	70.0%	95%	1.399800813	1
WarehMoT16	Warehouse	Motors	Turnover	Motors: Rewind 51-100 HP	(E) Motor	Motor	$0.5894	15	146674	0.109	848.4	$500	0.6%	20.0%	95%	1.302954404	1
WarehMoT17	Warehouse	Motors	Turnover	Downsizing motor during retrofit	Larger hp standard motor	HP Reduction	$0.34	20	186,404	0.190	1,477	$500.00	0.79%	25%	95%	2.925124127	1
WarehMoN12	Warehouse	Motors	New	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.472196051	1
WarehMoN13	Warehouse	Motors	New	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.028977005	0
WarehMoN14	Warehouse	Motors	New	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.588451679	1
WarehMoN15	Warehouse	Motors	New	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.589344322	0
WarehMoT18	Warehouse	Motors	Turnover	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.472196051	1
WarehMoT19	Warehouse	Motors	Turnover	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.028977005	0
WarehMoT20	Warehouse	Motors	Turnover	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.588451679	1
WarehMoT21	Warehouse	Motors	Turnover	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.589344322	0
WarehMoT22	Warehouse	Motors	Turnover	Air Comp Improvements			$0.11	15	56148	1.148	8,928	$990.00	16%	28%	65%	6.924957253	1
WarehMoE2	Warehouse	Motors	Early	Air Compressor Optimization			$0.16	15	56148	2.174	16,901	$2,750.00	30%	38%	65%	4.719423698	1
MiscMoT23	Misc	Motors	Turnover	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.145921749	1
HealtHeN2	Healthcare	Heating	New	Ground Source HP Open - Water	Air Source Heat Pump	ton	$39.38	15	314	0.23	19	$ 750.0	6%	20%	95%	0.166162138	0
HealtHen3	Healthcare	Heating	new	Ground Source HP Closed	Air Source Heat Pump	ton	$39.38	15	314	0.000	19	$750.00	6%	100%	95%	0.018127512	0
GrocePaE1	Grocery	Packaged DX	Early	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$3.13	20	688	0.05	64	$200.00	9%	15%	9%	0.428582596	0
GrocePaE2	Grocery	Packaged DX	Early	Adding window shade film	No shade film	sq ft window area	$7.05	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.030776812	0
GrocePaE3	Grocery	Packaged DX	Early	Adding window shade screen	No shade screen	sq ft window area	$3.90	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.195291286	0
GrocePaE4	Grocery	Packaged DX	Early	Windows U<0.40, .55 SHGC	Existing window specifications	sq ft window area	$1.40	30	2	0.000	0	$0.28	13%	50%	95%	0.906343104	0

`	New Commerical Segment	New End Use	Vintage	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	PJM Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
GrocePaE5	Grocery	Packaged DX	Early	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$4.91	20	688	0.05	46	$225.00	7%	95%	95%	0.307172907	0
GrocePaE7	Grocery	Packaged DX	Early	Automated control system	Baseline DX	ton	$0.69	10	727	0.004	36	$25.00	5%	100%	65%	0.675326892	0
GrocePaE8	Grocery	Packaged DX	Early	Duct Sealing, down to 15%	Leakage of 29%	ton	$7.92	15	688	0.05	12	$95.00	2%	45%	80%	0.327748911	0
GrocePaE9	Grocery	Packaged DX	Early	Hotel Keycard Sensors	No prior controls	Room Controlled	$0.29	10	617	0.041	342	$100.00	55%	95%	80%	1.588911636	1
GrocePaE10	Grocery	Packaged DX	Early	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	ton	$0.55	1	748	0.05	64	$35.00	9%	100%	45%	0.089753801	0
GrocePaE11	Grocery	Packaged DX	Early	7 day, two stage setback thermostat	Manual Thermostat	ton	$0.44	10	688	0.015	125	$55.00	18%	100%	45%	1.055895558	1
GrocePaE13	Grocery	Packaged DX	Early	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.50	7	688	0.05	110	$55.15	16%	95%	75%	0.774091925	0
GrocePaN1	Grocery	Packaged DX	New	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	ton	$1.36	20	688	0.05	64	$87.00	9%	100%	95%	0.985247348	0
GrocePaN2	Grocery	Packaged DX	New	Adding reflective roof treatment	Std color roof	ton	$4.50	20	688	0.05	10	$45.00	1%	100%	95%	0.80668581	0
GrocePaN3	Grocery	Packaged DX	New	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$2.73	20	688	0.05	46	$125.00	7%	100%	95%	0.552911233	0
GrocePaN4	Grocery	Packaged DX	New	Green Roof (New construction or roof replacement)	Std Roof	ton	$2.78	20	688	0.05	46	$127.43	7%	45%	95%	0.542367607	0
GrocePaN5	Grocery	Packaged DX	New	Duct Insulation, Add R8	No Insulation	ton	$10.42	20	688	0.05	12	$125.00	2%	100%	95%	0.305048568	0
GrocePaN6	Grocery	Packaged DX	New	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$2.14	20	593	0.04	42	$90.40	7%	100%	95%	0.705724004	0
GrocePaN7	Grocery	Packaged DX	New	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$2.29	20	593	0.08	79	$180.81	13%	100%	95%	0.658639308	0
GrocePaN8	Grocery	Packaged DX	New	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$2.44	20	593	0.12	111	$271.21	19%	100%	95%	0.617485735	0
GrocePaN9	Grocery	Packaged DX	New	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.20	20	688	0.05	46	$55.00	7%	100%	95%	1.256616438	1
GrocePaN10	Grocery	Packaged DX	New	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.20	20	700	0.06	58	$70.00	8%	100%	95%	1.256616438	1
GrocePaN11	Grocery	Packaged DX	New	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$2.02	20	770	0.06	57	$115.13	7%	100%	95%	0.747054755	0
GrocePaN12	Grocery	Packaged DX	New	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$2.53	20	794	0.04	39	$98.39	5%	100%	95%	0.596378318	0
GrocePaN13	Grocery	Packaged DX	New	Ground Source HP Open - Water	Air Source Heat Pump	ton	$3.34	15	700	0.23	225	$ 750.0	32%	20%	95%	0.359568798	0
GrocePaN14	Grocery	Packaged DX	New	Ground Source HP Closed	Air Source Heat Pump	ton	$5.98	15	700	0.015	125	$750.00	18%	100%	95%	0.127387639	0
GrocePaN15	Grocery	Packaged DX	New	Air-side Economizer	No Economizer	ton	$1.65	15	688	0.012	103	$170.00	15%	75%	45%	0.462273619	0
GrocePaN16	Grocery	Packaged DX	New	Energy Recovery Units	No Energy Recovery	ton	$1.30	15	688	0.016	138	$179.00	20%	100%	95%	0.585374416	0
GrocePaN17	Grocery	Packaged DX	New	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$3.39	15	727	0.004	33	$110.89	5%	100%	95%	0.224865885	0
GrocePaT1	Grocery	Packaged DX	Turnover	Duct Insulation, Add R8	No Insulation	ton	$10.42	15	688	0.05	12	$125.00	2%	100%	95%	0.249089173	0
GrocePaT2	Grocery	Packaged DX	Turnover	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$2.14	20	593	0.04	42	$90.40	7%	100%	95%	0.705724004	0
GrocePaT3	Grocery	Packaged DX	Turnover	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$2.29	20	593	0.08	79	$180.81	13%	100%	95%	0.658639308	0
GrocePaT4	Grocery	Packaged DX	Turnover	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$2.44	20	593	0.12	111	$271.21	19%	100%	95%	0.617485735	0
GrocePaT5	Grocery	Packaged DX	Turnover	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.20	20	688	0.05	46	$55.00	7%	100%	95%	1.256616438	1
GrocePaT6	Grocery	Packaged DX	Turnover	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.20	20	700	0.06	58	$70.00	8%	100%	95%	1.256616438	1
GrocePaT7	Grocery	Packaged DX	Turnover	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$2.02	20	770	0.06	57	$115.13	7%	100%	95%	0.747054755	0
GrocePaT8	Grocery	Packaged DX	Turnover	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$2.53	20	794	0.04	39	$98.39	5%	100%	95%	0.596378318	0
GrocePaT9	Grocery	Packaged DX	Turnover	Ground Source HP Open - Water	Air Source Heat Pump	ton	$3.34	15	700	0.23	225	$ 750.0	32%	5%	95%	0.359568798	0
GrocePaT10	Grocery	Packaged DX	Turnover	Ground Source HP Closed	Air Source Heat Pump	ton	$5.98	15	700	0.015	125	$750.00	18%	100%	95%	0.127387639	0
GrocePaT11	Grocery	Packaged DX	Turnover	Air-side Economizer	No Economizer	ton	$1.65	15	688	0.012	103	$170.00	15%	75%	45%	0.462273619	0
GrocePaT12	Grocery	Packaged DX	Turnover	Energy Recovery Units	No Energy Recovery	ton	$1.30	15	688	0.016	138	$179.00	20%	100%	95%	0.585374416	0
GrocePaT13	Grocery	Packaged DX	Turnover	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$3.39	15	727	0.004	33	$110.89	5%	100%	95%	0.224865885	0
GrocePaN18	Grocery	Packaged DX	New	Automated control system	Baseline DX	ton	$0.69	10	727	0.004	36	$25.00	5%	100%	65%	0.675326892	0
GrocePaN19	Grocery	Packaged DX	New	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.28	10	617	0.004	34	$43.00	5%	100%	95%	0.363802298	0
GrocePaT15	Grocery	Packaged DX	Turnover	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.28	10	617	0.004	34	$43.00	5%	100%	95%	0.363802298	0
InstiPaE1	Institutional	Packaged DX	Early	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$3.13	20	512	0.05	64	$200.00	12%	15%	9%	0.428582596	0
InstiPaE2	Institutional	Packaged DX	Early	Adding window shade film	No shade film	sq ft window area	$7.05	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.030776812	0
InstiPaE3	Institutional	Packaged DX	Early	Adding window shade screen	No shade screen	sq ft window area	$3.90	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.195291286	0
InstiPaE4	Institutional	Packaged DX	Early	Windows U<0.40, .55 SHGC	Existing window specifications	sq ft window area	$1.40	30	2	0.000	0	$0.28	13%	50%	95%	0.906343104	0
InstiPaE5	Institutional	Packaged DX	Early	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$6.59	20	512	0.05	34	$225.00	7%	95%	95%	0.259529357	0
InstiPaE7	Institutional	Packaged DX	Early	Automated control system	Baseline DX	ton	$0.92	10	541	0.003	27	$25.00	5%	100%	65%	0.50281348	0
InstiPaE8	Institutional	Packaged DX	Early	Duct Sealing, down to 15%	Leakage of 29%	ton	$7.92	15	512	0.05	12	$95.00	2%	45%	80%	0.327748911	0
InstiPaE9	Institutional	Packaged DX	Early	Hotel Keycard Sensors	No prior controls	Room Controlled	$0.29	10	460	0.041	342	$100.00	74%	95%	80%	1.588911636	1
InstiPaE10	Institutional	Packaged DX	Early	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	ton	$0.55	1	557	0.05	64	$35.00	11%	100%	45%	0.089753801	0
InstiPaE11	Institutional	Packaged DX	Early	7 day, two stage setback thermostat	Manual Thermostat	ton	$0.44	10	512	0.015	125	$55.00	24%	100%	45%	1.055895558	1
InstiPaE13	Institutional	Packaged DX	Early	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.67	7	512	0.05	82	$55.15	16%	95%	75%	0.632312433	0
InstiPaN1	Institutional	Packaged DX	New	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	ton	$1.36	20	512	0.05	64	$87.00	12%	100%	95%	0.985247348	0
InstiPaN2	Institutional	Packaged DX	New	Adding reflective roof treatment	Std color roof	ton	$4.50	20	512	0.05	10	$45.00	2%	100%	95%	0.80668581	0
InstiPaN3	Institutional	Packaged DX	New	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$3.66	20	512	0.05	34	$125.00	7%	100%	95%	0.467152842	0
InstiPaN4	Institutional	Packaged DX	New	Green Roof (New construction or roof replacement)	Std Roof	ton	$3.73	20	512	0.05	34	$127.43	7%	45%	95%	0.458244568	0
InstiPaN5	Institutional	Packaged DX	New	Duct Insulation, Add R8	No Insulation	ton	$10.42	20	512	0.05	12	$125.00	2%	100%	95%	0.305048568	0
InstiPaN6	Institutional	Packaged DX	New	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$2.87	20	441	0.04	32	$90.40	7%	100%	95%	0.596263839	0
InstiPaN7	Institutional	Packaged DX	New	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$3.07	20	441	0.08	59	$180.81	13%	100%	95%	0.556482138	0
InstiPaN8	Institutional	Packaged DX	New	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$3.28	20	441	0.12	83	$271.21	19%	100%	95%	0.521711622	0
InstiPaN9	Institutional	Packaged DX	New	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.61	20	512	0.05	34	$55.00	7%	100%	95%	1.061711006	1
InstiPaN10	Institutional	Packaged DX	New	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.61	20	521	0.06	43	$70.00	8%	100%	95%	1.061711006	1
InstiPaN11	Institutional	Packaged DX	New	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$2.71	20	574	0.06	42	$115.13	7%	100%	95%	0.631184052	0
InstiPaN12	Institutional	Packaged DX	New	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$3.39	20	591	0.04	29	$98.39	5%	100%	95%	0.503878036	0
InstiPaN13	Institutional	Packaged DX	New	Ground Source HP Open - Water	Air Source Heat Pump	ton	$4.48	15	521	0.23	167	$ 750.0	32%	20%	95%	0.305577463	0
InstiPaN14	Institutional	Packaged DX	New	Ground Source HP Closed	Air Source Heat Pump	ton	$8.03	15	521	0.011	93	$750.00	18%	100%	95%	0.094846249	0
InstiPaN15	Institutional	Packaged DX	New	Air-side Economizer	No Economizer	ton	$2.21	15	512	0.009	77	$170.00	15%	75%	45%	0.344185031	0
InstiPaN16	Institutional	Packaged DX	New	Energy Recovery Units	No Energy Recovery	ton	$1.75	15	512	0.012	102	$179.00	20%	100%	95%	0.435839518	0
InstiPaN17	Institutional	Packaged DX	New	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$4.55	15	541	0.003	24	$110.89	5%	100%	95%	0.167423509	0
InstiPaT1	Institutional	Packaged DX	Turnover	Duct Insulation, Add R8	No Insulation	ton	$10.42	15	512	0.05	12	$125.00	2%	100%	95%	0.249089173	0
InstiPaT2	Institutional	Packaged DX	Turnover	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$2.87	20	441	0.04	32	$90.40	7%	100%	95%	0.596263839	0
InstiPaT3	Institutional	Packaged DX	Turnover	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$3.07	20	441	0.08	59	$180.81	13%	100%	95%	0.556482138	0
InstiPaT4	Institutional	Packaged DX	Turnover	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$3.28	20	441	0.12	83	$271.21	19%	100%	95%	0.521711622	0
InstiPaT5	Institutional	Packaged DX	Turnover	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.61	20	512	0.05	34	$55.00	7%	100%	95%	1.061711006	1
InstiPaT6	Institutional	Packaged DX	Turnover	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.61	20	521	0.06	43	$70.00	8%	100%	95%	1.061711006	1
InstiPaT7	Institutional	Packaged DX	Turnover	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$2.71	20	574	0.06	42	$115.13	7%	100%	95%	0.631184052	0
InstiPaT8	Institutional	Packaged DX	Turnover	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$3.39	20	591	0.04	29	$98.39	5%	100%	95%	0.503878036	0
InstiPaT9	Institutional	Packaged DX	Turnover	Ground Source HP Open - Water	Air Source Heat Pump	ton	$4.48	15	521	0.23	167	$ 750.0	32%	5%	95%	0.305577463	0
InstiPaT10	Institutional	Packaged DX	Turnover	Ground Source HP Closed	Air Source Heat Pump	ton	$8.03	15	521	0.011	93	$750.00	18%	100%	95%	0.094846249	0
InstiPaT11	Institutional	Packaged DX	Turnover	Air-side Economizer	No Economizer	ton	$2.21	15	512	0.009	77	$170.00	15%	75%	45%	0.344185031	0
InstiPaT12	Institutional	Packaged DX	Turnover	Energy Recovery Units	No Energy Recovery	ton	$1.75	15	512	0.012	102	$179.00	20%	100%	95%	0.435839518	0
InstiPaT13	Institutional	Packaged DX	Turnover	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$4.55	15	541	0.003	24	$110.89	5%	100%	95%	0.167423509	0
InstiPaN18	Institutional	Packaged DX	New	Automated control system	Baseline DX	ton	$0.92	10	541	0.003	27	$25.00	5%	100%	65%	0.50281348	0
InstiPaN19	Institutional	Packaged DX	New	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.72	10	460	0.003	25	$43.00	5%	100%	95%	0.270868378	0
InstiPaT15	Institutional	Packaged DX	Turnover	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.72	10	460	0.003	25	$43.00	5%	100%	95%	0.270868378	0
LodgiPaE1	Lodging	Packaged DX	Early	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$3.13	20	612	0.05	64	$200.00	10%	15%	9%	0.428582596	0
LodgiPaE2	Lodging	Packaged DX	Early	Adding window shade film	No shade film	sq ft window area	$7.05	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.030776812	0
LodgiPaE3	Lodging	Packaged DX	Early	Adding window shade screen	No shade screen	sq ft window area	$3.90	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.195291286	0
LodgiPaE4	Lodging	Packaged DX	Early	Windows U<0.40, .55 SHGC	Existing window specifications	sq ft window area	$1.40	30	2	0.000	0	$0.28	13%	50%	95%	0.906343104	0
LodgiPaE5	Lodging	Packaged DX	Early	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$5.52	20	612	0.05	41	$225.00	7%	95%	95%	0.286546736	0
LodgiPaE7	Lodging	Packaged DX	Early	Automated control system	Baseline DX	ton	$0.77	10	646	0.004	32	$25.00	5%	100%	65%	0.600641208	0
LodgiPaE8	Lodging	Packaged DX	Early	Duct Sealing, down to 15%	Leakage of 29%	ton	$7.92	15	612	0.05	12	$95.00	2%	45%	80%	0.327748911	0
LodgiPaE9	Lodging	Packaged DX	Early	Hotel Keycard Sensors	No prior controls	Room Controlled	$0.29	10	549	0.041	342	$100.00	62%	95%	80%	1.588911636	1
LodgiPaE10	Lodging	Packaged DX	Early	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	ton	$0.55	1	665	0.05	64	$35.00	10%	100%	45%	0.089753801	0
LodgiPaE11	Lodging	Packaged DX	Early	7 day, two stage setback thermostat	Manual Thermostat	ton	$0.44	10	612	0.015	125	$55.00	20%	100%	45%	1.055895558	1
LodgiPaE13	Lodging	Packaged DX	Early	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.56	7	612	0.05	98	$55.15	16%	95%	75%	0.712711779	0
LodgiPaN1	Lodging	Packaged DX	New	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	ton	$1.36	20	612	0.05	64	$87.00	10%	100%	95%	0.985247348	0
LodgiPaN2	Lodging	Packaged DX	New	Adding reflective roof treatment	Std color roof	ton	$4.50	20	612	0.05	10	$45.00	2%	100%	95%	0.80668581	0
LodgiPaN3	Lodging	Packaged DX	New	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$3.06	20	612	0.05	41	$125.00	7%	100%	95%	0.515784125	0
LodgiPaN4	Lodging	Packaged DX	New	Green Roof (New construction or roof replacement)	Std Roof	ton	$3.12	20	612	0.05	41	$127.43	7%	45%	95%	0.505948486	0

`	New Commerical Segment	New End Use	Vintage	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	PJM Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
LodgiPaN5	Lodging	Packaged DX	New	Duct Insulation, Add R8	No Insulation	ton	$10.42	20	612	0.05	12	$125.00	2%	100%	95%	0.305048568	0
LodgiPaN6	Lodging	Packaged DX	New	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$2.40	20	527	0.04	38	$90.40	7%	100%	95%	0.658335762	0
LodgiPaN7	Lodging	Packaged DX	New	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$2.57	20	527	0.08	70	$180.81	13%	100%	95%	0.614412728	0
LodgiPaN8	Lodging	Packaged DX	New	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$2.74	20	527	0.12	99	$271.21	19%	100%	95%	0.576022552	0
LodgiPaN9	Lodging	Packaged DX	New	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.35	20	612	0.05	41	$55.00	7%	100%	95%	1.172236647	1
LodgiPaN10	Lodging	Packaged DX	New	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.35	20	623	0.06	52	$70.00	8%	100%	95%	1.172236647	1
LodgiPaN11	Lodging	Packaged DX	New	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$2.27	20	685	0.06	51	$115.13	7%	100%	95%	0.696891219	0
LodgiPaN12	Lodging	Packaged DX	New	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$2.84	20	706	0.04	35	$98.39	5%	100%	95%	0.556332464	0
LodgiPaN13	Lodging	Packaged DX	New	Ground Source HP Open - Water	Air Source Heat Pump	ton	$3.75	15	623	0.23	200	$ 750.0	32%	20%	95%	0.336194501	0
LodgiPaN14	Lodging	Packaged DX	New	Ground Source HP Closed	Air Source Heat Pump	ton	$6.72	15	623	0.013	112	$750.00	18%	100%	95%	0.113299598	0
LodgiPaN15	Lodging	Packaged DX	New	Air-side Economizer	No Economizer	ton	$1.85	15	612	0.011	92	$170.00	15%	75%	45%	0.411149901	0
LodgiPaN16	Lodging	Packaged DX	New	Energy Recovery Units	No Energy Recovery	ton	$1.46	15	612	0.015	122	$179.00	20%	100%	95%	0.520636747	0
LodgiPaN17	Lodging	Packaged DX	New	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$3.81	15	646	0.003	29	$110.89	5%	100%	95%	0.199997539	0
LodgiPaT1	Lodging	Packaged DX	Turnover	Duct Insulation, Add R8	No Insulation	ton	$10.42	15	612	0.05	12	$125.00	2%	100%	95%	0.249089173	0
LodgiPaT2	Lodging	Packaged DX	Turnover	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$2.40	20	527	0.04	38	$90.40	7%	100%	95%	0.658335762	0
LodgiPaT3	Lodging	Packaged DX	Turnover	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$2.57	20	527	0.08	70	$180.81	13%	100%	95%	0.614412728	0
LodgiPaT4	Lodging	Packaged DX	Turnover	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$2.74	20	527	0.12	99	$271.21	19%	100%	95%	0.576022552	0
LodgiPaT5	Lodging	Packaged DX	Turnover	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.35	20	612	0.05	41	$55.00	7%	100%	95%	1.172236647	1
LodgiPaT6	Lodging	Packaged DX	Turnover	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.35	20	623	0.06	52	$70.00	8%	100%	95%	1.172236647	1
LodgiPaT7	Lodging	Packaged DX	Turnover	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$2.27	20	685	0.06	51	$115.13	7%	100%	95%	0.696891219	0
LodgiPaT8	Lodging	Packaged DX	Turnover	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$2.84	20	706	0.04	35	$98.39	5%	100%	95%	0.556332464	0
LodgiPaT9	Lodging	Packaged DX	Turnover	Ground Source HP Open - Water	Air Source Heat Pump	ton	$3.75	15	623	0.23	200	$ 750.0	32%	5%	95%	0.336194501	0
LodgiPaT10	Lodging	Packaged DX	Turnover	Ground Source HP Closed	Air Source Heat Pump	ton	$6.72	15	623	0.013	112	$750.00	18%	100%	95%	0.113299598	0
LodgiPaT11	Lodging	Packaged DX	Turnover	Air-side Economizer	No Economizer	ton	$1.85	15	612	0.011	92	$170.00	15%	75%	45%	0.411149901	0
LodgiPaT12	Lodging	Packaged DX	Turnover	Energy Recovery Units	No Energy Recovery	ton	$1.46	15	612	0.015	122	$179.00	20%	100%	95%	0.520636747	0
LodgiPaT13	Lodging	Packaged DX	Turnover	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$3.81	15	646	0.003	29	$110.89	5%	100%	95%	0.199997539	0
LodgiPaN18	Lodging	Packaged DX	New	Automated control system	Baseline DX	ton	$0.77	10	646	0.004	32	$25.00	5%	100%	65%	0.600641208	0
LodgiPaN19	Lodging	Packaged DX	New	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.44	10	549	0.004	30	$43.00	5%	100%	95%	0.32356871	0
LodgiPaT15	Lodging	Packaged DX	Turnover	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.44	10	549	0.004	30	$43.00	5%	100%	95%	0.32356871	0
MiscPaE1	Misc	Packaged DX	Early	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$3.13	20	707	0.05	64	$200.00	9%	15%	9%	0.428582596	0
MiscPaE2	Misc	Packaged DX	Early	Adding window shade film	No shade film	sq ft window area	$7.05	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.030776812	0
MiscPaE3	Misc	Packaged DX	Early	Adding window shade screen	No shade screen	sq ft window area	$3.90	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.195291286	0
MiscPaE4	Misc	Packaged DX	Early	Windows U<0.40, .55 SHGC	Existing window specifications	sq ft window area	$1.40	30	2	0.000	0	$0.28	13%	50%	95%	0.906343104	0
MiscPaE5	Misc	Packaged DX	Early	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$4.77	20	707	0.05	47	$225.00	7%	95%	95%	0.312402077	0
MiscPaE7	Misc	Packaged DX	Early	Automated control system	Baseline DX	ton	$0.67	10	747	0.004	37	$25.00	5%	100%	65%	0.694261291	0
MiscPaE8	Misc	Packaged DX	Early	Duct Sealing, down to 15%	Leakage of 29%	ton	$7.92	15	707	0.05	12	$95.00	2%	45%	80%	0.327748911	0
MiscPaE9	Misc	Packaged DX	Early	Hotel Keycard Sensors	No prior controls	Room Controlled	$0.29	10	635	0.041	342	$100.00	54%	95%	80%	1.588911636	1
MiscPaE10	Misc	Packaged DX	Early	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	ton	$0.55	1	769	0.05	64	$35.00	8%	100%	45%	0.089753801	0
MiscPaE11	Misc	Packaged DX	Early	7 day, two stage setback thermostat	Manual Thermostat	ton	$0.44	10	707	0.015	125	$55.00	18%	100%	45%	1.055895558	1
MiscPaE13	Misc	Packaged DX	Early	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.49	7	707	0.05	113	$55.15	16%	95%	75%	0.789653089	0
MiscPaN1	Misc	Packaged DX	New	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	ton	$1.36	20	707	0.05	64	$87.00	9%	100%	95%	0.985247348	0
MiscPaN2	Misc	Packaged DX	New	Adding reflective roof treatment	Std color roof	ton	$4.50	20	707	0.05	10	$45.00	1%	100%	95%	0.80668581	0
MiscPaN3	Misc	Packaged DX	New	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$2.65	20	707	0.05	47	$125.00	7%	100%	95%	0.562323739	0
MiscPaN4	Misc	Packaged DX	New	Green Roof (New construction or roof replacement)	Std Roof	ton	$2.70	20	707	0.05	47	$127.43	7%	45%	95%	0.551600623	0
MiscPaN5	Misc	Packaged DX	New	Duct Insulation, Add R8	No Insulation	ton	$10.42	20	707	0.05	12	$125.00	2%	100%	95%	0.305048568	0
MiscPaN6	Misc	Packaged DX	New	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$2.08	20	609	0.04	44	$90.40	7%	100%	95%	0.717737924	0
MiscPaN7	Misc	Packaged DX	New	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$2.23	20	609	0.08	81	$180.81	13%	100%	95%	0.66985168	0
MiscPaN8	Misc	Packaged DX	New	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$2.37	20	609	0.12	114	$271.21	19%	100%	95%	0.627997527	0
MiscPaN9	Misc	Packaged DX	New	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.17	20	707	0.05	47	$55.00	7%	100%	95%	1.278008498	1
MiscPaN10	Misc	Packaged DX	New	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.17	20	720	0.06	60	$70.00	8%	100%	95%	1.278008498	1
MiscPaN11	Misc	Packaged DX	New	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.96	20	792	0.06	59	$115.13	7%	100%	95%	0.759772272	0
MiscPaN12	Misc	Packaged DX	New	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$2.46	20	816	0.04	40	$98.39	5%	100%	95%	0.606530787	0
MiscPaN13	Misc	Packaged DX	New	Ground Source HP Open - Water	Air Source Heat Pump	ton	$3.25	15	720	0.23	231	$ 750.0	32%	20%	95%	0.365494676	0
MiscPaN14	Misc	Packaged DX	New	Ground Source HP Closed	Air Source Heat Pump	ton	$5.82	15	720	0.015	129	$750.00	18%	100%	95%	0.130959256	0
MiscPaN15	Misc	Packaged DX	New	Air-side Economizer	No Economizer	ton	$1.60	15	707	0.013	106	$170.00	15%	75%	45%	0.475234562	0
MiscPaN16	Misc	Packaged DX	New	Energy Recovery Units	No Energy Recovery	ton	$1.27	15	707	0.017	141	$179.00	20%	100%	95%	0.601786782	0
MiscPaN17	Misc	Packaged DX	New	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$3.29	15	747	0.004	34	$110.89	5%	100%	95%	0.231170536	0
MiscPaT1	Misc	Packaged DX	Turnover	Duct Insulation, Add R8	No Insulation	ton	$10.42	15	707	0.05	12	$125.00	2%	100%	95%	0.249089173	0
MiscPaT2	Misc	Packaged DX	Turnover	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$2.08	20	609	0.04	44	$90.40	7%	100%	95%	0.717737924	0
MiscPaT3	Misc	Packaged DX	Turnover	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$2.23	20	609	0.08	81	$180.81	13%	100%	95%	0.66985168	0
MiscPaT4	Misc	Packaged DX	Turnover	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$2.37	20	609	0.12	114	$271.21	19%	100%	95%	0.627997527	0
MiscPaT5	Misc	Packaged DX	Turnover	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.17	20	707	0.05	47	$55.00	7%	100%	95%	1.278008498	1
MiscPaT6	Misc	Packaged DX	Turnover	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.17	20	720	0.06	60	$70.00	8%	100%	95%	1.278008498	1
MiscPaT7	Misc	Packaged DX	Turnover	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.96	20	792	0.06	59	$115.13	7%	100%	95%	0.759772272	0
MiscPaT8	Misc	Packaged DX	Turnover	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$2.46	20	816	0.04	40	$98.39	5%	100%	95%	0.606530787	0
MiscPaT9	Misc	Packaged DX	Turnover	Ground Source HP Open - Water	Air Source Heat Pump	ton	$3.25	15	720	0.23	231	$ 750.0	32%	5%	95%	0.365494676	0
MiscPaT10	Misc	Packaged DX	Turnover	Ground Source HP Closed	Air Source Heat Pump	ton	$5.82	15	720	0.015	129	$750.00	18%	100%	95%	0.130959256	0
MiscPaT11	Misc	Packaged DX	Turnover	Air-side Economizer	No Economizer	ton	$1.60	15	707	0.013	106	$170.00	15%	75%	45%	0.475234562	0
MiscPaT12	Misc	Packaged DX	Turnover	Energy Recovery Units	No Energy Recovery	ton	$1.27	15	707	0.017	141	$179.00	20%	100%	95%	0.601786782	0
MiscPaT13	Misc	Packaged DX	Turnover	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$3.29	15	747	0.004	34	$110.89	5%	100%	95%	0.231170536	0
MiscPaN18	Misc	Packaged DX	New	Automated control system	Baseline DX	ton	$0.67	10	747	0.004	37	$25.00	5%	100%	65%	0.694261291	0
MiscPaN19	Misc	Packaged DX	New	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.24	10	635	0.004	35	$43.00	5%	100%	95%	0.374002362	0
MiscPaT15	Misc	Packaged DX	Turnover	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.24	10	635	0.004	35	$43.00	5%	100%	95%	0.374002362	0
AllReN6	All	Refrigeration	New	Reach-in Cooler: Shaded Pole to PSC: 1-37 Watt			$0.60	15	832	0.047	352	$212.50	42%	75%	49%	1.269632968	1
AllReN7	All	Refrigeration	New	Reach-in Cooler: PSC to ECM: 1-37 Watt			$0.54	15	467	0.022	169	$91.25	36%	75%	49%	1.419542153	1
AllReN8	All	Refrigeration	New	Reach-in Cooler: Shaded Pole to ECM: 1-37 Watt			$0.59	15	832	0.069	521	$306.25	63%	75%	49%	1.303935435	1
AllReN9	All	Refrigeration	New	Reach-in Freezer: Shaded Pole to ECM: 1-14 Watt			$0.49	15	832	0.082	622	$306.25	75%	75%	49%	1.556713706	1
AllReN10	All	Refrigeration	New	Reach-in Shaded Pole to PSC Evaporator Fan Motor			$0.55	15	832	0.051	386	$212.50	46%	75%	49%	1.39226797	1
AllReN11	All	Refrigeration	New	Reach-in PSC to ECM Evaporator Fan Motor			$0.49	15	467	0.025	185	$91.25	40%	75%	49%	1.553936676	1
AllReN12	All	Refrigeration	New	Reach-in Shaded Pole to ECM Evaporator Fan Motor			$0.54	15	832	0.076	571	$306.25	69%	75%	49%	1.429073193	1
AllReN13	All	Refrigeration	New	Walk-in Cooler: PSC to ECM: 16-49 Watt			$0.35	15	711	0.034	258	$91.25	36%	75%	49%	2.167111689	1
AllReN14	All	Refrigeration	New	Walk-in Freezer: PSC to ECM: 16-49 Watt			$0.30	15	711	0.041	309	$91.25	43%	75%	49%	2.595494232	1
AllReN15	All	Refrigeration	New	Walk-in Cooler: Shaded Pole to ECM: 16-49 Watt			$0.44	15	1,175	0.093	704	$306.25	60%	75%	49%	1.761939629	1
AllReN16	All	Refrigeration	New	Walk-in Freezer: Shaded Pole to ECM: 16-49 Watt			$0.36	15	1,175	0.112	842	$306.25	72%	75%	49%	2.10731984	1
AllReN17	All	Refrigeration	New	Walk-in PSC to ECM			$0.32	15	711	0.038	283	$91.25	40%	75%	49%	2.377103132	1
AllReN18	All	Refrigeration	New	Walk-in Shaded Pole to ECM			$0.40	15	1175	0.103	773	$306.25	66%	75%	49%	1.934629734	1
AllReT6	All	Refrigeration	Turnover	High Efficiency Ice Makers	Standard Ice Making		$0.12	10	11,815	0.159	1,197	$140.00	10%	85%	85%	4.000597061	1
AllReN19	All	Refrigeration	New	High Efficiency Ice Machine Self Contained	Standard Ice Machine Self Contained		$0.31	10	4,341	0.042	318	$100.00	7%	85%	85%	1.487941363	1
AllReT7	All	Refrigeration	Turnover	Fluorescent walk-in light fixture	Incandescent walk-in light fixture	fixture	$0.42	15	792	0.065	491	$206.00	62.00%	85%	45%	1.825971489	1
AllReT8	All	Refrigeration	Turnover	LED Case Lighting	T12 or T10 fluorescent lighting	Light Bar	$0.43	15	677	0.070	526	$225.00	77.78%	95%	75%	1.793117092	1
AllReT9	All	Refrigeration	Turnover	LED Case Lighting - Occupancy Sensor	No Occupancy Sensor	Light Bar	$0.15	8	667	0.003	20	$3.00	3.00%	15%	95%	2.363580238	1
AllReT10	All	Refrigeration	Turnover	Efficient, low-temp reach-in	Standard low-temp reach-in	unit	$0.07	12	5,431	0.222	1,671	$123.33	30.77%	85%	85%	8.098144868	1
AllReT11	All	Refrigeration	Turnover	High R-Value Glass Doors		door	$0.67	10	3,986	0.106	797	$537.50	20.00%	85%	85%	0.69394608	0
AllReT12	All	Refrigeration	Turnover	Compressor VSD retrofit	Base Refrigeration System - Grocery		$0.35	13	5,436	0.101	761	$267.00	14%	75%	86%	1.8734209	1
AllReT13	All	Refrigeration	Turnover	Quick acting freezer doors			$0.62	10	38,544	4.461	33,637	$20,966.00	87%	75%	86%	0.750689551	0
AllReT14	All	Refrigeration	Turnover	VFD on cooling tower fans	Base single-speed fan		$0.29	15	7158	0.681	5,132	$1,507.40	72%	35%	85%	2.60937005	1
AllReT15	All	Refrigeration	Turnover	Reach-in Cooler: Shaded Pole to PSC: 1-37 Watt			$0.60	15	832	0.047	352	$212.50	42%	75%	49%	1.269632968	1
AllReT16	All	Refrigeration	Turnover	Reach-in Cooler: PSC to ECM: 1-37 Watt			$0.54	15	467	0.022	169	$91.25	36%	75%	49%	1.419542153	1
AllReT17	All	Refrigeration	Turnover	Reach-in Cooler: Shaded Pole to ECM: 1-37 Watt			$0.59	15	832	0.069	521	$306.25	63%	75%	49%	1.303935435	1

`	New Commerical Segment	New End Use	Vintage	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	PJM Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
AllReT18	All	Refrigeration	Turnover	Reach-in Freezer: Shaded Pole to ECM: 1-14 Watt			$0.49	15	832	0.082	622	$306.25	75%	75%	49%	1.556713706	1
AllReT19	All	Refrigeration	Turnover	Reach-in Shaded Pole to PSC Evaporator Fan Motor			$0.55	15	832	0.051	386	$212.50	46%	75%	49%	1.39226797	1
AllReT18	All	Refrigeration	Turnover	Reach-in PSC to ECM Evaporator Fan Motor			$0.49	15	467	0.025	185	$91.25	40%	75%	49%	1.553936676	1
AllReT20	All	Refrigeration	Turnover	Reach-in Shaded Pole to ECM Evaporator Fan Motor			$0.54	15	832	0.076	571	$306.25	69%	75%	49%	1.429073193	1
AllReT21	All	Refrigeration	Turnover	Walk-in Cooler: PSC to ECM: 16-49 Watt			$0.35	15	711	0.034	258	$91.25	36%	75%	49%	2.167111689	1
AllReT22	All	Refrigeration	Turnover	Walk-in Freezer: PSC to ECM: 16-49 Watt			$0.30	15	711	0.041	309	$91.25	43%	75%	49%	2.595494232	1
AllReT23	All	Refrigeration	Turnover	Walk-in Cooler: Shaded Pole to ECM: 16-49 Watt			$0.44	15	1,175	0.093	704	$306.25	60%	75%	49%	1.761939629	1
AllReT24	All	Refrigeration	Turnover	Walk-in Freezer: Shaded Pole to ECM: 16-49 Watt			$0.36	15	1,175	0.112	842	$306.25	72%	75%	49%	2.10731984	1
AllReT25	All	Refrigeration	Turnover	Walk-in PSC to ECM			$0.32	15	711	0.038	283	$91.25	40%	75%	49%	2.377103132	1
AllReT26	All	Refrigeration	Turnover	Walk-in Shaded Pole to ECM			$0.40	15	1175	0.103	773	$306.25	66%	75%	49%	1.934629734	1
GroceReN1	All	Refrigeration	New	Demand Defrost Electric	Base Refrigeration System - Grocery		$0.91	15	4	0.000	0	$0.05	1%	95%	92%	0.843882111	0
AllReT27	All	Refrigeration	Turnover	Demand Defrost Electric	Base Refrigeration System - Grocery		$0.91	15	4	0.000	0	$0.05	1%	95%	92%	0.843882111	0
GroceReN3	All	Refrigeration	New	Demand Hot Gas Defrost	Base Refrigeration System - Grocery		$0.35	15	4	0.000	0	$0.05	3%	95%	92%	2.1653691	1
AllReT28	All	Refrigeration	Turnover	Demand Hot Gas Defrost	Base Refrigeration System - Grocery		$0.35	15	4	0.000	0	$0.05	3%	95%	92%	2.1653691	1
GroceReN4	All	Refrigeration	New	Efficient compressor motor - scroll	Base Refrigeration System - Grocery		$0.09	15	15,825	0.084	633	$60.00	4%	95%	92%	8.086245481	1
AllReT29	All	Refrigeration	Turnover	Efficient compressor motor - scroll	Base Refrigeration System - Grocery		$0.09	15	15,825	0.084	633	$60.00	4%	95%	92%	8.086245481	1
GroceReN6	All	Refrigeration	New	High R-Value Glass Doors	Base Refrigeration System - Grocery	Door	$0.67	10	3,986	0.106	797	$537.50	20.00%	95%	92%	0.69394608	0
GroceReN7	All	Refrigeration	New	Refrigeration Commissioning	Base Refrigeration System - Grocery	Per refigerator	$0.31	7	8,800	0.187	1,408	$440.00	16%	95%	92%	0.993726003	0
RestaPaE1	Restaurant	Packaged DX	Early	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$3.13	20	737	0.05	64	$200.00	9%	15%	9%	0.428582596	0
RestaPaE2	Restaurant	Packaged DX	Early	Adding window shade film	No shade film	sq ft window area	$7.05	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.030776812	0
RestaPaE3	Restaurant	Packaged DX	Early	Adding window shade screen	No shade screen	sq ft window area	$3.90	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.195291286	0
RestaPaE4	Restaurant	Packaged DX	Early	Windows U<0.40, .55 SHGC	Existing window specifications	sq ft window area	$1.40	30	2	0.000	0	$0.28	13%	50%	95%	0.906343104	0
RestaPaE5	Restaurant	Packaged DX	Early	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$4.58	20	737	0.05	49	$225.00	7%	95%	95%	0.320536342	0
RestaPaE7	Restaurant	Packaged DX	Early	Automated control system	Baseline DX	ton	$0.64	10	779	0.005	39	$25.00	5%	100%	65%	0.7237148	0
RestaPaE8	Restaurant	Packaged DX	Early	Duct Sealing, down to 15%	Leakage of 29%	ton	$7.92	15	737	0.05	12	$95.00	2%	45%	80%	0.327748911	0
RestaPaE9	Restaurant	Packaged DX	Early	Hotel Keycard Sensors	No prior controls	Room Controlled	$0.29	10	662	0.041	342	$100.00	52%	95%	80%	1.588911636	1
RestaPaE10	Restaurant	Packaged DX	Early	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	ton	$0.55	1	802	0.05	64	$35.00	8%	100%	45%	0.089753801	0
RestaPaE11	Restaurant	Packaged DX	Early	7 day, two stage setback thermostat	Manual Thermostat	ton	$0.44	10	737	0.015	125	$55.00	17%	100%	45%	1.055895558	1
RestaPaE13	Restaurant	Packaged DX	Early	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.47	7	737	0.05	118	$55.15	16%	95%	75%	0.813859343	0
RestaPaN1	Restaurant	Packaged DX	New	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	ton	$1.36	20	737	0.05	64	$87.00	9%	100%	95%	0.985247348	0
RestaPaN2	Restaurant	Packaged DX	New	Adding reflective roof treatment	Std color roof	ton	$4.50	20	737	0.05	10	$45.00	1%	100%	95%	0.80668581	0
RestaPaN3	Restaurant	Packaged DX	New	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$2.54	20	737	0.05	49	$125.00	7%	100%	95%	0.576965415	0
RestaPaN4	Restaurant	Packaged DX	New	Green Roof (New construction or roof replacement)	Std Roof	ton	$2.59	20	737	0.05	49	$127.43	7%	45%	95%	0.565963093	0
RestaPaN5	Restaurant	Packaged DX	New	Duct Insulation, Add R8	No Insulation	ton	$10.42	20	737	0.05	12	$125.00	2%	100%	95%	0.305048568	0
RestaPaN6	Restaurant	Packaged DX	New	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$1.99	20	635	0.04	45	$90.40	7%	100%	95%	0.736426245	0
RestaPaN7	Restaurant	Packaged DX	New	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$2.14	20	635	0.08	85	$180.81	13%	100%	95%	0.687293148	0
RestaPaN8	Restaurant	Packaged DX	New	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$2.28	20	635	0.12	119	$271.21	19%	100%	95%	0.644349205	0
RestaPaN9	Restaurant	Packaged DX	New	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.12	20	737	0.05	49	$55.00	7%	100%	95%	1.311285035	1
RestaPaN10	Restaurant	Packaged DX	New	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.12	20	751	0.06	63	$70.00	8%	100%	95%	1.311285035	1
RestaPaN11	Restaurant	Packaged DX	New	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.88	20	826	0.06	61	$115.13	7%	100%	95%	0.779555075	0
RestaPaN12	Restaurant	Packaged DX	New	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$2.36	20	851	0.04	42	$98.39	5%	100%	95%	0.622323518	0
RestaPaN13	Restaurant	Packaged DX	New	Ground Source HP Open - Water	Air Source Heat Pump	ton	$3.11	15	751	0.23	241	$ 750.0	32%	20%	95%	0.374712709	0
RestaPaN14	Restaurant	Packaged DX	New	Ground Source HP Closed	Air Source Heat Pump	ton	$5.58	15	751	0.016	134	$750.00	18%	100%	95%	0.136515103	0
RestaPaN15	Restaurant	Packaged DX	New	Air-side Economizer	No Economizer	ton	$1.54	15	737	0.013	111	$170.00	15%	75%	45%	0.495396028	0
RestaPaN16	Restaurant	Packaged DX	New	Energy Recovery Units	No Energy Recovery	ton	$1.21	15	737	0.018	147	$179.00	20%	100%	95%	0.627317131	0
RestaPaN17	Restaurant	Packaged DX	New	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$3.16	15	779	0.004	35	$110.89	5%	100%	95%	0.240977771	0
RestaPaT1	Restaurant	Packaged DX	Turnover	Duct Insulation, Add R8	No Insulation	ton	$10.42	15	737	0.05	12	$125.00	2%	100%	95%	0.249089173	0
RestaPaT2	Restaurant	Packaged DX	Turnover	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$1.99	20	635	0.04	45	$90.40	7%	100%	95%	0.736426245	0
RestaPaT3	Restaurant	Packaged DX	Turnover	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$2.14	20	635	0.08	85	$180.81	13%	100%	95%	0.687293148	0
RestaPaT4	Restaurant	Packaged DX	Turnover	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$2.28	20	635	0.12	119	$271.21	19%	100%	95%	0.644349205	0
RestaPaT5	Restaurant	Packaged DX	Turnover	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.12	20	737	0.05	49	$55.00	7%	100%	95%	1.311285035	1
RestaPaT6	Restaurant	Packaged DX	Turnover	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.12	20	751	0.06	63	$70.00	8%	100%	95%	1.311285035	1
RestaPaT7	Restaurant	Packaged DX	Turnover	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.88	20	826	0.06	61	$115.13	7%	100%	95%	0.779555075	0
RestaPaT8	Restaurant	Packaged DX	Turnover	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$2.36	20	851	0.04	42	$98.39	5%	100%	95%	0.622323518	0
RestaPaT9	Restaurant	Packaged DX	Turnover	Ground Source HP Open - Water	Air Source Heat Pump	ton	$3.11	15	751	0.23	241	$ 750.0	32%	5%	95%	0.374712709	0
RestaPaT10	Restaurant	Packaged DX	Turnover	Ground Source HP Closed	Air Source Heat Pump	ton	$5.58	15	751	0.016	134	$750.00	18%	100%	95%	0.136515103	0
RestaPaT11	Restaurant	Packaged DX	Turnover	Air-side Economizer	No Economizer	ton	$1.54	15	737	0.013	111	$170.00	15%	75%	45%	0.495396028	0
RestaPaT12	Restaurant	Packaged DX	Turnover	Energy Recovery Units	No Energy Recovery	ton	$1.21	15	737	0.018	147	$179.00	20%	100%	95%	0.627317131	0
RestaPaT13	Restaurant	Packaged DX	Turnover	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$3.16	15	779	0.004	35	$110.89	5%	100%	95%	0.240977771	0
RestaPaN18	Restaurant	Packaged DX	New	Automated control system	Baseline DX	ton	$0.64	10	779	0.005	39	$25.00	5%	100%	65%	0.7237148	0
RestaPaN19	Restaurant	Packaged DX	New	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.19	10	662	0.004	36	$43.00	5%	100%	95%	0.389869129	0
RestaPaT15	Restaurant	Packaged DX	Turnover	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.19	10	662	0.004	36	$43.00	5%	100%	95%	0.389869129	0
RetaiPaE1	Retail	Packaged DX	Early	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$3.13	20	722	0.05	64	$200.00	9%	15%	9%	0.428582596	0
RetaiPaE2	Retail	Packaged DX	Early	Adding window shade film	No shade film	sq ft window area	$7.05	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.030776812	0
RetaiPaE3	Retail	Packaged DX	Early	Adding window shade screen	No shade screen	sq ft window area	$3.90	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.195291286	0
RetaiPaE4	Retail	Packaged DX	Early	Windows U<0.40, .55 SHGC	Existing window specifications	sq ft window area	$1.40	30	2	0.000	0	$0.28	13%	50%	95%	0.906343104	0
RetaiPaE5	Retail	Packaged DX	Early	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$4.67	20	722	0.05	48	$225.00	7%	95%	95%	0.31646921	0
RetaiPaE7	Retail	Packaged DX	Early	Automated control system	Baseline DX	ton	$0.66	10	763	0.005	38	$25.00	5%	100%	65%	0.708988046	0
RetaiPaE8	Retail	Packaged DX	Early	Duct Sealing, down to 15%	Leakage of 29%	ton	$7.92	15	722	0.05	12	$95.00	2%	45%	80%	0.327748911	0
RetaiPaE9	Retail	Packaged DX	Early	Hotel Keycard Sensors	No prior controls	Room Controlled	$0.29	10	648	0.041	342	$100.00	53%	95%	80%	1.588911636	1
RetaiPaE10	Retail	Packaged DX	Early	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	ton	$0.55	1	785	0.05	64	$35.00	8%	100%	45%	0.089753801	0
RetaiPaE11	Retail	Packaged DX	Early	7 day, two stage setback thermostat	Manual Thermostat	ton	$0.44	10	722	0.015	125	$55.00	17%	100%	45%	1.055895558	1
RetaiPaE13	Retail	Packaged DX	Early	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.48	7	722	0.05	116	$55.15	16%	95%	75%	0.801756216	0
RetaiPaN1	Retail	Packaged DX	New	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	ton	$1.36	20	722	0.05	64	$87.00	9%	100%	95%	0.985247348	0
RetaiPaN2	Retail	Packaged DX	New	Adding reflective roof treatment	Std color roof	ton	$4.50	20	722	0.05	10	$45.00	1%	100%	95%	0.80668581	0
RetaiPaN3	Retail	Packaged DX	New	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$2.60	20	722	0.05	48	$125.00	7%	100%	95%	0.569644577	0
RetaiPaN4	Retail	Packaged DX	New	Green Roof (New construction or roof replacement)	Std Roof	ton	$2.65	20	722	0.05	48	$127.43	7%	45%	95%	0.558781858	0
RetaiPaN5	Retail	Packaged DX	New	Duct Insulation, Add R8	No Insulation	ton	$10.42	20	722	0.05	12	$125.00	2%	100%	95%	0.305048568	0
RetaiPaN6	Retail	Packaged DX	New	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$2.03	20	622	0.04	44	$90.40	7%	100%	95%	0.727082085	0
RetaiPaN7	Retail	Packaged DX	New	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$2.18	20	622	0.08	83	$180.81	13%	100%	95%	0.678572414	0
RetaiPaN8	Retail	Packaged DX	New	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$2.32	20	622	0.12	117	$271.21	19%	100%	95%	0.636173366	0
RetaiPaN9	Retail	Packaged DX	New	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.14	20	722	0.05	48	$55.00	7%	100%	95%	1.294646766	1
RetaiPaN10	Retail	Packaged DX	New	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.14	20	735	0.06	61	$70.00	8%	100%	95%	1.294646766	1
RetaiPaN11	Retail	Packaged DX	New	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.92	20	809	0.06	60	$115.13	7%	100%	95%	0.769663673	0
RetaiPaN12	Retail	Packaged DX	New	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$2.41	20	834	0.04	41	$98.39	5%	100%	95%	0.614427153	0
RetaiPaN13	Retail	Packaged DX	New	Ground Source HP Open - Water	Air Source Heat Pump	ton	$3.18	15	735	0.23	236	$ 750.0	32%	20%	95%	0.370103693	0
RetaiPaN14	Retail	Packaged DX	New	Ground Source HP Closed	Air Source Heat Pump	ton	$5.70	15	735	0.016	132	$750.00	18%	100%	95%	0.133737179	0
RetaiPaN15	Retail	Packaged DX	New	Air-side Economizer	No Economizer	ton	$1.57	15	722	0.013	108	$170.00	15%	75%	45%	0.485315295	0
RetaiPaN16	Retail	Packaged DX	New	Energy Recovery Units	No Energy Recovery	ton	$1.24	15	722	0.017	144	$179.00	20%	100%	95%	0.614551957	0
RetaiPaN17	Retail	Packaged DX	New	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$3.23	15	763	0.004	34	$110.89	5%	100%	95%	0.236074153	0
RetaiPaT1	Retail	Packaged DX	Turnover	Duct Insulation, Add R8	No Insulation	ton	$10.42	15	722	0.05	12	$125.00	2%	100%	95%	0.249089173	0
RetaiPaT2	Retail	Packaged DX	Turnover	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$2.03	20	622	0.04	44	$90.40	7%	100%	95%	0.727082085	0
RetaiPaT3	Retail	Packaged DX	Turnover	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$2.18	20	622	0.08	83	$180.81	13%	100%	95%	0.678572414	0
RetaiPaT4	Retail	Packaged DX	Turnover	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$2.32	20	622	0.12	117	$271.21	19%	100%	95%	0.636173366	0
RetaiPaT5	Retail	Packaged DX	Turnover	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.14	20	722	0.05	48	$55.00	7%	100%	95%	1.294646766	1
RetaiPaT6	Retail	Packaged DX	Turnover	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.14	20	735	0.06	61	$70.00	8%	100%	95%	1.294646766	1
RetaiPaT7	Retail	Packaged DX	Turnover	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.92	20	809	0.06	60	$115.13	7%	100%	95%	0.769663673	0
RetaiPaT8	Retail	Packaged DX	Turnover	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$2.41	20	834	0.04	41	$98.39	5%	100%	95%	0.614427153	0
RetaiPaT9	Retail	Packaged DX	Turnover	Ground Source HP Open - Water	Air Source Heat Pump	ton	$3.18	15	735	0.23	236	$ 750.0	32%	5%	95%	0.370103693	0

`	New Commerical Segment	New End Use	Vintage	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	PJM Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
RetaiPaT10	Retail	Packaged DX	Turnover	Ground Source HP Closed	Air Source Heat Pump	ton	$5.70	15	735	0.016	132	$750.00	18%	100%	95%	0.133737179	0
RetaiPaT11	Retail	Packaged DX	Turnover	Air-side Economizer	No Economizer	ton	$1.57	15	722	0.013	108	$170.00	15%	75%	45%	0.485315295	0
RetaiPaT12	Retail	Packaged DX	Turnover	Energy Recovery Units	No Energy Recovery	ton	$1.24	15	722	0.017	144	$179.00	20%	100%	95%	0.614551957	0
RetaiPaT13	Retail	Packaged DX	Turnover	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$3.23	15	763	0.004	34	$110.89	5%	100%	95%	0.236074153	0
RetaiPaN18	Retail	Packaged DX	New	Automated control system	Baseline DX	ton	$0.66	10	763	0.005	38	$25.00	5%	100%	65%	0.708988046	0
RetaiPaN19	Retail	Packaged DX	New	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.22	10	648	0.004	35	$43.00	5%	100%	95%	0.381935746	0
RetaiPaT15	Retail	Packaged DX	Turnover	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.22	10	648	0.004	35	$43.00	5%	100%	95%	0.381935746	0
WarehPaE1	Warehouse	Packaged DX	Early	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$3.13	20	571	0.05	64	$200.00	11%	15%	9%	0.428582596	0
WarehPaE2	Warehouse	Packaged DX	Early	Adding window shade film	No shade film	sq ft window area	$7.05	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.030776812	0
WarehPaE3	Warehouse	Packaged DX	Early	Adding window shade screen	No shade screen	sq ft window area	$3.90	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.195291286	0
WarehPaE4	Warehouse	Packaged DX	Early	Windows U<0.40, .55 SHGC	Existing window specifications	sq ft window area	$1.40	30	2	0.000	0	$0.28	13%	50%	95%	0.906343104	0
WarehPaE5	Warehouse	Packaged DX	Early	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$5.91	20	571	0.05	38	$225.00	7%	95%	95%	0.275507377	0
WarehPaE7	Warehouse	Packaged DX	Early	Automated control system	Baseline DX	ton	$0.83	10	603	0.004	30	$25.00	5%	100%	65%	0.560668588	0
WarehPaE8	Warehouse	Packaged DX	Early	Duct Sealing, down to 15%	Leakage of 29%	ton	$7.92	15	571	0.05	12	$95.00	2%	45%	80%	0.327748911	0
WarehPaE9	Warehouse	Packaged DX	Early	Hotel Keycard Sensors	No prior controls	Room Controlled	$0.29	10	513	0.041	342	$100.00	67%	95%	80%	1.588911636	1
WarehPaE10	Warehouse	Packaged DX	Early	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	ton	$0.55	1	621	0.05	64	$35.00	10%	100%	45%	0.089753801	0
WarehPaE11	Warehouse	Packaged DX	Early	7 day, two stage setback thermostat	Manual Thermostat	ton	$0.44	10	571	0.015	125	$55.00	22%	100%	45%	1.055895558	1
WarehPaE13	Warehouse	Packaged DX	Early	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.60	7	571	0.05	91	$55.15	16%	95%	75%	0.679860434	0
WarehPaN1	Warehouse	Packaged DX	New	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	ton	$1.36	20	571	0.05	64	$87.00	11%	100%	95%	0.985247348	0
WarehPaN2	Warehouse	Packaged DX	New	Adding reflective roof treatment	Std color roof	ton	$4.50	20	571	0.05	10	$45.00	2%	100%	95%	0.80668581	0
WarehPaN3	Warehouse	Packaged DX	New	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$3.28	20	571	0.05	38	$125.00	7%	100%	95%	0.495913278	0
WarehPaN4	Warehouse	Packaged DX	New	Green Roof (New construction or roof replacement)	Std Roof	ton	$3.35	20	571	0.05	38	$127.43	7%	45%	95%	0.486456563	0
WarehPaN5	Warehouse	Packaged DX	New	Duct Insulation, Add R8	No Insulation	ton	$10.42	20	571	0.05	12	$125.00	2%	100%	95%	0.305048568	0
WarehPaN6	Warehouse	Packaged DX	New	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$2.57	20	492	0.04	35	$90.40	7%	100%	95%	0.632973041	0
WarehPaN7	Warehouse	Packaged DX	New	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$2.76	20	492	0.08	66	$180.81	13%	100%	95%	0.590742164	0
WarehPaN8	Warehouse	Packaged DX	New	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$2.94	20	492	0.12	92	$271.21	19%	100%	95%	0.553830989	0
WarehPaN9	Warehouse	Packaged DX	New	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.44	20	571	0.05	38	$55.00	7%	100%	95%	1.127075632	1
WarehPaN10	Warehouse	Packaged DX	New	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.44	20	581	0.06	48	$70.00	8%	100%	95%	1.127075632	1
WarehPaN11	Warehouse	Packaged DX	New	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$2.43	20	640	0.06	47	$115.13	7%	100%	95%	0.67004313	0
WarehPaN12	Warehouse	Packaged DX	New	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$3.04	20	659	0.04	32	$98.39	5%	100%	95%	0.534899472	0
WarehPaN13	Warehouse	Packaged DX	New	Ground Source HP Open - Water	Air Source Heat Pump	ton	$4.02	15	581	0.23	187	$ 750.0	32%	20%	95%	0.323684313	0
WarehPaN14	Warehouse	Packaged DX	New	Ground Source HP Closed	Air Source Heat Pump	ton	$7.20	15	581	0.012	104	$750.00	18%	100%	95%	0.10575952	0
WarehPaN15	Warehouse	Packaged DX	New	Air-side Economizer	No Economizer	ton	$1.98	15	571	0.010	86	$170.00	15%	75%	45%	0.383787911	0
WarehPaN16	Warehouse	Packaged DX	New	Energy Recovery Units	No Energy Recovery	ton	$1.57	15	571	0.014	114	$179.00	20%	100%	95%	0.485988417	0
WarehPaN17	Warehouse	Packaged DX	New	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$4.08	15	603	0.003	27	$110.89	5%	100%	95%	0.186687721	0
WarehPaT1	Warehouse	Packaged DX	Turnover	Duct Insulation, Add R8	No Insulation	ton	$10.42	15	571	0.05	12	$125.00	2%	100%	95%	0.249089173	0
WarehPaT2	Warehouse	Packaged DX	Turnover	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$2.57	20	492	0.04	35	$90.40	7%	100%	95%	0.632973041	0
WarehPaT3	Warehouse	Packaged DX	Turnover	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$2.76	20	492	0.08	66	$180.81	13%	100%	95%	0.590742164	0
WarehPaT4	Warehouse	Packaged DX	Turnover	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$2.94	20	492	0.12	92	$271.21	19%	100%	95%	0.553830989	0
WarehPaT5	Warehouse	Packaged DX	Turnover	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.44	20	571	0.05	38	$55.00	7%	100%	95%	1.127075632	1
WarehPaT6	Warehouse	Packaged DX	Turnover	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.44	20	581	0.06	48	$70.00	8%	100%	95%	1.127075632	1
WarehPaT7	Warehouse	Packaged DX	Turnover	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$2.43	20	640	0.06	47	$115.13	7%	100%	95%	0.67004313	0
WarehPaT8	Warehouse	Packaged DX	Turnover	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$3.04	20	659	0.04	32	$98.39	5%	100%	95%	0.534899472	0
WarehPaT9	Warehouse	Packaged DX	Turnover	Ground Source HP Open - Water	Air Source Heat Pump	ton	$4.02	15	581	0.23	187	$ 750.0	32%	5%	95%	0.323684313	0
WarehPaT10	Warehouse	Packaged DX	Turnover	Ground Source HP Closed	Air Source Heat Pump	ton	$7.20	15	581	0.012	104	$750.00	18%	100%	95%	0.10575952	0
WarehPaT11	Warehouse	Packaged DX	Turnover	Air-side Economizer	No Economizer	ton	$1.98	15	571	0.010	86	$170.00	15%	75%	45%	0.383787911	0
WarehPaT12	Warehouse	Packaged DX	Turnover	Energy Recovery Units	No Energy Recovery	ton	$1.57	15	571	0.014	114	$179.00	20%	100%	95%	0.485988417	0
WarehPaT13	Warehouse	Packaged DX	Turnover	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$4.08	15	603	0.003	27	$110.89	5%	100%	95%	0.186687721	0
WarehPaN18	Warehouse	Packaged DX	New	Automated control system	Baseline DX	ton	$0.83	10	603	0.004	30	$25.00	5%	100%	65%	0.560668588	0
WarehPaN19	Warehouse	Packaged DX	New	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.54	10	513	0.003	28	$43.00	5%	100%	95%	0.302035241	0
WarehPaT15	Warehouse	Packaged DX	Turnover	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.54	10	513	0.003	28	$43.00	5%	100%	95%	0.302035241	0
HealtHeN4	Healthcare	Heating	New	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$5.82	15	314	0.000	19	$110.89	6%	100%	95%	0.12260469	0
HealtHeT1	Healthcare	Heating	Turnover	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$5.82	15	314	0.000	19	$110.89	6%	100%	95%	0.12260469	0
GroceHeE1	Grocery	Heating	Early	Re-commissioning	Current Controls not working properly, setpoints not optimized,	sq ft	$0.2710	7	125,500	0.297	20,080	$5,441.68	16%	95%	75%	1.034942818	1
GroceHeE2	Grocery	Heating	Early	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$4.44	20	1,353	0.05	45	$200.00	3%	10%	95%	0.342229633	0
GroceHeE3	Grocery	Heating	Early	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.67	20	1,353	0.05	75	$125.00	6%	10%	95%	0.767813348	0
GroceHeE4	Grocery	Heating	Early	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.75	20	1,353	0.05	34	$127.43	3%	10%	95%	0.457908822	0
GroceHeE5	Grocery	Heating	Early	Humidification with High pressure, Ultrasonic devices	Electric Resistive Elements	unit	$0.1893	10	2,794	0.039	2,641	$500.00	95%	100%	95%	2.264366625	1
GroceHeN1	Grocery	Heating	New	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5 - Electric Heat	sq ft	$1.93	20	1,353	0.05	45	$87.00	3%	10%	95%	0.786734788	0
GroceHeN2	Grocery	Heating	New	Ground Source HP Open - Water	Air Source Heat Pump	ton	$9.14	15	1,353	0.23	82	$ 750.0	6%	20%	95%	0.225519152	0
GroceHen3	Grocery	Heating	new	Ground Source HP Closed	Air Source Heat Pump	ton	$9.14	15	1,353	0.001	82	$750.00	6%	100%	95%	0.078072643	0
GroceHeN4	Grocery	Heating	New	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.35	15	1,353	0.001	82	$110.89	6%	100%	95%	0.528041139	0
GroceHeT1	Grocery	Heating	Turnover	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.35	15	1,353	0.001	82	$110.89	6%	100%	95%	0.528041139	0
InstiHeE1	Institutional	Heating	Early	Re-commissioning	Current Controls not working properly, setpoints not optimized,	sq ft	$0.2710	7	125,500	0.297	20,080	$5,441.68	16%	95%	75%	1.034942818	1
InstiHeE2	Institutional	Heating	Early	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$4.44	20	963	0.05	45	$200.00	5%	10%	95%	0.342229633	0
InstiHeE3	Institutional	Heating	Early	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.67	20	963	0.05	75	$125.00	8%	10%	95%	0.767813348	0
InstiHeE4	Institutional	Heating	Early	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.75	20	963	0.05	34	$127.43	4%	10%	95%	0.457908822	0
InstiHeE5	Institutional	Heating	Early	Humidification with High pressure, Ultrasonic devices	Electric Resistive Elements	unit	$0.1893	10	2,794	0.039	2,641	$500.00	95%	100%	95%	2.264366625	1
InstiHeN1	Institutional	Heating	New	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5 - Electric Heat	sq ft	$1.93	20	963	0.05	45	$87.00	5%	10%	95%	0.786734788	0
InstiHeN2	Institutional	Heating	New	Ground Source HP Open - Water	Air Source Heat Pump	ton	$12.85	15	963	0.23	58	$ 750.0	6%	20%	95%	0.203227872	0
InstiHen3	Institutional	Heating	new	Ground Source HP Closed	Air Source Heat Pump	ton	$12.85	15	963	0.001	58	$750.00	6%	100%	95%	0.055560498	0
InstiHeN4	Institutional	Heating	New	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.90	15	963	0.001	58	$110.89	6%	100%	95%	0.375781163	0
InstiHeT1	Institutional	Heating	Turnover	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.90	15	963	0.001	58	$110.89	6%	100%	95%	0.375781163	0
LodgiHeE1	Lodging	Heating	Early	Re-commissioning	Current Controls not working properly, setpoints not optimized,	sq ft	$0.2710	7	125,500	0.297	20,080	$5,441.68	16%	95%	75%	1.034942818	1
LodgiHeE2	Lodging	Heating	Early	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$4.44	20	1,638	0.05	45	$200.00	3%	10%	95%	0.342229633	0
LodgiHeE3	Lodging	Heating	Early	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.67	20	1,638	0.05	75	$125.00	5%	10%	95%	0.767813348	0
LodgiHeE4	Lodging	Heating	Early	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.75	20	1,638	0.05	34	$127.43	2%	10%	95%	0.457908822	0
LodgiHeE5	Lodging	Heating	Early	Humidification with High pressure, Ultrasonic devices	Electric Resistive Elements	unit	$0.1893	10	2,794	0.039	2,641	$500.00	95%	100%	95%	2.264366625	1
LodgiHeN1	Lodging	Heating	New	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5 - Electric Heat	sq ft	$1.93	20	1,638	0.05	45	$87.00	3%	10%	95%	0.786734788	0
LodgiHeN2	Lodging	Heating	New	Ground Source HP Open - Water	Air Source Heat Pump	ton	$7.55	15	1,638	0.23	99	$ 750.0	6%	20%	95%	0.241784011	0
LodgiHen3	Lodging	Heating	new	Ground Source HP Closed	Air Source Heat Pump	ton	$7.55	15	1,638	0.001	99	$750.00	6%	100%	95%	0.094498655	0
LodgiHeN4	Lodging	Heating	New	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.12	15	1,638	0.001	99	$110.89	6%	100%	95%	0.639137808	0
LodgiHeT1	Lodging	Heating	Turnover	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.12	15	1,638	0.001	99	$110.89	6%	100%	95%	0.639137808	0
MiscHeE1	Misc	Heating	Early	Re-commissioning	Current Controls not working properly, setpoints not optimized,	sq ft	$0.2710	7	125,500	0.297	20,080	$5,441.68	16%	95%	75%	1.034942818	1
MiscHeE2	Misc	Heating	Early	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$4.44	20	1,121	0.05	45	$200.00	4%	10%	95%	0.342229633	0
MiscHeE3	Misc	Heating	Early	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.67	20	1,121	0.05	75	$125.00	7%	10%	95%	0.767813348	0
MiscHeE4	Misc	Heating	Early	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.75	20	1,121	0.05	34	$127.43	3%	10%	95%	0.457908822	0
MiscHeE5	Misc	Heating	Early	Humidification with High pressure, Ultrasonic devices	Electric Resistive Elements	unit	$0.1893	10	2,794	0.039	2,641	$500.00	95%	100%	95%	2.264366625	1
MiscHeN1	Misc	Heating	New	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5 - Electric Heat	sq ft	$1.93	20	1,121	0.05	45	$87.00	4%	10%	95%	0.786734788	0
MiscHeN2	Misc	Heating	New	Ground Source HP Open - Water	Air Source Heat Pump	ton	$11.04	15	1,121	0.23	68	$ 750.0	6%	20%	95%	0.212235104	0
MiscHen3	Misc	Heating	new	Ground Source HP Closed	Air Source Heat Pump	ton	$11.04	15	1,121	0.001	68	$750.00	6%	100%	95%	0.064656975	0
MiscHeN4	Misc	Heating	New	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.63	15	1,121	0.001	68	$110.89	6%	100%	95%	0.437304816	0
MiscHeT1	Misc	Heating	Turnover	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.63	15	1,121	0.001	68	$110.89	6%	100%	95%	0.437304816	0
AllReE1	All	Refrigeration	Early	Refrigeration Commissioning	Base Refrigeration System - Grocery	Per refigerator	$0.25	7	8,800	0.117	880	$220.00	10%	95%	92%	1.242157504	1
GroceReN8	All	Refrigeration	New	Strip curtains for walk-ins	Base Refrigeration System - Grocery		$0.50	15	29,900	0.079	598	$300.00	2%	45%	78%	1.52782774	1
AllReT30	All	Refrigeration	Turnover	Strip curtains for walk-ins	Base Refrigeration System - Grocery		$0.50	15	29,900	0.079	598	$300.00	2%	45%	78%	1.52782774	1
AllReN26	All	Refrigeration	New	Anti-sweat heat (ASH) controls - Freezer	ASH without controls	Per Door	$0.16	12	2,985	0.029	1,882	$300.00	63%	95%	85%	3.453029472	1
AllReN27	All	Refrigeration	New	Anti-sweat heat (ASH) controls - Cooler	ASH without controls	Per Door	$0.29	12	1,621	0.028	1,023	$300.00	63%	95%	85%	1.892941356	1
AllStT1	All	Signage	Turnover	Induction Street Lighting	Base HID Streetlighting	Fixture	$0.57	15	2,762	0.101	1,619	$925.00	59%	95%	95%	1.263888095	1

`	New Commerical Segment	New End Use	Vintage	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	PJM Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
AllStT2	All	Signage	Turnover	LED exit sign - 1 sided	Incandescent exit sign	Exit Sign	$0.15	15	175	0.024	158	$23.50	90%	65%	70%	5.129644841	1
AllStT3	All	Signage	Turnover	LED exit sign -2 sided	Incandescent exit sign	Exit Sign	$0.16	15	350	0.048	228	$37.50	65%	65%	70%	4.811740455	1
AllStT4	All	Signage	Turnover	Photoluminescent Exit Sign	Incandescent exit sign	Exit Sign	$0.17	15	175	0.011	175	$30.00	100%	50%	70%	4.216472742	1
AllStT5	All	Signage	Turnover	LED or equivalent sign lighting -1 sided	Replace fluorescent sign lighting	Exit Sign	$0.28	15	79	0.009	61	$17.36	78%	48%	7%	2.691320344	1
RestaHeE1	Restaurant	Heating	Early	Re-commissioning	Current Controls not working properly, setpoints not optimized,	sq ft	$0.2710	7	125,500	0.297	20,080	$5,441.68	16%	95%	75%	1.034942818	1
RestaHeE2	Restaurant	Heating	Early	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$4.44	20	1,317	0.05	45	$200.00	3%	10%	95%	0.342229633	0
RestaHeE3	Restaurant	Heating	Early	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.67	20	1,317	0.05	75	$125.00	6%	10%	95%	0.767813348	0
RestaHeE4	Restaurant	Heating	Early	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.75	20	1,317	0.05	34	$127.43	3%	10%	95%	0.457908822	0
RestaHeE5	Restaurant	Heating	Early	Humidification with High pressure, Ultrasonic devices	Electric Resistive Elements	unit	$0.1893	10	2,794	0.039	2,641	$500.00	95%	100%	95%	2.264366625	1
RestaHeN1	Restaurant	Heating	New	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5 - Electric Heat	sq ft	$1.93	20	1,317	0.05	45	$87.00	3%	10%	95%	0.786734788	0
RestaHeN2	Restaurant	Heating	New	Ground Source HP Open - Water	Air Source Heat Pump	ton	$9.40	15	1,317	0.23	80	$ 750.0	6%	20%	95%	0.223445545	0
RestaHen3	Restaurant	Heating	new	Ground Source HP Closed	Air Source Heat Pump	ton	$9.40	15	1,317	0.001	80	$750.00	6%	100%	95%	0.07597849	0
RestaHeN4	Restaurant	Heating	New	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.39	15	1,317	0.001	80	$110.89	6%	100%	95%	0.513877421	0
RestaHeT1	Restaurant	Heating	Turnover	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.39	15	1,317	0.001	80	$110.89	6%	100%	95%	0.513877421	0
RetaiHeE1	Retail	Heating	Early	Re-commissioning	Current Controls not working properly, setpoints not optimized,	sq ft	$0.2710	7	125,500	0.297	20,080	$5,441.68	16%	95%	75%	1.034942818	1
RetaiHeE2	Retail	Heating	Early	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$4.44	20	1,353	0.05	45	$200.00	3%	10%	95%	0.342229633	0
RetaiHeE3	Retail	Heating	Early	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.67	20	1,353	0.05	75	$125.00	6%	10%	95%	0.767813348	0
RetaiHeE4	Retail	Heating	Early	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.75	20	1,353	0.05	34	$127.43	3%	10%	95%	0.457908822	0
RetaiHeE5	Retail	Heating	Early	Humidification with High pressure, Ultrasonic devices	Electric Resistive Elements	unit	$0.1893	10	2,794	0.039	2,641	$500.00	95%	100%	95%	2.264366625	1
RetaiHeN1	Retail	Heating	New	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5 - Electric Heat	sq ft	$1.93	20	1,353	0.05	45	$87.00	3%	10%	95%	0.786734788	0
RetaiHeN2	Retail	Heating	New	Ground Source HP Open - Water	Air Source Heat Pump	ton	$9.14	15	1,353	0.23	82	$ 750.0	6%	20%	95%	0.225519152	0
RetaiHen3	Retail	Heating	new	Ground Source HP Closed	Air Source Heat Pump	ton	$9.14	15	1,353	0.001	82	$750.00	6%	100%	95%	0.078072643	0
RetaiHeN4	Retail	Heating	New	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.35	15	1,353	0.001	82	$110.89	6%	100%	95%	0.528041139	0
RetaiHeT1	Retail	Heating	Turnover	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.35	15	1,353	0.001	82	$110.89	6%	100%	95%	0.528041139	0
WarehHeE1	Warehouse	Heating	Early	Re-commissioning	Current Controls not working properly, setpoints not optimized,	sq ft	$0.2710	7	125,500	0.297	20,080	$5,441.68	16%	95%	75%	1.034942818	1
WarehHeE2	Warehouse	Heating	Early	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$4.44	20	1,163	0.05	45	$200.00	4%	10%	95%	0.342229633	0
WarehHeE3	Warehouse	Heating	Early	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.67	20	1,163	0.05	75	$125.00	6%	10%	95%	0.767813348	0
WarehHeE4	Warehouse	Heating	Early	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.75	20	1,163	0.05	34	$127.43	3%	10%	95%	0.457908822	0
WarehHeE5	Warehouse	Heating	Early	Humidification with High pressure, Ultrasonic devices	Electric Resistive Elements	unit	$0.1893	10	2,794	0.039	2,641	$500.00	95%	100%	95%	2.264366625	1
WarehHeN1	Warehouse	Heating	New	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5 - Electric Heat	sq ft	$1.93	20	1,163	0.05	45	$87.00	4%	10%	95%	0.786734788	0
WarehHeN2	Warehouse	Heating	New	Ground Source HP Open - Water	Air Source Heat Pump	ton	$10.64	15	1,163	0.23	70	$ 750.0	6%	20%	95%	0.214632713	0
WarehHen3	Warehouse	Heating	new	Ground Source HP Closed	Air Source Heat Pump	ton	$10.64	15	1,163	0.001	70	$750.00	6%	100%	95%	0.067078339	0
WarehHeN4	Warehouse	Heating	New	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.57	15	1,163	0.001	70	$110.89	6%	100%	95%	0.453681616	0
WarehHeT1	Warehouse	Heating	Turnover	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.57	15	1,163	0.001	70	$110.89	6%	100%	95%	0.453681616	0
GroceChE1	Grocery	Chiller	Early	Duct Sealing, down to 15%	Leakage of 29%	ton	$2.0251	15	4,691	0.009	46.9104	$95.00	1%	40%	$0.90	0.39094423	0
GroceChE2	Grocery	Chiller	Early	Duct Insulation, Add R8	No Insulation	ton	$2.6647	15	4,691	0.009	46.9104	$125.00	1%	50%	95%	0.297117615	0
GroceChE3	Grocery	Chiller	Early	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton	ton	$0.5329	15	4,691	0.046	234.5520	$125.00	5%	75%	75%	1.485588076	1
GroceChE4	Grocery	Chiller	Early	Energy Recovery Units	No Energy Recovery	ton	$0.4796	15	4,691	0.185	938.2	$450.00	20%	75%	75%	1.650653417	1
GroceChE5	Grocery	Chiller	Early	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.4859	7	4,691	0.148	751	$364.67	16%	75%	75%	0.667710989	0
GroceChE6	Grocery	Chiller	Early	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$0.82	15	4,691	0.05	245	$200.00	5%	15%	95%	0.968658422	0
GroceChE7	Grocery	Chiller	Early	Adding window shade film	No shade film	sq ft window area	$7.0453	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.032529568	0
GroceChE8	Grocery	Chiller	Early	Adding window shade screen	No shade screen	sq ft window area	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.202998871	0
GroceChE9	Grocery	Chiller	Early	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.60	20	4,691	0.05	141	$225.00	3%	75%	95%	0.688094387	0
GroceChN1	Grocery	Chiller	New	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	sq ft	$0.53	20	4,691	0.05	164	$87.00	4%	15%	95%	2.024135718	1
GroceChN2	Grocery	Chiller	New	Adding window shade screen	No shade screen	sq ft window area	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.202998871	0
GroceChN3	Grocery	Chiller	New	Adding reflective roof treatment	Std color roof	sq ft roof area	$4.50	20	4,691	0.05	10	$45.00	0%	100%	95%	0.804929318	0
GroceChN4	Grocery	Chiller	New	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$2.78	20	4,691	0.05	46	$127.43	1%	45%	95%	0.539523184	0
GroceChN5	Grocery	Chiller	New	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.4504	15	4,691	0.76	566	$255.00	12%	95%	95%	2.954825519	1
GroceChN6	Grocery	Chiller	New	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2490	15	4,691	1.944	1,456	$362.50	31%	95%	95%	5.344886358	1
GroceChN7	Grocery	Chiller	New	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1290	15	11,242	1.728	1,294	$167.00	12%	95%	95%	10.31282132	1
GroceChN8	Grocery	Chiller	New	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.4903	15	4,691	0.046	234.5520	$115.00	5%	95%	75%	1.614769647	1
GroceChN9	Grocery	Chiller	New	Energy Recovery Units	No Energy Recovery	ton	$0.2665	15	4,691	0.185	938.2	$250.00	20%	95%	75%	2.971176151	1
GroceChN10	Grocery	Chiller	New	Duct Insulation, Add R8	No Insulation	ton	$2.6647	15	4,691	0.009	46.9104	$125.00	1%	100%	95%	0.297117615	0
GroceChT1	Grocery	Chiller	Turnover	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.5211	15	4,691	0.76	566	$295.00	12%	95%	95%	2.554171212	1
GroceChT2	Grocery	Chiller	Turnover	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.3177	15	4,691	1.944	1,456	$462.50	31%	95%	95%	4.189235254	1
GroceChT3	Grocery	Chiller	Turnover	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.5067	15	4,691	1.944	821	$416.00	18%	95%	95%	3.591907934	1
GroceChN11	Grocery	Chiller	New	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.5067	15	4,691	1.944	821	$416.00	18%	95%	95%	3.591907934	1
GroceChT5	Grocery	Chiller	Turnover	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.5415	15	4,691	0.046	234.5520	$127.00	5%	95%	75%	1.462192988	1
GroceChT4	Grocery	Chiller	Turnover	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1600	15	11,242	1.728	1,294	$207.00	12%	95%	95%	8.320005603	1
InstiChE1	Institutional	Chiller	Early	Duct Sealing, down to 15%	Leakage of 29%	ton	$2.8555	15	3,327	0.007	33.2688	$95.00	1%	40%	$0.90	0.277257184	0
InstiChE2	Institutional	Chiller	Early	Duct Insulation, Add R8	No Insulation	ton	$3.7573	15	3,327	0.007	33.2688	$125.00	1%	50%	95%	0.21071546	0
InstiChE3	Institutional	Chiller	Early	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton	ton	$0.7515	15	3,327	0.033	166.3440	$125.00	5%	75%	75%	1.0535773	1
InstiChE4	Institutional	Chiller	Early	Energy Recovery Units	No Energy Recovery	ton	$0.6763	15	3,327	0.131	665.4	$450.00	20%	75%	75%	1.170641444	1
InstiChE5	Institutional	Chiller	Early	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.6851	7	3,327	0.105	532	$364.67	16%	75%	75%	0.473539841	0
InstiChE6	Institutional	Chiller	Early	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$0.82	15	3,327	0.05	245	$200.00	7%	15%	95%	0.968658422	0
InstiChE7	Institutional	Chiller	Early	Adding window shade film	No shade film	sq ft window area	$7.0453	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.032529568	0
InstiChE8	Institutional	Chiller	Early	Adding window shade screen	No shade screen	sq ft window area	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.202998871	0
InstiChE9	Institutional	Chiller	Early	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$2.25	20	3,327	0.05	100	$225.00	3%	75%	95%	0.523085491	0
InstiChN1	Institutional	Chiller	New	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	sq ft	$0.75	20	3,327	0.05	116	$87.00	4%	15%	95%	1.526264052	1
InstiChN2	Institutional	Chiller	New	Adding window shade screen	No shade screen	sq ft window area	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.202998871	0
InstiChN3	Institutional	Chiller	New	Adding reflective roof treatment	Std color roof	sq ft roof area	$4.50	20	3,327	0.05	10	$45.00	0%	100%	95%	0.804929318	0
InstiChN4	Institutional	Chiller	New	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.73	20	3,327	0.05	34	$127.43	1%	45%	95%	0.456126758	0
InstiChN5	Institutional	Chiller	New	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.6351	15	3,327	0.76	402	$255.00	12%	95%	95%	2.504039992	1
InstiChN6	Institutional	Chiller	New	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.3511	15	3,327	1.944	1,032	$362.50	31%	95%	95%	4.529475295	1
InstiChN7	Institutional	Chiller	New	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1820	15	7,973	1.728	918	$167.00	12%	95%	95%	8.739506558	1
InstiChN8	Institutional	Chiller	New	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.6913	15	3,327	0.033	166.3440	$115.00	5%	95%	75%	1.145192717	1
InstiChN9	Institutional	Chiller	New	Energy Recovery Units	No Energy Recovery	ton	$0.3757	15	3,327	0.131	665.4	$250.00	20%	95%	75%	2.1071546	1
InstiChN10	Institutional	Chiller	New	Duct Insulation, Add R8	No Insulation	ton	$3.7573	15	3,327	0.007	33.2688	$125.00	1%	100%	95%	0.21071546	0
InstiChT1	Institutional	Chiller	Turnover	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.7347	15	3,327	0.76	402	$295.00	12%	95%	95%	2.164509145	1
InstiChT2	Institutional	Chiller	Turnover	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.4480	15	3,327	1.944	1,032	$462.50	31%	95%	95%	3.550129286	1
InstiChT3	Institutional	Chiller	Turnover	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.7145	15	3,327	1.944	582	$416.00	18%	95%	95%	3.191239788	1
InstiChN11	Institutional	Chiller	New	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.7145	15	3,327	1.944	582	$416.00	18%	95%	95%	3.191239788	1
InstiChT5	Institutional	Chiller	Turnover	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.7635	15	3,327	0.033	166.3440	$127.00	5%	95%	75%	1.036985531	1
InstiChT4	Institutional	Chiller	Turnover	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.2255	15	7,973	1.728	918	$207.00	12%	95%	95%	7.05071302	1
LodgiChE1	Lodging	Chiller	Early	Duct Sealing, down to 15%	Leakage of 29%	ton	$2.3904	15	3,974	0.008	39.7416	$95.00	1%	40%	$0.90	0.331200528	0
LodgiChE2	Lodging	Chiller	Early	Duct Insulation, Add R8	No Insulation	ton	$3.1453	15	3,974	0.008	39.7416	$125.00	1%	50%	95%	0.251712401	0
LodgiChE3	Lodging	Chiller	Early	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton	ton	$0.6291	15	3,974	0.039	198.7080	$125.00	5%	75%	75%	1.258562005	1
LodgiChE4	Lodging	Chiller	Early	Energy Recovery Units	No Energy Recovery	ton	$0.5662	15	3,974	0.157	794.8	$450.00	20%	75%	75%	1.398402227	1
LodgiChE5	Lodging	Chiller	Early	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.5735	7	3,974	0.126	636	$364.67	16%	75%	75%	0.565672069	0
LodgiChE6	Lodging	Chiller	Early	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$0.82	15	3,974	0.05	245	$200.00	6%	15%	95%	0.968658422	0
LodgiChE7	Lodging	Chiller	Early	Adding window shade film	No shade film	sq ft window area	$7.0453	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.032529568	0
LodgiChE8	Lodging	Chiller	Early	Adding window shade screen	No shade screen	sq ft window area	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.202998871	0
LodgiChE9	Lodging	Chiller	Early	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.89	20	3,974	0.05	119	$225.00	3%	75%	95%	0.601380528	0
LodgiChN1	Lodging	Chiller	New	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	sq ft	$0.63	20	3,974	0.05	139	$87.00	4%	15%	95%	1.762499077	1
LodgiChN2	Lodging	Chiller	New	Adding window shade screen	No shade screen	sq ft window area	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.202998871	0
LodgiChN3	Lodging	Chiller	New	Adding reflective roof treatment	Std color roof	sq ft roof area	$4.50	20	3,974	0.05	10	$45.00	0%	100%	95%	0.804929318	0
LodgiChN4	Lodging	Chiller	New	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.12	20	3,974	0.05	41	$127.43	1%	45%	95%	0.503418634	0
LodgiChN5	Lodging	Chiller	New	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.5316	15	3,974	0.76	480	$255.00	12%	95%	95%	2.717933125	1
LodgiChN6	Lodging	Chiller	New	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2939	15	3,974	1.944	1,233	$362.50	31%	95%	95%	4.916379524	1

`	New Commerical Segment	New End Use	Vintage	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	PJM Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
LodgiChN7	Lodging	Chiller	New	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1523	15	9,524	1.728	1,096	$167.00	12%	95%	95%	9.486028357	1
LodgiChN8	Lodging	Chiller	New	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.5787	15	3,974	0.039	198.7080	$115.00	5%	95%	75%	1.368002179	1
LodgiChN9	Lodging	Chiller	New	Energy Recovery Units	No Energy Recovery	ton	$0.3145	15	3,974	0.157	794.8	$250.00	20%	95%	75%	2.517124009	1
LodgiChN10	Lodging	Chiller	New	Duct Insulation, Add R8	No Insulation	ton	$3.1453	15	3,974	0.008	39.7416	$125.00	1%	100%	95%	0.251712401	0
LodgiChT1	Lodging	Chiller	Turnover	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.6150	15	3,974	0.76	480	$295.00	12%	95%	95%	2.34939982	1
LodgiChT2	Lodging	Chiller	Turnover	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.3750	15	3,974	1.944	1,233	$462.50	31%	95%	95%	3.853378546	1
LodgiChT3	Lodging	Chiller	Turnover	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.5981	15	3,974	1.944	695	$416.00	18%	95%	95%	3.381352735	1
LodgiChN11	Lodging	Chiller	New	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.5981	15	3,974	1.944	695	$416.00	18%	95%	95%	3.381352735	1
LodgiChT5	Lodging	Chiller	Turnover	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.6391	15	3,974	0.039	198.7080	$127.00	5%	95%	75%	1.238742131	1
LodgiChT4	Lodging	Chiller	Turnover	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1888	15	9,524	1.728	1,096	$207.00	12%	95%	95%	7.652979399	1
MiscChE1	Misc	Chiller	Early	Duct Sealing, down to 15%	Leakage of 29%	ton	$2.0556	15	4,621	0.009	46.2144	$95.00	1%	40%	$0.90	0.38514387	0
MiscChE2	Misc	Chiller	Early	Duct Insulation, Add R8	No Insulation	ton	$2.7048	15	4,621	0.009	46.2144	$125.00	1%	50%	95%	0.292709342	0
MiscChE3	Misc	Chiller	Early	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton	ton	$0.5410	15	4,621	0.046	231.0720	$125.00	5%	75%	75%	1.46354671	1
MiscChE4	Misc	Chiller	Early	Energy Recovery Units	No Energy Recovery	ton	$0.4869	15	4,621	0.182	924.3	$450.00	20%	75%	75%	1.626163011	1
MiscChE5	Misc	Chiller	Early	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.4932	7	4,621	0.146	739	$364.67	16%	75%	75%	0.657804298	0
MiscChE6	Misc	Chiller	Early	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$0.82	15	4,621	0.05	245	$200.00	5%	15%	95%	0.968658422	0
MiscChE7	Misc	Chiller	Early	Adding window shade film	No shade film	sq ft window area	$7.0453	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.032529568	0
MiscChE8	Misc	Chiller	Early	Adding window shade screen	No shade screen	sq ft window area	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.202998871	0
MiscChE9	Misc	Chiller	Early	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.62	20	4,621	0.05	139	$225.00	3%	75%	95%	0.679675565	0
MiscChN1	Misc	Chiller	New	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	sq ft	$0.54	20	4,621	0.05	162	$87.00	4%	15%	95%	1.998734103	1
MiscChN2	Misc	Chiller	New	Adding window shade screen	No shade screen	sq ft window area	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.202998871	0
MiscChN3	Misc	Chiller	New	Adding reflective roof treatment	Std color roof	sq ft roof area	$4.50	20	4,621	0.05	10	$45.00	0%	100%	95%	0.804929318	0
MiscChN4	Misc	Chiller	New	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$2.70	20	4,621	0.05	47	$127.43	1%	45%	95%	0.54867645	0
MiscChN5	Misc	Chiller	New	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.4572	15	4,621	0.76	558	$255.00	12%	95%	95%	2.931826258	1
MiscChN6	Misc	Chiller	New	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2527	15	4,621	1.944	1,434	$362.50	31%	95%	95%	5.303283753	1
MiscChN7	Misc	Chiller	New	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1310	15	11,076	1.728	1,275	$167.00	12%	95%	95%	10.23255016	1
MiscChN8	Misc	Chiller	New	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.4977	15	4,621	0.046	231.0720	$115.00	5%	95%	75%	1.590811641	1
MiscChN9	Misc	Chiller	New	Energy Recovery Units	No Energy Recovery	ton	$0.2705	15	4,621	0.182	924.3	$250.00	20%	95%	75%	2.927093419	1
MiscChN10	Misc	Chiller	New	Duct Insulation, Add R8	No Insulation	ton	$2.7048	15	4,621	0.009	46.2144	$125.00	1%	100%	95%	0.292709342	0
MiscChT1	Misc	Chiller	Turnover	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.5289	15	4,621	0.76	558	$295.00	12%	95%	95%	2.534290494	1
MiscChT2	Misc	Chiller	Turnover	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.3225	15	4,621	1.944	1,434	$462.50	31%	95%	95%	4.156627806	1
MiscChT3	Misc	Chiller	Turnover	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.5144	15	4,621	1.944	809	$416.00	18%	95%	95%	3.571465682	1
MiscChN11	Misc	Chiller	New	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.5144	15	4,621	1.944	809	$416.00	18%	95%	95%	3.571465682	1
MiscChT5	Misc	Chiller	Turnover	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.5496	15	4,621	0.046	231.0720	$127.00	5%	95%	75%	1.44049873	1
MiscChT4	Misc	Chiller	Turnover	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1624	15	11,076	1.728	1,275	$207.00	12%	95%	95%	8.255245778	1
AllStT6	All	Signage	Turnover	LED or equivalent sign lighting -2 sided	Replace fluorescent sign lighting	Exit Sign	$0.12	15	175	0.002	140	$17.36	80%	48%	7%	5.647456401	1
AllStT7	All	Signage	Turnover	LED Street Lighting	Std HID Street Lighting	Pole	$0.63	15	2,762	0.047	756	$475.00	27%	95%	95%	1.148586023	1
AllStT8	All	Signage	Turnover	Red LED Traffic Light	Red Traffic Light	Signal	$0.37	10	332	0.019	299	$112.00	90%	95%	75%	1.153448325	1
AllStT9	All	Signage	Turnover	Yellow LED Traffic Light	Yellow Standard Traffic Light	Lamp	$12.10	10	12	0.001	10	$121.00	83%	95%	75%	0.035707513	0
AllStT10	All	Signage	Turnover	Green LED Traffic Light	Green Standard Traffic Light	Lamp	$0.77	10	260	0.014	226	$174.00	87%	95%	75%	0.561182563	0
AllStT11	All	Signage	Turnover	Hand/Man LED	Pedestrian Standard	Lamp	$0.19	10	1,016	0.059	946	$182.00	93%	95%	75%	2.245767153	1
AllStN1	All	Signage	New	Induction Street Lighting	Base HID Streetlighting	Fixture	$0.54	15	2,762	0.101	1,619	$875.00	59%	95%	95%	1.336110272	1
AllStN2	All	Signage	New	LED or equivalent sign lighting	Replace fluorescent sign lighting	Exit Sign	$0.58	15	52	0.002	30	$17.36	58%	95%	7%	1.241954314	1
AllStN3	All	Signage	New	LED Street Lighting	Std HID Street Lighting	Pole	$0.56	15	3,023	0.047	756	$425.00	25%	95%	95%	1.28371379	1
AllStE1	All	Signage	Early	Dusk to Dawn	Time Clock Control	Pole	$0.17	15	3,023	0.076	1,209	$200.00	40%	95%	50%	4.364662887	1
AllWaT1	All	Water Heating	Turnover	Ultrasonic Faucet Control	Manual Faucet Control	unit	$1.000	10	1,750	0.010	125	$125	7%	75%	75%	0.445511906	0
AllWaT2	All	Water Heating	Turnover	Faucet Aerators	Std Flow faucet	unit	$0.246	12	4,122	0.006	61	$15	6%	75%	75%	2.353347272	1
AllWaT3	All	Water Heating	Turnover	Hot Water (DHW) Pipe Insulation	No insulation present	10 ln ft	$0.292	14	4,122	0.011	124.00	$36.23	3%	75%	75%	2.370601845	1
AllWaT4	All	Water Heating	Turnover	Low-Flow Showerheads	Std Flow showerhead	unit	$0.108	9	4,122	0.042	461	$50	11%	75%	75%	3.515791862	1
AllWaT5	All	Water Heating	Turnover	Water Heater Thermostat Setback	Constant setpoint	unit	$0.029	2	4,122	0.053	577.09	$17	14%	75%	75%	2.854238349	1
AllWaN1	All	Water Heating	New	Ultrasonic Faucet Control	Manual Faucet Control	unit	$0.400	10	4,122	0.011	125	$50	3%	75%	75%	1.127413302	1
AllWaN2	All	Water Heating	New	Faucet Aerators	Std Flow faucet	unit	$0.082	12	4,122	0.006	61	$5	6%	75%	75%	7.060041817	1
AllWaN3	All	Water Heating	New	Hot Water (DHW) Pipe Insulation	No insulation present	10 ln ft	$0.292	14	4,122	0.011	124.00	$36.23	3%	75%	75%	2.370601845	1
AllWaN4	All	Water Heating	New	Low-Flow Showerheads	Std Flow showerhead	unit	$0.108	9	4,122	0.042	461	$50	11%	75%	75%	3.515791862	1
AllWaN5	All	Water Heating	New	Water Heater Thermostat Setback	Constant setpoint	unit	$0.029	2	4,122	0.053	577.09	$17	14%	75%	75%	2.854238349	1
AllWaN6	All	Water Heating	New	High Efficiency Water Heater (Electric) EF .93, 28-50 Gal	Std Efficiency water heater	unit	$0.541	14	4,122	0.012	133	$72	3%	75%	100%	1.279453219	1
AllWaN7	All	Water Heating	New	Heat Pump Water Heater (air source)	Base Water Heating	unit	$0.516	14	4,122	0.176	1,914.00	$988	46%	75%	100%	1.341807626	1
AllWaN8	All	Water Heating	New	Heat Recovery Unit	Base Water Heating	unit	$0.362	14	4,122	0.190	2,073	$750	50.3%	50%	95%	1.914822303	1
AllWaN9	All	Water Heating	New	Solar Water Heater	Base Water Heating	unit	$1.206	14	4,122	0.193	2,106	$2,540	82.0%	65%	95%	0.574288232	0
AllWaT6	All	Water Heating	Turnover	High Efficiency Water Heater (Electric) EF .93, 28-50 Gal	Std Efficiency water heater	unit	$0.541	14	4,122	0.012	133	$72	8.0%	100%	75%	1.279453219	1
RestaChE1	Restaurant	Chiller	Early	Duct Sealing, down to 15%	Leakage of 29%	ton	$1.9839	15	4,788	0.009	47.8848	$95.00	1%	40%	$0.90	0.399064734	0
RestaChE2	Restaurant	Chiller	Early	Duct Insulation, Add R8	No Insulation	ton	$2.6104	15	4,788	0.009	47.8848	$125.00	1%	50%	95%	0.303289198	0
RestaChE3	Restaurant	Chiller	Early	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton	ton	$0.5221	15	4,788	0.047	239.4240	$125.00	5%	75%	75%	1.516445988	1
RestaChE4	Restaurant	Chiller	Early	Energy Recovery Units	No Energy Recovery	ton	$0.4699	15	4,788	0.189	957.7	$450.00	20%	75%	75%	1.684939987	1
RestaChE5	Restaurant	Chiller	Early	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.4760	7	4,788	0.151	766	$364.67	16%	75%	75%	0.681580357	0
RestaChE6	Restaurant	Chiller	Early	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$0.82	15	4,788	0.05	245	$200.00	5%	15%	95%	0.968658422	0
RestaChE7	Restaurant	Chiller	Early	Adding window shade film	No shade film	sq ft window area	$7.0453	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.032529568	0
RestaChE8	Restaurant	Chiller	Early	Adding window shade screen	No shade screen	sq ft window area	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.202998871	0
RestaChE9	Restaurant	Chiller	Early	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.57	20	4,788	0.05	144	$225.00	3%	75%	95%	0.699880736	0
RestaChN1	Restaurant	Chiller	New	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	sq ft	$0.52	20	4,788	0.05	168	$87.00	4%	15%	95%	2.05969798	1
RestaChN2	Restaurant	Chiller	New	Adding window shade screen	No shade screen	sq ft window area	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.202998871	0
RestaChN3	Restaurant	Chiller	New	Adding reflective roof treatment	Std color roof	sq ft roof area	$4.50	20	4,788	0.05	10	$45.00	0%	100%	95%	0.804929318	0
RestaChN4	Restaurant	Chiller	New	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$2.59	20	4,788	0.05	49	$127.43	1%	45%	95%	0.562914864	0
RestaChN5	Restaurant	Chiller	New	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.4412	15	4,788	0.76	578	$255.00	12%	95%	95%	2.987024486	1
RestaChN6	Restaurant	Chiller	New	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2439	15	4,788	1.944	1,486	$362.50	31%	95%	95%	5.403130006	1
RestaChN7	Restaurant	Chiller	New	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1264	15	11,476	1.728	1,321	$167.00	12%	95%	95%	10.42520094	1
RestaChN8	Restaurant	Chiller	New	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.4803	15	4,788	0.047	239.4240	$115.00	5%	95%	75%	1.648310857	1
RestaChN9	Restaurant	Chiller	New	Energy Recovery Units	No Energy Recovery	ton	$0.2610	15	4,788	0.189	957.7	$250.00	20%	95%	75%	3.032891976	1
RestaChN10	Restaurant	Chiller	New	Duct Insulation, Add R8	No Insulation	ton	$2.6104	15	4,788	0.009	47.8848	$125.00	1%	100%	95%	0.303289198	0
RestaChT1	Restaurant	Chiller	Turnover	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.5105	15	4,788	0.76	578	$295.00	12%	95%	95%	2.582004216	1
RestaChT2	Restaurant	Chiller	Turnover	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.3112	15	4,788	1.944	1,486	$462.50	31%	95%	95%	4.23488568	1
RestaChT3	Restaurant	Chiller	Turnover	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.4964	15	4,788	1.944	838	$416.00	18%	95%	95%	3.620527088	1
RestaChN11	Restaurant	Chiller	New	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.4964	15	4,788	1.944	838	$416.00	18%	95%	95%	3.620527088	1
RestaChT5	Restaurant	Chiller	Turnover	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.5304	15	4,788	0.047	239.4240	$127.00	5%	95%	75%	1.492564949	1
RestaChT4	Restaurant	Chiller	Turnover	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1567	15	11,476	1.728	1,321	$207.00	12%	95%	95%	8.410669359	1
RetaiChE1	Retail	Chiller	Early	Duct Sealing, down to 15%	Leakage of 29%	ton	$2.0251	15	4,691	0.009	46.9104	$95.00	1%	40%	$0.90	0.39094423	0
RetaiChE2	Retail	Chiller	Early	Duct Insulation, Add R8	No Insulation	ton	$2.6647	15	4,691	0.009	46.9104	$125.00	1%	50%	95%	0.297117615	0
RetaiChE3	Retail	Chiller	Early	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton	ton	$0.5329	15	4,691	0.046	234.5520	$125.00	5%	75%	75%	1.485588076	1
RetaiChE4	Retail	Chiller	Early	Energy Recovery Units	No Energy Recovery	ton	$0.4796	15	4,691	0.185	938.2	$450.00	20%	75%	75%	1.650653417	1
RetaiChE5	Retail	Chiller	Early	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.4859	7	4,691	0.148	751	$364.67	16%	75%	75%	0.667710989	0
RetaiChE6	Retail	Chiller	Early	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$0.82	15	4,691	0.05	245	$200.00	5%	15%	95%	0.968658422	0
RetaiChE7	Retail	Chiller	Early	Adding window shade film	No shade film	sq ft window area	$7.0453	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.032529568	0
RetaiChE8	Retail	Chiller	Early	Adding window shade screen	No shade screen	sq ft window area	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.202998871	0
RetaiChE9	Retail	Chiller	Early	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.60	20	4,691	0.05	141	$225.00	3%	75%	95%	0.688094387	0
RetaiChN1	Retail	Chiller	New	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	sq ft	$0.53	20	4,691	0.05	164	$87.00	4%	15%	95%	2.024135718	1
RetaiChN2	Retail	Chiller	New	Adding window shade screen	No shade screen	sq ft window area	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.202998871	0
RetaiChN3	Retail	Chiller	New	Adding reflective roof treatment	Std color roof	sq ft roof area	$4.50	20	4,691	0.05	10	$45.00	0%	100%	95%	0.804929318	0
RetaiChN4	Retail	Chiller	New	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$2.65	20	4,691	0.05	48	$127.43	1%	45%	95%	0.555795657	0
RetaiChN5	Retail	Chiller	New	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.4504	15	4,691	0.76	566	$255.00	12%	95%	95%	2.954825519	1

`	New Commerical Segment	New End Use	Vintage	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	PJM Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
RetaiChN6	Retail	Chiller	New	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2490	15	4,691	1.944	1,456	$362.50	31%	95%	95%	5.344886358	1
RetaiChN7	Retail	Chiller	New	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1290	15	11,242	1.728	1,294	$167.00	12%	95%	95%	10.31282132	1
RetaiChN8	Retail	Chiller	New	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.4903	15	4,691	0.046	234.5520	$115.00	5%	95%	75%	1.614769647	1
RetaiChN9	Retail	Chiller	New	Energy Recovery Units	No Energy Recovery	ton	$0.2665	15	4,691	0.185	938.2	$250.00	20%	95%	75%	2.971176151	1
RetaiChN10	Retail	Chiller	New	Duct Insulation, Add R8	No Insulation	ton	$2.6647	15	4,691	0.009	46.9104	$125.00	1%	100%	95%	0.297117615	0
RetaiChT1	Retail	Chiller	Turnover	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.5211	15	4,691	0.76	566	$295.00	12%	95%	95%	2.554171212	1
RetaiChT2	Retail	Chiller	Turnover	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.3177	15	4,691	1.944	1,456	$462.50	31%	95%	95%	4.189235254	1
RetaiChT3	Retail	Chiller	Turnover	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.5067	15	4,691	1.944	821	$416.00	18%	95%	95%	3.591907934	1
RetaiChN11	Retail	Chiller	New	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.5067	15	4,691	1.944	821	$416.00	18%	95%	95%	3.591907934	1
RetaiChT5	Retail	Chiller	Turnover	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.5415	15	4,691	0.046	234.5520	$127.00	5%	95%	75%	1.462192988	1
RetaiChT4	Retail	Chiller	Turnover	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1600	15	11,242	1.728	1,294	$207.00	12%	95%	95%	8.320005603	1
WarehChE1	Warehouse	Chiller	Early	Duct Sealing, down to 15%	Leakage of 29%	ton	$2.5609	15	3,710	0.007	37.0968	$95.00	1%	40%	$0.90	0.309159161	0
WarehChE2	Warehouse	Chiller	Early	Duct Insulation, Add R8	No Insulation	ton	$3.3696	15	3,710	0.007	37.0968	$125.00	1%	50%	95%	0.234960963	0
WarehChE3	Warehouse	Chiller	Early	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton	ton	$0.6739	15	3,710	0.037	185.4840	$125.00	5%	75%	75%	1.174804814	1
WarehChE4	Warehouse	Chiller	Early	Energy Recovery Units	No Energy Recovery	ton	$0.6065	15	3,710	0.146	741.9	$450.00	20%	75%	75%	1.305338682	1
WarehChE5	Warehouse	Chiller	Early	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.6144	7	3,710	0.117	594	$364.67	16%	75%	75%	0.528026643	0
WarehChE6	Warehouse	Chiller	Early	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$0.82	15	3,710	0.05	245	$200.00	7%	15%	95%	0.968658422	0
WarehChE7	Warehouse	Chiller	Early	Adding window shade film	No shade film	sq ft window area	$7.0453	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.032529568	0
WarehChE8	Warehouse	Chiller	Early	Adding window shade screen	No shade screen	sq ft window area	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.202998871	0
WarehChE9	Warehouse	Chiller	Early	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$2.02	20	3,710	0.05	111	$225.00	3%	75%	95%	0.569389008	0
WarehChN1	Warehouse	Chiller	New	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	sq ft	$0.67	20	3,710	0.05	130	$87.00	4%	15%	95%	1.665972938	1
WarehChN2	Warehouse	Chiller	New	Adding window shade screen	No shade screen	sq ft window area	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.202998871	0
WarehChN3	Warehouse	Chiller	New	Adding reflective roof treatment	Std color roof	sq ft roof area	$4.50	20	3,710	0.05	10	$45.00	0%	100%	95%	0.804929318	0
WarehChN4	Warehouse	Chiller	New	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.35	20	3,710	0.05	38	$127.43	1%	45%	95%	0.484095072	0
WarehChN5	Warehouse	Chiller	New	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.5696	15	3,710	0.76	448	$255.00	12%	95%	95%	2.630535931	1
WarehChN6	Warehouse	Chiller	New	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.3149	15	3,710	1.944	1,151	$362.50	31%	95%	95%	4.758289624	1
WarehChN7	Warehouse	Chiller	New	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1632	15	8,890	1.728	1,023	$167.00	12%	95%	95%	9.180997944	1
WarehChN8	Warehouse	Chiller	New	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.6200	15	3,710	0.037	185.4840	$115.00	5%	95%	75%	1.276961754	1
WarehChN9	Warehouse	Chiller	New	Energy Recovery Units	No Energy Recovery	ton	$0.3370	15	3,710	0.146	741.9	$250.00	20%	95%	75%	2.349609627	1
WarehChN10	Warehouse	Chiller	New	Duct Insulation, Add R8	No Insulation	ton	$3.3696	15	3,710	0.007	37.0968	$125.00	1%	100%	95%	0.234960963	0
WarehChT1	Warehouse	Chiller	Turnover	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.6589	15	3,710	0.76	448	$295.00	12%	95%	95%	2.273853093	1
WarehChT2	Warehouse	Chiller	Turnover	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.4017	15	3,710	1.944	1,151	$462.50	31%	95%	95%	3.729470246	1
WarehChT3	Warehouse	Chiller	Turnover	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.6408	15	3,710	1.944	649	$416.00	18%	95%	95%	3.303672176	1
WarehChN11	Warehouse	Chiller	New	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.6408	15	3,710	1.944	649	$416.00	18%	95%	95%	3.303672176	1
WarehChT5	Warehouse	Chiller	Turnover	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.6847	15	3,710	0.037	185.4840	$127.00	5%	95%	75%	1.15630395	1
WarehChT4	Warehouse	Chiller	Turnover	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.2023	15	8,890	1.728	1,023	$207.00	12%	95%	95%	7.406892061	1
WarehHeT2	Warehouse	Heating	Turnover	7 day, two stage setback thermostat	Manual Thermostat - hp	ton	$0.09	10	3,968	0.009	595	$55.00	15%	100%	45%	4.638710978	1
GroceHeT2	Grocery	Heating	Turnover	7 day, two stage setback thermostat	Manual Thermostat - hp	ton	$0.08	10	4,618	0.010	693	$55.00	15%	100%	45%	5.399007021	1
HealtHeT2	Healthcare	Heating	Turnover	7 day, two stage setback thermostat	Manual Thermostat - hp	ton	$0.34	10	1,072	0.002	161	$55.00	15%	100%	45%	1.253583357	1
InstiHeT2	Institutional	Heating	Turnover	7 day, two stage setback thermostat	Manual Thermostat - hp	ton	$0.11	10	3,286	0.007	493	$55.00	15%	100%	45%	3.842210361	1
MiscHeT2	Misc	Heating	Turnover	7 day, two stage setback thermostat	Manual Thermostat - hp	ton	$0.10	10	3,825	0.008	574	$55.00	15%	100%	45%	4.471264825	1
AllWaT7	All	Water Heating	Turnover	Heat Pump Water Heater (air source)	Base Water Heating	unit	$0.516	14	4,122	0.176	1,914.00	$988	46%	75%	100%	1.341807626	1
RestaHeT2	Restaurant	Heating	Turnover	7 day, two stage setback thermostat	Manual Thermostat - hp	ton	$0.08	10	4,494	0.010	674	$55.00	15%	100%	45%	5.254188727	1
RetaiHeT2	Retail	Heating	Turnover	7 day, two stage setback thermostat	Manual Thermostat - hp	ton	$0.08	10	4,618	0.010	693	$55.00	15%	100%	45%	5.399007021	1
LodgiHeT2	Lodging	Heating	Turnover	7 day, two stage setback thermostat	Manual Thermostat - hp	ton	$0.07	10	5,590	0.012	838	$55.00	15%	100%	45%	6.534925514	1
AllWaT8	All	Water Heating	Turnover	Heat Recovery Unit	Base Water Heating	unit	$0.458	14	4,122	0.190	2,073	$950	50.3%	50%	95%	1.511701818	1
AllWaT9	All	Water Heating	Turnover	Solar Water Heater	Base Water Heating	unit	$1.401	14	4,122	0.193	2,106	$2,950	82.0%	65%	95%	0.494471902	0
RestaMoE1	Restaurant	Motors	Early	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.145921749	1
InstiMoT9	Institutional	Motors	Turnover	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5713	15	84274	6.136	22754.0	$13,000.00	27%	90.0%	80%	1.461076293	1
RestaMoT23	Restaurant	Motors	Turnover	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.145921749	1
RetaiMoE1	Retail	Motors	Early	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.145921749	1
RetaiMoT23	Retail	Motors	Turnover	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.145921749	1
WarehMoE1	Warehouse	Motors	Early	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.145921749	1
WarehMoT23	Warehouse	Motors	Turnover	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.145921749	1

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Fla
HealtChE1	Healthcare	Chiller	Early	1	Duct Sealing, down to 15%	Leakage of 29%	ton	$1.3760	15	6,904	0.014	69.0432	$95.00	1%	40%	90%	0.745	0
HealtChE2	Healthcare	Chiller	Early	2	Duct Insulation, Add R8	No Insulation	ton	$1.8105	15	6,904	0.014	69.0432	$125.00	1%	50%	95%	0.566	0
HealtChE3	Healthcare	Chiller	Early	3	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton	ton	$0.3621	15	6,904	0.068	345.2160	$125.00	5%	75%	75%	2.829	1
HealtChE4	Healthcare	Chiller	Early	4	Energy Recovery Units	No Energy Recovery	ton	$0.3259	15	6,904	0.273	1,380.9	$450.00	20%	75%	75%	3.144	1
HealtChE5	Healthcare	Chiller	Early	5	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.3301	7	6,904	0.218	1,105	$364.67	16%	75%	75%	1.528	1
HealtChE6	Healthcare	Chiller	Early	6	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$0.82	15	6,904	0.05	245	$200.00	4%	15%	95%	1.253	1
HealtChE7	Healthcare	Chiller	Early	7	Adding window shade film	No shade film	q ft window are	$7.0453	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.050	0
HealtChE8	Healthcare	Chiller	Early	8	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.263	0
HealtChE9	Healthcare	Chiller	Early	9	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.09	20	6,904	0.05	207	$225.00	3%	75%	95%	1.213	1
HealtChN1	Healthcare	Chiller	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	sq ft	$0.36	20	6,904	0.05	242	$87.00	4%	15%	95%	3.587	1
HealtChN2	Healthcare	Chiller	New	2	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.263	0
HealtChN3	Healthcare	Chiller	New	3	Adding reflective roof treatment	Std color roof	sq ft roof area	$4.50	20	6,904	0.05	10	$45.00	0%	100%	95%	1.099	1
HealtChN4	Healthcare	Chiller	New	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$1.80	20	6,904	0.05	71	$127.43	1%	45%	95%	0.929	0
HealtChN5	Healthcare	Chiller	New	5	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.3060	15	6,904	0.76	833	$255.00	12%	95%	95%	4.832	1
HealtChN6	Healthcare	Chiller	New	6	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.1692	15	6,904	1.944	2,143	$362.50	31%	95%	95%	8.741	1
HealtChN7	Healthcare	Chiller	New	7	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.0877	15	16,547	1.728	1,905	$167.00	12%	95%	95%	16.866	1
HealtChN8	Healthcare	Chiller	New	8	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.3331	15	6,904	0.068	345.2160	$115.00	5%	95%	75%	3.075	1
HealtChN9	Healthcare	Chiller	New	9	Energy Recovery Units	No Energy Recovery	ton	$0.1810	15	6,904	0.273	1,380.9	$250.00	20%	95%	75%	5.659	1
HealtChN10	Healthcare	Chiller	New	10	Duct Insulation, Add R8	No Insulation	ton	$1.8105	15	6,904	0.014	69.0432	$125.00	1%	100%	95%	0.566	0
HealtChT1	Healthcare	Chiller	Turnover	1	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.3540	15	6,904	0.76	833	$295.00	12%	95%	95%	4.177	1
HealtChT2	Healthcare	Chiller	Turnover	2	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2158	15	6,904	1.944	2,143	$462.50	31%	95%	95%	6.851	1
HealtChT3	Healthcare	Chiller	Turnover	3	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.3443	15	6,904	1.944	1,208	$416.00	18%	95%	95%	5.600	1
HealtChN11	Healthcare	Chiller	New	11	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.3443	15	6,904	1.944	1,208	$416.00	18%	95%	95%	5.600	1
HealtChT5	Healthcare	Chiller	Turnover	5	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.3679	15	6,904	0.068	345.2160	$127.00	5%	95%	75%	2.785	1
HealtChT4	Healthcare	Chiller	Turnover	4	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1087	15	16,547	1.728	1,905	$207.00	12%	95%	95%	13.607	1
OfficFlE1	Office	Fluorescent	Early	1	Premium Efficiency T8 Lighting Replacement (32W lamps with low	Replace (E) T12 Lamp - Bundle	Fixture	$0.5712	14	394	0.011	97	$55.38	25%	95%	41%	1.641	1
GroceFT6	Grocery	Fluorescent	Turnover	6	LED Retrofit Tube	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$1.0146	6	163	0.007	64	$65.00	39%	40%	95%	0.412	0
OfficFlE2	Office	Fluorescent	Early	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2641	14	1,578	0.054	473	$125.00	30%	95%	80%	3.549	1
OfficFlE3	Office	Fluorescent	Early	3	Photocell dimming control	No prior dimming control	Photocell	$0.2852	9	1,578	0.091	789	$225.00	50%	95%	95%	2.217	1
LodgiInE6	Lodging	Incandescent	Early	6	Hotel Occupancy Sensors	No prior control	Per Room	$0.7447	10	240	0.019	168	$125.00	70%	90%	95%	0.936	0
OfficFlN1	Office	Fluorescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1781	15	20,340	0.234	2,034	$362.18	10%	95%	100%	5.577	1
OfficFlN2	Office	Fluorescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.3561	15	20,340	0.584	5,085	$1,810.90	25%	75%	100%	2.789	1
HealtHeE1	Healthcare	Heating	Early	1	Re-commissioning	Current Controls not working properly, setpoints not optimized,	sq ft	$0.2710	7	125,500	0.297	20,080	$5,441.68	16%	95%	75%	1.723	1
HealtHeE2	Healthcare	Heating	Early	2	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$4.44	20	318	0.05	45	$200.00	14%	10%	95%	0.455	0
HealtHeE3	Healthcare	Heating	Early	3	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.67	20	318	0.05	75	$125.00	24%	10%	95%	1.010	1
HealtHeE4	Healthcare	Heating	Early	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.75	20	318	0.05	34	$127.43	11%	10%	95%	0.612	0
HealtHeE5	Healthcare	Heating	Early	5	Humidification with High pressure, Ultrasonic devices	Electric Resistive Elements	unit	$0.1893	10	2,794	0.039	2,641	$500.00	95%	100%	95%	3.512	1
HealtHeN1	Healthcare	Heating	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5 - Electric Heat	sq ft	$1.93	20	318	0.05	45	$87.00	14%	10%	95%	1.045	1
WarehHIE1	Warehouse	HID	Early	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.5670	10	1,268	0.043	378	$214.50	30%	85%	80%	1.229	1
WarehHIE2	Warehouse	HID	Early	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.4472	10	1,856	0.077	671	$300.00	36%	85%	80%	1.558	1
WarehHIE3	Warehouse	HID	Early	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.5150	10	1,268	0.052	456	$235.00	36%	85%	80%	1.353	1
WarehHIE4	Warehouse	HID	Early	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.5081	10	1,856	0.074	640	$325.00	34%	85%	80%	1.371	1
WarehHIT5	Warehouse	HID	Turnover	5	Ceramic Metal Halide lamp	Replace non-ceramic lamp lamp 400 W	Lamp	$0.1282	4	1,560	0.031	273	$35.00	18%	85%	55%	2.099	1
WarehHIE8	Warehouse	HID	Early	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2465	10	5,070	0.175	1,521	$375.00	30%	85%	85%	2.826	1
WarehHIE9	Warehouse	HID	Early	9	Photocell dimming control	No prior dimming control	Photocell	$0.2170	10	5,070	0.291	2,535	$550.00	50%	85%	85%	3.212	1
WarehHIE10	Warehouse	HID	Early	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1972	10	5,070	0.058	507	$100.00	10%	85%	45%	3.533	1
WarehHIE7	Warehouse	HID	Early	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$1.2166	15	1,268	0.065	566	$688.00	45%	85%	80%	0.816	0
WarehHIT1	Warehouse	HID	Turnover	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.2921	10	1,268	0.043	378	$110.50	30%	85%	80%	2.386	1
WarehHIT2	Warehouse	HID	Turnover	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.3354	10	1,856	0.077	671	$225.00	36%	85%	80%	2.078	1
WarehHIT3	Warehouse	HID	Turnover	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.3178	10	1,268	0.052	456	$145.00	36%	85%	80%	2.193	1
WarehHIT4	Warehouse	HID	Turnover	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.4065	10	1,856	0.074	640	$260.00	34%	85%	80%	1.714	1
WarehHIT6	Warehouse	HID	Turnover	6	Multi Lamp Hard Wired CFL	Replace HID Fixture Drawing 400 W	Fixture	$0.5140	10	1,856	0.095	827	$425.00	45%	85%	55%	1.356	1
WarehHIT7	Warehouse	HID	Turnover	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.6631	15	1,268	0.065	566	$375.00	45%	85%	80%	1.498	1
OfficInE2	Office	Incandescent	Early	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1159	14	3,594	0.124	1,078	$125.00	30%	95%	80%	8.084	1
OfficInE3	Office	Incandescent	Early	3	Photocell dimming control	No prior dimming control	Photocell	$0.1252	9	3,594	0.207	1,797	$225.00	50%	95%	95%	5.051	1
GroceInN1	Grocery	Incandescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0572	15	9,629	0.111	963	$55.11	10%	95%	100%	17.351	1
HealtInN1	Healthcare	Incandescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0842	15	49,948	0.574	4,995	$420.44	10%	95%	100%	11.798	1
AlllLaN1	All	Large Appliances	New	1	EnergyStar vending machine	Standard vending machine	machine	$0.2672	15	3,619	0.140	1,310	$350.00	36%	100%	50%	3.688	1
AlllLaN2	All	Large Appliances	New	2	Beverage machine control	Vending machine with no sensor	machine	$0.1021	5	3,619	0.178	1,665	$170.00	46%	100%	50%	3.330	1
AlllLaN3	All	Large Appliances	New	3	Other cold product control	Vending machine with no sensor	machine	$0.1111	5	3,504	0.172	1,612	$179.00	46%	100%	50%	3.061	1
AlllLaN4	All	Large Appliances	New	4	Non-cooled snack control	Vending machine with no sensor	machine	$0.4671	5	745	0.037	343	$160.00	46%	100%	50%	0.728	0
AlllLaN5	All	Large Appliances	New	5	EnergyStar dishwasher	Std Dishwasher	dishwasher	$0.4015	12	250	0.015	137	$55.00	55%	100%	50%	2.027	1
AlllLaN6	All	Large Appliances	New	6	EnergyStar refrigerator	Std Refrigerator	refrigerator	$0.3000	12	750	0.011	100	$30.00	13%	100%	50%	2.712	1
AlllLaN7	All	Large Appliances	New	7	Low-temperature dish machine	High temp dish machine with booster heater	removed kW	$0.0634	15	17,451	0.894	8,362	$530.00	48%	100%	50%	15.548	1
AlllLaN8	All	Large Appliances	New	8	High-efficiency washer	Standard washer, electric hot water	washer	$0.4380	10	2,262	0.102	959	$420.00	42%	100%	50%	1.577	1
AlllLaN9	All	Large Appliances	New	9	High-efficiency coin-op washer w/o Electric Water Heat	Coin-op wash, w/out electric hot water	washer	$1.7872	10	1,180	0.025	235	$420.00	20%	100%	50%	0.387	0
AlllLaN10	All	Large Appliances	New	10	High-efficiency coin-op washer w/ Electric water heat	Coin-op wash, electric hot water	washer	$0.4380	10	2,262	0.102	959	$420.00	42%	100%	50%	1.577	1
AlllLaT1	All	Large Appliances	Turnover	1	EnergyStar vending machine	Standard vending machine	machine	$0.2672	15	3,619	0.140	1,310	$350.00	36%	100%	50%	3.688	1
AlllLaT2	All	Large Appliances	Turnover	2	Beverage machine control	Vending machine with no sensor	machine	$0.1021	5	3,619	0.178	1,665	$170.00	46%	100%	50%	3.330	1
AlllLaT3	All	Large Appliances	Turnover	3	Other cold product control	Vending machine with no sensor	machine	$0.1111	5	3,504	0.172	1,612	$179.00	46%	100%	50%	3.061	1
AlllLaT4	All	Large Appliances	Turnover	4	Non-cooled snack control	Vending machine with no sensor	machine	$0.4671	5	745	0.037	343	$160.00	46%	100%	50%	0.728	0
AlllLaT5	All	Large Appliances	Turnover	5	EnergyStar dishwasher	Std Dishwasher	dishwasher	$0.4015	12	250	0.015	137	$55.00	55%	100%	50%	2.027	1
AlllLaT6	All	Large Appliances	Turnover	6	EnergyStar refrigerator	Std Refrigerator	refrigerator	$0.3000	12	750	0.011	100	$30.00	13%	100%	50%	2.712	1
AlllLaT7	All	Large Appliances	Turnover	7	Low-temperature dish machine	High temp dish machine with booster heater	removed kW	$0.0634	15	17,451	0.894	8,362	$530.00	48%	100%	50%	15.548	1
AlllLaT8	All	Large Appliances	Turnover	8	High-efficiency washer	Standard washer, electric hot water	washer	$0.4380	10	2,262	0.102	959	$420.00	42%	100%	50%	1.577	1
AlllLaT9	All	Large Appliances	Turnover	9	High-efficiency coin-op washer w/o Electric Water Heat	Coin-op wash, w/out electric hot water	washer	$1.7872	10	1,180	0.025	235	$420.00	20%	100%	50%	0.387	0
AlllLaT10	All	Large Appliances	Turnover	10	High-efficiency coin-op washer w/ Electric water heat	Coin-op wash, electric hot water	washer	$0.4380	10	2,262	0.102	959	$420.00	42%	100%	50%	1.577	1
OfficMoN1	Office	Motors	New	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.3115	15	12921	0.0282	117.2	$154	0.91%	74.4%	100%	0.820	0
OfficMoN2	Office	Motors	New	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.4170	15	49501	0.0231	367.6	$521	0.74%	74.4%	100%	0.678	0
OfficMoN3	Office	Motors	New	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.2732	15	121517	0.0138	541.0	$689	0.45%	66.3%	100%	0.736	0
OfficMoN4	Office	Motors	New	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.5357	15	244333	0.0121	953.4	$511	0.39%	55.8%	100%	1.735	1
OfficMoN5	Office	Motors	New	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-500 HP	Motor	$0.4495	15	524346	0.0284	4796.5	$2,156	0.91%	55.8%	100%	2.058	1
OfficMoN6	Office	Motors	New	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.6710	15	81970	2.109	16,394	$11,000.00	20%	55.0%	100%	1.496	1
OfficMoN7	Office	Motors	New	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.5624	15	81970	13.596	23115.5	$13,000.00	28%	70.0%	100%	2.308	1
OfficMoN8	Office	Motors	New	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.5767	15	81970	0.000	22541.7	$13,000.00	28%	80.0%	100%	1.597	1
OfficMoN9	Office	Motors	New	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.6473	15	81970	13.596	20082.6	$13,000.00	25%	70.0%	100%	2.093	1
OfficMoN10	Office	Motors	New	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.5746	15	81970	10.318	22623.7	$13,000.00	28%	55.0%	100%	2.111	1
OfficMoN11	Office	Motors	New	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.6473	15	81970	13.596	20082.6	$13,000.00	25%	30.0%	100%	2.093	1
OfficMoT1	Office	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.3115	15	12921	0.0282	117.2	$154	0.91%	74.4%	100%	0.820	0
OfficMoT2	Office	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.4170	15	49501	0.0231	367.6	$521	0.74%	74.4%	100%	0.678	0
OfficMoT3	Office	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.2732	15	121517	0.0138	541.0	$689	0.45%	66.3%	100%	0.736	0
OfficMoT4	Office	Motors	Turnover	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.5357	15	244333	0.0121	953.4	$511	0.39%	55.8%	100%	1.735	1
OfficMoT5	Office	Motors	Turnover	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-250 HP	Motor	$0.4495	15	524346	0.0284	4796.5	$2,156	0.91%	55.8%	100%	2.058	1
OfficMoT6	Office	Motors	Turnover	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.6710	15	81970	2.109	16,394	$11,000.00	20%	55.0%	80%	1.496	1

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Fla
OfficMoT7	Office	Motors	Turnover	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.5624	15	81970	13.596	23115.5	$13,000.00	28%	90.0%	80%	2.308	1
OfficMoT8	Office	Motors	Turnover	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.5767	15	81970	0.000	22541.7	$13,000.00	28%	90.0%	80%	1.597	1
OfficMoT9	Office	Motors	Turnover	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.6473	15	81970	13.596	20082.6	$13,000.00	25%	90.0%	80%	2.093	1
OfficMoT10	Office	Motors	Turnover	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.5746	15	81970	10.318	22623.7	$13,000.00	28%	80.0%	80%	2.111	1
OfficMoT11	Office	Motors	Turnover	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.6473	15	81970	13.596	20082.6	$13,000.00	25%	55.0%	80%	2.093	1
OfficMoT12	Office	Motors	Turnover	12	Motors: Rewind 125-200 HP	(E) Motor	Motor	$0.6069	15	245909	0.159	1235.7	$750	0.5%	35.0%	95%	1.654	1
OfficMoT13	Office	Motors	Turnover	13	Motors: Rewind 201-500 HP	(E) Motor	Motor	$0.7470	15	532803	0.344	2677.4	$2,000	0.5%	50.0%	95%	1.344	1
OfficMoT14	Office	Motors	Turnover	14	Motors: Rewind 20-50 HP	(E) Motor	Motor	$0.5601	15	50263	0.057	446.3	$250	0.9%	10.0%	95%	1.792	1
OfficMoT15	Office	Motors	Turnover	15	Motors: Rewind 500+ HP	(E) Motor	Motor	$0.6474	15	1229546	0.795	6178.6	$4,000	0.5%	70.0%	95%	1.550	1
OfficMoT16	Office	Motors	Turnover	16	Motors: Rewind 51-100 HP	(E) Motor	Motor	$0.6955	15	124291	0.092	718.9	$500	0.6%	20.0%	95%	1.443	1
OfficMoT17	Office	Motors	Turnover	17	Downsizing motor during retrofit	Larger hp standard motor	HP Reduction	$0.34	20	186,404	0.190	1,477	$500.00	0.79%	25%	95%	3.727	1
OfficMoN12	Office	Motors	New	12	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	3.710	1
OfficMoN13	Office	Motors	New	13	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.043	0
OfficMoN14	Office	Motors	New	14	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	4.690	1
OfficMoN15	Office	Motors	New	15	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.884	0
OfficMoT18	Office	Motors	Turnover	18	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	3.710	1
OfficMoT19	Office	Motors	Turnover	19	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.043	0
OfficMoT20	Office	Motors	Turnover	20	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	4.690	1
OfficMoT21	Office	Motors	Turnover	21	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.884	0
AllOfE1	All	Office Equipment	Early	1	PC network power management	No central control	PC	$0.14	5	410	0.023	215	$30.00	52.44%	75%	80%	2.436	1
AllOfE2	All	Office Equipment	Early	2	Occupancy sensor controls/Smart Strip	Computers, other plug loads	sensor	$0.60	5	413	0.010	124	$75.00	30.02%	55%	95%	0.552	0
AllOfN1	All	Office Equipment	New	1	ENERGY STAR® Office Equipment	Std Office Equipment	PC	$1.09	5	4,000	0.021	200	$218.00	5.00%	90%	80%	0.312	0
AllOfN2	All	Office Equipment	New	2	Energy Star - Water Cooler	Std Water Cooler	unit	$1.06	5	453	0.022	204	$215.67	45.08%	35%	80%	0.322	0
AllOfN3	All	Office Equipment	New	3	80 Plus® PC-desktop	Standard personal computer, desktop	PC	$0.19	5	410	0.014	130	$25.00	31.71%	100%	55%	1.768	1
AllOfN6	All	Office Equipment	New	6	Data Center - Server/Storage Virtualization	No Virtualization	unit	$1.76	5	4,818	0.452	4,227	$7,434	87.73%	70%	80%	0.193	0
AllOfT1	All	Office Equipment	Turnover	1	ENERGY STAR® Office Equipment	Std Office Equipment	PC	$1.09	5	4,000	0.021	200	$218.00	5.00%	90%	80%	0.312	0
AllOfT2	All	Office Equipment	Turnover	2	Energy Star - Water Cooler	Std Water Cooler	unit	$1.06	5	453	0.022	204	$215.67	45.08%	35%	80%	0.322	0
AllOfT3	All	Office Equipment	Turnover	3	80 Plus® PC-desktop	Standard personal computer, desktop	PC	$0.19	5	410	0.014	130	$25.00	31.71%	100%	55%	1.768	1
AllOfT6	All	Office Equipment	Turnover	6	Data Center - Server/Storage Virtualization	No Virtualization	unit	$1.76	5	4,818	0.452	4,227	$7,434	87.73%	70%	80%	0.193	0
HealtPaE1	Healthcare	Packaged DX	Early	1	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$3.13	20	1,063	0.05	64	$200.00	6%	15%	95%	0.561	0
HealtPaE2	Healthcare	Packaged DX	Early	2	Adding window shade film	No shade film	q ft window are	$7.05	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.049	0
HealtPaE3	Healthcare	Packaged DX	Early	3	Adding window shade screen	No shade screen	q ft window are	$3.90	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.255	0
HealtPaE4	Healthcare	Packaged DX	Early	4	Windows U<0.40, .55 SHGC	Existing window specifications	q ft window are	$1.40	30	2	0.000	0	$0.28	13%	50%	95%	1.179	1
HealtPaE5	Healthcare	Packaged DX	Early	5	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$3.18	20	1,063	0.05	71	$225.00	7%	95%	95%	0.534	0
HealtPaE7	Healthcare	Packaged DX	Early	7	Automated control system	Baseline DX	ton	$0.45	10	1,123	0.007	56	$25.00	5%	100%	65%	1.571	1
HealtPaE8	Healthcare	Packaged DX	Early	8	Duct Sealing, down to 15%	Leakage of 29%	ton	$7.92	15	1,063	0.05	12	$95.00	1%	45%	80%	0.439	0
HealtPaE9	Healthcare	Packaged DX	Early	9	Hotel Keycard Sensors	No prior controls	oom Controlle	$0.29	10	954	0.041	342	$100.00	36%	95%	80%	2.392	1
HealtPaE10	Healthcare	Packaged DX	Early	10	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	ton	$0.55	1	1,156	0.05	64	$35.00	6%	100%	45%	0.181	0
HealtPaE11	Healthcare	Packaged DX	Early	11	7 day, two stage setback thermostat	Manual Thermostat	ton	$0.44	10	1,063	0.015	125	$55.00	12%	100%	45%	1.589	1
HealtPaE13	Healthcare	Packaged DX	Early	13	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.32	7	1,063	0.05	170	$55.15	16%	95%	75%	1.682	1
HealtPaN1	Healthcare	Packaged DX	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	ton	$1.36	20	1,063	0.05	64	$87.00	6%	100%	95%	1.289	1
HealtPaN2	Healthcare	Packaged DX	New	2	Adding reflective roof treatment	Std color roof	ton	$4.50	20	1,063	0.05	10	$45.00	1%	100%	95%	1.104	1
HealtPaN3	Healthcare	Packaged DX	New	3	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$1.76	20	1,063	0.05	71	$125.00	7%	100%	95%	0.961	0
HealtPaN4	Healthcare	Packaged DX	New	4	Green Roof (New construction or roof replacement)	Std Roof	ton	$1.80	20	1,063	0.05	71	$127.43	7%	45%	95%	0.943	0
HealtPaN5	Healthcare	Packaged DX	New	5	Duct Insulation, Add R8	No Insulation	ton	$10.42	20	1,063	0.05	12	$125.00	1%	100%	95%	0.416	0
HealtPaN6	Healthcare	Packaged DX	New	6	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$1.38	20	916	0.04	65	$90.40	7%	100%	95%	1.227	1
HealtPaN7	Healthcare	Packaged DX	New	7	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$1.48	20	916	0.08	122	$180.81	13%	100%	95%	1.145	1
HealtPaN8	Healthcare	Packaged DX	New	8	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$1.58	20	916	0.12	172	$271.21	19%	100%	95%	1.073	1
HealtPaN9	Healthcare	Packaged DX	New	9	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$0.78	20	1,063	0.05	71	$55.00	7%	100%	95%	2.184	1
HealtPaN10	Healthcare	Packaged DX	New	10	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$0.78	20	1,082	0.06	90	$70.00	8%	100%	95%	2.184	1
HealtPaN11	Healthcare	Packaged DX	New	11	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.31	20	1,190	0.06	88	$115.13	7%	100%	95%	1.298	1
HealtPaN12	Healthcare	Packaged DX	New	12	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$1.64	20	1,227	0.04	60	$98.39	5%	100%	95%	1.036	1
HealtPaN13	Healthcare	Packaged DX	New	13	Ground Source HP Open - Water	Air Source Heat Pump	ton	$2.16	15	1,082	0.23	347	$ 750.0	32%	20%	95%	0.626	0
HealtPaN14	Healthcare	Packaged DX	New	14	Ground Source HP Closed	Air Source Heat Pump	ton	$3.87	15	1,082	0.023	194	$750.00	18%	100%	95%	0.257	0
HealtPaN15	Healthcare	Packaged DX	New	15	Air-side Economizer	No Economizer	ton	$1.07	15	1,063	0.019	159	$170.00	15%	75%	45%	0.934	0
HealtPaN16	Healthcare	Packaged DX	New	16	Energy Recovery Units	No Energy Recovery	ton	$0.84	15	1,063	0.025	213	$179.00	20%	100%	95%	1.183	1
HealtPaN17	Healthcare	Packaged DX	New	17	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$2.19	15	1,123	0.006	51	$110.89	5%	100%	95%	0.454	0
HealtPaT1	Healthcare	Packaged DX	Turnover	1	Duct Insulation, Add R8	No Insulation	ton	$10.42	15	1,063	0.05	12	$125.00	1%	100%	95%	0.333	0
HealtPaT2	Healthcare	Packaged DX	Turnover	2	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$1.38	20	916	0.04	65	$90.40	7%	100%	95%	1.227	1
HealtPaT3	Healthcare	Packaged DX	Turnover	3	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$1.48	20	916	0.08	122	$180.81	13%	100%	95%	1.145	1
HealtPaT4	Healthcare	Packaged DX	Turnover	4	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$1.58	20	916	0.12	172	$271.21	19%	100%	95%	1.073	1
HealtPaT5	Healthcare	Packaged DX	Turnover	5	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$0.78	20	1,063	0.05	71	$55.00	7%	100%	95%	2.184	1
HealtPaT6	Healthcare	Packaged DX	Turnover	6	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$0.78	20	1,082	0.06	90	$70.00	8%	100%	95%	2.184	1
HealtPaT7	Healthcare	Packaged DX	Turnover	7	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.31	20	1,190	0.06	88	$115.13	7%	100%	95%	1.298	1
HealtPaT8	Healthcare	Packaged DX	Turnover	8	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$1.64	20	1,227	0.04	60	$98.39	5%	100%	95%	1.036	1
HealtPaT9	Healthcare	Packaged DX	Turnover	9	Ground Source HP Open - Water	Air Source Heat Pump	ton	$2.16	15	1,082	0.23	347	$ 750.0	32%	5%	95%	0.626	0
HealtPaT10	Healthcare	Packaged DX	Turnover	10	Ground Source HP Closed	Air Source Heat Pump	ton	$3.87	15	1,082	0.023	194	$750.00	18%	100%	95%	0.257	0
HealtPaT11	Healthcare	Packaged DX	Turnover	11	Air-side Economizer	No Economizer	ton	$1.07	15	1,063	0.019	159	$170.00	15%	75%	45%	0.934	0
HealtPaT12	Healthcare	Packaged DX	Turnover	12	Energy Recovery Units	No Energy Recovery	ton	$0.84	15	1,063	0.025	213	$179.00	20%	100%	95%	1.183	1
HealtPaT13	Healthcare	Packaged DX	Turnover	13	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$2.19	15	1,123	0.006	51	$110.89	5%	100%	95%	0.454	0
AllReT1	All	Refrigeration	Turnover	1	Vertical night covers	No covers present	linear ft	$0.34	5	4,380	0.006	44	$15.00	1.00%	50%	95%	1.015	1
AllReT2	All	Refrigeration	Turnover	2	eCube	No eCube	unit	$0.33	9	5,431	0.162	1,222	$399.00	22.50%	95%	95%	1.952	1
AllReT3	All	Refrigeration	Turnover	3	Anti-sweat heat (ASH) controls - Freezer	ASH without controls	Per Door	$0.16	12	2,985	0.029	1,882	$300.00	63%	95%	85%	4.799	1
AllReT4	All	Refrigeration	Turnover	4	Anti-sweat heat (ASH) controls - Cooler	ASH without controls	Per Door	$0.29	12	1,621	0.028	1,023	$300.00	63%	95%	85%	2.630	1
AllReT5	All	Refrigeration	Turnover	5	Floating head pressure controller	Standard head pressure control	ton	$0.46	14	18,314	0.085	641	$296.00	4%	50%	95%	2.047	1
AllReN1	All	Refrigeration	New	1	Efficient, low-temp reach-in	Standard low-temp reach-in	unit	$0.07	12	5,431	0.222	1,671	$123.33	30.77%	95%	95%	11.209	1
AllReN2	All	Refrigeration	New	2	No-heat glass doors	Standard low-temp reach-in	door	$0.67	10	3,986	0.106	797	$537.50	20.00%	95%	95%	1.042	1
AllReN3	All	Refrigeration	New	3	High Efficiency Ice Makers	Standard Ice Maker	Each	$0.16	10	11,815	0.042	318	$50.00	3%	85%	85%	4.468	1
AllReN4	All	Refrigeration	New	4	Compressor VSD	Base Refrigeration System - Grocery		$0.35	13	5,436	0.101	761	$267.00	14%	75%	86%	2.528	1
AllReN5	All	Refrigeration	New	5	VFD on cooling tower fans	Base single-speed fan		$0.29	15	7158	0.681	5,132	$1,507.40	72%	25%	95%	3.410	1
AllReN6	All	Refrigeration	New	6	Reach-in Cooler: Shaded Pole to PSC: 1-37 Watt			$0.60	15	832	0.047	352	$212.50	42%	75%	49%	1.659	1
AllReN7	All	Refrigeration	New	7	Reach-in Cooler: PSC to ECM: 1-37 Watt			$0.54	15	467	0.022	169	$91.25	36%	75%	49%	1.855	1
AllReN8	All	Refrigeration	New	8	Reach-in Cooler: Shaded Pole to ECM: 1-37 Watt			$0.59	15	832	0.069	521	$306.25	63%	75%	49%	1.704	1
AllReN9	All	Refrigeration	New	9	Reach-in Freezer: Shaded Pole to ECM: 1-14 Watt			$0.49	15	832	0.082	622	$306.25	75%	75%	49%	2.034	1
AllReN10	All	Refrigeration	New	10	Reach-in Shaded Pole to PSC Evaporator Fan Motor			$0.55	15	832	0.051	386	$212.50	46%	75%	49%	1.820	1
AllReN11	All	Refrigeration	New	11	Reach-in PSC to ECM Evaporator Fan Motor			$0.49	15	467	0.025	185	$91.25	40%	75%	49%	2.031	1
AllReN12	All	Refrigeration	New	12	Reach-in Shaded Pole to ECM Evaporator Fan Motor			$0.54	15	832	0.076	571	$306.25	69%	75%	49%	1.868	1
AllReN13	All	Refrigeration	New	13	Walk-in Cooler: PSC to ECM: 16-49 Watt			$0.35	15	711	0.034	258	$91.25	36%	75%	49%	2.832	1
AllReN14	All	Refrigeration	New	14	Walk-in Freezer: PSC to ECM: 16-49 Watt			$0.30	15	711	0.041	309	$91.25	43%	75%	49%	3.392	1
AllReN15	All	Refrigeration	New	15	Walk-in Cooler: Shaded Pole to ECM: 16-49 Watt			$0.44	15	1,175	0.093	704	$306.25	60%	75%	49%	2.303	1
AllReN16	All	Refrigeration	New	16	Walk-in Freezer: Shaded Pole to ECM: 16-49 Watt			$0.36	15	1,175	0.112	842	$306.25	72%	75%	49%	2.754	1
AllReN17	All	Refrigeration	New	17	Walk-in PSC to ECM			$0.32	15	711	0.038	283	$91.25	40%	75%	49%	3.107	1
AllReN18	All	Refrigeration	New	18	Walk-in Shaded Pole to ECM			$0.40	15	1175	0.103	773	$306.25	66%	75%	49%	2.528	1
AllReT6	All	Refrigeration	Turnover	6	High Efficiency Ice Makers	Standard Ice Making		$0.12	10	11,815	0.159	1,197	$140.00	10%	85%	85%	6.006	1

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Fla
AllReN19	All	Refrigeration	New	19	High Efficiency Ice Machine Self Contained	Standard Ice Machine Self Contained		$0.31	10	4,341	0.042	318	$100.00	7%	85%	85%	2.234	1
AllReT7	All	Refrigeration	Turnover	7	Fluorescent walk-in light fixture	Incandescent walk-in light fixture	fixture	$0.42	15	792	0.065	491	$206.00	62.00%	85%	45%	2.386	1
AllReT8	All	Refrigeration	Turnover	8	LED Case Lighting	T12 or T10 fluorescent lighting	Light Bar	$0.43	15	677	0.070	526	$225.00	77.78%	95%	75%	2.343	1
AllReT9	All	Refrigeration	Turnover	9	LED Case Lighting - Occupancy Sensor	No Occupancy Sensor	Light Bar	$0.15	8	667	0.003	20	$3.00	3.00%	15%	95%	3.779	1
AllReT10	All	Refrigeration	Turnover	10	Efficient, low-temp reach-in	Standard low-temp reach-in	unit	$0.07	12	5,431	0.222	1,671	$123.33	30.77%	85%	85%	11.209	1
AllReT11	All	Refrigeration	Turnover	11	High R-Value Glass Doors		door	$0.67	10	3,986	0.106	797	$537.50	20.00%	85%	85%	1.042	1
AllReT12	All	Refrigeration	Turnover	12	Compressor VSD retrofit	Base Refrigeration System - Grocery		$0.35	13	5,436	0.101	761	$267.00	14%	75%	86%	2.528	1
AllReT13	All	Refrigeration	Turnover	13	Quick acting freezer doors			$0.62	10	38,544	4.461	33,637	$20,966.00	87%	75%	86%	1.127	1
AllReT14	All	Refrigeration	Turnover	14	VFD on cooling tower fans	Base single-speed fan		$0.29	15	7158	0.681	5,132	$1,507.40	72%	35%	85%	3.410	1
AllReT15	All	Refrigeration	Turnover	15	Reach-in Cooler: Shaded Pole to PSC: 1-37 Watt			$0.60	15	832	0.047	352	$212.50	42%	75%	49%	1.659	1
AllReT16	All	Refrigeration	Turnover	16	Reach-in Cooler: PSC to ECM: 1-37 Watt			$0.54	15	467	0.022	169	$91.25	36%	75%	49%	1.855	1
AllReT17	All	Refrigeration	Turnover	17	Reach-in Cooler: Shaded Pole to ECM: 1-37 Watt			$0.59	15	832	0.069	521	$306.25	63%	75%	49%	1.704	1
AllReT18	All	Refrigeration	Turnover	18	Reach-in Freezer: Shaded Pole to ECM: 1-14 Watt			$0.49	15	832	0.082	622	$306.25	75%	75%	49%	2.034	1
AllReT19	All	Refrigeration	Turnover	19	Reach-in Shaded Pole to PSC Evaporator Fan Motor			$0.55	15	832	0.051	386	$212.50	46%	75%	49%	1.820	1
AllReT18	All	Refrigeration	Turnover	18	Reach-in PSC to ECM Evaporator Fan Motor			$0.49	15	467	0.025	185	$91.25	40%	75%	49%	2.031	1
AllReT20	All	Refrigeration	Turnover	20	Reach-in Shaded Pole to ECM Evaporator Fan Motor			$0.54	15	832	0.076	571	$306.25	69%	75%	49%	1.868	1
AllReT21	All	Refrigeration	Turnover	21	Walk-in Cooler: PSC to ECM: 16-49 Watt			$0.35	15	711	0.034	258	$91.25	36%	75%	49%	2.832	1
AllReT22	All	Refrigeration	Turnover	22	Walk-in Freezer: PSC to ECM: 16-49 Watt			$0.30	15	711	0.041	309	$91.25	43%	75%	49%	3.392	1
AllReT23	All	Refrigeration	Turnover	23	Walk-in Cooler: Shaded Pole to ECM: 16-49 Watt			$0.44	15	1,175	0.093	704	$306.25	60%	75%	49%	2.303	1
AllReT24	All	Refrigeration	Turnover	24	Walk-in Freezer: Shaded Pole to ECM: 16-49 Watt			$0.36	15	1,175	0.112	842	$306.25	72%	75%	49%	2.754	1
AllReT25	All	Refrigeration	Turnover	25	Walk-in PSC to ECM			$0.32	15	711	0.038	283	$91.25	40%	75%	49%	3.107	1
AllReT26	All	Refrigeration	Turnover	26	Walk-in Shaded Pole to ECM			$0.40	15	1175	0.103	773	$306.25	66%	75%	49%	2.528	1
AllSiT1	All	Signage	Turnover	1	Induction Street Lighting	Base HID Streetlighting	Fixture	$0.57	15	2,762	0.101	1,619	$925.00	59%	95%	95%	1.661	1
AllSiT2	All	Signage	Turnover	2	LED exit sign - 1 sided	Incandescent exit sign	Exit Sign	$0.15	15	175	0.024	158	$23.50	90%	65%	70%	6.752	1
AllSiT3	All	Signage	Turnover	3	LED exit sign -2 sided	Incandescent exit sign	Exit Sign	$0.16	15	350	0.048	228	$37.50	65%	65%	70%	6.339	1
AllSiT4	All	Signage	Turnover	4	Photoluminescent Exit Sign	Incandescent exit sign	Exit Sign	$0.17	15	175	0.011	175	$30.00	100%	50%	70%	5.541	1
AllSiT5	All	Signage	Turnover	5	LED or equivalent sign lighting -1 sided	Replace fluorescent sign lighting	Exit Sign	$0.28	15	79	0.009	61	$17.36	78%	48%	7%	3.542	1
AllSiT6	All	Signage	Turnover	6	LED or equivalent sign lighting -2 sided	Replace fluorescent sign lighting	Exit Sign	$0.12	15	175	0.002	140	$17.36	80%	48%	7%	7.415	1
AllSiT7	All	Signage	Turnover	7	LED Street Lighting	Std HID Street Lighting	Pole	$0.63	15	2,762	0.047	756	$475.00	27%	95%	95%	1.509	1
AllSiT8	All	Signage	Turnover	8	Red LED Traffic Light	Red Traffic Light	Signal	$0.37	10	332	0.019	299	$112.00	90%	95%	75%	1.769	1
AllSiT9	All	Signage	Turnover	9	Yellow LED Traffic Light	Yellow Standard Traffic Light	Lamp	$12.10	10	12	0.001	10	$121.00	83%	95%	75%	0.055	0
AllSiT10	All	Signage	Turnover	10	Green LED Traffic Light	Green Standard Traffic Light	Lamp	$0.77	10	260	0.014	226	$174.00	87%	95%	75%	0.860	0
AllSiT11	All	Signage	Turnover	11	Hand/Man LED	Pedestrian Standard	Lamp	$0.19	10	1,016	0.059	946	$182.00	93%	95%	75%	3.443	1
AllWaT1	All	Water Heating	Turnover	1	Ultrasonic Faucet Control	Manual Faucet Control	unit	$1.000	10	1,750	0.010	125	$125	7%	75%	75%	0.678	0
AllWaT2	All	Water Heating	Turnover	2	Faucet Aerators	Std Flow faucet	unit	$0.246	12	4,122	0.006	61	$15	6%	75%	75%	3.280	1
AllWaT3	All	Water Heating	Turnover	3	Hot Water (DHW) Pipe Insulation	No insulation present	10 ln ft	$0.292	14	4,122	0.011	124.00	$36.23	3%	75%	75%	3.155	1
AllWaT4	All	Water Heating	Turnover	4	Low-Flow Showerheads	Std Flow showerhead	unit	$0.108	9	4,122	0.042	461	$50	11%	75%	75%	5.728	1
AllWaT5	All	Water Heating	Turnover	5	Water Heater Thermostat Setback	Constant setpoint	unit	$0.029	2	4,122	0.053	577.09	$17	14%	75%	75%	4.475	1
AllWaN1	All	Water Heating	New	1	Ultrasonic Faucet Control	Manual Faucet Control	unit	$0.400	10	4,122	0.011	125	$50	3%	75%	75%	1.712	1
AllWaN2	All	Water Heating	New	2	Faucet Aerators	Std Flow faucet	unit	$0.082	12	4,122	0.006	61	$5	6%	75%	75%	9.841	1
AllWaN3	All	Water Heating	New	3	Hot Water (DHW) Pipe Insulation	No insulation present	10 ln ft	$0.292	14	4,122	0.011	124.00	$36.23	3%	75%	75%	3.155	1
AllWaN4	All	Water Heating	New	4	Low-Flow Showerheads	Std Flow showerhead	unit	$0.108	9	4,122	0.042	461	$50	11%	75%	75%	5.728	1
AllWaN5	All	Water Heating	New	5	Water Heater Thermostat Setback	Constant setpoint	unit	$0.029	2	4,122	0.053	577.09	$17	14%	75%	75%	4.475	1
AllWaN6	All	Water Heating	New	6	High Efficiency Water Heater (Electric) EF .93, 28-50 Gal	Std Efficiency water heater	unit	$0.541	14	4,122	0.012	133	$72	3%	75%	100%	1.703	1
AllWaN7	All	Water Heating	New	7	Heat Pump Water Heater (air source)	Base Water Heating	unit	$0.516	14	4,122	0.176	1,914.00	$988	46%	75%	100%	1.786	1
AllWaN8	All	Water Heating	New	8	Heat Recovery Unit	Base Water Heating	unit	$0.362	14	4,122	0.190	2,073	$750	50.3%	50%	95%	2.548	1
AllWaN9	All	Water Heating	New	9	Solar Water Heater	Base Water Heating	unit	$1.206	14	4,122	0.193	2,106	$2,540	82.0%	65%	95%	0.764	0
AllWaT6	All	Water Heating	Turnover	6	High Efficiency Water Heater (Electric) EF .93, 28-50 Gal	Std Efficiency water heater	unit	$0.541	14	4,122	0.012	133	$72	8.0%	100%	75%	1.703	1
AllWaT7	All	Water Heating	Turnover	7	Heat Pump Water Heater (air source)	Base Water Heating	unit	$0.516	14	4,122	0.176	1,914.00	$988	46%	75%	100%	1.786	1
AllWaT8	All	Water Heating	Turnover	8	Heat Recovery Unit	Base Water Heating	unit	$0.458	14	4,122	0.190	2,073	$950	50.3%	50%	95%	2.012	1
AllWaT9	All	Water Heating	Turnover	9	Solar Water Heater	Base Water Heating	unit	$1.401	14	4,122	0.193	2,106	$2,950	82.0%	65%	95%	0.658	0
GroceReN1	All	Refrigeration	New	20	Demand Defrost Electric	Base Refrigeration System - Grocery		$0.91	15	4	0.000	0	$0.05	1%	95%	92%	1.103	1
AllReT27	All	Refrigeration	Turnover	27	Demand Defrost Electric	Base Refrigeration System - Grocery		$0.91	15	4	0.000	0	$0.05	1%	95%	92%	1.103	1
GroceReN3	All	Refrigeration	New	21	Demand Hot Gas Defrost	Base Refrigeration System - Grocery		$0.35	15	4	0.000	0	$0.05	3%	95%	92%	2.830	1
AllReT28	All	Refrigeration	Turnover	28	Demand Hot Gas Defrost	Base Refrigeration System - Grocery		$0.35	15	4	0.000	0	$0.05	3%	95%	92%	2.830	1
GroceReN4	All	Refrigeration	New	22	Efficient compressor motor - scroll	Base Refrigeration System - Grocery		$0.09	15	15,825	0.084	633	$60.00	4%	95%	92%	10.568	1
AllReT29	All	Refrigeration	Turnover	29	Efficient compressor motor - scroll	Base Refrigeration System - Grocery		$0.09	15	15,825	0.084	633	$60.00	4%	95%	92%	10.568	1
GroceReN6	All	Refrigeration	New	23	High R-Value Glass Doors	Base Refrigeration System - Grocery	Door	$0.67	10	3,986	0.106	797	$537.50	20.00%	95%	92%	1.042	1
GroceReN7	All	Refrigeration	New	24	Refrigeration Commissioning	Base Refrigeration System - Grocery	Per refigerator	$0.31	7	8,800	0.187	1,408	$440.00	16%	95%	92%	1.584	1
AllReE1	All	Refrigeration	Early	1	Refrigeration Commissioning	Base Refrigeration System - Grocery	Per refigerator	$0.25	7	8,800	0.117	880	$220.00	10%	95%	92%	1.980	1
GroceReN8	All	Refrigeration	New	25	Strip curtains for walk-ins	Base Refrigeration System - Grocery		$0.50	15	29,900	0.079	598	$300.00	2%	45%	78%	1.997	1
AllReT30	All	Refrigeration	Turnover	30	Strip curtains for walk-ins	Base Refrigeration System - Grocery		$0.50	15	29,900	0.079	598	$300.00	2%	45%	78%	1.997	1
HealtPaN18	Healthcare	Packaged DX	New	18	Automated control system	Baseline DX	ton	$0.45	10	1,123	0.007	56	$25.00	5%	100%	65%	1.571	1
HealtPaN19	Healthcare	Packaged DX	New	19	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$0.83	10	954	0.006	52	$43.00	5%	100%	95%	0.846	0
HealtPaT15	Healthcare	Packaged DX	Turnover	15	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$0.83	10	954	0.006	52	$43.00	5%	100%	95%	0.846	0
AllCoN1	All	Cooking	New	1	Commercial Hot Food Holding Cabinets (Energy Star)	Standard Cabinet	Each	$0.94	12	23,411	0.187	1,592	$1,500.00	7%	40%	95%	0.872	0
AllCoN2	All	Cooking	New	2	High Efficiency Fryers (Energy Star)	Standard Fryer	Each	$5.45	12	18,196	0.027	233	$1,271.00	1%	40%	95%	0.151	0
AllCoN3	All	Cooking	New	3	High Efficiency Griddle	Standard Griddle	Each	$0.66	12	17,056	0.304	2,595	$1,700.00	15%	40%	95%	1.254	1
AllCoN4	All	Cooking	New	4	High Efficiency Induction Cooking	Standard Cooking	Each	$1.04	12	29,376	0.248	2,118	$2,213.00	7%	40%	95%	0.786	0
AllCoN5	All	Cooking	New	5	Electric Steam cooker	Standard Cooker	Each	$0.40	12	46,813	0.439	3,745	$1,500.00	8%	40%	95%	2.051	1
AllCoN6	All	Cooking	New	6	Electric convection oven	Standard Oven	Each	$1.20	15	12,193	0.265	2,262	$2,713.00	19%	40%	95%	0.829	0
AllCoN7	All	Cooking	New	7	Electric combination oven	Standard Oven	Each	$1.12	12	39,353	1.769	15,095	$16,884.00	38%	40%	95%	0.734	0
AllCoT1	All	Cooking	Turnover	1	Commercial Hot Food Holding Cabinets (Energy Star)	Standard Cabinet	Each	$0.94	12	23,411	0.187	1,592	$1,500.00	7%	40%	95%	0.872	0
AllCoT2	All	Cooking	Turnover	2	High Efficiency Fryers (Energy Star)	Standard Fryer	Each	$5.45	12	18,196	0.027	233	$1,271.00	1%	40%	95%	0.151	0
AllCoT3	All	Cooking	Turnover	3	High Efficiency Griddle	Standard Griddle	Each	$0.66	12	17,056	0.304	2,595	$1,700.00	15%	40%	95%	1.254	1
AllCoT4	All	Cooking	Turnover	4	High Efficiency Induction Cooking	Standard Cooking	Each	$1.04	12	29,376	0.248	2,118	$2,213.00	7%	40%	95%	0.786	0
AllCoT5	All	Cooking	Turnover	5	Electric Steam cooker	Standard Cooker	Each	$0.40	12	46,813	0.439	3,745	$1,500.00	8%	40%	95%	2.051	1
AllCoT6	All	Cooking	Turnover	6	Electric convection oven	Standard Oven	Each	$1.20	15	12,193	0.265	2,262	$2,713.00	19%	40%	95%	0.829	0
AllCoT7	All	Cooking	Turnover	7	Electric combination oven	Standard Oven	Each	$1.12	12	39,353	1.769	15,095	$16,884.00	38%	40%	95%	0.734	0
InstiFlE1	Institutional	Fluorescent	Early	1	Premium Efficiency T8 Lighting Replacement (32W lamps with low	Replace (E) T12 Lamp - Bundle	Fixture	$0.6076	15	371	0.010	91	$55.38	25%	95%	11%	1.634	1
InstiFlE2	Institutional	Fluorescent	Early	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2809	14	1,483	0.051	445	$125.00	30%	95%	80%	3.336	1
InstiFlE3	Institutional	Fluorescent	Early	3	Photocell dimming control	No prior dimming control	Photocell	$0.3034	9	1,483	0.085	742	$225.00	50%	95%	95%	2.085	1
GroceFlE1	Grocery	Fluorescent	Early	1	Premium Efficiency T8 Lighting Replacement (32W lamps with low	Replace (E) T12 Lamp - Bundle	Fixture	$0.2754	11	818	0.023	201	$55.38	25%	95%	55%	2.758	1
GroceFlE2	Grocery	Fluorescent	Early	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1273	14	3,272	0.113	982	$125.00	30%	95%	80%	7.360	1
GroceFlE3	Grocery	Fluorescent	Early	3	Photocell dimming control	No prior dimming control	Photocell	$0.1375	9	3,272	0.188	1,636	$225.00	50%	95%	95%	4.599	1
LodgiFlE1	Lodging	Fluorescent	Early	1	Premium Efficiency T8 Lighting Replacement (32W lamps with low	Replace (E) T12 Lamp - Bundle	Fixture	$0.3246	10	694	0.020	171	$55.38	25%	95%	55%	2.147	1
LodgiFlE2	Lodging	Fluorescent	Early	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1501	14	2,776	0.096	833	$125.00	30%	95%	80%	6.244	1
LodgiFlE3	Lodging	Fluorescent	Early	3	Photocell dimming control	No prior dimming control	Photocell	$0.1621	9	2,776	0.160	1,388	$225.00	50%	95%	95%	3.901	1
HealtFlE1	Healthcare	Fluorescent	Early	1	Premium Efficiency T8 Lighting Replacement (32W lamps with low	Replace (E) T12 Lamp - Bundle	Fixture	$0.2970	11	759	0.021	186	$55.38	25%	95%	44%	2.557	1
HealtFlE2	Healthcare	Fluorescent	Early	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1373	14	3,034	0.105	910	$125.00	30%	95%	80%	6.824	1
HealtFlE3	Healthcare	Fluorescent	Early	3	Photocell dimming control	No prior dimming control	Photocell	$0.1483	9	3,034	0.174	1,517	$225.00	50%	95%	95%	4.264	1
RestaFlE1	Restaurant	Fluorescent	Early	1	Premium Efficiency T8 Lighting Replacement (32W lamps with low	Replace (E) T12 Lamp - Bundle	Fixture	$0.3672	11	614	0.017	151	$55.38	25%	95%	49%	2.068	1
RestaFlE2	Restaurant	Fluorescent	Early	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1698	14	2,454	0.085	736	$125.00	30%	95%	80%	5.520	1
RestaFlE3	Restaurant	Fluorescent	Early	3	Photocell dimming control	No prior dimming control	Photocell	$0.1834	9	2,454	0.141	1,227	$225.00	50%	95%	95%	3.449	1

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Fla
RetailFIE1	Retail	Fluorescent	Early	1	Premium Efficiency T8 Lighting Replacement (32W lamps with low	Replace (E) T12 Lamp - Bundle	Fixture	$0.3810	11	591	0.017	145	$55.38	25%	95%	55%	1.993	1
RetailFIE2	Retail	Fluorescent	Early	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1761	14	2,365	0.082	710	$125.00	30%	95%	80%	5.320	1
RetailFIE3	Retail	Fluorescent	Early	3	Photocell dimming control	No prior dimming control	Photocell	$0.1902	9	2,365	0.136	1,183	$225.00	50%	95%	95%	3.324	1
WarehFIE1	Warehouse	Fluorescent	Early	1	Premium Efficiency T8 Lighting Replacement (32W lamps with low	Replace (E) T12 Lamp - Bundle	Fixture	$0.4113	12	548	0.015	135	$55.38	25%	95%	35%	1.995	1
WarehFIE2	Warehouse	Fluorescent	Early	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1901	14	2,191	0.076	657	$125.00	30%	95%	80%	4.929	1
WarehFIE3	Warehouse	Fluorescent	Early	3	Photocell dimming control	No prior dimming control	Photocell	$0.2054	9	2,191	0.126	1,096	$225.00	50%	95%	95%	3.079	1
MiscFIE1	Misc	Fluorescent	Early	1	Premium Efficiency T8 Lighting Replacement (32W lamps with low	Replace (E) T12 Lamp - Bundle	Fixture	$0.3764	11	599	0.017	147	$55.38	25%	95%	44%	2.018	1
OfficHIN1	Office	HID	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1781	15	621	0.007	62	$11.06	10%	95%	100%	5.577	1
OfficHIN2	Office	HID	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.3561	15	621	0.018	155	$55.32	25%	85%	100%	2.789	1
OfficInN1	Office	Incandescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1781	15	2,727	0.031	273	$48.56	10%	95%	100%	5.577	1
OfficInN2	Office	Incandescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.3561	15	2,727	0.078	682	$242.78	25%	75%	100%	2.789	1
InstiFIN1	Institutional	Fluorescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1722	15	62,741	0.721	6,274	$1,080.26	10%	95%	100%	5.768	1
InstiFIN2	Institutional	Fluorescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.3444	15	62,741	1.803	15,685	$5,401.30	25%	75%	100%	2.884	1
HealtFIN1	Healthcare	Fluorescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0842	15	441,728	5.077	44,173	$3,718.25	10%	95%	100%	11.798	1
HealtFIN2	Healthcare	Fluorescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1684	15	441,728	12.691	110,432	$18,591.24	25%	75%	100%	5.899	1
GroceFIN1	Grocery	Fluorescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0572	15	60,020	0.690	6,002	$343.52	10%	95%	100%	17.351	1
GroceFIN2	Grocery	Fluorescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1145	15	60,020	1.724	15,005	$1,717.60	25%	75%	100%	8.675	1
LodgiFIN1	Lodging	Fluorescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1012	15	303,563	3.489	30,356	$3,071.87	10%	95%	100%	9.813	1
LodgiFIN2	Lodging	Fluorescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.2024	15	303,563	8.722	75,891	$15,359.37	25%	75%	100%	4.907	1
RestaFIN1	Restaurant	Fluorescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0763	15	13,140	0.151	1,314	$100.27	10%	95%	100%	13.013	1
RestaFIN2	Restaurant	Fluorescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1526	15	13,140	0.378	3,285	$501.37	25%	75%	100%	6.507	1
RetaiFIN1	Retail	Fluorescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0792	15	60,011	0.690	6,001	$475.15	10%	95%	100%	12.542	1
RetaiFIN2	Retail	Fluorescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1584	15	60,011	1.724	15,003	$2,375.74	25%	75%	100%	6.271	1
WarehFIN1	Warehouse	Fluorescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1603	15	44,747	0.514	4,475	$717.11	10%	95%	100%	6.197	1
WarehFIN2	Warehouse	Fluorescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.3205	15	44,747	1.286	11,187	$3,585.53	25%	75%	100%	3.098	1
GroceHIN1	Grocery	HID	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0572	15	3,937	0.045	394	$22.53	10%	95%	100%	17.351	1
GroceHIN2	Grocery	HID	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1145	15	3,937	0.113	984	$112.66	25%	85%	100%	8.675	1
InstiHIN1	Institutional	HID	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1722	15	2,159	0.025	216	$37.18	10%	95%	100%	5.768	1
InstiHIN2	Institutional	HID	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.3444	15	2,159	0.062	540	$185.89	25%	85%	100%	2.884	1
HealtHIN1	Healthcare	HID	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0842	15	15,203	0.175	1,520	$127.97	10%	95%	100%	11.798	1
HealtHIN2	Healthcare	HID	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1684	15	15,203	0.437	3,801	$639.84	25%	85%	100%	5.899	1
LodgiHIN1	Lodging	HID	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1012	15	10,539	0.121	1,054	$106.65	10%	95%	100%	9.813	1
LodgiHIN2	Lodging	HID	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.2024	15	10,539	0.303	2,635	$533.27	25%	85%	100%	4.907	1
RestaHIN1	Restaurant	HID	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0763	15	459	0.005	46	$3.51	10%	95%	100%	13.013	1
RestaHIN2	Restaurant	HID	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1526	15	459	0.013	115	$17.53	25%	85%	100%	6.507	1
RetaiHIN1	Retail	HID	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0792	15	10,313	0.119	1,031	$81.65	10%	95%	100%	12.542	1
RetaiHIN2	Retail	HID	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1584	15	10,313	0.296	2,578	$408.25	25%	85%	100%	6.271	1
WarehHIN1	Warehouse	HID	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1603	15	7,843	0.090	784	$125.69	10%	95%	100%	6.197	1
WarehHIN2	Warehouse	HID	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.3205	15	7,843	0.225	1,961	$628.45	25%	85%	100%	3.098	1
MiscHIN1	Misc	HID	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0988	15	4,211	0.048	421	$41.61	10%	95%	100%	10.051	1
MiscHIN2	Misc	HID	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1976	15	4,211	0.121	1,053	$208.03	25%	85%	100%	5.025	1
MiscFIN1	Misc	Fluorescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0988	15	121,285	1.394	12,128	$1,198.38	10%	95%	100%	10.051	1
MiscFIN2	Misc	Fluorescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1976	15	121,285	3.485	30,321	$5,991.88	25%	75%	100%	5.025	1
InstiInN1	Institutional	Incandescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1722	15	7,094	0.082	709	$122.15	10%	95%	100%	5.768	1
InstiInN2	Institutional	Incandescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.3444	15	7,094	0.204	1,774	$610.75	25%	75%	100%	2.884	1
GroceInT1	Grocery	Incandescent	Turnover	1	CFL Lamp - 21 Watt	EISA - 75 Watt equivalent - 53W	Lamp	$0.0161	5	309	0.021	186	$3.00	60%	75%	50%	21.376	1
HealtInT1	Healthcare	Incandescent	Turnover	1	CFL Lamp - 21 Watt	EISA - 75 Watt equivalent - 53W	Lamp	$0.0174	5	286	0.020	173	$3.00	60%	75%	50%	19.820	1
GroceInN2	Grocery	Incandescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1145	15	9,629	0.277	2,407	$275.57	25%	75%	100%	8.675	1
HealtInN2	Healthcare	Incandescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1684	15	49,948	1.435	12,487	$2,102.19	25%	75%	100%	5.899	1
LodgiInN1	Lodging	Incandescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1012	15	72,424	0.832	7,242	$732.89	10%	95%	100%	9.813	1
LodgiInN2	Lodging	Incandescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.2024	15	72,424	2.081	18,106	$3,664.46	25%	75%	100%	4.907	1
RestaInN1	Restaurant	Incandescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0763	15	8,649	0.099	865	$66.01	10%	95%	100%	13.013	1
RestaInN2	Restaurant	Incandescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1526	15	8,649	0.249	2,162	$330.03	25%	75%	100%	6.507	1
RetaiInN1	Retail	Incandescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0792	15	9,628	0.111	963	$76.23	10%	95%	100%	12.542	1
RetaiInN2	Retail	Incandescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1584	15	9,628	0.277	2,407	$381.16	25%	75%	100%	6.271	1
WarehInN1	Warehouse	Incandescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1603	15	5,975	0.069	598	$95.76	10%	95%	100%	6.197	1
WarehInN2	Warehouse	Incandescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.3205	15	5,975	0.172	1,494	$478.78	25%	75%	100%	3.098	1
MiscInN1	Misc	Incandescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0988	15	28,936	0.333	2,894	$285.91	10%	95%	100%	10.051	1
MiscInN2	Misc	Incandescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1976	15	28,936	0.831	7,234	$1,429.55	25%	75%	100%	5.025	1
MiscFIE2	Misc	Fluorescent	Early	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1740	14	2,394	0.083	718	$125.00	30%	95%	80%	5.385	1
MiscFIE3	Misc	Fluorescent	Early	3	Photocell dimming control	No prior dimming control	Photocell	$0.1879	9	2,394	0.138	1,197	$225.00	50%	95%	95%	3.365	1
MiscFIN4	Misc	Fluorescent	New	4	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0696	14	2,394	0.083	718	$50.00	30%	95%	15%	13.463	1
MiscFIN3	Misc	Fluorescent	New	3	Photocell dimming control	No prior dimming control	Photocell	$0.1253	9	2,394	0.138	1,197	$150.00	50%	95%	75%	5.047	1
InstiFIN4	Institutional	Fluorescent	New	4	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1124	14	1,483	0.051	445	$50.00	30%	95%	15%	8.341	1
InstiFIN3	Institutional	Fluorescent	New	3	Photocell dimming control	No prior dimming control	Photocell	$0.2022	9	1,483	0.085	742	$150.00	50%	95%	75%	3.127	1
GroceFIN4	Grocery	Fluorescent	New	4	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0509	14	3,272	0.113	982	$50.00	30%	95%	15%	18.400	1
GroceFIN3	Grocery	Fluorescent	New	3	Photocell dimming control	No prior dimming control	Photocell	$0.0917	9	3,272	0.188	1,636	$150.00	50%	95%	75%	6.898	1
HealtFIN4	Healthcare	Fluorescent	New	4	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0549	14	3,034	0.105	910	$50.00	30%	95%	15%	17.061	1
HealtFIN3	Healthcare	Fluorescent	New	3	Photocell dimming control	No prior dimming control	Photocell	$0.0989	9	3,034	0.174	1,517	$150.00	50%	95%	75%	6.396	1
LodgiFIN4	Lodging	Fluorescent	New	4	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0600	14	2,776	0.096	833	$50.00	30%	95%	15%	15.611	1
LodgiFIN3	Lodging	Fluorescent	New	3	Photocell dimming control	No prior dimming control	Photocell	$0.1081	9	2,776	0.160	1,388	$150.00	50%	95%	75%	5.852	1
OfficFIN4	Office	Fluorescent	New	4	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1056	14	1,578	0.054	473	$50.00	30%	95%	15%	8.872	1
OfficFIN3	Office	Fluorescent	New	3	Photocell dimming control	No prior dimming control	Photocell	$0.1901	9	1,578	0.091	789	$150.00	50%	95%	75%	3.326	1
RestaFIN4	Restaurant	Fluorescent	New	4	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0679	14	2,454	0.085	736	$50.00	30%	95%	15%	13.800	1
RestaFIN3	Restaurant	Fluorescent	New	3	Photocell dimming control	No prior dimming control	Photocell	$0.1222	9	2,454	0.141	1,227	$150.00	50%	95%	75%	5.174	1
RetaiFIN4	Retail	Fluorescent	New	4	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0705	14	2,365	0.082	710	$50.00	30%	95%	15%	13.301	1
RetaiFIN3	Retail	Fluorescent	New	3	Photocell dimming control	No prior dimming control	Photocell	$0.1268	9	2,365	0.136	1,183	$150.00	50%	95%	75%	4.986	1
WarehFIN4	Warehouse	Fluorescent	New	4	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0761	14	2,191	0.076	657	$50.00	30%	95%	15%	12.322	1
WarehFIN3	Warehouse	Fluorescent	New	3	Photocell dimming control	No prior dimming control	Photocell	$0.1369	9	2,191	0.126	1,096	$150.00	50%	95%	75%	4.619	1
MiscFIT2	Misc	Fluorescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0696	14	2,394	0.083	718	$50.00	30%	95%	80%	13.463	1
MiscFIT3	Misc	Fluorescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.1253	9	2,394	0.138	1,197	$150.00	50%	95%	95%	5.047	1
InstiFIT2	Institutional	Fluorescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1124	14	1,483	0.051	445	$50.00	30%	95%	80%	8.341	1
InstiFIT3	Institutional	Fluorescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.2022	9	1,483	0.085	742	$150.00	50%	95%	95%	3.127	1
GroceFIT2	Grocery	Fluorescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0509	14	3,272	0.113	982	$50.00	30%	95%	80%	18.400	1
GroceFIT3	Grocery	Fluorescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.0917	9	3,272	0.188	1,636	$150.00	50%	95%	95%	6.898	1
HealtFIT2	Healthcare	Fluorescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0549	14	3,034	0.105	910	$50.00	30%	95%	80%	17.061	1
HealtFIT3	Healthcare	Fluorescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.0989	9	3,034	0.174	1,517	$150.00	50%	95%	95%	6.396	1
LodgiFIT2	Lodging	Fluorescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0600	14	2,776	0.096	833	$50.00	30%	95%	80%	15.611	1
LodgiFIT3	Lodging	Fluorescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.1081	9	2,776	0.160	1,388	$150.00	50%	95%	95%	5.852	1
OfficFIT2	Office	Fluorescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1056	14	1,578	0.054	473	$50.00	30%	95%	80%	8.872	1
OfficFIT3	Office	Fluorescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.1901	9	1,578	0.091	789	$150.00	50%	95%	95%	3.326	1
RestaFIT2	Restaurant	Fluorescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0679	14	2,454	0.085	736	$50.00	30%	95%	80%	13.800	1
RestaFIT3	Restaurant	Fluorescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.1222	9	2,454	0.141	1,227	$150.00	50%	95%	95%	5.174	1
RetaiFIT2	Retail	Fluorescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0705	14	2,365	0.082	710	$50.00	30%	95%	80%	13.301	1

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Fla
RetailFIT3	Retail	Fluorescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.1268	9	2,365	0.136	1,183	$150.00	50%	95%	95%	4.986	1
WarehFIT2	Warehouse	Fluorescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0761	14	2,191	0.076	657	$50.00	30%	95%	80%	12.322	1
WarehFIT3	Warehouse	Fluorescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.1369	9	2,191	0.126	1,096	$150.00	50%	95%	95%	4.619	1
GrocelFIT1	Grocery	Fluorescent	Turnover	1	Premium Efficiency T8 Lighting Replacement (28W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.0650	6	163	0.004	36	$2.32	22%	90%	95%	6.434	1
GrocelFIT4	Grocery	Fluorescent	Turnover	4	Premium Efficiency T8 Lighting Replacement (25W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.0990	6	163	0.002	20	$2.02	13%	60%	95%	4.223	1
GrocelFIT5	Grocery	Fluorescent	Turnover	5	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.0307	11	582	0.010	83	$2.55	14%	75%	95%	24.736	1
GrocelFIE4	Grocery	Fluorescent	Early	4	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.7257	11	582	0.010	83	$60.38	14%	75%	95%	1.046	1
HealthFIT6	Healthcare	Fluorescent	Turnover	6	LED Retrofit Tube	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$1.0943	7	151	0.007	59	$65.00	39%	40%	95%	0.449	0
HealthFIT1	Healthcare	Fluorescent	Turnover	1	Premium Efficiency T8 Lighting Replacement (28W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.0701	7	151	0.004	33	$2.32	22%	90%	95%	7.004	1
HealthFIT4	Healthcare	Fluorescent	Turnover	4	Premium Efficiency T8 Lighting Replacement (25W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.1068	7	151	0.002	19	$2.02	13%	60%	95%	4.598	1
HealthFIT5	Healthcare	Fluorescent	Turnover	5	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.0331	11	540	0.009	77	$2.55	14%	75%	95%	22.935	1
HealthFIE4	Healthcare	Fluorescent	Early	4	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.7769	11	540	0.009	77	$59.93	14%	75%	95%	0.978	0
InstiFIT6	Institutional	Fluorescent	Turnover	6	LED Retrofit Tube	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$2.2383	15	74	0.003	29	$65.00	39%	40%	95%	0.444	0
InstiFIT1	Institutional	Fluorescent	Turnover	1	Premium Efficiency T8 Lighting Replacement (28W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.1433	15	74	0.002	16	$2.32	22%	90%	95%	6.928	1
InstiFIT4	Institutional	Fluorescent	Turnover	4	Premium Efficiency T8 Lighting Replacement (25W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.2184	15	74	0.001	9	$2.02	13%	60%	95%	4.547	1
InstiFIT5	Institutional	Fluorescent	Turnover	5	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.0677	11	264	0.004	38	$2.55	14%	75%	95%	11.213	1
InstiFIE4	Institutional	Fluorescent	Early	4	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.9281	11	264	0.004	38	$35.00	14%	75%	95%	0.818	0
LodgiFIT6	Lodging	Fluorescent	Turnover	6	LED Retrofit Tube	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$1.1959	8	138	0.006	54	$65.00	39%	40%	95%	0.470	0
LodgiFIT1	Lodging	Fluorescent	Turnover	1	Premium Efficiency T8 Lighting Replacement (28W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.0766	8	138	0.003	30	$2.32	22%	90%	95%	7.342	1
LodgiFIT4	Lodging	Fluorescent	Turnover	4	Premium Efficiency T8 Lighting Replacement (25W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.1167	8	138	0.002	17	$2.02	13%	60%	95%	4.819	1
LodgiFIT5	Lodging	Fluorescent	Turnover	5	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.0362	11	494	0.008	71	$2.55	14%	75%	95%	20.986	1
LodgiFIE4	Lodging	Fluorescent	Early	4	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.4959	11	494	0.008	71	$35.00	14%	75%	95%	1.532	1
MiscFIT6	Misc	Fluorescent	Turnover	6	LED Retrofit Tube	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$1.3867	9	119	0.005	47	$65.00	39%	40%	95%	0.456	0
MiscFIT1	Misc	Fluorescent	Turnover	1	Premium Efficiency T8 Lighting Replacement (28W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.0888	9	119	0.003	26	$2.32	22%	90%	95%	7.121	1
MiscFIT4	Misc	Fluorescent	Turnover	4	Premium Efficiency T8 Lighting Replacement (25W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.1353	9	119	0.002	15	$2.02	13%	60%	95%	4.674	1
MiscFIT5	Misc	Fluorescent	Turnover	5	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.0420	11	426	0.007	61	$2.55	14%	75%	95%	18.099	1
MiscFIE4	Misc	Fluorescent	Early	4	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.5750	11	426	0.007	61	$35.00	14%	75%	95%	1.321	1
OfficFIT6	Office	Fluorescent	Turnover	6	LED Retrofit Tube	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$2.1044	14	79	0.004	31	$65.00	39%	40%	95%	0.445	0
OfficFIT1	Office	Fluorescent	Turnover	1	Premium Efficiency T8 Lighting Replacement (28W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.1348	14	79	0.002	17	$2.32	22%	90%	95%	6.954	1
OfficFIT4	Office	Fluorescent	Turnover	4	Premium Efficiency T8 Lighting Replacement (25W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.2053	14	79	0.001	10	$2.02	13%	60%	95%	4.565	1
OfficFIT5	Office	Fluorescent	Turnover	5	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.0637	11	281	0.005	40	$2.55	14%	75%	95%	11.926	1
OfficFIE4	Office	Fluorescent	Early	4	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.8726	11	281	0.005	40	$35.00	14%	75%	95%	0.870	0
RestaFIT6	Restaurant	Fluorescent	Turnover	6	LED Retrofit Tube	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$1.3528	9	122	0.006	48	$65.00	39%	40%	95%	0.467	0
RestaFIT1	Restaurant	Fluorescent	Turnover	1	Premium Efficiency T8 Lighting Replacement (28W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.0866	9	122	0.003	27	$2.32	22%	90%	95%	7.300	1
RestaFIT4	Restaurant	Fluorescent	Turnover	4	Premium Efficiency T8 Lighting Replacement (25W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.1320	9	122	0.002	15	$2.02	13%	60%	95%	4.791	1
RestaFIT5	Restaurant	Fluorescent	Turnover	5	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.0409	11	437	0.007	62	$2.55	14%	75%	95%	18.552	1
RestaFIE4	Restaurant	Fluorescent	Early	4	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.5610	11	437	0.007	62	$35.00	14%	75%	95%	1.354	1
RetailFIT6	Retail	Fluorescent	Turnover	6	LED Retrofit Tube	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$1.4036	9	118	0.005	46	$65.00	39%	40%	95%	0.451	0
RetailFIT1	Retail	Fluorescent	Turnover	1	Premium Efficiency T8 Lighting Replacement (28W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.0899	9	118	0.003	26	$2.32	22%	90%	95%	7.035	1
RetailFIT4	Retail	Fluorescent	Turnover	4	Premium Efficiency T8 Lighting Replacement (25W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.1369	9	118	0.002	15	$2.02	13%	60%	95%	4.618	1
RetailFIT5	Retail	Fluorescent	Turnover	5	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.0425	11	421	0.007	60	$2.55	14%	75%	95%	17.881	1
RetailFIE4	Retail	Fluorescent	Early	4	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.5820	11	421	0.007	60	$35.00	14%	75%	95%	1.305	1
WarehFIT6	Warehouse	Fluorescent	Turnover	6	LED Retrofit Tube	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$1.5152	10	109	0.005	43	$65.00	39%	40%	95%	0.460	0
WarehFIT1	Warehouse	Fluorescent	Turnover	1	Premium Efficiency T8 Lighting Replacement (28W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.0970	10	109	0.003	24	$2.32	22%	90%	95%	7.182	1
WarehFIT4	Warehouse	Fluorescent	Turnover	4	Premium Efficiency T8 Lighting Replacement (25W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.1478	10	109	0.002	14	$2.02	13%	60%	95%	4.714	1
WarehFIT5	Warehouse	Fluorescent	Turnover	5	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.0459	11	390	0.006	56	$2.55	14%	75%	95%	16.565	1
WarehFIE4	Warehouse	Fluorescent	Early	4	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.6283	11	390	0.006	56	$35.00	14%	75%	95%	1.209	1
GrocelHIE1	Grocery	HID	Early	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.3797	10	1,893	0.065	565	$214.50	30%	85%	80%	1.835	1
GrocelHIE2	Grocery	HID	Early	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.2995	10	2,772	0.115	1,002	$300.00	36%	85%	80%	2.327	1
GrocelHIE3	Grocery	HID	Early	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.3449	10	1,893	0.078	681	$235.00	36%	85%	80%	2.021	1
GrocelHIE4	Grocery	HID	Early	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.3403	10	2,772	0.110	955	$325.00	34%	85%	80%	2.048	1
GrocelHIT5	Grocery	HID	Turnover	5	Ceramic Metal Halide lamp	Replace non-ceramic lamp lamp 400 W	Lamp	$0.0859	3	2,330	0.047	408	$35.00	18%	85%	55%	2.364	1
GrocelHIE7	Grocery	HID	Early	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.8147	15	1,893	0.097	844	$688.00	45%	85%	80%	1.219	1
GrocelHIT1	Grocery	HID	Turnover	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.1956	10	1,893	0.065	565	$110.50	30%	85%	80%	3.563	1
GrocelHIT2	Grocery	HID	Turnover	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.2246	10	2,772	0.115	1,002	$225.00	36%	85%	80%	3.102	1
GrocelHIT3	Grocery	HID	Turnover	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.2128	10	1,893	0.078	681	$145.00	36%	85%	80%	3.275	1
GrocelHIT4	Grocery	HID	Turnover	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.2722	10	2,772	0.110	955	$260.00	34%	85%	80%	2.560	1
GrocelHIT6	Grocery	HID	Turnover	6	Multi Lamp Hard Wired CFL	Replace HID Fixture Drawing 400 W	Fixture	$0.3442	10	2,772	0.142	1,235	$425.00	45%	85%	55%	2.024	1
GrocelHIT7	Grocery	HID	Turnover	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.4441	15	1,893	0.097	844	$375.00	45%	85%	80%	2.236	1
HealthHIE1	Healthcare	HID	Early	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.4095	10	1,755	0.060	524	$214.50	30%	85%	80%	1.702	1
HealthHIE2	Healthcare	HID	Early	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.3230	10	2,570	0.107	929	$300.00	36%	85%	80%	2.157	1
HealthHIE3	Healthcare	HID	Early	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.3720	10	1,755	0.073	632	$235.00	36%	85%	80%	1.873	1
HealthHIE4	Healthcare	HID	Early	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.3670	10	2,570	0.102	886	$325.00	34%	85%	80%	1.899	1
HealthHIT5	Healthcare	HID	Turnover	5	Ceramic Metal Halide lamp	Replace non-ceramic lamp lamp 400 W	Lamp	$0.0926	3	2,160	0.043	378	$35.00	18%	85%	55%	2.192	1
HealthHIE7	Healthcare	HID	Early	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.8787	15	1,755	0.090	783	$688.00	45%	85%	80%	1.130	1
HealthHIT1	Healthcare	HID	Turnover	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.2110	10	1,755	0.060	524	$110.50	30%	85%	80%	3.303	1
HealthHIT2	Healthcare	HID	Turnover	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.2422	10	2,570	0.107	929	$225.00	36%	85%	80%	2.877	1
HealthHIT3	Healthcare	HID	Turnover	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.2295	10	1,755	0.073	632	$145.00	36%	85%	80%	3.036	1
HealthHIT4	Healthcare	HID	Turnover	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.2936	10	2,570	0.102	886	$260.00	34%	85%	80%	2.374	1
HealthHIT6	Healthcare	HID	Turnover	6	Multi Lamp Hard Wired CFL	Replace HID Fixture Drawing 400 W	Fixture	$0.3712	10	2,570	0.132	1,145	$425.00	45%	85%	55%	1.877	1
HealthHIT7	Healthcare	HID	Turnover	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.4789	15	1,755	0.090	783	$375.00	45%	85%	80%	2.074	1
InstiHIE1	Institutional	HID	Early	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.8376	10	858	0.029	256	$214.50	30%	85%	80%	0.832	0
InstiHIE2	Institutional	HID	Early	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.6607	10	1,257	0.052	454	$300.00	36%	85%	80%	1.055	1
InstiHIE3	Institutional	HID	Early	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.7608	10	858	0.035	309	$235.00	36%	85%	80%	0.916	0
InstiHIE4	Institutional	HID	Early	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.7506	10	1,257	0.050	433	$325.00	34%	85%	80%	0.928	0
InstiHIT5	Institutional	HID	Turnover	5	Ceramic Metal Halide lamp	Replace non-ceramic lamp lamp 400 W	Lamp	$0.1894	6	1,056	0.021	185	$35.00	18%	85%	55%	2.207	1
InstiHIE7	Institutional	HID	Early	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$1.7973	15	858	0.044	383	$688.00	45%	85%	80%	0.553	0
InstiHIT1	Institutional	HID	Turnover	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.4315	10	858	0.029	256	$110.50	30%	85%	80%	1.615	1
InstiHIT2	Institutional	HID	Turnover	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.4955	10	1,257	0.052	454	$225.00	36%	85%	80%	1.406	1
InstiHIT3	Institutional	HID	Turnover	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.4694	10	858	0.035	309	$145.00	36%	85%	80%	1.484	1
InstiHIT4	Institutional	HID	Turnover	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.6005	10	1,257	0.050	433	$260.00	34%	85%	80%	1.160	1
InstiHIT6	Institutional	HID	Turnover	6	Multi Lamp Hard Wired CFL	Replace HID Fixture Drawing 400 W	Fixture	$0.7594	10	1,257	0.064	560	$425.00	45%	85%	55%	0.918	0
InstiHIT7	Institutional	HID	Turnover	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.9796	15	858	0.044	383	$375.00	45%	85%	80%	1.014	1
LodgiHIE1	Lodging	HID	Early	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.4475	10	1,606	0.055	479	$214.50	30%	85%	80%	1.557	1
LodgiHIE2	Lodging	HID	Early	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.3530	10	2,352	0.098	850	$300.00	36%	85%	80%	1.974	1
LodgiHIE3	Lodging	HID	Early	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.4065	10	1,606	0.066	578	$235.00	36%	85%	80%	1.714	1
LodgiHIE4	Lodging	HID	Early	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.4011	10	2,352	0.093	810	$325.00	34%	85%	80%	1.737	1
LodgiHIT5	Lodging	HID	Turnover	5	Ceramic Metal Halide lamp	Replace non-ceramic lamp lamp 400 W	Lamp	$0.1012	3	1,976	0.040	346	$35.00	18%	85%	55%	2.005	1
LodgiHIE7	Lodging	HID	Early	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.9603	15	1,606	0.082	716	$688.00	45%	85%	80%	1.034	1
LodgiHIT1	Lodging	HID	Turnover	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.2306	10	1,606	0.055	479	$110.50	30%	85%	80%	3.022	1
LodgiHIT2	Lodging	HID	Turnover	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.2648	10	2,352	0.098	850	$225.00	36%	85%	80%	2.632	1
LodgiHIT3	Lodging	HID	Turnover	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.2508	10	1,606	0.066	578	$145.00	36%	85%	80%	2.778	1
LodgiHIT4	Lodging	HID	Turnover	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.3209	10	2,352	0.093	810	$260.00	34%	85%	80%	2.172	1
LodgiHIT6	Lodging	HID	Turnover	6	Multi Lamp Hard Wired CFL	Replace HID Fixture Drawing 400 W	Fixture	$0.4057	10	2,352	0.120	1,047	$425.00	45%	85%	55%	1.718	1

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Fla
LodgiHIT7	Lodging	HID	Turnover	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.5234	15	1,606	0.082	716	$375.00	45%	85%	80%	1.897	1
OfficHIE1	Office	HID	Early	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.7875	10	913	0.031	272	$214.50	30%	85%	80%	0.885	0
OfficHIE2	Office	HID	Early	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.6211	10	1,337	0.056	483	$300.00	36%	85%	80%	1.122	1
OfficHIE3	Office	HID	Early	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.7153	10	913	0.038	329	$235.00	36%	85%	80%	0.974	0
OfficHIE4	Office	HID	Early	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.7057	10	1,337	0.053	461	$325.00	34%	85%	80%	0.987	0
OfficHIT5	Office	HID	Turnover	5	Ceramic Metal Halide lamp	Replace non-ceramic lamp lamp 400 W	Lamp	$0.1781	5	1,123	0.023	197	$35.00	18%	85%	55%	1.932	1
OfficHIE7	Office	HID	Early	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$1.6898	15	913	0.047	407	$688.00	45%	85%	80%	0.588	0
OfficHIT1	Office	HID	Turnover	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.4057	10	913	0.031	272	$110.50	30%	85%	80%	1.718	1
OfficHIT2	Office	HID	Turnover	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.4659	10	1,337	0.056	483	$225.00	36%	85%	80%	1.496	1
OfficHIT3	Office	HID	Turnover	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.4414	10	913	0.038	329	$145.00	36%	85%	80%	1.579	1
OfficHIT4	Office	HID	Turnover	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.5646	10	1,337	0.053	461	$260.00	34%	85%	80%	1.234	1
OfficHIT6	Office	HID	Turnover	6	Multi Lamp Hard Wired CFL	Replace HID Fixture Drawing 400 W	Fixture	$0.7139	10	1,337	0.068	595	$425.00	45%	85%	55%	0.976	0
OfficHIT7	Office	HID	Turnover	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.9210	15	913	0.047	407	$375.00	45%	85%	80%	1.078	1
RestaHIE1	Restaurant	HID	Early	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.5063	10	1,420	0.049	424	$214.50	30%	85%	80%	1.376	1
RestaHIE2	Restaurant	HID	Early	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.3993	10	2,079	0.086	751	$300.00	36%	85%	80%	1.745	1
RestaHIE3	Restaurant	HID	Early	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.4598	10	1,420	0.059	511	$235.00	36%	85%	80%	1.515	1
RestaHIE4	Restaurant	HID	Early	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.4537	10	2,079	0.082	716	$325.00	34%	85%	80%	1.536	1
RestaHIT5	Restaurant	HID	Turnover	5	Ceramic Metal Halide lamp	Replace non-ceramic lamp lamp 400 W	Lamp	$0.1145	3	1,747	0.035	306	$35.00	18%	85%	55%	1.773	1
RestaHIE7	Restaurant	HID	Early	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$1.0863	15	1,420	0.073	633	$688.00	45%	85%	80%	0.914	0
RestaHIT1	Restaurant	HID	Turnover	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.2608	10	1,420	0.049	424	$110.50	30%	85%	80%	2.672	1
RestaHIT2	Restaurant	HID	Turnover	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.2995	10	2,079	0.086	751	$225.00	36%	85%	80%	2.327	1
RestaHIT3	Restaurant	HID	Turnover	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.2837	10	1,420	0.059	511	$145.00	36%	85%	80%	2.456	1
RestaHIT4	Restaurant	HID	Turnover	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.3630	10	2,079	0.082	716	$260.00	34%	85%	80%	1.920	1
RestaHIT6	Restaurant	HID	Turnover	6	Multi Lamp Hard Wired CFL	Replace HID Fixture Drawing 400 W	Fixture	$0.4590	10	2,079	0.106	926	$425.00	45%	85%	55%	1.518	1
RestaHIT7	Restaurant	HID	Turnover	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.5921	15	1,420	0.073	633	$375.00	45%	85%	80%	1.677	1
RetaiHIE1	Retail	HID	Early	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.5253	10	1,368	0.047	408	$214.50	30%	85%	80%	1.327	1
RetaiHIE2	Retail	HID	Early	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.4143	10	2,004	0.083	724	$300.00	36%	85%	80%	1.682	1
RetaiHIE3	Retail	HID	Early	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.4771	10	1,368	0.057	493	$235.00	36%	85%	80%	1.461	1
RetaiHIE4	Retail	HID	Early	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.4707	10	2,004	0.079	690	$325.00	34%	85%	80%	1.480	1
RetaiHIT5	Retail	HID	Turnover	5	Ceramic Metal Halide lamp	Replace non-ceramic lamp lamp 400 W	Lamp	$0.1188	4	1,684	0.034	295	$35.00	18%	85%	55%	2.266	1
RetaiHIE7	Retail	HID	Early	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$1.1270	15	1,368	0.070	610	$688.00	45%	85%	80%	0.881	0
RetaiHIT1	Retail	HID	Turnover	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.2706	10	1,368	0.047	408	$110.50	30%	85%	80%	2.575	1
RetaiHIT2	Retail	HID	Turnover	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.3107	10	2,004	0.083	724	$225.00	36%	85%	80%	2.243	1
RetaiHIT3	Retail	HID	Turnover	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.2944	10	1,368	0.057	493	$145.00	36%	85%	80%	2.367	1
RetaiHIT4	Retail	HID	Turnover	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.3766	10	2,004	0.079	690	$260.00	34%	85%	80%	1.850	1
RetaiHIT6	Retail	HID	Turnover	6	Multi Lamp Hard Wired CFL	Replace HID Fixture Drawing 400 W	Fixture	$0.4762	10	2,004	0.103	893	$425.00	45%	85%	55%	1.463	1
RetaiHIT7	Retail	HID	Turnover	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.6143	15	1,368	0.070	610	$375.00	45%	85%	80%	1.617	1
MiscHIE1	Misc	HID	Early	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.5189	10	1,385	0.048	413	$214.50	30%	85%	80%	1.343	1
MiscHIE2	Misc	HID	Early	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.4093	10	2,028	0.084	733	$300.00	36%	85%	80%	1.703	1
MiscHIE3	Misc	HID	Early	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.4713	10	1,385	0.057	499	$235.00	36%	85%	80%	1.478	1
MiscHIE4	Misc	HID	Early	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.4650	10	2,028	0.080	699	$325.00	34%	85%	80%	1.498	1
MiscHIT5	Misc	HID	Turnover	5	Ceramic Metal Halide lamp	Replace non-ceramic lamp lamp 400 W	Lamp	$0.1173	4	1,705	0.034	298	$35.00	18%	85%	55%	2.294	1
MiscHIE7	Misc	HID	Early	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$1.1134	15	1,385	0.071	618	$688.00	45%	85%	80%	0.892	0
MiscHIT1	Misc	HID	Turnover	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.2673	10	1,385	0.048	413	$110.50	30%	85%	80%	2.607	1
MiscHIT2	Misc	HID	Turnover	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.3070	10	2,028	0.084	733	$225.00	36%	85%	80%	2.270	1
MiscHIT3	Misc	HID	Turnover	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.2908	10	1,385	0.057	499	$145.00	36%	85%	80%	2.396	1
MiscHIT4	Misc	HID	Turnover	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.3720	10	2,028	0.080	699	$260.00	34%	85%	80%	1.873	1
MiscHIT6	Misc	HID	Turnover	6	Multi Lamp Hard Wired CFL	Replace HID Fixture Drawing 400 W	Fixture	$0.4704	10	2,028	0.104	903	$425.00	45%	85%	55%	1.481	1
MiscHIT7	Misc	HID	Turnover	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.6069	15	1,385	0.071	618	$375.00	45%	85%	80%	1.636	1
GroceHIE8	Grocery	HID	Early	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1651	10	7,571	0.261	2,271	$375.00	30%	85%	85%	4.221	1
GroceHIE9	Grocery	HID	Early	9	Photocell dimming control	No prior dimming control	Photocell	$0.1453	10	7,571	0.435	3,786	$550.00	50%	85%	85%	4.796	1
GroceHIE10	Grocery	HID	Early	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1321	10	7,571	0.087	757	$100.00	10%	85%	45%	5.276	1
HealtHIE8	Healthcare	HID	Early	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1781	10	7,020	0.242	2,106	$375.00	30%	85%	85%	3.913	1
HealtHIE9	Healthcare	HID	Early	9	Photocell dimming control	No prior dimming control	Photocell	$0.1567	10	7,020	0.403	3,510	$550.00	50%	85%	85%	4.447	1
HealtHIE10	Healthcare	HID	Early	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1425	10	7,020	0.081	702	$100.00	10%	85%	45%	4.892	1
InstiHIE8	Institutional	HID	Early	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.3642	10	3,432	0.118	1,030	$375.00	30%	85%	85%	1.913	1
InstiHIE9	Institutional	HID	Early	9	Photocell dimming control	No prior dimming control	Photocell	$0.3205	10	3,432	0.197	1,716	$550.00	50%	85%	85%	2.174	1
InstiHIE10	Institutional	HID	Early	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.2914	10	3,432	0.039	343	$100.00	10%	85%	45%	2.392	1
OfficHIE8	Office	HID	Early	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.3424	10	3,650	0.126	1,095	$375.00	30%	85%	85%	2.035	1
OfficHIE9	Office	HID	Early	9	Photocell dimming control	No prior dimming control	Photocell	$0.3013	10	3,650	0.210	1,825	$550.00	50%	85%	85%	2.313	1
OfficHIE10	Office	HID	Early	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.2739	10	3,650	0.042	365	$100.00	10%	85%	45%	2.544	1
RestaHIE8	Restaurant	HID	Early	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2201	10	5,678	0.196	1,704	$375.00	30%	85%	85%	3.166	1
RestaHIE9	Restaurant	HID	Early	9	Photocell dimming control	No prior dimming control	Photocell	$0.1937	10	5,678	0.326	2,839	$550.00	50%	85%	85%	3.597	1
RestaHIE10	Restaurant	HID	Early	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1761	10	5,678	0.065	568	$100.00	10%	85%	45%	3.957	1
RetaiHIE8	Retail	HID	Early	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2284	10	5,473	0.189	1,642	$375.00	30%	85%	85%	3.051	1
RetaiHIE9	Retail	HID	Early	9	Photocell dimming control	No prior dimming control	Photocell	$0.2010	10	5,473	0.314	2,737	$550.00	50%	85%	85%	3.467	1
RetaiHIE10	Retail	HID	Early	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1827	10	5,473	0.063	547	$100.00	10%	85%	45%	3.814	1
MiscHIE8	Misc	HID	Early	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2256	10	5,540	0.191	1,662	$375.00	30%	85%	85%	3.088	1
MiscHIE9	Misc	HID	Early	9	Photocell dimming control	No prior dimming control	Photocell	$0.1986	10	5,540	0.318	2,770	$550.00	50%	85%	85%	3.509	1
MiscHIE10	Misc	HID	Early	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1805	10	5,540	0.064	554	$100.00	10%	85%	45%	3.860	1
LodgiHIE8	Lodging	HID	Early	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1946	10	6,423	0.221	1,927	$375.00	30%	85%	85%	3.581	1
LodgiHIE9	Lodging	HID	Early	9	Photocell dimming control	No prior dimming control	Photocell	$0.1713	10	6,423	0.369	3,212	$550.00	50%	85%	85%	4.069	1
LodgiHIE10	Lodging	HID	Early	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1557	10	6,423	0.074	642	$100.00	10%	85%	45%	4.476	1
LodgiHIT8	Lodging	HID	Turnover	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1427	10	6,423	0.221	1,927	$275.00	30%	85%	85%	4.883	1
LodgiHIT9	Lodging	HID	Turnover	9	Photocell dimming control	No prior dimming control	Photocell	$0.1713	10	6,423	0.369	3,212	$550.00	50%	85%	85%	4.069	1
LodgiHIT10	Lodging	HID	Turnover	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1168	10	6,423	0.074	642	$75.00	10%	85%	45%	5.968	1
GroceHIT8	Grocery	HID	Turnover	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1211	10	7,571	0.261	2,271	$275.00	30%	85%	85%	5.756	1
GroceHIT9	Grocery	HID	Turnover	9	Photocell dimming control	No prior dimming control	Photocell	$0.1453	10	7,571	0.435	3,786	$550.00	50%	85%	85%	4.796	1
GroceHIT10	Grocery	HID	Turnover	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.0991	10	7,571	0.087	757	$75.00	10%	85%	45%	7.035	1
HealtHIT8	Healthcare	HID	Turnover	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1306	10	7,020	0.242	2,106	$275.00	30%	85%	85%	5.337	1
HealtHIT9	Healthcare	HID	Turnover	9	Photocell dimming control	No prior dimming control	Photocell	$0.1567	10	7,020	0.403	3,510	$550.00	50%	85%	85%	4.447	1
HealtHIT10	Healthcare	HID	Turnover	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1068	10	7,020	0.081	702	$75.00	10%	85%	45%	6.522	1
InstiHIT8	Institutional	HID	Turnover	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2671	10	3,432	0.118	1,030	$275.00	30%	85%	85%	2.609	1
InstiHIT9	Institutional	HID	Turnover	9	Photocell dimming control	No prior dimming control	Photocell	$0.3205	10	3,432	0.197	1,716	$550.00	50%	85%	85%	2.174	1
InstiHIT10	Institutional	HID	Turnover	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.2185	10	3,432	0.039	343	$75.00	10%	85%	45%	3.189	1
OfficHIT8	Office	HID	Turnover	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2511	10	3,650	0.126	1,095	$275.00	30%	85%	85%	2.775	1
OfficHIT9	Office	HID	Turnover	9	Photocell dimming control	No prior dimming control	Photocell	$0.3013	10	3,650	0.210	1,825	$550.00	50%	85%	85%	2.313	1
OfficHIT10	Office	HID	Turnover	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.2055	10	3,650	0.042	365	$75.00	10%	85%	45%	3.392	1
MiscHIT8	Misc	HID	Turnover	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1655	10	5,540	0.191	1,662	$275.00	30%	85%	85%	4.211	1
MiscHIT9	Misc	HID	Turnover	9	Photocell dimming control	No prior dimming control	Photocell	$0.1986	10	5,540	0.318	2,770	$550.00	50%	85%	85%	3.509	1
MiscHIT10	Misc	HID	Turnover	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1354	10	5,540	0.064	554	$75.00	10%	85%	45%	5.147	1
RestaHIT8	Restaurant	HID	Turnover	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1614	10	5,678	0.196	1,704	$275.00	30%	85%	85%	4.317	1
RestaHIT9	Restaurant	HID	Turnover	9	Photocell dimming control	No prior dimming control	Photocell	$0.1937	10	5,678	0.326	2,839	$550.00	50%	85%	85%	3.597	1
RestaHIT10	Restaurant	HID	Turnover	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1321	10	5,678	0.065	568	$75.00	10%	85%	45%	5.276	1

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Fla
RetaiHIT8	Retail	HID	Turnover	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1675	10	5,473	0.189	1,642	$275.00	30%	85%	85%	4.161	1
RetaiHIT9	Retail	HID	Turnover	9	Photocell dimming control	No prior dimming control	Photocell	$0.2010	10	5,473	0.314	2,737	$550.00	50%	85%	85%	3.467	1
RetaiHIT10	Retail	HID	Turnover	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1370	10	5,473	0.063	547	$75.00	10%	85%	45%	5.085	1
WarehHIT8	Warehouse	HID	Turnover	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1808	10	5,070	0.175	1,521	$275.00	30%	85%	85%	3.854	1
WarehHIT9	Warehouse	HID	Turnover	9	Photocell dimming control	No prior dimming control	Photocell	$0.2170	10	5,070	0.291	2,535	$550.00	50%	85%	85%	3.212	1
WarehHIT10	Warehouse	HID	Turnover	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1479	10	5,070	0.058	507	$75.00	10%	85%	45%	4.711	1
WarehHIN8	Warehouse	HID	New	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1781	10	4,680	0.161	1,404	$250.00	30%	85%	85%	3.913	1
WarehHIN9	Warehouse	HID	New	9	Photocell dimming control	No prior dimming control	Photocell	$0.1923	10	4,680	0.269	2,340	$450.00	50%	85%	85%	3.624	1
WarehHIN10	Warehouse	HID	New	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1389	10	4,680	0.054	468	$65.00	10%	25%	45%	5.017	1
GroceHIN8	Grocery	HID	New	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1192	10	6,989	0.241	2,097	$250.00	30%	85%	85%	5.844	1
GroceHIN9	Grocery	HID	New	9	Photocell dimming control	No prior dimming control	Photocell	$0.1288	10	6,989	0.402	3,494	$450.00	50%	85%	85%	5.411	1
GroceHIN10	Grocery	HID	New	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.0930	10	6,989	0.080	699	$65.00	10%	25%	45%	7.492	1
HealtHIN8	Healthcare	HID	New	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1286	10	6,480	0.223	1,944	$250.00	30%	85%	85%	5.419	1
HealtHIN9	Healthcare	HID	New	9	Photocell dimming control	No prior dimming control	Photocell	$0.1389	10	6,480	0.372	3,240	$450.00	50%	85%	85%	5.017	1
HealtHIN10	Healthcare	HID	New	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1003	10	6,480	0.074	648	$65.00	10%	25%	45%	6.947	1
InstiHIN8	Institutional	HID	New	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2630	10	3,168	0.109	950	$250.00	30%	85%	85%	2.649	1
InstiHIN9	Institutional	HID	New	9	Photocell dimming control	No prior dimming control	Photocell	$0.2841	10	3,168	0.182	1,584	$450.00	50%	85%	85%	2.453	1
InstiHIN10	Institutional	HID	New	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.2052	10	3,168	0.036	317	$65.00	10%	25%	45%	3.396	1
LodgiHIN8	Lodging	HID	New	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1405	10	5,929	0.204	1,779	$250.00	30%	85%	85%	4.958	1
LodgiHIN9	Lodging	HID	New	9	Photocell dimming control	No prior dimming control	Photocell	$0.1518	10	5,929	0.341	2,965	$450.00	50%	85%	85%	4.591	1
LodgiHIN10	Lodging	HID	New	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1096	10	5,929	0.068	593	$65.00	10%	25%	45%	6.357	1
OfficHIN8	Office	HID	New	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2473	10	3,370	0.116	1,011	$250.00	30%	85%	85%	2.818	1
OfficHIN9	Office	HID	New	9	Photocell dimming control	No prior dimming control	Photocell	$0.2671	10	3,370	0.194	1,685	$450.00	50%	85%	85%	2.609	1
OfficHIN10	Office	HID	New	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1929	10	3,370	0.039	337	$65.00	10%	25%	45%	3.612	1
RestaHIN8	Restaurant	HID	New	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1590	10	5,242	0.181	1,572	$250.00	30%	85%	85%	4.383	1
RestaHIN9	Restaurant	HID	New	9	Photocell dimming control	No prior dimming control	Photocell	$0.1717	10	5,242	0.301	2,621	$450.00	50%	85%	85%	4.058	1
RestaHIN10	Restaurant	HID	New	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1240	10	5,242	0.060	524	$65.00	10%	25%	45%	5.619	1
RetaiHIN8	Retail	HID	New	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1650	10	5,052	0.174	1,516	$250.00	30%	85%	85%	4.225	1
RetaiHIN9	Retail	HID	New	9	Photocell dimming control	No prior dimming control	Photocell	$0.1781	10	5,052	0.290	2,526	$450.00	50%	85%	85%	3.912	1
RetaiHIN10	Retail	HID	New	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1287	10	5,052	0.058	505	$65.00	10%	25%	45%	5.416	1
miscHIN8	misc	HID	New	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1630	10	5,114	0.176	1,534	$250.00	30%	85%	85%	4.276	1
MiscHIN9	Misc	HID	New	9	Photocell dimming control	No prior dimming control	Photocell	$0.1760	10	5,114	0.294	2,557	$450.00	50%	85%	85%	3.959	1
MiscHIN10	Misc	HID	New	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1271	10	5,114	0.059	511	$65.00	10%	25%	45%	5.482	1
OfficInN3	Office	Incandescent	New	3	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0464	14	3,594	0.124	1,078	$50.00	30%	95%	15%	20.211	1
OfficInN4	Office	Incandescent	New	4	Photocell dimming control	No prior dimming control	Photocell	$0.0835	9	3,594	0.207	1,797	$150.00	50%	95%	95%	7.577	1
OfficInT2	Office	Incandescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1159	14	3,594	0.124	1,078	$125.00	30%	95%	80%	8.084	1
OfficInT3	Office	Incandescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.1252	9	3,594	0.207	1,797	$225.00	50%	95%	95%	5.051	1
GroceInN3	Grocery	Incandescent	New	3	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0224	14	7,455	0.257	2,236	$50.00	30%	95%	15%	41.918	1
GroceInT2	Grocery	Incandescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0559	14	7,455	0.257	2,236	$125.00	30%	95%	80%	16.767	1
HealtInT2	Healthcare	Incandescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0603	14	6,912	0.238	2,074	$125.00	30%	95%	80%	15.547	1
GroceInN4	Grocery	Incandescent	New	4	Photocell dimming control	No prior dimming control	Photocell	$0.0402	9	7,455	0.428	3,727	$150.00	50%	95%	95%	15.714	1
HealtInN3	Healthcare	Incandescent	New	3	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0241	14	6,912	0.238	2,074	$50.00	30%	95%	15%	38.867	1
GroceInT3	Grocery	Incandescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.0604	9	7,455	0.428	3,727	$225.00	50%	95%	95%	10.476	1
HealtInT3	Healthcare	Incandescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.0651	9	6,912	0.397	3,456	$225.00	50%	95%	95%	9.714	1
HealtInN4	Healthcare	Incandescent	New	4	Photocell dimming control	No prior dimming control	Photocell	$0.0434	9	6,912	0.397	3,456	$150.00	50%	95%	95%	14.570	1
InstiInN3	Institutional	Incandescent	New	3	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0493	14	3,379	0.117	1,014	$50.00	30%	95%	15%	19.001	1
InstiInN4	Institutional	Incandescent	New	4	Photocell dimming control	No prior dimming control	Photocell	$0.0888	9	3,379	0.194	1,690	$150.00	50%	95%	95%	7.123	1
InstiInT2	Institutional	Incandescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1233	14	3,379	0.117	1,014	$125.00	30%	95%	80%	7.601	1
InstiInT3	Institutional	Incandescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.1332	9	3,379	0.194	1,690	$225.00	50%	95%	95%	4.749	1
LodgInN3	Lodging	Incandescent	New	3	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0264	14	6,324	0.218	1,897	$50.00	30%	95%	15%	35.563	1
LodgInN4	Lodging	Incandescent	New	4	Photocell dimming control	No prior dimming control	Photocell	$0.0474	9	6,324	0.363	3,162	$150.00	50%	95%	95%	13.332	1
LodgInT2	Lodging	Incandescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0659	14	6,324	0.218	1,897	$125.00	30%	95%	80%	14.225	1
LodgInT3	Lodging	Incandescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.0712	9	6,324	0.363	3,162	$225.00	50%	95%	95%	8.888	1
RestaInN3	Restaurant	Incandescent	New	3	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0298	14	5,591	0.193	1,677	$50.00	30%	95%	15%	31.439	1
RestaInN4	Restaurant	Incandescent	New	4	Photocell dimming control	No prior dimming control	Photocell	$0.0537	9	5,591	0.321	2,796	$150.00	50%	95%	95%	11.786	1
RestaInT2	Restaurant	Incandescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0745	14	5,591	0.193	1,677	$125.00	30%	95%	80%	12.576	1
RestaInT3	Restaurant	Incandescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.0805	9	5,591	0.321	2,796	$225.00	50%	95%	95%	7.857	1
RetaiInN3	Retail	Incandescent	New	3	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0309	14	5,389	0.186	1,617	$50.00	30%	95%	15%	30.302	1
RetaiInN4	Retail	Incandescent	New	4	Photocell dimming control	No prior dimming control	Photocell	$0.0557	9	5,389	0.310	2,694	$150.00	50%	95%	95%	11.360	1
RetaiInT2	Retail	Incandescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0773	14	5,389	0.186	1,617	$125.00	30%	95%	80%	12.121	1
RetaiInT3	Retail	Incandescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.0835	9	5,389	0.310	2,694	$225.00	50%	95%	95%	7.573	1
WarehInN3	Warehouse	Incandescent	New	3	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0334	14	4,992	0.172	1,498	$50.00	30%	95%	15%	28.070	1
WarehInN4	Warehouse	Incandescent	New	4	Photocell dimming control	No prior dimming control	Photocell	$0.0601	9	4,992	0.287	2,496	$150.00	50%	95%	95%	10.523	1
WarehInT2	Warehouse	Incandescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0835	14	4,992	0.172	1,498	$125.00	30%	95%	80%	11.228	1
WarehInT3	Warehouse	Incandescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.0901	9	4,992	0.287	2,496	$225.00	50%	95%	95%	7.015	1
MiscInN3	Misc	Incandescent	New	3	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0306	14	5,455	0.188	1,636	$50.00	30%	95%	15%	30.671	1
MiscInN4	Misc	Incandescent	New	4	Photocell dimming control	No prior dimming control	Photocell	$0.0550	9	5,455	0.313	2,727	$150.00	50%	95%	95%	11.498	1
MiscInT2	Misc	Incandescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0764	14	5,455	0.188	1,636	$125.00	30%	95%	80%	12.269	1
MiscInT3	Misc	Incandescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.0825	9	5,455	0.313	2,727	$225.00	50%	95%	95%	7.665	1
GroceInT4	Grocery	Incandescent	Turnover	4	LED Lamp - 12 Watt	EISA - 60 Watt equivalent - 43W	Lamp	$0.1329	5	250	0.021	181	$23.99	72%	75%	50%	2.590	1
HealtInT4	Healthcare	Incandescent	Turnover	4	LED Lamp - 12 Watt	EISA - 60 Watt equivalent - 43W	Lamp	$0.1433	5	232	0.019	167	$23.99	72%	75%	50%	2.401	1
GroceInT5	Grocery	Incandescent	Turnover	5	LED Lamp PAR - 12 Watt	Halogen PAR - 45 W	Lamp	$0.1908	5	262	0.021	181	$34.45	69%	75%	90%	1.803	1
HealtInT5	Healthcare	Incandescent	Turnover	5	LED Lamp PAR - 12 Watt	Halogen PAR - 45 W	Lamp	$0.2058	5	243	0.019	167	$34.45	69%	75%	90%	1.672	1
InstiInT1	Institutional	Incandescent	Turnover	1	CFL Lamp - 21 Watt	EISA - 75 Watt equivalent - 53W	Lamp	$0.0355	5	140	0.010	84	$3.00	60%	75%	50%	9.690	1
InstiInT4	Institutional	Incandescent	Turnover	4	LED Lamp - 12 Watt	EISA - 60 Watt equivalent - 43W	Lamp	$0.2931	5	114	0.009	82	$23.99	72%	75%	50%	1.174	1
InstiInT5	Institutional	Incandescent	Turnover	5	LED Lamp PAR - 12 Watt	Halogen PAR - 45 W	Lamp	$0.4209	5	119	0.009	82	$34.45	69%	75%	90%	0.817	0
LodgInT1	Lodging	Incandescent	Turnover	1	CFL Lamp - 21 Watt	EISA - 75 Watt equivalent - 53W	Lamp	$0.0190	5	262	0.018	158	$3.00	60%	75%	50%	18.135	1
LodgInT4	Lodging	Incandescent	Turnover	4	LED Lamp - 12 Watt	EISA - 60 Watt equivalent - 43W	Lamp	$0.1566	5	212	0.018	153	$23.99	72%	75%	50%	2.197	1
LodgInT5	Lodging	Incandescent	Turnover	5	LED Lamp PAR - 12 Watt	Halogen PAR - 45 W	Lamp	$0.2249	5	222	0.018	153	$34.45	69%	75%	90%	1.530	1
OfficInT1	Office	Incandescent	Turnover	1	CFL Lamp - 21 Watt	EISA - 75 Watt equivalent - 53W	Lamp	$0.0334	5	149	0.010	90	$3.00	60%	75%	50%	10.306	1
OfficInT4	Office	Incandescent	Turnover	4	LED Lamp - 12 Watt	EISA - 60 Watt equivalent - 43W	Lamp	$0.2756	5	121	0.010	87	$23.99	72%	75%	50%	1.249	1
OfficInT5	Office	Incandescent	Turnover	5	LED Lamp PAR - 12 Watt	Halogen PAR - 45 W	Lamp	$0.3958	5	126	0.010	87	$34.45	69%	75%	90%	0.869	0
RestaInT1	Restaurant	Incandescent	Turnover	1	CFL Lamp - 21 Watt	EISA - 75 Watt equivalent - 53W	Lamp	$0.0215	5	232	0.016	140	$3.00	60%	75%	50%	16.032	1
RestaInT4	Restaurant	Incandescent	Turnover	4	LED Lamp - 12 Watt	EISA - 60 Watt equivalent - 43W	Lamp	$0.1772	5	188	0.016	135	$23.99	72%	75%	50%	1.942	1
RestaInT5	Restaurant	Incandescent	Turnover	5	LED Lamp PAR - 12 Watt	Halogen PAR - 45 W	Lamp	$0.2544	5	197	0.016	135	$34.45	69%	75%	90%	1.352	1
RetaiInT1	Retail	Incandescent	Turnover	1	CFL Lamp - 21 Watt	EISA - 75 Watt equivalent - 53W	Lamp	$0.0223	5	223	0.015	135	$3.00	60%	75%	50%	15.452	1
RetaiInT4	Retail	Incandescent	Turnover	4	LED Lamp - 12 Watt	EISA - 60 Watt equivalent - 43W	Lamp	$0.1838	5	181	0.015	131	$23.99	72%	75%	50%	1.872	1
RetaiInT5	Retail	Incandescent	Turnover	5	LED Lamp PAR - 12 Watt	Halogen PAR - 45 W	Lamp	$0.2640	5	189	0.015	131	$34.45	69%	75%	90%	1.304	1
miscInT1	misc	Incandescent	Turnover	1	CFL Lamp - 21 Watt	EISA - 75 Watt equivalent - 53W	Lamp	$0.0220	5	226	0.016	136	$3.00	60%	75%	50%	15.640	1
miscInT4	misc	Incandescent	Turnover	4	LED Lamp - 12 Watt	EISA - 60 Watt equivalent - 43W	Lamp	$0.1816	5	183	0.015	132	$23.99	72%	75%	50%	1.895	1
miscInT5	misc	Incandescent	Turnover	5	LED Lamp PAR - 12 Watt	Halogen PAR - 45 W	Lamp	$0.2608	5	192	0.015	132	$34.45	69%	75%	90%	1.319	1
WarehInT1	Warehouse	Incandescent	Turnover	1	CFL Lamp - 21 Watt	EISA - 75 Watt equivalent - 53W	Lamp	$0.0240	5	207	0.014	125	$3.00	60%	75%	50%	14.314	1
WarehInT4	Warehouse	Incandescent	Turnover	4	LED Lamp - 12 Watt	EISA - 60 Watt equivalent - 43W	Lamp	$0.1984	5	168	0.014	121	$23.99	72%	75%	50%	1.734	1
WarehInT5	Warehouse	Incandescent	Turnover	5	LED Lamp PAR - 12 Watt	Halogen PAR - 45 W	Lamp	$0.2849	5	176	0.014	121	$34.45	69%	75%	90%	1.208	1

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Fla
LodgiInN6	Lodging	Incandescent	New	6	Hotel Occupancy Sensors	No prior control	Per Room	$0.4468	10	240	0.019	168	$75.00	70%	90%	95%	1.560	1
LodgiInT6	Lodging	Incandescent	Turnover	6	Hotel Occupancy Sensors	No prior control	Per Room	$0.5957	10	240	0.019	168	$100.00	70%	90%	95%	1.170	1
AllSiN1	All	Signage	New	1	Induction Street Lighting	Base HID Streetlighting	Fixture	$0.54	15	2,762	0.101	1,619	$875.00	59%	95%	95%	1.756	1
AllSiN2	All	Signage	New	2	LED or equivalent sign lighting	Replace fluorescent sign lighting	Exit Sign	$0.58	15	52	0.002	30	$17.36	58%	95%	7%	1.632	1
AllSiN3	All	Signage	New	3	LED Street Lighting	Std HID Street Lighting	Pole	$0.56	15	3,023	0.047	756	$425.00	25%	95%	95%	1.687	1
AllSiE1	All	Signage	Early	1	Dusk to Dawn	Time Clock Control	Pole	$0.17	15	3,023	0.076	1,209	$200.00	40%	95%	50%	5.736	1
OfficMoT22	Office	Motors	Turnover	22	Air Comp Improvements			$0.11	15	56148	1.148	8,928	$990.00	16%	28%	65%	9.050	1
OfficMoE2	Office	Motors	Early	2	Air Compressor Optimization			$0.16	15	56148	2.174	16,901	$2,750.00	30%	38%	65%	6.168	1
GroceMoE1	Grocery	Motors	Early	1	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.824	1
AllOtT1	All	Other	Turnover	1	Motor Improvements Bundle - Industrial Model	No Motor Improvements	Motor	$0.48	14	10000	0.128	1,092	$522.00	11%	90%	95%	1.963	1
AllOtT2	All	Other	Turnover	2	EE Transformer - CSL 3	NEMA Transformer - 75W	Motor	$0.60	15	4197	0.187	1,595	$950.00	23%	90%	95%	1.670	1
AllOtN1	All	Other	New	1	EE Transformer - CSL 3	NEMA Transformer - 75W	Motor	$0.60	15	4197	0.187	1,595	$950.00	23%	90%	95%	1.670	1
AllReN26	All	Refrigeration	New	26	Anti-sweat heat (ASH) controls - Freezer	ASH without controls	Per Door	$0.16	12	2,985	0.029	1,882	$300.00	63%	95%	85%	4.799	1
AllReN27	All	Refrigeration	New	27	Anti-sweat heat (ASH) controls - Cooler	ASH without controls	Per Door	$0.29	12	1,621	0.028	1,023	$300.00	63%	95%	85%	2.630	1
GroceMoN1	Grocery	Motors	New	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1015	15	15384	0.0282	139.5	$154	0.91%	74.4%	100%	0.954	0
GroceMoN2	Grocery	Motors	New	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.1901	15	58940	0.0231	437.7	$521	0.74%	74.4%	100%	0.802	0
GroceMoN3	Grocery	Motors	New	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0693	15	144688	0.0138	644.1	$689	0.45%	66.3%	100%	0.874	0
GroceMoN4	Grocery	Motors	New	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4499	15	290922	0.0121	1135.2	$511	0.39%	55.8%	100%	2.063	1
GroceMoN5	Grocery	Motors	New	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-500 HP	Motor	$0.3775	15	624328	0.0284	5711.1	$2,156	0.91%	55.8%	100%	2.449	1
GroceMoN6	Grocery	Motors	New	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant sped control	Motor	$0.5635	15	97600	2.511	19,520	$11,000.00	20%	55.0%	100%	1.781	1
GroceMoN7	Grocery	Motors	New	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.5573	15	97600	12.213	23326.3	$13,000.00	24%	70.0%	100%	2.254	1
GroceMoN8	Grocery	Motors	New	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4844	15	97600	0.000	26839.9	$13,000.00	28%	80.0%	100%	1.902	1
GroceMoN9	Grocery	Motors	New	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5573	15	97600	12.213	23326.3	$13,000.00	24%	70.0%	100%	2.254	1
GroceMoN10	Grocery	Motors	New	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4826	15	97600	9.205	26937.5	$13,000.00	28%	55.0%	100%	2.362	1
GroceMoN11	Grocery	Motors	New	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5573	15	97600	12.213	23326.3	$13,000.00	24%	30.0%	100%	2.254	1
GroceMoT1	Grocery	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1015	15	15384	0.0282	139.5	$154	0.91%	74.4%	100%	0.954	0
GroceMoT2	Grocery	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.1901	15	58940	0.0231	437.7	$521	0.74%	74.4%	100%	0.802	0
GroceMoT3	Grocery	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0693	15	144688	0.0138	644.1	$689	0.45%	66.3%	100%	0.874	0
GroceMoT4	Grocery	Motors	Turnover	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4499	15	290922	0.0121	1135.2	$511	0.39%	55.8%	100%	2.063	1
GroceMoT5	Grocery	Motors	Turnover	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-250 HP	Motor	$0.3775	15	624328	0.0284	5711.1	$2,156	0.91%	55.8%	100%	2.449	1
GroceMoT6	Grocery	Motors	Turnover	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant sped control	Motor	$0.5635	15	97600	2.511	19,520	$11,000.00	20%	55.0%	80%	1.781	1
GroceMoT7	Grocery	Motors	Turnover	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.5573	15	97600	12.213	23326.3	$13,000.00	24%	90.0%	80%	2.254	1
GroceMoT8	Grocery	Motors	Turnover	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4844	15	97600	0.000	26839.9	$13,000.00	28%	90.0%	80%	1.902	1
GroceMoT9	Grocery	Motors	Turnover	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5573	15	97600	12.213	23326.3	$13,000.00	24%	90.0%	80%	2.254	1
GroceMoT10	Grocery	Motors	Turnover	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4826	15	97600	9.205	26937.5	$13,000.00	28%	80.0%	80%	2.362	1
GroceMoT11	Grocery	Motors	Turnover	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5573	15	97600	12.213	23326.3	$13,000.00	24%	55.0%	80%	2.254	1
GroceMoT12	Grocery	Motors	Turnover	12	Motors: Rewind 125-200 HP	(E) Motor	Motor	$0.5097	15	292799	0.189	1471.4	$750	0.5%	35.0%	95%	1.969	1
GroceMoT13	Grocery	Motors	Turnover	13	Motors: Rewind 201-500 HP	(E) Motor	Motor	$0.6274	15	634398	0.410	3187.9	$2,000	0.5%	50.0%	95%	1.600	1
GroceMoT14	Grocery	Motors	Turnover	14	Motors: Rewind 20-50 HP	(E) Motor	Motor	$0.4704	15	59847	0.068	531.4	$250	0.9%	10.0%	95%	2.133	1
GroceMoT15	Grocery	Motors	Turnover	15	Motors: Rewind 500+ HP	(E) Motor	Motor	$0.5437	15	1463995	0.946	7356.8	$4,000	0.5%	70.0%	95%	1.846	1
GroceMoT16	Grocery	Motors	Turnover	16	Motors: Rewind 51-100 HP	(E) Motor	Motor	$0.5841	15	147991	0.110	856.0	$500	0.6%	20.0%	95%	1.718	1
GroceMoT17	Grocery	Motors	Turnover	17	Downsizing motor during retrofit	Larger hp standard motor	HP Reduction	$0.34	20	186,404	0.190	1,477	$500.00	0.79%	25%	95%	3.727	1
GroceMoN12	Grocery	Motors	New	12	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	3.710	1
GroceMoN13	Grocery	Motors	New	13	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.043	0
GroceMoN14	Grocery	Motors	New	14	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	4.690	1
GroceMoN15	Grocery	Motors	New	15	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.884	0
GroceMoT18	Grocery	Motors	Turnover	18	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	3.710	1
GroceMoT19	Grocery	Motors	Turnover	19	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.043	0
GroceMoT20	Grocery	Motors	Turnover	20	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	4.690	1
GroceMoT21	Grocery	Motors	Turnover	21	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.884	0
GroceMoT22	Grocery	Motors	Turnover	22	Air Comp Improvements			$0.11	15	56148	1.148	8,928	$990.00	16%	28%	65%	9.050	1
GroceMoE2	Grocery	Motors	Early	2	Air Compressor Optimization			$0.16	15	56148	2.174	16,901	$2,750.00	30%	38%	65%	6.168	1
GroceMoT23	Grocery	Motors	Turnover	23	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.824	1
HealtMoN1	Healthcare	Motors	New	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$0.8576	15	19759	0.0282	179.2	$154	0.91%	74.4%	100%	1.191	1
HealtMoN2	Healthcare	Motors	New	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$0.9266	15	75700	0.0231	562.2	$521	0.74%	74.4%	100%	1.023	1
HealtMoN3	Healthcare	Motors	New	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$0.8325	15	185830	0.0138	827.3	$689	0.45%	66.3%	100%	1.119	1
HealtMoN4	Healthcare	Motors	New	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.3503	15	373646	0.0121	1458.0	$511	0.39%	55.8%	100%	2.645	1
HealtMoN5	Healthcare	Motors	New	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-500 HP	Motor	$0.2939	15	801855	0.0284	7335.1	$2,156	0.91%	55.8%	100%	3.143	1
HealtMoN6	Healthcare	Motors	New	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant sped control	Motor	$0.4388	15	125352	3.225	25,070	$11,000.00	20%	55.0%	100%	2.287	1
HealtMoN7	Healthcare	Motors	New	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4035	15	125352	12.213	32215.5	$13,000.00	26%	70.0%	100%	2.884	1
HealtMoN8	Healthcare	Motors	New	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.3771	15	125352	0.000	34471.8	$13,000.00	28%	80.0%	100%	2.443	1
HealtMoN9	Healthcare	Motors	New	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5034	15	125352	12.213	25822.5	$13,000.00	21%	70.0%	100%	2.431	1
HealtMoN10	Healthcare	Motors	New	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.3989	15	125352	9.205	32591.5	$13,000.00	26%	55.0%	100%	2.763	1
HealtMoN11	Healthcare	Motors	New	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.4779	15	125352	12.213	27201.4	$13,000.00	22%	30.0%	100%	2.529	1
HealtMoT1	Healthcare	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$0.8576	15	19759	0.0282	179.2	$154	0.91%	74.4%	100%	1.191	1
HealtMoT2	Healthcare	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$0.9266	15	75700	0.0231	562.2	$521	0.74%	74.4%	100%	1.023	1
HealtMoT3	Healthcare	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$0.8325	15	185830	0.0138	827.3	$689	0.45%	66.3%	100%	1.119	1
HealtMoT4	Healthcare	Motors	Turnover	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.3503	15	373646	0.0121	1458.0	$511	0.39%	55.8%	100%	2.645	1
HealtMoT5	Healthcare	Motors	Turnover	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-250 HP	Motor	$0.2939	15	801855	0.0284	7335.1	$2,156	0.91%	55.8%	100%	3.143	1
HealtMoT6	Healthcare	Motors	Turnover	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant sped control	Motor	$0.4388	15	125352	3.225	25,070	$11,000.00	20%	55.0%	80%	2.287	1
HealtMoT7	Healthcare	Motors	Turnover	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4035	15	125352	12.213	32215.5	$13,000.00	26%	90.0%	80%	2.884	1
HealtMoT8	Healthcare	Motors	Turnover	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.3771	15	125352	0.000	34471.8	$13,000.00	28%	90.0%	80%	2.443	1
HealtMoT9	Healthcare	Motors	Turnover	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5034	15	125352	12.213	25822.5	$13,000.00	21%	90.0%	80%	2.431	1
HealtMoT10	Healthcare	Motors	Turnover	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.3989	15	125352	9.205	32591.5	$13,000.00	26%	80.0%	80%	2.763	1
HealtMoT11	Healthcare	Motors	Turnover	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.4779	15	125352	12.213	27201.4	$13,000.00	22%	55.0%	80%	2.529	1
HealtMoT12	Healthcare	Motors	Turnover	12	Motors: Rewind 125-200 HP	(E) Motor	Motor	$0.3969	15	376056	0.243	1889.7	$750	0.5%	35.0%	95%	2.529	1
HealtMoT13	Healthcare	Motors	Turnover	13	Motors: Rewind 201-500 HP	(E) Motor	Motor	$0.4885	15	814788	0.527	4094.4	$2,000	0.5%	50.0%	95%	2.055	1
HealtMoT14	Healthcare	Motors	Turnover	14	Motors: Rewind 20-50 HP	(E) Motor	Motor	$0.3663	15	76864	0.088	682.5	$250	0.9%	10.0%	95%	2.740	1
HealtMoT15	Healthcare	Motors	Turnover	15	Motors: Rewind 500+ HP	(E) Motor	Motor	$0.4233	15	1880281	1.216	9448.6	$4,000	0.5%	70.0%	95%	2.371	1
HealtMoT16	Healthcare	Motors	Turnover	16	Motors: Rewind 51-100 HP	(E) Motor	Motor	$0.4548	15	190072	0.141	1099.4	$500	0.6%	20.0%	95%	2.207	1
HealtMoT17	Healthcare	Motors	Turnover	17	Downsizing motor during retrofit	Larger hp standard motor	HP Reduction	$0.34	20	186,404	0.190	1,477	$500.00	0.79%	25%	95%	3.727	1
HealtMoN12	Healthcare	Motors	New	12	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	3.710	1
HealtMoN13	Healthcare	Motors	New	13	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.043	0
HealtMoN14	Healthcare	Motors	New	14	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	4.690	1
HealtMoN15	Healthcare	Motors	New	15	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.884	0
HealtMoT18	Healthcare	Motors	Turnover	18	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	3.710	1
HealtMoT19	Healthcare	Motors	Turnover	19	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.043	0
HealtMoT20	Healthcare	Motors	Turnover	20	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	4.690	1
HealtMoT21	Healthcare	Motors	Turnover	21	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.884	0
HealtMoT22	Healthcare	Motors	Turnover	22	Air Comp Improvements			$0.11	15	56148	1.148	8,928	$990.00	16%	28%	65%	9.050	1
HealtMoE2	Healthcare	Motors	Early	2	Air Compressor Optimization			$0.16	15	56148	2.174	16,901	$2,750.00	30%	38%	65%	6.168	1
HealtMoE1	Healthcare	Motors	Early	1	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.824	1
InstiMoN1	Institutional	Motors	New	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.2757	15	13284	0.0282	120.5	$154	0.91%	74.4%	100%	0.839	0
InstiMoN2	Institutional	Motors	New	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.3783	15	50893	0.0231	377.9	$521	0.74%	74.4%	100%	0.697	0

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Fla
InstiMoN3	Institutional	Motors	New	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.2384	15	124933	0.0138	556.2	$689	0.45%	66.3%	100%	0.757	0
InstiMoN4	Institutional	Motors	New	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.5211	15	251201	0.0121	980.2	$511	0.39%	55.8%	100%	1.783	1
InstiMoN5	Institutional	Motors	New	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-500 HP	Motor	$0.4372	15	539086	0.0284	4931.3	$2,156	0.91%	55.8%	100%	2.116	1
InstiMoN6	Institutional	Motors	New	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.6526	15	84274	2.168	16,855	$11,000.00	20%	55.0%	100%	1.538	1
InstiMoN7	Institutional	Motors	New	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.5509	15	84274	13.596	23596.7	$13,000.00	28%	70.0%	100%	2.342	1
InstiMoN8	Institutional	Motors	New	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.5609	15	84274	0.000	23175.3	$13,000.00	28%	80.0%	100%	1.642	1
InstiMoN9	Institutional	Motors	New	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.6348	15	84274	13.596	20478.6	$13,000.00	24%	70.0%	100%	2.121	1
InstiMoN10	Institutional	Motors	New	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.5609	15	84274	10.318	23175.3	$13,000.00	28%	55.0%	100%	2.150	1
InstiMoN11	Institutional	Motors	New	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.6348	15	84274	13.596	20478.6	$13,000.00	24%	30.0%	100%	2.121	1
InstiMoT1	Institutional	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.2757	15	13284	0.0282	120.5	$154	0.91%	74.4%	100%	0.839	0
InstiMoT10	Institutional	Motors	Turnover	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.5609	15	84274	10.318	23175.3	$13,000.00	28%	80.0%	80%	2.150	1
InstiMoT11	Institutional	Motors	Turnover	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.6348	15	84274	13.596	20478.6	$13,000.00	24%	55.0%	80%	2.121	1
InstiMoT12	Institutional	Motors	Turnover	12	Motors: Rewind 125-200 HP	(E) Motor	Motor	$0.5903	15	252822	0.163	1270.5	$750	0.5%	35.0%	95%	1.700	1
InstiMoT13	Institutional	Motors	Turnover	13	Motors: Rewind 201-500 HP	(E) Motor	Motor	$0.7266	15	547781	0.354	2752.7	$2,000	0.5%	50.0%	95%	1.381	1
InstiMoT14	Institutional	Motors	Turnover	14	Motors: Rewind 20-50 HP	(E) Motor	Motor	$0.5448	15	51676	0.059	458.9	$250	0.9%	10.0%	95%	1.842	1
InstiMoT15	Institutional	Motors	Turnover	15	Motors: Rewind 500+ HP	(E) Motor	Motor	$0.6297	15	1264109	0.817	6352.3	$4,000	0.5%	70.0%	95%	1.594	1
InstiMoT16	Institutional	Motors	Turnover	16	Motors: Rewind 51-100 HP	(E) Motor	Motor	$0.6765	15	127785	0.095	739.1	$500	0.6%	20.0%	95%	1.484	1
InstiMoT17	Institutional	Motors	Turnover	17	Downsizing motor during retrofit	Larger hp standard motor	HP Reduction	$0.34	20	186,404	0.190	1,477	$500.00	0.79%	25%	95%	3.727	1
InstiMoT2	Institutional	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.3783	15	50893	0.0231	377.9	$521	0.74%	74.4%	100%	0.697	0
HealtMoT23	Healthcare	Motors	Turnover	23	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.824	1
InstiMoT3	Institutional	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.2384	15	124933	0.0138	556.2	$689	0.45%	66.3%	100%	0.757	0
InstiMoT4	Institutional	Motors	Turnover	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.5211	15	251201	0.0121	980.2	$511	0.39%	55.8%	100%	1.783	1
InstiMoT5	Institutional	Motors	Turnover	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-250 HP	Motor	$0.4372	15	539086	0.0284	4931.3	$2,156	0.91%	55.8%	100%	2.116	1
InstiMoT6	Institutional	Motors	Turnover	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.6526	15	84274	2.168	16,855	$11,000.00	20%	55.0%	80%	1.538	1
InstiMoT7	Institutional	Motors	Turnover	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.5509	15	84274	13.596	23596.7	$13,000.00	28%	90.0%	80%	2.342	1
InstiMoT8	Institutional	Motors	Turnover	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.5609	15	84274	0.000	23175.3	$13,000.00	28%	90.0%	80%	1.642	1
InstiMoN12	Institutional	Motors	New	12	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	3.710	1
InstiMoN13	Institutional	Motors	New	13	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.043	0
InstiMoN14	Institutional	Motors	New	14	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	4.690	1
InstiMoN15	Institutional	Motors	New	15	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.884	0
InstiMoT18	Institutional	Motors	Turnover	18	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	3.710	1
InstiMoT19	Institutional	Motors	Turnover	19	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.043	0
InstiMoT20	Institutional	Motors	Turnover	20	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	4.690	1
InstiMoT21	Institutional	Motors	Turnover	21	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.884	0
InstiMoT22	Institutional	Motors	Turnover	22	Air Comp Improvements			$0.11	15	56148	1.148	8,928	$990.00	16%	28%	65%	9.050	1
InstiMoE2	Institutional	Motors	Early	2	Air Compressor Optimization			$0.16	15	56148	2.174	16,901	$2,750.00	30%	38%	65%	6.168	1
InstiMoE1	Institutional	Motors	Early	1	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.824	1
LodgiMoN1	Lodging	Motors	New	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1114	15	15247	0.0282	138.3	$154	0.91%	74.4%	100%	0.946	0
LodgiMoN2	Lodging	Motors	New	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.2008	15	58416	0.0231	433.8	$521	0.74%	74.4%	100%	0.796	0
LodgiMoN3	Lodging	Motors	New	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0789	15	143401	0.0138	638.4	$689	0.45%	66.3%	100%	0.867	0
LodgiMoN4	Lodging	Motors	New	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4540	15	288334	0.0121	1125.1	$511	0.39%	55.8%	100%	2.044	1
LodgiMoN5	Lodging	Motors	New	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-500 HP	Motor	$0.3809	15	618773	0.0284	5660.3	$2,156	0.91%	55.8%	100%	2.427	1
LodgiMoN6	Lodging	Motors	New	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5686	15	96731	2.489	19,346	$11,000.00	20%	55.0%	100%	1.765	1
LodgiMoN7	Lodging	Motors	New	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.5116	15	96731	12.674	25408.1	$13,000.00	26%	70.0%	100%	2.425	1
LodgiMoN8	Lodging	Motors	New	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4887	15	96731	0.000	26601.1	$13,000.00	28%	80.0%	100%	1.885	1
LodgiMoN9	Lodging	Motors	New	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5707	15	96731	12.674	22780.2	$13,000.00	24%	70.0%	100%	2.238	1
LodgiMoN10	Lodging	Motors	New	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4917	15	96731	9.576	26439.9	$13,000.00	27%	55.0%	100%	2.345	1
LodgiMoN11	Lodging	Motors	New	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5663	15	96731	12.674	22957.6	$13,000.00	24%	30.0%	100%	2.251	1
LodgiMoT1	Lodging	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1114	15	15247	0.0282	138.3	$154	0.91%	74.4%	100%	0.946	0
LodgiMoT2	Lodging	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.2008	15	58416	0.0231	433.8	$521	0.74%	74.4%	100%	0.796	0
LodgiMoT3	Lodging	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0789	15	143401	0.0138	638.4	$689	0.45%	66.3%	100%	0.867	0
LodgiMoT4	Lodging	Motors	Turnover	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4540	15	288334	0.0121	1125.1	$511	0.39%	55.8%	100%	2.044	1
LodgiMoT5	Lodging	Motors	Turnover	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-250 HP	Motor	$0.3809	15	618773	0.0284	5660.3	$2,156	0.91%	55.8%	100%	2.427	1
LodgiMoT6	Lodging	Motors	Turnover	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5686	15	96731	2.489	19,346	$11,000.00	20%	55.0%	80%	1.765	1
LodgiMoT7	Lodging	Motors	Turnover	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.5116	15	96731	12.674	25408.1	$13,000.00	26%	90.0%	80%	2.425	1
LodgiMoT8	Lodging	Motors	Turnover	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4887	15	96731	0.000	26601.1	$13,000.00	28%	90.0%	80%	1.885	1
LodgiMoT9	Lodging	Motors	Turnover	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5707	15	96731	12.674	22780.2	$13,000.00	24%	90.0%	80%	2.238	1
LodgiMoT10	Lodging	Motors	Turnover	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4917	15	96731	9.576	26439.9	$13,000.00	27%	80.0%	80%	2.345	1
LodgiMoT11	Lodging	Motors	Turnover	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5663	15	96731	12.674	22957.6	$13,000.00	24%	55.0%	80%	2.251	1
LodgiMoT12	Lodging	Motors	Turnover	12	Motors: Rewind 125-200 HP	(E) Motor	Motor	$0.5143	15	290194	0.188	1458.3	$750	0.5%	35.0%	95%	1.951	1
LodgiMoT13	Lodging	Motors	Turnover	13	Motors: Rewind 201-500 HP	(E) Motor	Motor	$0.6330	15	628754	0.406	3159.6	$2,000	0.5%	50.0%	95%	1.585	1
LodgiMoT14	Lodging	Motors	Turnover	14	Motors: Rewind 20-50 HP	(E) Motor	Motor	$0.4747	15	59314	0.068	526.7	$250	0.9%	10.0%	95%	2.114	1
LodgiMoT15	Lodging	Motors	Turnover	15	Motors: Rewind 500+ HP	(E) Motor	Motor	$0.5486	15	1450970	0.938	7291.3	$4,000	0.5%	70.0%	95%	1.829	1
LodgiMoT16	Lodging	Motors	Turnover	16	Motors: Rewind 51-100 HP	(E) Motor	Motor	$0.5894	15	146674	0.109	848.4	$500	0.6%	20.0%	95%	1.703	1
LodgiMoT17	Lodging	Motors	Turnover	17	Downsizing motor during retrofit	Larger hp standard motor	HP Reduction	$0.34	20	186,404	0.190	1,477	$500.00	0.79%	25%	95%	3.727	1
LodgiMoN12	Lodging	Motors	New	12	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	3.710	1
LodgiMoN13	Lodging	Motors	New	13	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.043	0
LodgiMoN14	Lodging	Motors	New	14	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	4.690	1
LodgiMoN15	Lodging	Motors	New	15	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.884	0
LodgiMoT18	Lodging	Motors	Turnover	18	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	3.710	1
LodgiMoT19	Lodging	Motors	Turnover	19	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.043	0
LodgiMoT20	Lodging	Motors	Turnover	20	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	4.690	1
LodgiMoT21	Lodging	Motors	Turnover	21	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.884	0
LodgiMoT22	Lodging	Motors	Turnover	22	Air Comp Improvements			$0.11	15	56148	1.148	8,928	$990.00	16%	28%	65%	9.050	1
LodgiMoE2	Lodging	Motors	Early	2	Air Compressor Optimization			$0.16	15	56148	2.174	16,901	$2,750.00	30%	38%	65%	6.168	1
InstiMoT23	Institutional	Motors	Turnover	23	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.824	1
miscMoN1	misc	Motors	New	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1114	15	15247	0.0282	138.3	$154	0.91%	74.4%	100%	0.946	0
miscMoN2	misc	Motors	New	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.2008	15	58416	0.0231	433.8	$521	0.74%	74.4%	100%	0.796	0
miscMoN3	misc	Motors	New	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0789	15	143401	0.0138	638.4	$689	0.45%	66.3%	100%	0.867	0
miscMoN4	misc	Motors	New	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4540	15	288334	0.0121	1125.1	$511	0.39%	55.8%	100%	2.044	1
miscMoN5	misc	Motors	New	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-500 HP	Motor	$0.3809	15	618773	0.0284	5660.3	$2,156	0.91%	55.8%	100%	2.427	1
miscMoN6	misc	Motors	New	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5686	15	96731	2.489	19,346	$11,000.00	20%	55.0%	100%	1.765	1
miscMoN7	misc	Motors	New	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.5116	15	96731	12.674	25408.1	$13,000.00	26%	70.0%	100%	2.425	1
miscMoN8	misc	Motors	New	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4887	15	96731	0.000	26601.1	$13,000.00	28%	80.0%	100%	1.885	1
miscMoN9	misc	Motors	New	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5707	15	96731	12.674	22780.2	$13,000.00	24%	70.0%	100%	2.238	1
miscMoN10	misc	Motors	New	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4917	15	96731	9.576	26439.9	$13,000.00	27%	55.0%	100%	2.345	1
miscMoN11	misc	Motors	New	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5663	15	96731	12.674	22957.6	$13,000.00	24%	30.0%	100%	2.251	1
miscMoT1	misc	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1114	15	15247	0.0282	138.3	$154	0.91%	74.4%	100%	0.946	0
miscMoT2	misc	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.2008	15	58416	0.0231	433.8	$521	0.74%	74.4%	100%	0.796	0
miscMoT3	misc	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0789	15	143401	0.0138	638.4	$689	0.45%	66.3%	100%	0.867	0
miscMoT4	misc	Motors	Turnover	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4540	15	288334	0.0121	1125.1	$511	0.39%	55.8%	100%	2.044	1
miscMoT5	misc	Motors	Turnover	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-250 HP	Motor	$0.3809	15	618773	0.0284	5660.3	$2,156	0.91%	55.8%	100%	2.427	1
miscMoT6	misc	Motors	Turnover	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5686	15	96731	2.489	19,346	$11,000.00	20%	55.0%	80%	1.765	1
miscMoT7	misc	Motors	Turnover	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.5116	15	96731	12.674	25408.1	$13,000.00	26%	90.0%	80%	2.425	1

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Fla
miscMoT8	misc	Motors	Turnover	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4887	15	96731	0.000	26601.1	$13,000.00	28%	90.0%	80%	1.885	1
miscMoT9	misc	Motors	Turnover	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5707	15	96731	12.674	22780.2	$13,000.00	24%	90.0%	80%	2.238	1
miscMoT10	misc	Motors	Turnover	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4917	15	96731	9.576	26439.9	$13,000.00	27%	80.0%	80%	2.345	1
miscMoT11	misc	Motors	Turnover	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5663	15	96731	12.674	22957.6	$13,000.00	24%	55.0%	80%	2.251	1
miscMoT12	misc	Motors	Turnover	12	Motors: Rewind 125-200 HP	(E) Motor	Motor	$0.5143	15	290194	0.188	1458.3	$750	0.5%	35.0%	95%	1.951	1
miscMoT13	misc	Motors	Turnover	13	Motors: Rewind 201-500 HP	(E) Motor	Motor	$0.6330	15	628754	0.406	3159.6	$2,000	0.5%	50.0%	95%	1.585	1
miscMoT14	misc	Motors	Turnover	14	Motors: Rewind 20-50 HP	(E) Motor	Motor	$0.4747	15	59314	0.068	526.7	$250	0.9%	10.0%	95%	2.114	1
miscMoT15	misc	Motors	Turnover	15	Motors: Rewind 500+ HP	(E) Motor	Motor	$0.5486	15	1450970	0.938	7291.3	$4,000	0.5%	70.0%	95%	1.829	1
miscMoT16	misc	Motors	Turnover	16	Motors: Rewind 51-100 HP	(E) Motor	Motor	$0.5894	15	146674	0.109	848.4	$500	0.6%	20.0%	95%	1.703	1
miscMoT17	misc	Motors	Turnover	17	Downsizing motor during retrofit	Larger hp standard motor	HP Reduction	$0.34	20	186,404	0.190	1,477	$500.00	0.79%	25%	95%	3.727	1
miscMoN12	misc	Motors	New	12	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	3.710	1
miscMoN13	misc	Motors	New	13	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.043	0
miscMoN14	misc	Motors	New	14	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	4.690	1
miscMoN15	misc	Motors	New	15	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.884	0
miscMoT18	misc	Motors	Turnover	18	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	3.710	1
miscMoT19	misc	Motors	Turnover	19	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.043	0
miscMoT20	misc	Motors	Turnover	20	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	4.690	1
miscMoT21	misc	Motors	Turnover	21	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.884	0
miscMoT22	misc	Motors	Turnover	22	Air Comp Improvements			$0.11	15	56148	1.148	8,928	$990.00	16%	28%	65%	9.050	1
miscMoE2	misc	Motors	Early	2	Air Compressor Optimization			$0.16	15	56148	2.174	16,901	$2,750.00	30%	38%	65%	6.168	1
LodgiMoE1	Lodging	Motors	Early	1	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.824	1
RetaiMoN1	Retail	Motors	New	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1015	15	15384	0.0282	139.5	$154	0.91%	74.4%	100%	0.954	0
RetaiMoN2	Retail	Motors	New	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.1901	15	58940	0.0231	437.7	$521	0.74%	74.4%	100%	0.802	0
RetaiMoN3	Retail	Motors	New	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0693	15	144688	0.0138	644.1	$689	0.45%	66.3%	100%	0.874	0
RetaiMoN4	Retail	Motors	New	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4499	15	290922	0.0121	1135.2	$511	0.39%	55.8%	100%	2.063	1
RetaiMoN5	Retail	Motors	New	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-500 HP	Motor	$0.3775	15	624328	0.0284	5711.1	$2,156	0.91%	55.8%	100%	2.449	1
RetaiMoN6	Retail	Motors	New	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5635	15	97600	2.511	19,520	$11,000.00	20%	55.0%	100%	1.781	1
RetaiMoN7	Retail	Motors	New	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.5573	15	97600	12.213	23326.3	$13,000.00	24%	70.0%	100%	2.254	1
RetaiMoN8	Retail	Motors	New	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4844	15	97600	0.000	26839.9	$13,000.00	28%	80.0%	100%	1.902	1
RetaiMoN9	Retail	Motors	New	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5573	15	97600	12.213	23326.3	$13,000.00	24%	70.0%	100%	2.254	1
RetaiMoN10	Retail	Motors	New	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4826	15	97600	9.205	26937.5	$13,000.00	28%	55.0%	100%	2.362	1
RetaiMoN11	Retail	Motors	New	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5573	15	97600	12.213	23326.3	$13,000.00	24%	30.0%	100%	2.254	1
RetaiMoT1	Retail	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1015	15	15384	0.0282	139.5	$154	0.91%	74.4%	100%	0.954	0
RetaiMoT2	Retail	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.1901	15	58940	0.0231	437.7	$521	0.74%	74.4%	100%	0.802	0
RetaiMoT3	Retail	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0693	15	144688	0.0138	644.1	$689	0.45%	66.3%	100%	0.874	0
RetaiMoT4	Retail	Motors	Turnover	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4499	15	290922	0.0121	1135.2	$511	0.39%	55.8%	100%	2.063	1
RetaiMoT5	Retail	Motors	Turnover	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-250 HP	Motor	$0.3775	15	624328	0.0284	5711.1	$2,156	0.91%	55.8%	100%	2.449	1
RetaiMoT6	Retail	Motors	Turnover	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5635	15	97600	2.511	19,520	$11,000.00	20%	55.0%	80%	1.781	1
RetaiMoT7	Retail	Motors	Turnover	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.5573	15	97600	12.213	23326.3	$13,000.00	24%	90.0%	80%	2.254	1
RetaiMoT8	Retail	Motors	Turnover	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4844	15	97600	0.000	26839.9	$13,000.00	28%	90.0%	80%	1.902	1
RetaiMoT9	Retail	Motors	Turnover	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5573	15	97600	12.213	23326.3	$13,000.00	24%	90.0%	80%	2.254	1
RetaiMoT10	Retail	Motors	Turnover	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4826	15	97600	9.205	26937.5	$13,000.00	28%	80.0%	80%	2.362	1
RetaiMoT11	Retail	Motors	Turnover	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5573	15	97600	12.213	23326.3	$13,000.00	24%	55.0%	80%	2.254	1
RetaiMoT12	Retail	Motors	Turnover	12	Motors: Rewind 125-200 HP	(E) Motor	Motor	$0.5097	15	292799	0.189	1471.4	$750	0.5%	35.0%	95%	1.969	1
RetaiMoT13	Retail	Motors	Turnover	13	Motors: Rewind 201-500 HP	(E) Motor	Motor	$0.6274	15	634398	0.410	3187.9	$2,000	0.5%	50.0%	95%	1.600	1
RetaiMoT14	Retail	Motors	Turnover	14	Motors: Rewind 20-50 HP	(E) Motor	Motor	$0.4704	15	59847	0.068	531.4	$250	0.9%	10.0%	95%	2.133	1
RetaiMoT15	Retail	Motors	Turnover	15	Motors: Rewind 500+ HP	(E) Motor	Motor	$0.5437	15	1463995	0.946	7356.8	$4,000	0.5%	70.0%	95%	1.846	1
RetaiMoT16	Retail	Motors	Turnover	16	Motors: Rewind 51-100 HP	(E) Motor	Motor	$0.5841	15	147991	0.110	856.0	$500	0.6%	20.0%	95%	1.718	1
RetaiMoT17	Retail	Motors	Turnover	17	Downsizing motor during retrofit	Larger hp standard motor	HP Reduction	$0.34	20	186,404	0.190	1,477	$500.00	0.79%	25%	95%	3.727	1
RetaiMoN12	Retail	Motors	New	12	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	3.710	1
RetaiMoN13	Retail	Motors	New	13	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.043	0
RetaiMoN14	Retail	Motors	New	14	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	4.690	1
RetaiMoN15	Retail	Motors	New	15	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.884	0
RetaiMoT18	Retail	Motors	Turnover	18	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	3.710	1
RetaiMoT19	Retail	Motors	Turnover	19	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.043	0
RetaiMoT20	Retail	Motors	Turnover	20	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	4.690	1
RetaiMoT21	Retail	Motors	Turnover	21	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.884	0
RetaiMoT22	Retail	Motors	Turnover	22	Air Comp Improvements			$0.11	15	56148	1.148	8,928	$990.00	16%	28%	65%	9.050	1
RetaiMoE2	Retail	Motors	Early	2	Air Compressor Optimization			$0.16	15	56148	2.174	16,901	$2,750.00	30%	38%	65%	6.168	1
LodgiMoT23	Lodging	Motors	Turnover	23	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.824	1
RestaMoN1	Restaurant	Motors	New	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1487	15	14753	0.0282	133.8	$154	0.91%	74.4%	100%	0.919	0
RestaMoN2	Restaurant	Motors	New	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.2410	15	56520	0.0231	419.7	$521	0.74%	74.4%	100%	0.771	0
RestaMoN3	Restaurant	Motors	New	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.1151	15	138748	0.0138	617.7	$689	0.45%	66.3%	100%	0.839	0
RestaMoN4	Restaurant	Motors	New	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4692	15	278979	0.0121	1088.6	$511	0.39%	55.8%	100%	1.979	1
RestaMoN5	Restaurant	Motors	New	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-500 HP	Motor	$0.3937	15	598698	0.0284	5476.7	$2,156	0.91%	55.8%	100%	2.349	1
RestaMoN6	Restaurant	Motors	New	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5877	15	93593	2.408	18,719	$11,000.00	20%	55.0%	100%	1.708	1
RestaMoN7	Restaurant	Motors	New	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4978	15	93593	12.213	26112.4	$13,000.00	28%	70.0%	100%	2.452	1
RestaMoN8	Restaurant	Motors	New	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.5051	15	93593	0.000	25738.1	$13,000.00	28%	80.0%	100%	1.824	1
RestaMoN9	Restaurant	Motors	New	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5763	15	93593	12.213	22555.9	$13,000.00	24%	70.0%	100%	2.200	1
RestaMoN10	Restaurant	Motors	New	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.5014	15	93593	9.205	25925.2	$13,000.00	28%	55.0%	100%	2.290	1
RestaMoN11	Restaurant	Motors	New	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5763	15	93593	12.213	22555.9	$13,000.00	24%	30.0%	100%	2.200	1
RestaMoT1	Restaurant	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1487	15	14753	0.0282	133.8	$154	0.91%	74.4%	100%	0.919	0
RestaMoT2	Restaurant	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.2410	15	56520	0.0231	419.7	$521	0.74%	74.4%	100%	0.771	0
RestaMoT3	Restaurant	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.1151	15	138748	0.0138	617.7	$689	0.45%	66.3%	100%	0.839	0
RestaMoT4	Restaurant	Motors	Turnover	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4692	15	278979	0.0121	1088.6	$511	0.39%	55.8%	100%	1.979	1
RestaMoT5	Restaurant	Motors	Turnover	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-250 HP	Motor	$0.3937	15	598698	0.0284	5476.7	$2,156	0.91%	55.8%	100%	2.349	1
RestaMoT6	Restaurant	Motors	Turnover	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5877	15	93593	2.408	18,719	$11,000.00	20%	55.0%	80%	1.708	1
RestaMoT7	Restaurant	Motors	Turnover	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4978	15	93593	12.213	26112.4	$13,000.00	28%	90.0%	80%	2.452	1
RestaMoT8	Restaurant	Motors	Turnover	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.5051	15	93593	0.000	25738.1	$13,000.00	28%	90.0%	80%	1.824	1
RestaMoT9	Restaurant	Motors	Turnover	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5763	15	93593	12.213	22555.9	$13,000.00	24%	90.0%	80%	2.200	1
RestaMoT10	Restaurant	Motors	Turnover	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.5014	15	93593	9.205	25925.2	$13,000.00	28%	80.0%	80%	2.290	1
RestaMoT11	Restaurant	Motors	Turnover	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5763	15	93593	12.213	22555.9	$13,000.00	24%	55.0%	80%	2.200	1
RestaMoT12	Restaurant	Motors	Turnover	12	Motors: Rewind 125-200 HP	(E) Motor	Motor	$0.5316	15	280779	0.182	1410.9	$750	0.5%	35.0%	95%	1.888	1
RestaMoT13	Restaurant	Motors	Turnover	13	Motors: Rewind 201-500 HP	(E) Motor	Motor	$0.6542	15	608354	0.393	3057.1	$2,000	0.5%	50.0%	95%	1.534	1
RestaMoT14	Restaurant	Motors	Turnover	14	Motors: Rewind 20-50 HP	(E) Motor	Motor	$0.4906	15	57390	0.066	509.6	$250	0.9%	10.0%	95%	2.046	1
RestaMoT15	Restaurant	Motors	Turnover	15	Motors: Rewind 500+ HP	(E) Motor	Motor	$0.5670	15	1403894	0.908	7054.7	$4,000	0.5%	70.0%	95%	1.770	1
RestaMoT16	Restaurant	Motors	Turnover	16	Motors: Rewind 51-100 HP	(E) Motor	Motor	$0.6091	15	141915	0.106	820.8	$500	0.6%	20.0%	95%	1.648	1
RestaMoT17	Restaurant	Motors	Turnover	17	Downsizing motor during retrofit	Larger hp standard motor	HP Reduction	$0.34	20	186,404	0.190	1,477	$500.00	0.79%	25%	95%	3.727	1
RestaMoN12	Restaurant	Motors	New	12	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	3.710	1
RestaMoN13	Restaurant	Motors	New	13	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.043	0
RestaMoN14	Restaurant	Motors	New	14	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	4.690	1
RestaMoN15	Restaurant	Motors	New	15	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.884	0
RestaMoT18	Restaurant	Motors	Turnover	18	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	3.710	1
RestaMoT19	Restaurant	Motors	Turnover	19	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.043	0

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Fla
RestaMoT20	Restaurant	Motors	Turnover	20	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	4.690	1
RestaMoT21	Restaurant	Motors	Turnover	21	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.884	0
RestaMoT22	Restaurant	Motors	Turnover	22	Air Comp Improvements			$0.11	15	56148	1.148	8,928	$990.00	16%	28%	65%	9.050	1
RestaMoE2	Restaurant	Motors	Early	2	Air Compressor Optimization			$0.16	15	56148	2.174	16,901	$2,750.00	30%	38%	65%	6.168	1
miscMoE1	misc	Motors	Early	1	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.824	1
WarehMoN1	Warehouse	Motors	New	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1114	15	15247	0.0282	138.3	$154	0.91%	74.4%	100%	0.946	0
WarehMoN2	Warehouse	Motors	New	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.2008	15	58416	0.0231	433.8	$521	0.74%	74.4%	100%	0.796	0
WarehMoN3	Warehouse	Motors	New	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0789	15	143401	0.0138	638.4	$689	0.45%	66.3%	100%	0.867	0
WarehMoN4	Warehouse	Motors	New	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4540	15	288334	0.0121	1125.1	$511	0.39%	55.8%	100%	2.044	1
WarehMoN5	Warehouse	Motors	New	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-500 HP	Motor	$0.3809	15	618773	0.0284	5660.3	$2,156	0.91%	55.8%	100%	2.427	1
WarehMoN6	Warehouse	Motors	New	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5686	15	96731	2.489	19,346	$11,000.00	20%	55.0%	100%	1.765	1
WarehMoN7	Warehouse	Motors	New	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.5116	15	96731	12.674	25408.1	$13,000.00	26%	70.0%	100%	2.425	1
WarehMoN8	Warehouse	Motors	New	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4887	15	96731	0.000	26601.1	$13,000.00	28%	80.0%	100%	1.885	1
WarehMoN9	Warehouse	Motors	New	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5707	15	96731	12.674	22780.2	$13,000.00	24%	70.0%	100%	2.238	1
WarehMoN10	Warehouse	Motors	New	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4917	15	96731	9.576	26439.9	$13,000.00	27%	55.0%	100%	2.345	1
WarehMoN11	Warehouse	Motors	New	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5663	15	96731	12.674	22957.6	$13,000.00	24%	30.0%	100%	2.251	1
WarehMoT1	Warehouse	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1114	15	15247	0.0282	138.3	$154	0.91%	74.4%	100%	0.946	0
WarehMoT2	Warehouse	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.2008	15	58416	0.0231	433.8	$521	0.74%	74.4%	100%	0.796	0
WarehMoT3	Warehouse	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0789	15	143401	0.0138	638.4	$689	0.45%	66.3%	100%	0.867	0
WarehMoT4	Warehouse	Motors	Turnover	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4540	15	288334	0.0121	1125.1	$511	0.39%	55.8%	100%	2.044	1
WarehMoT5	Warehouse	Motors	Turnover	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-250 HP	Motor	$0.3809	15	618773	0.0284	5660.3	$2,156	0.91%	55.8%	100%	2.427	1
WarehMoT6	Warehouse	Motors	Turnover	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5686	15	96731	2.489	19,346	$11,000.00	20%	55.0%	80%	1.765	1
WarehMoT7	Warehouse	Motors	Turnover	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.5116	15	96731	12.674	25408.1	$13,000.00	26%	90.0%	80%	2.425	1
WarehMoT8	Warehouse	Motors	Turnover	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4887	15	96731	0.000	26601.1	$13,000.00	28%	90.0%	80%	1.885	1
WarehMoT9	Warehouse	Motors	Turnover	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5707	15	96731	12.674	22780.2	$13,000.00	24%	90.0%	80%	2.238	1
WarehMoT10	Warehouse	Motors	Turnover	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4917	15	96731	9.576	26439.9	$13,000.00	27%	80.0%	80%	2.345	1
WarehMoT11	Warehouse	Motors	Turnover	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5663	15	96731	12.674	22957.6	$13,000.00	24%	55.0%	80%	2.251	1
WarehMoT12	Warehouse	Motors	Turnover	12	Motors: Rewind 125-200 HP	(E) Motor	Motor	$0.5143	15	290194	0.188	1458.3	$750	0.5%	35.0%	95%	1.951	1
WarehMoT13	Warehouse	Motors	Turnover	13	Motors: Rewind 201-500 HP	(E) Motor	Motor	$0.6330	15	628754	0.406	3159.6	$2,000	0.5%	50.0%	95%	1.585	1
WarehMoT14	Warehouse	Motors	Turnover	14	Motors: Rewind 20-50 HP	(E) Motor	Motor	$0.4747	15	59314	0.068	526.7	$250	0.9%	10.0%	95%	2.114	1
WarehMoT15	Warehouse	Motors	Turnover	15	Motors: Rewind 500+ HP	(E) Motor	Motor	$0.5486	15	1450970	0.938	7291.3	$4,000	0.5%	70.0%	95%	1.829	1
WarehMoT16	Warehouse	Motors	Turnover	16	Motors: Rewind 51-100 HP	(E) Motor	Motor	$0.5894	15	146674	0.109	848.4	$500	0.6%	20.0%	95%	1.703	1
WarehMoT17	Warehouse	Motors	Turnover	17	Downsizing motor during retrofit	Larger hp standard motor	HP Reduction	$0.34	20	186,404	0.190	1,477	$500.00	0.79%	25%	95%	3.727	1
WarehMoN12	Warehouse	Motors	New	12	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	3.710	1
WarehMoN13	Warehouse	Motors	New	13	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.043	0
WarehMoN14	Warehouse	Motors	New	14	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	4.690	1
WarehMoN15	Warehouse	Motors	New	15	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.884	0
WarehMoT18	Warehouse	Motors	Turnover	18	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	3.710	1
WarehMoT19	Warehouse	Motors	Turnover	19	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.043	0
WarehMoT20	Warehouse	Motors	Turnover	20	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	4.690	1
WarehMoT21	Warehouse	Motors	Turnover	21	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.884	0
WarehMoT22	Warehouse	Motors	Turnover	22	Air Comp Improvements			$0.11	15	56148	1.148	8,928	$990.00	16%	28%	65%	9.050	1
WarehMoE2	Warehouse	Motors	Early	2	Air Compressor Optimization			$0.16	15	56148	2.174	16,901	$2,750.00	30%	38%	65%	6.168	1
MiscMoT23	Misc	Motors	Turnover	23	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.824	1
HealtHeN2	Healthcare	Heating	New	2	Ground Source HP Open - Water	Air Source Heat Pump	ton	$38.96	15	318	0.23	19	$ 750.0	6%	20%	95%	0.224	0
HealtHen3	Healthcare	Heating	new	3	Ground Source HP Closed	Air Source Heat Pump	ton	$38.96	15	318	0.000	19	$750.00	6%	100%	95%	0.024	0
GrocePaE1	Grocery	Packaged DX	Early	1	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$3.13	20	648	0.05	64	$200.00	10%	15%	9%	0.561	0
GrocePaE2	Grocery	Packaged DX	Early	2	Adding window shade film	No shade film	q ft window are	$7.05	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.049	0
GrocePaE3	Grocery	Packaged DX	Early	3	Adding window shade screen	No shade screen	q ft window are	$3.90	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.255	0
GrocePaE4	Grocery	Packaged DX	Early	4	Windows U<0.40, .55 SHGC	Existing window specifications	q ft window are	$1.40	30	2	0.000	0	$0.28	13%	50%	95%	1.179	1
GrocePaE5	Grocery	Packaged DX	Early	5	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$5.21	20	648	0.05	43	$225.00	7%	95%	95%	0.392	0
GrocePaE7	Grocery	Packaged DX	Early	7	Automated control system	Baseline DX	ton	$0.73	10	685	0.004	34	$25.00	5%	100%	65%	0.958	0
GrocePaE8	Grocery	Packaged DX	Early	8	Duct Sealing, down to 15%	Leakage of 29%	ton	$7.92	15	648	0.05	12	$95.00	2%	45%	80%	0.439	0
GrocePaE9	Grocery	Packaged DX	Early	9	Hotel Keycard Sensors	No prior controls	oom Controlle	$0.29	10	582	0.041	342	$100.00	59%	95%	80%	2.392	1
GrocePaE10	Grocery	Packaged DX	Early	10	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	ton	$0.55	1	705	0.05	64	$35.00	9%	100%	45%	0.181	0
GrocePaE11	Grocery	Packaged DX	Early	11	7 day, two stage setback thermostat	Manual Thermostat	ton	$0.44	10	648	0.015	125	$55.00	19%	100%	45%	1.589	1
GrocePaE13	Grocery	Packaged DX	Early	13	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.53	7	648	0.05	104	$55.15	16%	95%	75%	1.135	1
GrocePaN1	Grocery	Packaged DX	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	ton	$1.36	20	648	0.05	64	$87.00	10%	100%	95%	1.289	1
GrocePaN2	Grocery	Packaged DX	New	2	Adding reflective roof treatment	Std color roof	ton	$4.50	20	648	0.05	10	$45.00	2%	100%	95%	1.104	1
GrocePaN3	Grocery	Packaged DX	New	3	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$2.89	20	648	0.05	43	$125.00	7%	100%	95%	0.705	0
GrocePaN4	Grocery	Packaged DX	New	4	Green Roof (New construction or roof replacement)	Std Roof	ton	$2.95	20	648	0.05	43	$127.43	7%	45%	95%	0.692	0
GrocePaN5	Grocery	Packaged DX	New	5	Duct Insulation, Add R8	No Insulation	ton	$10.42	20	648	0.05	12	$125.00	2%	100%	95%	0.416	0
GrocePaN6	Grocery	Packaged DX	New	6	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$2.27	20	558	0.04	40	$90.40	7%	100%	95%	0.900	0
GrocePaN7	Grocery	Packaged DX	New	7	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$2.43	20	558	0.08	74	$180.81	13%	100%	95%	0.840	0
GrocePaN8	Grocery	Packaged DX	New	8	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$2.59	20	558	0.12	105	$271.21	19%	100%	95%	0.787	0
GrocePaN9	Grocery	Packaged DX	New	9	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.27	20	648	0.05	43	$55.00	7%	100%	95%	1.602	1
GrocePaN10	Grocery	Packaged DX	New	10	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.27	20	660	0.06	55	$70.00	8%	100%	95%	1.602	1
GrocePaN11	Grocery	Packaged DX	New	11	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$2.14	20	726	0.06	54	$115.13	7%	100%	95%	0.952	0
GrocePaN12	Grocery	Packaged DX	New	12	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$2.68	20	748	0.04	37	$98.39	5%	100%	95%	0.760	0
GrocePaN13	Grocery	Packaged DX	New	13	Ground Source HP Open - Water	Air Source Heat Pump	ton	$3.54	15	660	0.23	212	$ 750.0	32%	20%	95%	0.460	0
GrocePaN14	Grocery	Packaged DX	New	14	Ground Source HP Closed	Air Source Heat Pump	ton	$6.34	15	660	0.014	118	$750.00	18%	100%	95%	0.157	0
GrocePaN15	Grocery	Packaged DX	New	15	Air-side Economizer	No Economizer	ton	$1.75	15	648	0.012	97	$170.00	15%	75%	45%	0.570	0
GrocePaN16	Grocery	Packaged DX	New	16	Energy Recovery Units	No Energy Recovery	ton	$1.38	15	648	0.015	130	$179.00	20%	100%	95%	0.722	0
GrocePaN17	Grocery	Packaged DX	New	17	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$3.59	15	685	0.004	31	$110.89	5%	100%	95%	0.277	0
GrocePaT1	Grocery	Packaged DX	Turnover	1	Duct Insulation, Add R8	No Insulation	ton	$10.42	15	648	0.05	12	$125.00	2%	100%	95%	0.333	0
GrocePaT2	Grocery	Packaged DX	Turnover	2	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$2.27	20	558	0.04	40	$90.40	7%	100%	95%	0.900	0
GrocePaT3	Grocery	Packaged DX	Turnover	3	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$2.43	20	558	0.08	74	$180.81	13%	100%	95%	0.840	0
GrocePaT4	Grocery	Packaged DX	Turnover	4	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$2.59	20	558	0.12	105	$271.21	19%	100%	95%	0.787	0
GrocePaT5	Grocery	Packaged DX	Turnover	5	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.27	20	648	0.05	43	$55.00	7%	100%	95%	1.602	1
GrocePaT6	Grocery	Packaged DX	Turnover	6	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.27	20	660	0.06	55	$70.00	8%	100%	95%	1.602	1
GrocePaT7	Grocery	Packaged DX	Turnover	7	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$2.14	20	726	0.06	54	$115.13	7%	100%	95%	0.952	0
GrocePaT8	Grocery	Packaged DX	Turnover	8	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$2.68	20	748	0.04	37	$98.39	5%	100%	95%	0.760	0
GrocePaT9	Grocery	Packaged DX	Turnover	9	Ground Source HP Open - Water	Air Source Heat Pump	ton	$3.54	15	660	0.23	212	$ 750.0	32%	5%	95%	0.460	0
GrocePaT10	Grocery	Packaged DX	Turnover	10	Ground Source HP Closed	Air Source Heat Pump	ton	$6.34	15	660	0.014	118	$750.00	18%	100%	95%	0.157	0
GrocePaT11	Grocery	Packaged DX	Turnover	11	Air-side Economizer	No Economizer	ton	$1.75	15	648	0.012	97	$170.00	15%	75%	45%	0.570	0
GrocePaT12	Grocery	Packaged DX	Turnover	12	Energy Recovery Units	No Energy Recovery	ton	$1.38	15	648	0.015	130	$179.00	20%	100%	95%	0.722	0
GrocePaT13	Grocery	Packaged DX	Turnover	13	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$3.59	15	685	0.004	31	$110.89	5%	100%	95%	0.277	0
GrocePaN18	Grocery	Packaged DX	New	18	Automated control system	Baseline DX	ton	$0.73	10	685	0.004	34	$25.00	5%	100%	65%	0.958	0
GrocePaN19	Grocery	Packaged DX	New	19	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.36	10	582	0.004	32	$43.00	5%	100%	95%	0.516	0
GrocePaT15	Grocery	Packaged DX	Turnover	15	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.36	10	582	0.004	32	$43.00	5%	100%	95%	0.516	0
InstiPaE1	Institutional	Packaged DX	Early	1	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$3.13	20	483	0.05	64	$200.00	13%	15%	9%	0.561	0
InstiPaE2	Institutional	Packaged DX	Early	2	Adding window shade film	No shade film	q ft window are	$7.05	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.049	0
InstiPaE3	Institutional	Packaged DX	Early	3	Adding window shade screen	No shade screen	q ft window are	$3.90	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.255	0
InstiPaE4	Institutional	Packaged DX	Early	4	Windows U<0.40, .55 SHGC	Existing window specifications	q ft window are	$1.40	30	2	0.000	0	$0.28	13%	50%	95%	1.179	1

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Fla
InstiPaE5	Institutional	Packaged DX	Early	5	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$6.98	20	483	0.05	32	$225.00	7%	95%	95%	0.335	0
InstiPaE7	Institutional	Packaged DX	Early	7	Automated control system	Baseline DX	ton	$0.98	10	511	0.003	26	$25.00	5%	100%	65%	0.714	0
InstiPaE8	Institutional	Packaged DX	Early	8	Duct Sealing, down to 15%	Leakage of 29%	ton	$7.92	15	483	0.05	12	$95.00	2%	45%	80%	0.439	0
InstiPaE9	Institutional	Packaged DX	Early	9	Hotel Keycard Sensors	No prior controls	oom Controlle	$0.29	10	434	0.041	342	$100.00	79%	95%	80%	2.392	1
InstiPaE10	Institutional	Packaged DX	Early	10	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	ton	$0.55	1	525	0.05	64	$35.00	12%	100%	45%	0.181	0
InstiPaE11	Institutional	Packaged DX	Early	11	7 day, two stage setback thermostat	Manual Thermostat	ton	$0.44	10	483	0.015	125	$55.00	26%	100%	45%	1.589	1
InstiPaE13	Institutional	Packaged DX	Early	13	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.71	7	483	0.05	77	$55.15	16%	95%	75%	0.918	0
InstiPaN1	Institutional	Packaged DX	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	ton	$1.36	20	483	0.05	64	$87.00	13%	100%	95%	1.289	1
InstiPaN2	Institutional	Packaged DX	New	2	Adding reflective roof treatment	Std color roof	ton	$4.50	20	483	0.05	10	$45.00	2%	100%	95%	1.104	1
InstiPaN3	Institutional	Packaged DX	New	3	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$3.88	20	483	0.05	32	$125.00	7%	100%	95%	0.603	0
InstiPaN4	Institutional	Packaged DX	New	4	Green Roof (New construction or roof replacement)	Std Roof	ton	$3.96	20	483	0.05	32	$127.43	7%	45%	95%	0.592	0
InstiPaN5	Institutional	Packaged DX	New	5	Duct Insulation, Add R8	No Insulation	ton	$10.42	20	483	0.05	12	$125.00	2%	100%	95%	0.416	0
InstiPaN6	Institutional	Packaged DX	New	6	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$3.04	20	416	0.04	30	$90.40	7%	100%	95%	0.770	0
InstiPaN7	Institutional	Packaged DX	New	7	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$3.26	20	416	0.08	56	$180.81	13%	100%	95%	0.718	0
InstiPaN8	Institutional	Packaged DX	New	8	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$3.47	20	416	0.12	78	$271.21	19%	100%	95%	0.674	0
InstiPaN9	Institutional	Packaged DX	New	9	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.71	20	483	0.05	32	$55.00	7%	100%	95%	1.371	1
InstiPaN10	Institutional	Packaged DX	New	10	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.71	20	492	0.06	41	$70.00	8%	100%	95%	1.371	1
InstiPaN11	Institutional	Packaged DX	New	11	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$2.87	20	541	0.06	40	$115.13	7%	100%	95%	0.815	0
InstiPaN12	Institutional	Packaged DX	New	12	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$3.60	20	558	0.04	27	$98.39	5%	100%	95%	0.650	0
InstiPaN13	Institutional	Packaged DX	New	13	Ground Source HP Open - Water	Air Source Heat Pump	ton	$4.75	15	492	0.23	158	$ 750.0	32%	20%	95%	0.394	0
InstiPaN14	Institutional	Packaged DX	New	14	Ground Source HP Closed	Air Source Heat Pump	ton	$8.51	15	492	0.011	88	$750.00	18%	100%	95%	0.117	0
InstiPaN15	Institutional	Packaged DX	New	15	Air-side Economizer	No Economizer	ton	$2.35	15	483	0.009	72	$170.00	15%	75%	45%	0.425	0
InstiPaN16	Institutional	Packaged DX	New	16	Energy Recovery Units	No Energy Recovery	ton	$1.85	15	483	0.012	97	$179.00	20%	100%	95%	0.538	0
InstiPaN17	Institutional	Packaged DX	New	17	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$4.82	15	511	0.003	23	$110.89	5%	100%	95%	0.207	0
InstiPaT1	Institutional	Packaged DX	Turnover	1	Duct Insulation, Add R8	No Insulation	ton	$10.42	15	483	0.05	12	$125.00	2%	100%	95%	0.333	0
InstiPaT2	Institutional	Packaged DX	Turnover	2	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$3.04	20	416	0.04	30	$90.40	7%	100%	95%	0.770	0
InstiPaT3	Institutional	Packaged DX	Turnover	3	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$3.26	20	416	0.08	56	$180.81	13%	100%	95%	0.718	0
InstiPaT4	Institutional	Packaged DX	Turnover	4	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$3.47	20	416	0.12	78	$271.21	19%	100%	95%	0.674	0
InstiPaT5	Institutional	Packaged DX	Turnover	5	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.71	20	483	0.05	32	$55.00	7%	100%	95%	1.371	1
InstiPaT6	Institutional	Packaged DX	Turnover	6	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.71	20	492	0.06	41	$70.00	8%	100%	95%	1.371	1
InstiPaT7	Institutional	Packaged DX	Turnover	7	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$2.87	20	541	0.06	40	$115.13	7%	100%	95%	0.815	0
InstiPaT8	Institutional	Packaged DX	Turnover	8	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$3.60	20	558	0.04	27	$98.39	5%	100%	95%	0.650	0
InstiPaT9	Institutional	Packaged DX	Turnover	9	Ground Source HP Open - Water	Air Source Heat Pump	ton	$4.75	15	492	0.23	158	$ 750.0	32%	5%	95%	0.394	0
InstiPaT10	Institutional	Packaged DX	Turnover	10	Ground Source HP Closed	Air Source Heat Pump	ton	$8.51	15	492	0.011	88	$750.00	18%	100%	95%	0.117	0
InstiPaT11	Institutional	Packaged DX	Turnover	11	Air-side Economizer	No Economizer	ton	$2.35	15	483	0.009	72	$170.00	15%	75%	45%	0.425	0
InstiPaT12	Institutional	Packaged DX	Turnover	12	Energy Recovery Units	No Energy Recovery	ton	$1.85	15	483	0.012	97	$179.00	20%	100%	95%	0.538	0
InstiPaT13	Institutional	Packaged DX	Turnover	13	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$4.82	15	511	0.003	23	$110.89	5%	100%	95%	0.207	0
InstiPaN18	Institutional	Packaged DX	New	18	Automated control system	Baseline DX	ton	$0.98	10	511	0.003	26	$25.00	5%	100%	65%	0.714	0
InstiPaN19	Institutional	Packaged DX	New	19	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.82	10	434	0.003	24	$43.00	5%	100%	95%	0.385	0
InstiPaT15	Institutional	Packaged DX	Turnover	15	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.82	10	434	0.003	24	$43.00	5%	100%	95%	0.385	0
LodgiPaE1	Lodging	Packaged DX	Early	1	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$3.13	20	576	0.05	64	$200.00	11%	15%	9%	0.561	0
LodgiPaE2	Lodging	Packaged DX	Early	2	Adding window shade film	No shade film	q ft window are	$7.05	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.049	0
LodgiPaE3	Lodging	Packaged DX	Early	3	Adding window shade screen	No shade screen	q ft window are	$3.90	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.255	0
LodgiPaE4	Lodging	Packaged DX	Early	4	Windows U<0.40, .55 SHGC	Existing window specifications	q ft window are	$1.40	30	2	0.000	0	$0.28	13%	50%	95%	1.179	1
LodgiPaE5	Lodging	Packaged DX	Early	5	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$5.86	20	576	0.05	38	$225.00	7%	95%	95%	0.367	0
LodgiPaE7	Lodging	Packaged DX	Early	7	Automated control system	Baseline DX	ton	$0.82	10	609	0.004	30	$25.00	5%	100%	65%	0.852	0
LodgiPaE8	Lodging	Packaged DX	Early	8	Duct Sealing, down to 15%	Leakage of 29%	ton	$7.92	15	576	0.05	12	$95.00	2%	45%	80%	0.439	0
LodgiPaE9	Lodging	Packaged DX	Early	9	Hotel Keycard Sensors	No prior controls	oom Controlle	$0.29	10	517	0.041	342	$100.00	66%	95%	80%	2.392	1
LodgiPaE10	Lodging	Packaged DX	Early	10	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	ton	$0.55	1	627	0.05	64	$35.00	10%	100%	45%	0.181	0
LodgiPaE11	Lodging	Packaged DX	Early	11	7 day, two stage setback thermostat	Manual Thermostat	ton	$0.44	10	576	0.015	125	$55.00	22%	100%	45%	1.589	1
LodgiPaE13	Lodging	Packaged DX	Early	13	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.60	7	576	0.05	92	$55.15	16%	95%	75%	1.041	1
LodgiPaN1	Lodging	Packaged DX	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	ton	$1.36	20	576	0.05	64	$87.00	11%	100%	95%	1.289	1
LodgiPaN2	Lodging	Packaged DX	New	2	Adding reflective roof treatment	Std color roof	ton	$4.50	20	576	0.05	10	$45.00	2%	100%	95%	1.104	1
LodgiPaN3	Lodging	Packaged DX	New	3	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$3.25	20	576	0.05	38	$125.00	7%	100%	95%	0.661	0
LodgiPaN4	Lodging	Packaged DX	New	4	Green Roof (New construction or roof replacement)	Std Roof	ton	$3.32	20	576	0.05	38	$127.43	7%	45%	95%	0.648	0
LodgiPaN5	Lodging	Packaged DX	New	5	Duct Insulation, Add R8	No Insulation	ton	$10.42	20	576	0.05	12	$125.00	2%	100%	95%	0.416	0
LodgiPaN6	Lodging	Packaged DX	New	6	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$2.55	20	497	0.04	35	$90.40	7%	100%	95%	0.843	0
LodgiPaN7	Lodging	Packaged DX	New	7	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$2.73	20	497	0.08	66	$180.81	13%	100%	95%	0.787	0
LodgiPaN8	Lodging	Packaged DX	New	8	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$2.91	20	497	0.12	93	$271.21	19%	100%	95%	0.738	0
LodgiPaN9	Lodging	Packaged DX	New	9	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.43	20	576	0.05	38	$55.00	7%	100%	95%	1.501	1
LodgiPaN10	Lodging	Packaged DX	New	10	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.43	20	587	0.06	49	$70.00	8%	100%	95%	1.501	1
LodgiPaN11	Lodging	Packaged DX	New	11	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$2.41	20	646	0.06	48	$115.13	7%	100%	95%	0.893	0
LodgiPaN12	Lodging	Packaged DX	New	12	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$3.02	20	666	0.04	33	$98.39	5%	100%	95%	0.713	0
LodgiPaN13	Lodging	Packaged DX	New	13	Ground Source HP Open - Water	Air Source Heat Pump	ton	$3.98	15	587	0.23	188	$ 750.0	32%	20%	95%	0.431	0
LodgiPaN14	Lodging	Packaged DX	New	14	Ground Source HP Closed	Air Source Heat Pump	ton	$7.13	15	587	0.013	105	$750.00	18%	100%	95%	0.140	0
LodgiPaN15	Lodging	Packaged DX	New	15	Air-side Economizer	No Economizer	ton	$1.97	15	576	0.010	86	$170.00	15%	75%	45%	0.507	0
LodgiPaN16	Lodging	Packaged DX	New	16	Energy Recovery Units	No Energy Recovery	ton	$1.55	15	576	0.014	115	$179.00	20%	100%	95%	0.642	0
LodgiPaN17	Lodging	Packaged DX	New	17	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$4.04	15	609	0.003	27	$110.89	5%	100%	95%	0.246	0
LodgiPaT1	Lodging	Packaged DX	Turnover	1	Duct Insulation, Add R8	No Insulation	ton	$10.42	15	576	0.05	12	$125.00	2%	100%	95%	0.333	0
LodgiPaT2	Lodging	Packaged DX	Turnover	2	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$2.55	20	497	0.04	35	$90.40	7%	100%	95%	0.843	0
LodgiPaT3	Lodging	Packaged DX	Turnover	3	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$2.73	20	497	0.08	66	$180.81	13%	100%	95%	0.787	0
LodgiPaT4	Lodging	Packaged DX	Turnover	4	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$2.91	20	497	0.12	93	$271.21	19%	100%	95%	0.738	0
LodgiPaT5	Lodging	Packaged DX	Turnover	5	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.43	20	576	0.05	38	$55.00	7%	100%	95%	1.501	1
LodgiPaT6	Lodging	Packaged DX	Turnover	6	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.43	20	587	0.06	49	$70.00	8%	100%	95%	1.501	1
LodgiPaT7	Lodging	Packaged DX	Turnover	7	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$2.41	20	646	0.06	48	$115.13	7%	100%	95%	0.893	0
LodgiPaT8	Lodging	Packaged DX	Turnover	8	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$3.02	20	666	0.04	33	$98.39	5%	100%	95%	0.713	0
LodgiPaT9	Lodging	Packaged DX	Turnover	9	Ground Source HP Open - Water	Air Source Heat Pump	ton	$3.98	15	587	0.23	188	$ 750.0	32%	5%	95%	0.431	0
LodgiPaT10	Lodging	Packaged DX	Turnover	10	Ground Source HP Closed	Air Source Heat Pump	ton	$7.13	15	587	0.013	105	$750.00	18%	100%	95%	0.140	0
LodgiPaT11	Lodging	Packaged DX	Turnover	11	Air-side Economizer	No Economizer	ton	$1.97	15	576	0.010	86	$170.00	15%	75%	45%	0.507	0
LodgiPaT12	Lodging	Packaged DX	Turnover	12	Energy Recovery Units	No Energy Recovery	ton	$1.55	15	576	0.014	115	$179.00	20%	100%	95%	0.642	0
LodgiPaT13	Lodging	Packaged DX	Turnover	13	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$4.04	15	609	0.003	27	$110.89	5%	100%	95%	0.246	0
LodgiPaN18	Lodging	Packaged DX	New	18	Automated control system	Baseline DX	ton	$0.82	10	609	0.004	30	$25.00	5%	100%	65%	0.852	0
LodgiPaN19	Lodging	Packaged DX	New	19	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.52	10	517	0.003	28	$43.00	5%	100%	95%	0.459	0
LodgiPaT15	Lodging	Packaged DX	Turnover	15	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.52	10	517	0.003	28	$43.00	5%	100%	95%	0.459	0
MiscPaE1	Misc	Packaged DX	Early	1	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$3.13	20	665	0.05	64	$200.00	10%	15%	9%	0.561	0
MiscPaE2	Misc	Packaged DX	Early	2	Adding window shade film	No shade film	q ft window are	$7.05	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.049	0
MiscPaE3	Misc	Packaged DX	Early	3	Adding window shade screen	No shade screen	q ft window are	$3.90	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.255	0
MiscPaE4	Misc	Packaged DX	Early	4	Windows U<0.40, .55 SHGC	Existing window specifications	q ft window are	$1.40	30	2	0.000	0	$0.28	13%	50%	95%	1.179	1
MiscPaE5	Misc	Packaged DX	Early	5	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$5.07	20	665	0.05	44	$225.00	7%	95%	95%	0.397	0
MiscPaE7	Misc	Packaged DX	Early	7	Automated control system	Baseline DX	ton	$0.71	10	703	0.004	35	$25.00	5%	100%	65%	0.983	0
MiscPaE8	Misc	Packaged DX	Early	8	Duct Sealing, down to 15%	Leakage of 29%	ton	$7.92	15	665	0.05	12	$95.00	2%	45%	80%	0.439	0
MiscPaE9	Misc	Packaged DX	Early	9	Hotel Keycard Sensors	No prior controls	oom Controlle	$0.29	10	597	0.041	342	$100.00	57%	95%	80%	2.392	1
MiscPaE10	Misc	Packaged DX	Early	10	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	ton	$0.55	1	723	0.05	64	$35.00	9%	100%	45%	0.181	0
MiscPaE11	Misc	Packaged DX	Early	11	7 day, two stage setback thermostat	Manual Thermostat	ton	$0.44	10	665	0.015	125	$55.00	19%	100%	45%	1.589	1

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Fla
MiscPaE13	Misc	Packaged DX	Early	13	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.52	7	665	0.05	106	$55.15	16%	95%	75%	1.157	1
MiscPaN1	Misc	Packaged DX	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	ton	$1.36	20	665	0.05	64	$87.00	10%	100%	95%	1.289	1
MiscPaN2	Misc	Packaged DX	New	2	Adding reflective roof treatment	Std color roof	ton	$4.50	20	665	0.05	10	$45.00	2%	100%	95%	1.104	1
MiscPaN3	Misc	Packaged DX	New	3	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$2.82	20	665	0.05	44	$125.00	7%	100%	95%	0.715	0
MiscPaN4	Misc	Packaged DX	New	4	Green Roof (New construction or roof replacement)	Std Roof	ton	$2.87	20	665	0.05	44	$127.43	7%	45%	95%	0.702	0
MiscPaN5	Misc	Packaged DX	New	5	Duct Insulation, Add R8	No Insulation	ton	$10.42	20	665	0.05	12	$125.00	2%	100%	95%	0.416	0
MiscPaN6	Misc	Packaged DX	New	6	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$2.21	20	573	0.04	41	$90.40	7%	100%	95%	0.913	0
MiscPaN7	Misc	Packaged DX	New	7	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$2.37	20	573	0.08	76	$180.81	13%	100%	95%	0.852	0
MiscPaN8	Misc	Packaged DX	New	8	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$2.52	20	573	0.12	107	$271.21	19%	100%	95%	0.799	0
MiscPaN9	Misc	Packaged DX	New	9	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.24	20	665	0.05	44	$55.00	7%	100%	95%	1.626	1
MiscPaN10	Misc	Packaged DX	New	10	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.24	20	677	0.06	56	$70.00	8%	100%	95%	1.626	1
MiscPaN11	Misc	Packaged DX	New	11	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$2.09	20	745	0.06	55	$115.13	7%	100%	95%	0.967	0
MiscPaN12	Misc	Packaged DX	New	12	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$2.61	20	768	0.04	38	$98.39	5%	100%	95%	0.772	0
MiscPaN13	Misc	Packaged DX	New	13	Ground Source HP Open - Water	Air Source Heat Pump	ton	$3.45	15	677	0.23	217	$ 750.0	32%	20%	95%	0.467	0
MiscPaN14	Misc	Packaged DX	New	14	Ground Source HP Closed	Air Source Heat Pump	ton	$6.18	15	677	0.014	121	$750.00	18%	100%	95%	0.161	0
MiscPaN15	Misc	Packaged DX	New	15	Air-side Economizer	No Economizer	ton	$1.70	15	665	0.012	100	$170.00	15%	75%	45%	0.585	0
MiscPaN16	Misc	Packaged DX	New	16	Energy Recovery Units	No Energy Recovery	ton	$1.35	15	665	0.016	133	$179.00	20%	100%	95%	0.740	0
MiscPaN17	Misc	Packaged DX	New	17	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$3.50	15	703	0.004	32	$110.89	5%	100%	95%	0.284	0
MiscPaT1	Misc	Packaged DX	Turnover	1	Duct Insulation, Add R8	No Insulation	ton	$10.42	15	665	0.05	12	$125.00	2%	100%	95%	0.333	0
MiscPaT2	Misc	Packaged DX	Turnover	2	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$2.21	20	573	0.04	41	$90.40	7%	100%	95%	0.913	0
MiscPaT3	Misc	Packaged DX	Turnover	3	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$2.37	20	573	0.08	76	$180.81	13%	100%	95%	0.852	0
MiscPaT4	Misc	Packaged DX	Turnover	4	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$2.52	20	573	0.12	107	$271.21	19%	100%	95%	0.799	0
MiscPaT5	Misc	Packaged DX	Turnover	5	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.24	20	665	0.05	44	$55.00	7%	100%	95%	1.626	1
MiscPaT6	Misc	Packaged DX	Turnover	6	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.24	20	677	0.06	56	$70.00	8%	100%	95%	1.626	1
MiscPaT7	Misc	Packaged DX	Turnover	7	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$2.09	20	745	0.06	55	$115.13	7%	100%	95%	0.967	0
MiscPaT8	Misc	Packaged DX	Turnover	8	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$2.61	20	768	0.04	38	$98.39	5%	100%	95%	0.772	0
MiscPaT9	Misc	Packaged DX	Turnover	9	Ground Source HP Open - Water	Air Source Heat Pump	ton	$3.45	15	677	0.23	217	$ 750.0	32%	5%	95%	0.467	0
MiscPaT10	Misc	Packaged DX	Turnover	10	Ground Source HP Closed	Air Source Heat Pump	ton	$6.18	15	677	0.014	121	$750.00	18%	100%	95%	0.161	0
MiscPaT11	Misc	Packaged DX	Turnover	11	Air-side Economizer	No Economizer	ton	$1.70	15	665	0.012	100	$170.00	15%	75%	45%	0.585	0
MiscPaT12	Misc	Packaged DX	Turnover	12	Energy Recovery Units	No Energy Recovery	ton	$1.35	15	665	0.016	133	$179.00	20%	100%	95%	0.740	0
MiscPaT13	Misc	Packaged DX	Turnover	13	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$3.50	15	703	0.004	32	$110.89	5%	100%	95%	0.284	0
MiscPaN18	Misc	Packaged DX	New	18	Automated control system	Baseline DX	ton	$0.71	10	703	0.004	35	$25.00	5%	100%	65%	0.983	0
MiscPaN19	Misc	Packaged DX	New	19	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.32	10	597	0.004	33	$43.00	5%	100%	95%	0.529	0
MiscPaT15	Misc	Packaged DX	Turnover	15	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.32	10	597	0.004	33	$43.00	5%	100%	95%	0.529	0
OfficPaE1	Office	Packaged DX	Early	1	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$3.13	20	648	0.05	64	$200.00	10%	15%	9%	0.561	0
OfficPaE2	Office	Packaged DX	Early	2	Adding window shade film	No shade film	q ft window are	$7.05	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.049	0
OfficPaE3	Office	Packaged DX	Early	3	Adding window shade screen	No shade screen	q ft window are	$3.90	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.255	0
OfficPaE4	Office	Packaged DX	Early	4	Windows U<0.40, .55 SHGC	Existing window specifications	q ft window are	$1.40	30	2	0.000	0	$0.28	13%	50%	95%	1.179	1
OfficPaE5	Office	Packaged DX	Early	5	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$5.21	20	648	0.05	43	$225.00	7%	95%	95%	0.392	0
OfficPaE7	Office	Packaged DX	Early	7	Automated control system	Baseline DX	ton	$0.73	10	685	0.004	34	$25.00	5%	100%	65%	0.958	0
OfficPaE8	Office	Packaged DX	Early	8	Duct Sealing, down to 15%	Leakage of 29%	ton	$7.92	15	648	0.05	12	$95.00	2%	45%	80%	0.439	0
OfficPaE9	Office	Packaged DX	Early	9	Hotel Keycard Sensors	No prior controls	Room Controlle	$0.29	10	582	0.041	342	$100.00	59%	95%	80%	2.392	1
OfficPaE10	Office	Packaged DX	Early	10	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	ton	$0.55	1	705	0.05	64	$35.00	9%	100%	45%	0.181	0
OfficPaE11	Office	Packaged DX	Early	11	7 day, two stage setback thermostat	Manual Thermostat	ton	$0.44	10	648	0.015	125	$55.00	19%	100%	45%	1.589	1
OfficPaE13	Office	Packaged DX	Early	13	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.53	7	648	0.05	104	$55.15	16%	95%	75%	1.135	1
OfficPaN1	Office	Packaged DX	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	ton	$1.36	20	648	0.05	64	$87.00	10%	100%	95%	1.289	1
OfficPaN2	Office	Packaged DX	New	2	Adding reflective roof treatment	Std color roof	ton	$4.50	20	648	0.05	10	$45.00	2%	100%	95%	1.104	1
OfficPaN3	Office	Packaged DX	New	3	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$2.89	20	648	0.05	43	$125.00	7%	100%	95%	0.705	0
OfficPaN4	Office	Packaged DX	New	4	Green Roof (New construction or roof replacement)	Std Roof	ton	$2.95	20	648	0.05	43	$127.43	7%	45%	95%	0.692	0
OfficPaN5	Office	Packaged DX	New	5	Duct Insulation, Add R8	No Insulation	ton	$10.42	20	648	0.05	12	$125.00	2%	100%	95%	0.416	0
OfficPaN6	Office	Packaged DX	New	6	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$2.27	20	558	0.04	40	$90.40	7%	100%	95%	0.900	0
OfficPaN7	Office	Packaged DX	New	7	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$2.43	20	558	0.08	74	$180.81	13%	100%	95%	0.840	0
OfficPaN8	Office	Packaged DX	New	8	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$2.59	20	558	0.12	105	$271.21	19%	100%	95%	0.787	0
OfficPaN9	Office	Packaged DX	New	9	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.27	20	648	0.05	43	$55.00	7%	100%	95%	1.602	1
OfficPaN10	Office	Packaged DX	New	10	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.27	20	660	0.06	55	$70.00	8%	100%	95%	1.602	1
OfficPaN11	Office	Packaged DX	New	11	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$2.14	20	726	0.06	54	$115.13	7%	100%	95%	0.952	0
OfficPaN12	Office	Packaged DX	New	12	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$2.68	20	748	0.04	37	$98.39	5%	100%	95%	0.760	0
OfficPaN13	Office	Packaged DX	New	13	Ground Source HP Open - Water	Air Source Heat Pump	ton	$3.54	15	660	0.23	212	$ 750.0	32%	20%	95%	0.460	0
OfficPaN14	Office	Packaged DX	New	14	Ground Source HP Closed	Air Source Heat Pump	ton	$6.34	15	660	0.014	118	$750.00	18%	100%	95%	0.157	0
OfficPaN15	Office	Packaged DX	New	15	Air-side Economizer	No Economizer	ton	$1.75	15	648	0.012	97	$170.00	15%	75%	45%	0.570	0
OfficPaN16	Office	Packaged DX	New	16	Energy Recovery Units	No Energy Recovery	ton	$1.38	15	648	0.015	130	$179.00	20%	100%	95%	0.722	0
OfficPaN17	Office	Packaged DX	New	17	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$3.59	15	685	0.004	31	$110.89	5%	100%	95%	0.277	0
OfficPaT1	Office	Packaged DX	Turnover	1	Duct Insulation, Add R8	No Insulation	ton	$10.42	15	648	0.05	12	$125.00	2%	100%	95%	0.333	0
OfficPaT2	Office	Packaged DX	Turnover	2	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$2.27	20	558	0.04	40	$90.40	7%	100%	95%	0.900	0
OfficPaT3	Office	Packaged DX	Turnover	3	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$2.43	20	558	0.08	74	$180.81	13%	100%	95%	0.840	0
OfficPaT4	Office	Packaged DX	Turnover	4	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$2.59	20	558	0.12	105	$271.21	19%	100%	95%	0.787	0
OfficPaT5	Office	Packaged DX	Turnover	5	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.27	20	648	0.05	43	$55.00	7%	100%	95%	1.602	1
OfficPaT6	Office	Packaged DX	Turnover	6	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.27	20	660	0.06	55	$70.00	8%	100%	95%	1.602	1
OfficPaT7	Office	Packaged DX	Turnover	7	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$2.14	20	726	0.06	54	$115.13	7%	100%	95%	0.952	0
OfficPaT8	Office	Packaged DX	Turnover	8	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$2.68	20	748	0.04	37	$98.39	5%	100%	95%	0.760	0
OfficPaT9	Office	Packaged DX	Turnover	9	Ground Source HP Open - Water	Air Source Heat Pump	ton	$3.54	15	660	0.23	212	$ 750.0	32%	5%	95%	0.460	0
OfficPaT10	Office	Packaged DX	Turnover	10	Ground Source HP Closed	Air Source Heat Pump	ton	$6.34	15	660	0.014	118	$750.00	18%	100%	95%	0.157	0
OfficPaT11	Office	Packaged DX	Turnover	11	Air-side Economizer	No Economizer	ton	$1.75	15	648	0.012	97	$170.00	15%	75%	45%	0.570	0
OfficPaT12	Office	Packaged DX	Turnover	12	Energy Recovery Units	No Energy Recovery	ton	$1.38	15	648	0.015	130	$179.00	20%	100%	95%	0.722	0
OfficPaT13	Office	Packaged DX	Turnover	13	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$3.59	15	685	0.004	31	$110.89	5%	100%	95%	0.277	0
OfficPaN18	Office	Packaged DX	New	18	Automated control system	Baseline DX	ton	$0.73	10	685	0.004	34	$25.00	5%	100%	65%	0.958	0
OfficPaN19	Office	Packaged DX	New	19	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.36	10	582	0.004	32	$43.00	5%	100%	95%	0.516	0
OfficPaT15	Office	Packaged DX	Turnover	15	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.36	10	582	0.004	32	$43.00	5%	100%	95%	0.516	0
RestaPaE1	Restaurant	Packaged DX	Early	1	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$3.13	20	694	0.05	64	$200.00	9%	15%	9%	0.561	0
RestaPaE2	Restaurant	Packaged DX	Early	2	Adding window shade film	No shade film	q ft window are	$7.05	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.049	0
RestaPaE3	Restaurant	Packaged DX	Early	3	Adding window shade screen	No shade screen	q ft window are	$3.90	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.255	0
RestaPaE4	Restaurant	Packaged DX	Early	4	Windows U<0.40, .55 SHGC	Existing window specifications	q ft window are	$1.40	30	2	0.000	0	$0.28	13%	50%	95%	1.179	1
RestaPaE5	Restaurant	Packaged DX	Early	5	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$4.86	20	694	0.05	46	$225.00	7%	95%	95%	0.407	0
RestaPaE7	Restaurant	Packaged DX	Early	7	Automated control system	Baseline DX	ton	$0.68	10	734	0.004	37	$25.00	5%	100%	65%	1.026	1
RestaPaE8	Restaurant	Packaged DX	Early	8	Duct Sealing, down to 15%	Leakage of 29%	ton	$7.92	15	694	0.05	12	$95.00	2%	45%	80%	0.439	0
RestaPaE9	Restaurant	Packaged DX	Early	9	Hotel Keycard Sensors	No prior controls	Room Controlle	$0.29	10	623	0.041	342	$100.00	55%	95%	80%	2.392	1
RestaPaE10	Restaurant	Packaged DX	Early	10	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	ton	$0.55	1	755	0.05	64	$35.00	8%	100%	45%	0.181	0
RestaPaE11	Restaurant	Packaged DX	Early	11	7 day, two stage setback thermostat	Manual Thermostat	ton	$0.44	10	694	0.015	125	$55.00	18%	100%	45%	1.589	1
RestaPaE13	Restaurant	Packaged DX	Early	13	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.50	7	694	0.05	111	$55.15	16%	95%	75%	1.196	1
RestaPaN1	Restaurant	Packaged DX	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	ton	$1.36	20	694	0.05	64	$87.00	9%	100%	95%	1.289	1
RestaPaN2	Restaurant	Packaged DX	New	2	Adding reflective roof treatment	Std color roof	ton	$4.50	20	694	0.05	10	$45.00	1%	100%	95%	1.104	1
RestaPaN3	Restaurant	Packaged DX	New	3	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$2.70	20	694	0.05	46	$125.00	7%	100%	95%	0.733	0
RestaPaN4	Restaurant	Packaged DX	New	4	Green Roof (New construction or roof replacement)	Std Roof	ton	$2.75	20	694	0.05	46	$127.43	7%	45%	95%	0.719	0
RestaPaN5	Restaurant	Packaged DX	New	5	Duct Insulation, Add R8	No Insulation	ton	$10.42	20	694	0.05	12	$125.00	2%	100%	95%	0.416	0

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Fla
RestaPaN6	Restaurant	Packaged DX	New	6	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$2.12	20	598	0.04	43	$90.40	7%	100%	95%	0.936	0
RestaPaN7	Restaurant	Packaged DX	New	7	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$2.27	20	598	0.08	80	$180.81	13%	100%	95%	0.874	0
RestaPaN8	Restaurant	Packaged DX	New	8	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$2.42	20	598	0.12	112	$271.21	19%	100%	95%	0.819	0
RestaPaN9	Restaurant	Packaged DX	New	9	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.19	20	694	0.05	46	$55.00	7%	100%	95%	1.667	1
RestaPaN10	Restaurant	Packaged DX	New	10	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.19	20	707	0.06	59	$70.00	8%	100%	95%	1.667	1
RestaPaN11	Restaurant	Packaged DX	New	11	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$2.00	20	778	0.06	58	$115.13	7%	100%	95%	0.991	0
RestaPaN12	Restaurant	Packaged DX	New	12	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$2.50	20	802	0.04	39	$98.39	5%	100%	95%	0.791	0
RestaPaN13	Restaurant	Packaged DX	New	13	Ground Source HP Open - Water	Air Source Heat Pump	ton	$3.31	15	707	0.23	227	$ 750.0	32%	20%	95%	0.479	0
RestaPaN14	Restaurant	Packaged DX	New	14	Ground Source HP Closed	Air Source Heat Pump	ton	$5.92	15	707	0.015	127	$750.00	18%	100%	95%	0.168	0
RestaPaN15	Restaurant	Packaged DX	New	15	Air-side Economizer	No Economizer	ton	$1.63	15	694	0.012	104	$170.00	15%	75%	45%	0.610	0
RestaPaN16	Restaurant	Packaged DX	New	16	Energy Recovery Units	No Energy Recovery	ton	$1.29	15	694	0.017	139	$179.00	20%	100%	95%	0.773	0
RestaPaN17	Restaurant	Packaged DX	New	17	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$3.36	15	734	0.004	33	$110.89	5%	100%	95%	0.297	0
RestaPaT1	Restaurant	Packaged DX	Turnover	1	Duct Insulation, Add R8	No Insulation	ton	$10.42	15	694	0.05	12	$125.00	2%	100%	95%	0.333	0
RestaPaT2	Restaurant	Packaged DX	Turnover	2	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$2.12	20	598	0.04	43	$90.40	7%	100%	95%	0.936	0
RestaPaT3	Restaurant	Packaged DX	Turnover	3	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$2.27	20	598	0.08	80	$180.81	13%	100%	95%	0.874	0
RestaPaT4	Restaurant	Packaged DX	Turnover	4	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$2.42	20	598	0.12	112	$271.21	19%	100%	95%	0.819	0
RestaPaT5	Restaurant	Packaged DX	Turnover	5	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.19	20	694	0.05	46	$55.00	7%	100%	95%	1.667	1
RestaPaT6	Restaurant	Packaged DX	Turnover	6	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.19	20	707	0.06	59	$70.00	8%	100%	95%	1.667	1
RestaPaT7	Restaurant	Packaged DX	Turnover	7	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$2.00	20	778	0.06	58	$115.13	7%	100%	95%	0.991	0
RestaPaT8	Restaurant	Packaged DX	Turnover	8	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$2.50	20	802	0.04	39	$98.39	5%	100%	95%	0.791	0
RestaPaT9	Restaurant	Packaged DX	Turnover	9	Ground Source HP Open - Water	Air Source Heat Pump	ton	$3.31	15	707	0.23	227	$ 750.0	32%	5%	95%	0.479	0
RestaPaT10	Restaurant	Packaged DX	Turnover	10	Ground Source HP Closed	Air Source Heat Pump	ton	$5.92	15	707	0.015	127	$750.00	18%	100%	95%	0.168	0
RestaPaT11	Restaurant	Packaged DX	Turnover	11	Air-side Economizer	No Economizer	ton	$1.63	15	694	0.012	104	$170.00	15%	75%	45%	0.610	0
RestaPaT12	Restaurant	Packaged DX	Turnover	12	Energy Recovery Units	No Energy Recovery	ton	$1.29	15	694	0.017	139	$179.00	20%	100%	95%	0.773	0
RestaPaT13	Restaurant	Packaged DX	Turnover	13	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$3.36	15	734	0.004	33	$110.89	5%	100%	95%	0.297	0
RestaPaN18	Restaurant	Packaged DX	New	18	Automated control system	Baseline DX	ton	$0.68	10	734	0.004	37	$25.00	5%	100%	65%	1.026	1
RestaPaN19	Restaurant	Packaged DX	New	19	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.27	10	623	0.004	34	$43.00	5%	100%	95%	0.553	0
RestaPaT15	Restaurant	Packaged DX	Turnover	15	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.27	10	623	0.004	34	$43.00	5%	100%	95%	0.553	0
RetaiPaE1	Retail	Packaged DX	Early	1	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$3.13	20	680	0.05	64	$200.00	9%	15%	9%	0.561	0
RetaiPaE2	Retail	Packaged DX	Early	2	Adding window shade film	No shade film	q ft window are	$7.05	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.049	0
RetaiPaE3	Retail	Packaged DX	Early	3	Adding window shade screen	No shade screen	q ft window are	$3.90	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.255	0
RetaiPaE4	Retail	Packaged DX	Early	4	Windows U<0.40, .55 SHGC	Existing window specifications	q ft window are	$1.40	30	2	0.000	0	$0.28	13%	50%	95%	1.179	1
RetaiPaE5	Retail	Packaged DX	Early	5	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$4.96	20	680	0.05	45	$225.00	7%	95%	95%	0.403	0
RetaiPaE7	Retail	Packaged DX	Early	7	Automated control system	Baseline DX	ton	$0.70	10	719	0.004	36	$25.00	5%	100%	65%	1.005	1
RetaiPaE8	Retail	Packaged DX	Early	8	Duct Sealing, down to 15%	Leakage of 29%	ton	$7.92	15	680	0.05	12	$95.00	2%	45%	80%	0.439	0
RetaiPaE9	Retail	Packaged DX	Early	9	Hotel Keycard Sensors	No prior controls	Room Controlle	$0.29	10	611	0.041	342	$100.00	56%	95%	80%	2.392	1
RetaiPaE10	Retail	Packaged DX	Early	10	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	ton	$0.55	1	740	0.05	64	$35.00	9%	100%	45%	0.181	0
RetaiPaE11	Retail	Packaged DX	Early	11	7 day, two stage setback thermostat	Manual Thermostat	ton	$0.44	10	680	0.015	125	$55.00	18%	100%	45%	1.589	1
RetaiPaE13	Retail	Packaged DX	Early	13	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.51	7	680	0.05	109	$55.15	16%	95%	75%	1.178	1
RetaiPaN1	Retail	Packaged DX	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	ton	$1.36	20	680	0.05	64	$87.00	9%	100%	95%	1.289	1
RetaiPaN2	Retail	Packaged DX	New	2	Adding reflective roof treatment	Std color roof	ton	$4.50	20	680	0.05	10	$45.00	1%	100%	95%	1.104	1
RetaiPaN3	Retail	Packaged DX	New	3	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$2.76	20	680	0.05	45	$125.00	7%	100%	95%	0.725	0
RetaiPaN4	Retail	Packaged DX	New	4	Green Roof (New construction or roof replacement)	Std Roof	ton	$2.81	20	680	0.05	45	$127.43	7%	45%	95%	0.711	0
RetaiPaN5	Retail	Packaged DX	New	5	Duct Insulation, Add R8	No Insulation	ton	$10.42	20	680	0.05	12	$125.00	2%	100%	95%	0.416	0
RetaiPaN6	Retail	Packaged DX	New	6	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$2.16	20	586	0.04	42	$90.40	7%	100%	95%	0.925	0
RetaiPaN7	Retail	Packaged DX	New	7	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$2.31	20	586	0.08	78	$180.81	13%	100%	95%	0.863	0
RetaiPaN8	Retail	Packaged DX	New	8	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$2.47	20	586	0.12	110	$271.21	19%	100%	95%	0.809	0
RetaiPaN9	Retail	Packaged DX	New	9	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.21	20	680	0.05	45	$55.00	7%	100%	95%	1.647	1
RetaiPaN10	Retail	Packaged DX	New	10	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.21	20	693	0.06	58	$70.00	8%	100%	95%	1.647	1
RetaiPaN11	Retail	Packaged DX	New	11	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$2.04	20	762	0.06	56	$115.13	7%	100%	95%	0.979	0
RetaiPaN12	Retail	Packaged DX	New	12	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$2.56	20	786	0.04	39	$98.39	5%	100%	95%	0.782	0
RetaiPaN13	Retail	Packaged DX	New	13	Ground Source HP Open - Water	Air Source Heat Pump	ton	$3.37	15	693	0.23	222	$ 750.0	32%	20%	95%	0.473	0
RetaiPaN14	Retail	Packaged DX	New	14	Ground Source HP Closed	Air Source Heat Pump	ton	$6.04	15	693	0.015	124	$750.00	18%	100%	95%	0.165	0
RetaiPaN15	Retail	Packaged DX	New	15	Air-side Economizer	No Economizer	ton	$1.67	15	680	0.012	102	$170.00	15%	75%	45%	0.598	0
RetaiPaN16	Retail	Packaged DX	New	16	Energy Recovery Units	No Energy Recovery	ton	$1.32	15	680	0.016	136	$179.00	20%	100%	95%	0.757	0
RetaiPaN17	Retail	Packaged DX	New	17	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$3.42	15	719	0.004	32	$110.89	5%	100%	95%	0.291	0
RetaiPaT1	Retail	Packaged DX	Turnover	1	Duct Insulation, Add R8	No Insulation	ton	$10.42	15	680	0.05	12	$125.00	2%	100%	95%	0.333	0
RetaiPaT2	Retail	Packaged DX	Turnover	2	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$2.16	20	586	0.04	42	$90.40	7%	100%	95%	0.925	0
RetaiPaT3	Retail	Packaged DX	Turnover	3	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$2.31	20	586	0.08	78	$180.81	13%	100%	95%	0.863	0
RetaiPaT4	Retail	Packaged DX	Turnover	4	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$2.47	20	586	0.12	110	$271.21	19%	100%	95%	0.809	0
RetaiPaT5	Retail	Packaged DX	Turnover	5	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.21	20	680	0.05	45	$55.00	7%	100%	95%	1.647	1
RetaiPaT6	Retail	Packaged DX	Turnover	6	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.21	20	693	0.06	58	$70.00	8%	100%	95%	1.647	1
RetaiPaT7	Retail	Packaged DX	Turnover	7	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$2.04	20	762	0.06	56	$115.13	7%	100%	95%	0.979	0
RetaiPaT8	Retail	Packaged DX	Turnover	8	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$2.56	20	786	0.04	39	$98.39	5%	100%	95%	0.782	0
RetaiPaT9	Retail	Packaged DX	Turnover	9	Ground Source HP Open - Water	Air Source Heat Pump	ton	$3.37	15	693	0.23	222	$ 750.0	32%	5%	95%	0.473	0
RetaiPaT10	Retail	Packaged DX	Turnover	10	Ground Source HP Closed	Air Source Heat Pump	ton	$6.04	15	693	0.015	124	$750.00	18%	100%	95%	0.165	0
RetaiPaT11	Retail	Packaged DX	Turnover	11	Air-side Economizer	No Economizer	ton	$1.67	15	680	0.012	102	$170.00	15%	75%	45%	0.598	0
RetaiPaT12	Retail	Packaged DX	Turnover	12	Energy Recovery Units	No Energy Recovery	ton	$1.32	15	680	0.016	136	$179.00	20%	100%	95%	0.757	0
RetaiPaT13	Retail	Packaged DX	Turnover	13	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$3.42	15	719	0.004	32	$110.89	5%	100%	95%	0.291	0
RetaiPaN18	Retail	Packaged DX	New	18	Automated control system	Baseline DX	ton	$0.70	10	719	0.004	36	$25.00	5%	100%	65%	1.005	1
RetaiPaN19	Retail	Packaged DX	New	19	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.29	10	611	0.004	33	$43.00	5%	100%	95%	0.542	0
RetaiPaT15	Retail	Packaged DX	Turnover	15	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.29	10	611	0.004	33	$43.00	5%	100%	95%	0.542	0
WarehPaE1	Warehouse	Packaged DX	Early	1	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$3.13	20	527	0.05	64	$200.00	12%	15%	9%	0.561	0
WarehPaE2	Warehouse	Packaged DX	Early	2	Adding window shade film	No shade film	q ft window are	$7.05	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.049	0
WarehPaE3	Warehouse	Packaged DX	Early	3	Adding window shade screen	No shade screen	q ft window are	$3.90	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.255	0
WarehPaE4	Warehouse	Packaged DX	Early	4	Windows U<0.40, .55 SHGC	Existing window specifications	q ft window are	$1.40	30	2	0.000	0	$0.28	13%	50%	95%	1.179	1
WarehPaE5	Warehouse	Packaged DX	Early	5	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$6.40	20	527	0.05	35	$225.00	7%	95%	95%	0.350	0
WarehPaE7	Warehouse	Packaged DX	Early	7	Automated control system	Baseline DX	ton	$0.90	10	557	0.003	28	$25.00	5%	100%	65%	0.779	0
WarehPaE8	Warehouse	Packaged DX	Early	8	Duct Sealing, down to 15%	Leakage of 29%	ton	$7.92	15	527	0.05	12	$95.00	2%	45%	80%	0.439	0
WarehPaE9	Warehouse	Packaged DX	Early	9	Hotel Keycard Sensors	No prior controls	Room Controlle	$0.29	10	473	0.041	342	$100.00	72%	95%	80%	2.392	1
WarehPaE10	Warehouse	Packaged DX	Early	10	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	ton	$0.55	1	573	0.05	64	$35.00	11%	100%	45%	0.181	0
WarehPaE11	Warehouse	Packaged DX	Early	11	7 day, two stage setback thermostat	Manual Thermostat	ton	$0.44	10	527	0.015	125	$55.00	24%	100%	45%	1.589	1
WarehPaE13	Warehouse	Packaged DX	Early	13	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.65	7	527	0.05	84	$55.15	16%	95%	75%	0.976	0
WarehPaN1	Warehouse	Packaged DX	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	ton	$1.36	20	527	0.05	64	$87.00	12%	100%	95%	1.289	1
WarehPaN2	Warehouse	Packaged DX	New	2	Adding reflective roof treatment	Std color roof	ton	$4.50	20	527	0.05	10	$45.00	2%	100%	95%	1.104	1
WarehPaN3	Warehouse	Packaged DX	New	3	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$3.56	20	527	0.05	35	$125.00	7%	100%	95%	0.630	0
WarehPaN4	Warehouse	Packaged DX	New	4	Green Roof (New construction or roof replacement)	Std Roof	ton	$3.63	20	527	0.05	35	$127.43	7%	45%	95%	0.618	0
WarehPaN5	Warehouse	Packaged DX	New	5	Duct Insulation, Add R8	No Insulation	ton	$10.42	20	527	0.05	12	$125.00	2%	100%	95%	0.416	0
WarehPaN6	Warehouse	Packaged DX	New	6	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$2.79	20	454	0.04	32	$90.40	7%	100%	95%	0.804	0
WarehPaN7	Warehouse	Packaged DX	New	7	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$2.99	20	454	0.08	61	$180.81	13%	100%	95%	0.751	0
WarehPaN8	Warehouse	Packaged DX	New	8	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$3.18	20	454	0.12	85	$271.21	19%	100%	95%	0.704	0
WarehPaN9	Warehouse	Packaged DX	New	9	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.57	20	527	0.05	35	$55.00	7%	100%	95%	1.432	1
WarehPaN10	Warehouse	Packaged DX	New	10	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.57	20	537	0.06	45	$70.00	8%	100%	95%	1.432	1
WarehPaN11	Warehouse	Packaged DX	New	11	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$2.63	20	590	0.06	44	$115.13	7%	100%	95%	0.851	0

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Fla
WarehPaN12	Warehouse	Packaged DX	New	12	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$3.30	20	609	0.04	30	$98.39	5%	100%	95%	0.680	0
WarehPaN13	Warehouse	Packaged DX	New	13	Ground Source HP Open - Water	Air Source Heat Pump	ton	$4.35	15	537	0.23	172	$ 750.0	32%	20%	95%	0.412	0
WarehPaN14	Warehouse	Packaged DX	New	14	Ground Source HP Closed	Air Source Heat Pump	ton	$7.80	15	537	0.011	96	$750.00	18%	100%	95%	0.128	0
WarehPaN15	Warehouse	Packaged DX	New	15	Air-side Economizer	No Economizer	ton	$2.15	15	527	0.009	79	$170.00	15%	75%	45%	0.463	0
WarehPaN16	Warehouse	Packaged DX	New	16	Energy Recovery Units	No Energy Recovery	ton	$1.70	15	527	0.013	105	$179.00	20%	100%	95%	0.587	0
WarehPaN17	Warehouse	Packaged DX	New	17	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$4.42	15	557	0.003	25	$110.89	5%	100%	95%	0.225	0
WarehPaT1	Warehouse	Packaged DX	Turnover	1	Duct Insulation, Add R8	No Insulation	ton	$10.42	15	527	0.05	12	$125.00	2%	100%	95%	0.333	0
WarehPaT2	Warehouse	Packaged DX	Turnover	2	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$2.79	20	454	0.04	32	$90.40	7%	100%	95%	0.804	0
WarehPaT3	Warehouse	Packaged DX	Turnover	3	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$2.99	20	454	0.08	61	$180.81	13%	100%	95%	0.751	0
WarehPaT4	Warehouse	Packaged DX	Turnover	4	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$3.18	20	454	0.12	85	$271.21	19%	100%	95%	0.704	0
WarehPaT5	Warehouse	Packaged DX	Turnover	5	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing effiecney value (11.2 EER)	ton	$1.57	20	527	0.05	35	$55.00	7%	100%	95%	1.432	1
WarehPaT6	Warehouse	Packaged DX	Turnover	6	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.57	20	537	0.06	45	$70.00	8%	100%	95%	1.432	1
WarehPaT7	Warehouse	Packaged DX	Turnover	7	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$2.63	20	590	0.06	44	$115.13	7%	100%	95%	0.851	0
WarehPaT8	Warehouse	Packaged DX	Turnover	8	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$3.30	20	609	0.04	30	$98.39	5%	100%	95%	0.680	0
WarehPaT9	Warehouse	Packaged DX	Turnover	9	Ground Source HP Open - Water	Air Source Heat Pump	ton	$4.35	15	537	0.23	172	$ 750.0	32%	5%	95%	0.412	0
WarehPaT10	Warehouse	Packaged DX	Turnover	10	Ground Source HP Closed	Air Source Heat Pump	ton	$7.80	15	537	0.011	96	$750.00	18%	100%	95%	0.128	0
WarehPaT11	Warehouse	Packaged DX	Turnover	11	Air-side Economizer	No Economizer	ton	$2.15	15	527	0.009	79	$170.00	15%	75%	45%	0.463	0
WarehPaT12	Warehouse	Packaged DX	Turnover	12	Energy Recovery Units	No Energy Recovery	ton	$1.70	15	527	0.013	105	$179.00	20%	100%	95%	0.587	0
WarehPaT13	Warehouse	Packaged DX	Turnover	13	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$4.42	15	557	0.003	25	$110.89	5%	100%	95%	0.225	0
WarehPaN18	Warehouse	Packaged DX	New	18	Automated control system	Baseline DX	ton	$0.90	10	557	0.003	28	$25.00	5%	100%	65%	0.779	0
WarehPaN19	Warehouse	Packaged DX	New	19	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.67	10	473	0.003	26	$43.00	5%	100%	95%	0.420	0
WarehPaT15	Warehouse	Packaged DX	Turnover	15	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.67	10	473	0.003	26	$43.00	5%	100%	95%	0.420	0
HealtHeN4	Healthcare	Heating	New	4	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$5.76	15	318	0.000	19	$110.89	6%	100%	95%	0.164	0
HealtHeT1	Healthcare	Heating	Turnover	1	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$5.76	15	318	0.000	19	$110.89	6%	100%	95%	0.164	0
GroceHeE1	Grocery	Heating	Early	1	Re-commissioning	Current Controls not working properly, setpoints not optimized,	sq ft	$0.2710	7	125,500	0.297	20,080	$5,441.68	16%	95%	75%	1.723	1
GroceHeE2	Grocery	Heating	Early	2	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$4.44	20	1,369	0.05	45	$200.00	3%	10%	95%	0.455	0
GroceHeE3	Grocery	Heating	Early	3	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.67	20	1,369	0.05	75	$125.00	5%	10%	95%	1.010	1
GroceHeE4	Grocery	Heating	Early	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.75	20	1,369	0.05	34	$127.43	2%	10%	95%	0.612	0
GroceHeE5	Grocery	Heating	Early	5	Humidification with High pressure, Ultrasonic devices	Electric Resistive Elements	unit	$0.1893	10	2,794	0.039	2,641	$500.00	95%	100%	95%	3.512	1
GroceHeN1	Grocery	Heating	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5 - Electric Heat	sq ft	$1.93	20	1,369	0.05	45	$87.00	3%	10%	95%	1.045	1
GroceHeN2	Grocery	Heating	New	2	Ground Source HP Open - Water	Air Source Heat Pump	ton	$9.04	15	1,369	0.23	83	$ 750.0	6%	20%	95%	0.304	0
GroceHen3	Grocery	Heating	new	3	Ground Source HP Closed	Air Source Heat Pump	ton	$9.04	15	1,369	0.001	83	$750.00	6%	100%	95%	0.105	0
GroceHeN4	Grocery	Heating	New	4	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.34	15	1,369	0.001	83	$110.89	6%	100%	95%	0.707	0
GroceHeT1	Grocery	Heating	Turnover	1	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.34	15	1,369	0.001	83	$110.89	6%	100%	95%	0.707	0
InstiHeE1	Institutional	Heating	Early	1	Re-commissioning	Current Controls not working properly, setpoints not optimized,	sq ft	$0.2710	7	125,500	0.297	20,080	$5,441.68	16%	95%	75%	1.723	1
InstiHeE2	Institutional	Heating	Early	2	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$4.44	20	975	0.05	45	$200.00	5%	10%	95%	0.455	0
InstiHeE3	Institutional	Heating	Early	3	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.67	20	975	0.05	75	$125.00	8%	10%	95%	1.010	1
InstiHeE4	Institutional	Heating	Early	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.75	20	975	0.05	34	$127.43	3%	10%	95%	0.612	0
InstiHeE5	Institutional	Heating	Early	5	Humidification with High pressure, Ultrasonic devices	Electric Resistive Elements	unit	$0.1893	10	2,794	0.039	2,641	$500.00	95%	100%	95%	3.512	1
InstiHeN1	Institutional	Heating	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5 - Electric Heat	sq ft	$1.93	20	975	0.05	45	$87.00	5%	10%	95%	1.045	1
InstiHeN2	Institutional	Heating	New	2	Ground Source HP Open - Water	Air Source Heat Pump	ton	$12.70	15	975	0.23	59	$ 750.0	6%	20%	95%	0.274	0
InstiHen3	Institutional	Heating	new	3	Ground Source HP Closed	Air Source Heat Pump	ton	$12.70	15	975	0.001	59	$750.00	6%	100%	95%	0.074	0
InstiHeN4	Institutional	Heating	New	4	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.88	15	975	0.001	59	$110.89	6%	100%	95%	0.503	0
InstiHeT1	Institutional	Heating	Turnover	1	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.88	15	975	0.001	59	$110.89	6%	100%	95%	0.503	0
LodgiHeE1	Lodging	Heating	Early	1	Re-commissioning	Current Controls not working properly, setpoints not optimized,	sq ft	$0.2710	7	125,500	0.297	20,080	$5,441.68	16%	95%	75%	1.723	1
LodgiHeE2	Lodging	Heating	Early	2	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$4.44	20	1,659	0.05	45	$200.00	3%	10%	95%	0.455	0
LodgiHeE3	Lodging	Heating	Early	3	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.67	20	1,659	0.05	75	$125.00	5%	10%	95%	1.010	1
LodgiHeE4	Lodging	Heating	Early	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.75	20	1,659	0.05	34	$127.43	2%	10%	95%	0.612	0
LodgiHeE5	Lodging	Heating	Early	5	Humidification with High pressure, Ultrasonic devices	Electric Resistive Elements	unit	$0.1893	10	2,794	0.039	2,641	$500.00	95%	100%	95%	3.512	1
LodgiHeN1	Lodging	Heating	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5 - Electric Heat	sq ft	$1.93	20	1,659	0.05	45	$87.00	3%	10%	95%	1.045	1
LodgiHeN2	Lodging	Heating	New	2	Ground Source HP Open - Water	Air Source Heat Pump	ton	$7.46	15	1,659	0.23	101	$ 750.0	6%	20%	95%	0.326	0
LodgiHen3	Lodging	Heating	new	3	Ground Source HP Closed	Air Source Heat Pump	ton	$7.46	15	1,659	0.001	101	$750.00	6%	100%	95%	0.127	0
LodgiHeN4	Lodging	Heating	New	4	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.10	15	1,659	0.001	101	$110.89	6%	100%	95%	0.856	0
LodgiHeT1	Lodging	Heating	Turnover	1	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.10	15	1,659	0.001	101	$110.89	6%	100%	95%	0.856	0
MiscHeE1	Misc	Heating	Early	1	Re-commissioning	Current Controls not working properly, setpoints not optimized,	sq ft	$0.2710	7	125,500	0.297	20,080	$5,441.68	16%	95%	75%	1.723	1
MiscHeE2	Misc	Heating	Early	2	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$4.44	20	1,134	0.05	45	$200.00	4%	10%	95%	0.455	0
MiscHeE3	Misc	Heating	Early	3	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.67	20	1,134	0.05	75	$125.00	7%	10%	95%	1.010	1
MiscHeE4	Misc	Heating	Early	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.75	20	1,134	0.05	34	$127.43	3%	10%	95%	0.612	0
MiscHeE5	Misc	Heating	Early	5	Humidification with High pressure, Ultrasonic devices	Electric Resistive Elements	unit	$0.1893	10	2,794	0.039	2,641	$500.00	95%	100%	95%	3.512	1
MiscHeN1	Misc	Heating	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5 - Electric Heat	sq ft	$1.93	20	1,134	0.05	45	$87.00	4%	10%	95%	1.045	1
MiscHeN2	Misc	Heating	New	2	Ground Source HP Open - Water	Air Source Heat Pump	ton	$10.91	15	1,134	0.23	69	$ 750.0	6%	20%	95%	0.286	0
MiscHen3	Misc	Heating	new	3	Ground Source HP Closed	Air Source Heat Pump	ton	$10.91	15	1,134	0.001	69	$750.00	6%	100%	95%	0.087	0
MiscHeN4	Misc	Heating	New	4	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.61	15	1,134	0.001	69	$110.89	6%	100%	95%	0.586	0
MiscHeT1	Misc	Heating	Turnover	1	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.61	15	1,134	0.001	69	$110.89	6%	100%	95%	0.586	0
OfficHeE1	Office	Heating	Early	1	Re-commissioning	Current Controls not working properly, setpoints not optimized,	sq ft	$0.2710	7	125,500	0.297	20,080	$5,441.68	16%	95%	75%	1.723	1
OfficHeE2	Office	Heating	Early	2	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$4.44	20	875	0.05	45	$200.00	5%	10%	95%	0.455	0
OfficHeE3	Office	Heating	Early	3	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.67	20	875	0.05	75	$125.00	9%	10%	95%	1.010	1
OfficHeE4	Office	Heating	Early	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.75	20	875	0.05	34	$127.43	4%	10%	95%	0.612	0
OfficHeE5	Office	Heating	Early	5	Humidification with High pressure, Ultrasonic devices	Electric Resistive Elements	unit	$0.1893	10	2,794	0.039	2,641	$500.00	95%	100%	95%	3.512	1
OfficHeN1	Office	Heating	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5 - Electric Heat	sq ft	$1.93	20	875	0.05	45	$87.00	5%	10%	95%	1.045	1
OfficHeN2	Office	Heating	New	2	Ground Source HP Open - Water	Air Source Heat Pump	ton	$14.15	15	875	0.23	53	$ 750.0	6%	20%	95%	0.266	0
OfficHen3	Office	Heating	new	3	Ground Source HP Closed	Air Source Heat Pump	ton	$14.15	15	875	0.001	53	$750.00	6%	100%	95%	0.067	0
OfficHeN4	Office	Heating	New	4	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$2.09	15	875	0.001	53	$110.89	6%	100%	95%	0.452	0
OfficHeT1	Office	Heating	Turnover	1	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$2.09	15	875	0.001	53	$110.89	6%	100%	95%	0.452	0
RestaHeE1	Restaurant	Heating	Early	1	Re-commissioning	Current Controls not working properly, setpoints not optimized,	sq ft	$0.2710	7	125,500	0.297	20,080	$5,441.68	16%	95%	75%	1.723	1
RestaHeE2	Restaurant	Heating	Early	2	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$4.44	20	1,333	0.05	45	$200.00	3%	10%	95%	0.455	0
RestaHeE3	Restaurant	Heating	Early	3	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.67	20	1,333	0.05	75	$125.00	6%	10%	95%	1.010	1
RestaHeE4	Restaurant	Heating	Early	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.75	20	1,333	0.05	34	$127.43	3%	10%	95%	0.612	0
RestaHeE5	Restaurant	Heating	Early	5	Humidification with High pressure, Ultrasonic devices	Electric Resistive Elements	unit	$0.1893	10	2,794	0.039	2,641	$500.00	95%	100%	95%	3.512	1
RestaHeN1	Restaurant	Heating	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5 - Electric Heat	sq ft	$1.93	20	1,333	0.05	45	$87.00	3%	10%	95%	1.045	1
RestaHeN2	Restaurant	Heating	New	2	Ground Source HP Open - Water	Air Source Heat Pump	ton	$9.28	15	1,333	0.23	81	$ 750.0	6%	20%	95%	0.301	0
RestaHen3	Restaurant	Heating	new	3	Ground Source HP Closed	Air Source Heat Pump	ton	$9.28	15	1,333	0.001	81	$750.00	6%	100%	95%	0.102	0
RestaHeN4	Restaurant	Heating	New	4	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.37	15	1,333	0.001	81	$110.89	6%	100%	95%	0.688	0
RestaHeT1	Restaurant	Heating	Turnover	1	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.37	15	1,333	0.001	81	$110.89	6%	100%	95%	0.688	0
RetaiHeE1	Retail	Heating	Early	1	Re-commissioning	Current Controls not working properly, setpoints not optimized,	sq ft	$0.2710	7	125,500	0.297	20,080	$5,441.68	16%	95%	75%	1.723	1
RetaiHeE2	Retail	Heating	Early	2	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$4.44	20	1,369	0.05	45	$200.00	3%	10%	95%	0.455	0
RetaiHeE3	Retail	Heating	Early	3	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.67	20	1,369	0.05	75	$125.00	5%	10%	95%	1.010	1
RetaiHeE4	Retail	Heating	Early	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.75	20	1,369	0.05	34	$127.43	2%	10%	95%	0.612	0
RetaiHeE5	Retail	Heating	Early	5	Humidification with High pressure, Ultrasonic devices	Electric Resistive Elements	unit	$0.1893	10	2,794	0.039	2,641	$500.00	95%	100%	95%	3.512	1
RetaiHeN1	Retail	Heating	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5 - Electric Heat	sq ft	$1.93	20	1,369	0.05	45	$87.00	3%	10%	95%	1.045	1
RetaiHeN2	Retail	Heating	New	2	Ground Source HP Open - Water	Air Source Heat Pump	ton	$9.04	15	1,369	0.23	83	$ 750.0	6%	20%	95%	0.304	0
RetaiHen3	Retail	Heating	new	3	Ground Source HP Closed	Air Source Heat Pump	ton	$9.04	15	1,369	0.001	83	$750.00	6%	100%	95%	0.105	0
RetaiHeN4	Retail	Heating	New	4	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.34	15	1,369	0.001	83	$110.89	6%	100%	95%	0.707	0
RetaiHeT1	Retail	Heating	Turnover	1	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.34	15	1,369	0.001	83	$110.89	6%	100%	95%	0.707	0

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Fla
WarehHeE1	Warehouse	Heating	Early	1	Re-commissioning	Current Controls not working properly, setpoints not optimized,	sq ft	$0.2710	7	125,500	0.297	20,080	$5,441.68	16%	95%	75%	1.723	1
WarehHeE2	Warehouse	Heating	Early	2	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$4.44	20	1,177	0.05	45	$200.00	4%	10%	95%	0.455	0
WarehHeE3	Warehouse	Heating	Early	3	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.67	20	1,177	0.05	75	$125.00	6%	10%	95%	1.010	1
WarehHeE4	Warehouse	Heating	Early	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.75	20	1,177	0.05	34	$127.43	3%	10%	95%	0.612	0
WarehHeE5	Warehouse	Heating	Early	5	Humidification with High pressure, Ultrasonic devices	Electric Resistive Elements	unit	$0.1893	10	2,794	0.039	2,641	$500.00	95%	100%	95%	3.512	1
WarehHeN1	Warehouse	Heating	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5 - Electric Heat	sq ft	$1.93	20	1,177	0.05	45	$87.00	4%	10%	95%	1.045	1
WarehHeN2	Warehouse	Heating	New	2	Ground Source HP Open - Water	Air Source Heat Pump	ton	$10.51	15	1,177	0.23	71	$ 750.0	6%	20%	95%	0.289	0
WarehHen3	Warehouse	Heating	new	3	Ground Source HP Closed	Air Source Heat Pump	ton	$10.51	15	1,177	0.001	71	$750.00	6%	100%	95%	0.090	0
WarehHeN4	Warehouse	Heating	New	4	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.55	15	1,177	0.001	71	$110.89	6%	100%	95%	0.608	0
WarehHeT1	Warehouse	Heating	Turnover	1	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.55	15	1,177	0.001	71	$110.89	6%	100%	95%	0.608	0
GroceChE1	Grocery	Chiller	Early	1	Duct Sealing, down to 15%	Leakage of 29%	ton	$2.1495	15	4,420	0.009	44.1960	$95.00	1%	40%	$0.90	0.477	0
GroceChE2	Grocery	Chiller	Early	2	Duct Insulation, Add R8	No Insulation	ton	$2.8283	15	4,420	0.009	44.1960	$125.00	1%	50%	95%	0.362	0
GroceChE3	Grocery	Chiller	Early	3	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton	ton	$0.5657	15	4,420	0.044	220.9800	$125.00	5%	75%	75%	1.811	1
GroceChE4	Grocery	Chiller	Early	4	Energy Recovery Units	No Energy Recovery	ton	$0.5091	15	4,420	0.174	883.9	$450.00	20%	75%	75%	2.012	1
GroceChE5	Grocery	Chiller	Early	5	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.5157	7	4,420	0.140	707	$364.67	16%	75%	75%	0.978	0
GroceChE6	Grocery	Chiller	Early	6	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$0.82	15	4,420	0.05	245	$200.00	6%	15%	95%	1.253	1
GroceChE7	Grocery	Chiller	Early	7	Adding window shade film	No shade film	q ft window are	$7.0453	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.050	0
GroceChE8	Grocery	Chiller	Early	8	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.263	0
GroceChE9	Grocery	Chiller	Early	9	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.70	20	4,420	0.05	133	$225.00	3%	75%	95%	0.837	0
GroceChN1	Grocery	Chiller	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	sq ft	$0.56	20	4,420	0.05	155	$87.00	4%	15%	95%	2.454	1
GroceChN2	Grocery	Chiller	New	2	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.263	0
GroceChN3	Grocery	Chiller	New	3	Adding reflective roof treatment	Std color roof	sq ft roof area	$4.50	20	4,420	0.05	10	$45.00	0%	100%	95%	1.099	1
GroceChN4	Grocery	Chiller	New	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$2.95	20	4,420	0.05	43	$127.43	1%	45%	95%	0.683	0
GroceChN5	Grocery	Chiller	New	5	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.4781	15	4,420	0.76	533	$255.00	12%	95%	95%	3.776	1
GroceChN6	Grocery	Chiller	New	6	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2643	15	4,420	1.944	1,372	$362.50	31%	95%	95%	6.831	1
GroceChN7	Grocery	Chiller	New	7	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1370	15	10,592	1.728	1,219	$167.00	12%	95%	95%	13.180	1
GroceChN8	Grocery	Chiller	New	8	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.5204	15	4,420	0.044	220.9800	$115.00	5%	95%	75%	1.969	1
GroceChN9	Grocery	Chiller	New	9	Energy Recovery Units	No Energy Recovery	ton	$0.2828	15	4,420	0.174	883.9	$250.00	20%	95%	75%	3.622	1
GroceChN10	Grocery	Chiller	New	10	Duct Insulation, Add R8	No Insulation	ton	$2.8283	15	4,420	0.009	44.1960	$125.00	1%	100%	95%	0.362	0
GroceChT1	Grocery	Chiller	Turnover	1	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.5531	15	4,420	0.76	533	$295.00	12%	95%	95%	3.264	1
GroceChT2	Grocery	Chiller	Turnover	2	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.3372	15	4,420	1.944	1,372	$462.50	31%	95%	95%	5.354	1
GroceChT3	Grocery	Chiller	Turnover	3	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.5379	15	4,420	1.944	773	$416.00	18%	95%	95%	4.661	1
GroceChN11	Grocery	Chiller	New	11	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.5379	15	4,420	1.944	773	$416.00	18%	95%	95%	4.661	1
GroceChT5	Grocery	Chiller	Turnover	5	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.5747	15	4,420	0.044	220.9800	$127.00	5%	95%	75%	1.783	1
GroceChT4	Grocery	Chiller	Turnover	4	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1698	15	10,592	1.728	1,219	$207.00	12%	95%	95%	10.633	1
InstiChE1	Institutional	Chiller	Early	1	Duct Sealing, down to 15%	Leakage of 29%	ton	$3.0265	15	3,139	0.006	31.3896	$95.00	1%	40%	$0.90	0.338	0
InstiChE2	Institutional	Chiller	Early	2	Duct Insulation, Add R8	No Insulation	ton	$3.9822	15	3,139	0.006	31.3896	$125.00	1%	50%	95%	0.257	0
InstiChE3	Institutional	Chiller	Early	3	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton	ton	$0.7964	15	3,139	0.031	156.9480	$125.00	5%	75%	75%	1.286	1
InstiChE4	Institutional	Chiller	Early	4	Energy Recovery Units	No Energy Recovery	ton	$0.7168	15	3,139	0.124	627.8	$450.00	20%	75%	75%	1.429	1
InstiChE5	Institutional	Chiller	Early	5	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.7261	7	3,139	0.099	502	$364.67	16%	75%	75%	0.694	0
InstiChE6	Institutional	Chiller	Early	6	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$0.82	15	3,139	0.05	245	$200.00	8%	15%	95%	1.253	1
InstiChE7	Institutional	Chiller	Early	7	Adding window shade film	No shade film	q ft window are	$7.0453	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.050	0
InstiChE8	Institutional	Chiller	Early	8	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.263	0
InstiChE9	Institutional	Chiller	Early	9	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$2.39	20	3,139	0.05	94	$225.00	3%	75%	95%	0.644	0
InstiChN1	Institutional	Chiller	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	sq ft	$0.79	20	3,139	0.05	110	$87.00	4%	15%	95%	1.870	1
InstiChN2	Institutional	Chiller	New	2	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.263	0
InstiChN3	Institutional	Chiller	New	3	Adding reflective roof treatment	Std color roof	sq ft roof area	$4.50	20	3,139	0.05	10	$45.00	0%	100%	95%	1.099	1
InstiChN4	Institutional	Chiller	New	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.96	20	3,139	0.05	32	$127.43	1%	45%	95%	0.586	0
InstiChN5	Institutional	Chiller	New	5	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.6731	15	3,139	0.76	379	$255.00	12%	95%	95%	3.232	1
InstiChN6	Institutional	Chiller	New	6	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.3721	15	3,139	1.944	974	$362.50	31%	95%	95%	5.846	1
InstiChN7	Institutional	Chiller	New	7	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1929	15	7,523	1.728	866	$167.00	12%	95%	95%	11.280	1
InstiChN8	Institutional	Chiller	New	8	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.7327	15	3,139	0.031	156.9480	$115.00	5%	95%	75%	1.398	1
InstiChN9	Institutional	Chiller	New	9	Energy Recovery Units	No Energy Recovery	ton	$0.3982	15	3,139	0.124	627.8	$250.00	20%	95%	75%	2.573	1
InstiChN10	Institutional	Chiller	New	10	Duct Insulation, Add R8	No Insulation	ton	$3.9822	15	3,139	0.006	31.3896	$125.00	1%	100%	95%	0.257	0
InstiChT1	Institutional	Chiller	Turnover	1	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.7787	15	3,139	0.76	379	$295.00	12%	95%	95%	2.794	1
InstiChT2	Institutional	Chiller	Turnover	2	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.4748	15	3,139	1.944	974	$462.50	31%	95%	95%	4.582	1
InstiChT3	Institutional	Chiller	Turnover	3	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.7573	15	3,139	1.944	549	$416.00	18%	95%	95%	4.177	1
InstiChN11	Institutional	Chiller	New	11	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.7573	15	3,139	1.944	549	$416.00	18%	95%	95%	4.177	1
InstiChT5	Institutional	Chiller	Turnover	5	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.8092	15	3,139	0.031	156.9480	$127.00	5%	95%	75%	1.266	1
InstiChT4	Institutional	Chiller	Turnover	4	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.2391	15	7,523	1.728	866	$207.00	12%	95%	95%	9.100	1
LodgiChE1	Lodging	Chiller	Early	1	Duct Sealing, down to 15%	Leakage of 29%	ton	$2.5371	15	3,744	0.007	37.4448	$95.00	1%	40%	$0.90	0.404	0
LodgiChE2	Lodging	Chiller	Early	2	Duct Insulation, Add R8	No Insulation	ton	$3.3382	15	3,744	0.007	37.4448	$125.00	1%	50%	95%	0.307	0
LodgiChE3	Lodging	Chiller	Early	3	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton	ton	$0.6676	15	3,744	0.037	187.2240	$125.00	5%	75%	75%	1.534	1
LodgiChE4	Lodging	Chiller	Early	4	Energy Recovery Units	No Energy Recovery	ton	$0.6009	15	3,744	0.148	748.9	$450.00	20%	75%	75%	1.705	1
LodgiChE5	Lodging	Chiller	Early	5	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.6087	7	3,744	0.118	599	$364.67	16%	75%	75%	0.828	0
LodgiChE6	Lodging	Chiller	Early	6	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$0.82	15	3,744	0.05	245	$200.00	7%	15%	95%	1.253	1
LodgiChE7	Lodging	Chiller	Early	7	Adding window shade film	No shade film	q ft window are	$7.0453	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.050	0
LodgiChE8	Lodging	Chiller	Early	8	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.263	0
LodgiChE9	Lodging	Chiller	Early	9	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$2.00	20	3,744	0.05	112	$225.00	3%	75%	95%	0.735	0
LodgiChN1	Lodging	Chiller	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	sq ft	$0.66	20	3,744	0.05	131	$87.00	4%	15%	95%	2.146	1
LodgiChN2	Lodging	Chiller	New	2	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.263	0
LodgiChN3	Lodging	Chiller	New	3	Adding reflective roof treatment	Std color roof	sq ft roof area	$4.50	20	3,744	0.05	10	$45.00	0%	100%	95%	1.099	1
LodgiChN4	Lodging	Chiller	New	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.32	20	3,744	0.05	38	$127.43	1%	45%	95%	0.641	0
LodgiChN5	Lodging	Chiller	New	5	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.5643	15	3,744	0.76	452	$255.00	12%	95%	95%	3.489	1
LodgiChN6	Lodging	Chiller	New	6	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.3119	15	3,744	1.944	1,162	$362.50	31%	95%	95%	6.312	1
LodgiChN7	Lodging	Chiller	New	7	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1617	15	8,974	1.728	1,033	$167.00	12%	95%	95%	12.178	1
LodgiChN8	Lodging	Chiller	New	8	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.6142	15	3,744	0.037	187.2240	$115.00	5%	95%	75%	1.668	1
LodgiChN9	Lodging	Chiller	New	9	Energy Recovery Units	No Energy Recovery	ton	$0.3338	15	3,744	0.148	748.9	$250.00	20%	95%	75%	3.069	1
LodgiChN10	Lodging	Chiller	New	10	Duct Insulation, Add R8	No Insulation	ton	$3.3382	15	3,744	0.007	37.4448	$125.00	1%	100%	95%	0.307	0
LodgiChT1	Lodging	Chiller	Turnover	1	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.6528	15	3,744	0.76	452	$295.00	12%	95%	95%	3.016	1
LodgiChT2	Lodging	Chiller	Turnover	2	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.3980	15	3,744	1.944	1,162	$462.50	31%	95%	95%	4.947	1
LodgiChT3	Lodging	Chiller	Turnover	3	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.6348	15	3,744	1.944	655	$416.00	18%	95%	95%	4.406	1
LodgiChN11	Lodging	Chiller	New	11	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.6348	15	3,744	1.944	655	$416.00	18%	95%	95%	4.406	1
LodgiChT5	Lodging	Chiller	Turnover	5	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.6783	15	3,744	0.037	187.2240	$127.00	5%	95%	75%	1.510	1
LodgiChT4	Lodging	Chiller	Turnover	4	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.2004	15	8,974	1.728	1,033	$207.00	12%	95%	95%	9.825	1
MiscChE1	Misc	Chiller	Early	1	Duct Sealing, down to 15%	Leakage of 29%	ton	$2.1857	15	4,347	0.009	43.4652	$95.00	1%	40%	$0.90	0.469	0
MiscChE2	Misc	Chiller	Early	2	Duct Insulation, Add R8	No Insulation	ton	$2.8759	15	4,347	0.009	43.4652	$125.00	1%	50%	95%	0.356	0
MiscChE3	Misc	Chiller	Early	3	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton	ton	$0.5752	15	4,347	0.043	217.3260	$125.00	5%	75%	75%	1.781	1
MiscChE4	Misc	Chiller	Early	4	Energy Recovery Units	No Energy Recovery	ton	$0.5177	15	4,347	0.172	869.3	$450.00	20%	75%	75%	1.979	1
MiscChE5	Misc	Chiller	Early	5	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.5244	7	4,347	0.137	695	$364.67	16%	75%	75%	0.962	0
MiscChE6	Misc	Chiller	Early	6	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$0.82	15	4,347	0.05	245	$200.00	6%	15%	95%	1.253	1
MiscChE7	Misc	Chiller	Early	7	Adding window shade film	No shade film	q ft window are	$7.0453	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.050	0
MiscChE8	Misc	Chiller	Early	8	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.263	0
MiscChE9	Misc	Chiller	Early	9	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.73	20	4,347	0.05	130	$225.00	3%	75%	95%	0.826	0

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Fla
MiscChN1	Misc	Chiller	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	sq ft	$0.57	20	4,347	0.05	152	$87.00	4%	15%	95%	2.420	1
MiscChN2	Misc	Chiller	New	2	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.263	0
MiscChN3	Misc	Chiller	New	3	Adding reflective roof treatment	Std color roof	sq ft roof area	$4.50	20	4,347	0.05	10	$45.00	0%	100%	95%	1.099	1
MiscChN4	Misc	Chiller	New	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$2.87	20	4,347	0.05	44	$127.43	1%	45%	95%	0.693	0
MiscChN5	Misc	Chiller	New	5	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.4861	15	4,347	0.76	525	$255.00	12%	95%	95%	3.745	1
MiscChN6	Misc	Chiller	New	6	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2687	15	4,347	1.944	1,349	$362.50	31%	95%	95%	6.775	1
MiscChN7	Misc	Chiller	New	7	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1393	15	10,417	1.728	1,199	$167.00	12%	95%	95%	13.071	1
MiscChN8	Misc	Chiller	New	8	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.5292	15	4,347	0.043	217.3260	$115.00	5%	95%	75%	1.936	1
MiscChN9	Misc	Chiller	New	9	Energy Recovery Units	No Energy Recovery	ton	$0.2876	15	4,347	0.172	869.3	$250.00	20%	95%	75%	3.562	1
MiscChN10	Misc	Chiller	New	10	Duct Insulation, Add R8	No Insulation	ton	$2.8759	15	4,347	0.009	43.4652	$125.00	1%	100%	95%	0.356	0
MiscChT1	Misc	Chiller	Turnover	1	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.5624	15	4,347	0.76	525	$295.00	12%	95%	95%	3.237	1
MiscChT2	Misc	Chiller	Turnover	2	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.3429	15	4,347	1.944	1,349	$462.50	31%	95%	95%	5.310	1
MiscChT3	Misc	Chiller	Turnover	3	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.5469	15	4,347	1.944	761	$416.00	18%	95%	95%	4.633	1
MiscChN11	Misc	Chiller	New	11	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.5469	15	4,347	1.944	761	$416.00	18%	95%	95%	4.633	1
MiscChT5	Misc	Chiller	Turnover	5	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.5844	15	4,347	0.043	217.3260	$127.00	5%	95%	75%	1.753	1
MiscChT4	Misc	Chiller	Turnover	4	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1726	15	10,417	1.728	1,199	$207.00	12%	95%	95%	10.545	1
OfficChE1	Office	Chiller	Early	1	Duct Sealing, down to 15%	Leakage of 29%	ton	$2.2561	15	4,211	0.008	42.1080	$95.00	1%	40%	$0.90	0.454	0
OfficChE2	Office	Chiller	Early	2	Duct Insulation, Add R8	No Insulation	ton	$2.9686	15	4,211	0.008	42.1080	$125.00	1%	50%	95%	0.345	0
OfficChE3	Office	Chiller	Early	3	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton	ton	$0.5937	15	4,211	0.042	210.5400	$125.00	5%	75%	75%	1.726	1
OfficChE4	Office	Chiller	Early	4	Energy Recovery Units	No Energy Recovery	ton	$0.5343	15	4,211	0.166	842.2	$450.00	20%	75%	75%	1.917	1
OfficChE5	Office	Chiller	Early	5	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.5413	7	4,211	0.133	674	$364.67	16%	75%	75%	0.932	0
OfficChE6	Office	Chiller	Early	6	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$0.82	15	4,211	0.05	245	$200.00	6%	15%	95%	1.253	1
OfficChE7	Office	Chiller	Early	7	Adding window shade film	No shade film	q ft window are	$7.0453	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.050	0
OfficChE8	Office	Chiller	Early	8	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.263	0
OfficChE9	Office	Chiller	Early	9	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.78	20	4,211	0.05	126	$225.00	3%	75%	95%	0.806	0
OfficChN1	Office	Chiller	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	sq ft	$0.59	20	4,211	0.05	147	$87.00	4%	15%	95%	2.358	1
OfficChN2	Office	Chiller	New	2	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.263	0
OfficChN3	Office	Chiller	New	3	Adding reflective roof treatment	Std color roof	sq ft roof area	$4.50	20	4,211	0.05	10	$45.00	0%	100%	95%	1.099	1
OfficChN4	Office	Chiller	New	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$2.95	20	4,211	0.05	43	$127.43	1%	45%	95%	0.683	0
OfficChN5	Office	Chiller	New	5	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.5018	15	4,211	0.76	508	$255.00	12%	95%	95%	3.688	1
OfficChN6	Office	Chiller	New	6	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2774	15	4,211	1.944	1,307	$362.50	31%	95%	95%	6.670	1
OfficChN7	Office	Chiller	New	7	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1438	15	10,091	1.728	1,162	$167.00	12%	95%	95%	12.870	1
OfficChN8	Office	Chiller	New	8	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.5462	15	4,211	0.042	210.5400	$115.00	5%	95%	75%	1.876	1
OfficChN9	Office	Chiller	New	9	Energy Recovery Units	No Energy Recovery	ton	$0.2969	15	4,211	0.166	842.2	$250.00	20%	95%	75%	3.451	1
OfficChN10	Office	Chiller	New	10	Duct Insulation, Add R8	No Insulation	ton	$2.9686	15	4,211	0.008	42.1080	$125.00	1%	100%	95%	0.345	0
OfficChT1	Office	Chiller	Turnover	1	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.5805	15	4,211	0.76	508	$295.00	12%	95%	95%	3.188	1
OfficChT2	Office	Chiller	Turnover	2	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.3539	15	4,211	1.944	1,307	$462.50	31%	95%	95%	5.228	1
OfficChT3	Office	Chiller	Turnover	3	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.5645	15	4,211	1.944	737	$416.00	18%	95%	95%	4.582	1
OfficChN11	Office	Chiller	New	11	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.5645	15	4,211	1.944	737	$416.00	18%	95%	95%	4.582	1
OfficChT5	Office	Chiller	Turnover	5	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.6032	15	4,211	0.042	210.5400	$127.00	5%	95%	75%	1.698	1
OfficChT4	Office	Chiller	Turnover	4	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1782	15	10,091	1.728	1,162	$207.00	12%	95%	95%	10.383	1
RestaChE1	Restaurant	Chiller	Early	1	Duct Sealing, down to 15%	Leakage of 29%	ton	$2.1064	15	4,510	0.009	45.1008	$95.00	1%	40%	$0.90	0.486	0
RestaChE2	Restaurant	Chiller	Early	2	Duct Insulation, Add R8	No Insulation	ton	$2.7716	15	4,510	0.009	45.1008	$125.00	1%	50%	95%	0.370	0
RestaChE3	Restaurant	Chiller	Early	3	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton	ton	$0.5543	15	4,510	0.045	225.5040	$125.00	5%	75%	75%	1.848	1
RestaChE4	Restaurant	Chiller	Early	4	Energy Recovery Units	No Energy Recovery	ton	$0.4989	15	4,510	0.178	902.0	$450.00	20%	75%	75%	2.054	1
RestaChE5	Restaurant	Chiller	Early	5	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.5054	7	4,510	0.142	722	$364.67	16%	75%	75%	0.998	0
RestaChE6	Restaurant	Chiller	Early	6	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$0.82	15	4,510	0.05	245	$200.00	5%	15%	95%	1.253	1
RestaChE7	Restaurant	Chiller	Early	7	Adding window shade film	No shade film	q ft window are	$7.0453	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.050	0
RestaChE8	Restaurant	Chiller	Early	8	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.263	0
RestaChE9	Restaurant	Chiller	Early	9	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.66	20	4,510	0.05	135	$225.00	3%	75%	95%	0.851	0
RestaChN1	Restaurant	Chiller	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	sq ft	$0.55	20	4,510	0.05	158	$87.00	4%	15%	95%	2.495	1
RestaChN2	Restaurant	Chiller	New	2	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.263	0
RestaChN3	Restaurant	Chiller	New	3	Adding reflective roof treatment	Std color roof	sq ft roof area	$4.50	20	4,510	0.05	10	$45.00	0%	100%	95%	1.099	1
RestaChN4	Restaurant	Chiller	New	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$2.75	20	4,510	0.05	46	$127.43	1%	45%	95%	0.711	0
RestaChN5	Restaurant	Chiller	New	5	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.4685	15	4,510	0.76	544	$255.00	12%	95%	95%	3.815	1
RestaChN6	Restaurant	Chiller	New	6	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2590	15	4,510	1.944	1,400	$362.50	31%	95%	95%	6.900	1
RestaChN7	Restaurant	Chiller	New	7	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1342	15	10,809	1.728	1,244	$167.00	12%	95%	95%	13.314	1
RestaChN8	Restaurant	Chiller	New	8	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.5100	15	4,510	0.045	225.5040	$115.00	5%	95%	75%	2.009	1
RestaChN9	Restaurant	Chiller	New	9	Energy Recovery Units	No Energy Recovery	ton	$0.2772	15	4,510	0.178	902.0	$250.00	20%	95%	75%	3.696	1
RestaChN10	Restaurant	Chiller	New	10	Duct Insulation, Add R8	No Insulation	ton	$2.7716	15	4,510	0.009	45.1008	$125.00	1%	100%	95%	0.370	0
RestaChT1	Restaurant	Chiller	Turnover	1	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.5420	15	4,510	0.76	544	$295.00	12%	95%	95%	3.297	1
RestaChT2	Restaurant	Chiller	Turnover	2	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.3304	15	4,510	1.944	1,400	$462.50	31%	95%	95%	5.408	1
RestaChT3	Restaurant	Chiller	Turnover	3	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.5271	15	4,510	1.944	789	$416.00	18%	95%	95%	4.695	1
RestaChN11	Restaurant	Chiller	New	11	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.5271	15	4,510	1.944	789	$416.00	18%	95%	95%	4.695	1
RestaChT5	Restaurant	Chiller	Turnover	5	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.5632	15	4,510	0.045	225.5040	$127.00	5%	95%	75%	1.819	1
RestaChT4	Restaurant	Chiller	Turnover	4	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1664	15	10,809	1.728	1,244	$207.00	12%	95%	95%	10.741	1
RetaiChE1	Retail	Chiller	Early	1	Duct Sealing, down to 15%	Leakage of 29%	ton	$2.1495	15	4,420	0.009	44.1960	$95.00	1%	40%	$0.90	0.477	0
RetaiChE2	Retail	Chiller	Early	2	Duct Insulation, Add R8	No Insulation	ton	$2.8283	15	4,420	0.009	44.1960	$125.00	1%	50%	95%	0.362	0
RetaiChE3	Retail	Chiller	Early	3	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton	ton	$0.5657	15	4,420	0.044	220.9800	$125.00	5%	75%	75%	1.811	1
RetaiChE4	Retail	Chiller	Early	4	Energy Recovery Units	No Energy Recovery	ton	$0.5091	15	4,420	0.174	883.9	$450.00	20%	75%	75%	2.012	1
RetaiChE5	Retail	Chiller	Early	5	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.5157	7	4,420	0.140	707	$364.67	16%	75%	75%	0.978	0
RetaiChE6	Retail	Chiller	Early	6	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$0.82	15	4,420	0.05	245	$200.00	6%	15%	95%	1.253	1
RetaiChE7	Retail	Chiller	Early	7	Adding window shade film	No shade film	q ft window are	$7.0453	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.050	0
RetaiChE8	Retail	Chiller	Early	8	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.263	0
RetaiChE9	Retail	Chiller	Early	9	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.70	20	4,420	0.05	133	$225.00	3%	75%	95%	0.837	0
RetaiChN1	Retail	Chiller	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	sq ft	$0.56	20	4,420	0.05	155	$87.00	4%	15%	95%	2.454	1
RetaiChN2	Retail	Chiller	New	2	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.263	0
RetaiChN3	Retail	Chiller	New	3	Adding reflective roof treatment	Std color roof	sq ft roof area	$4.50	20	4,420	0.05	10	$45.00	0%	100%	95%	1.099	1
RetaiChN4	Retail	Chiller	New	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$2.81	20	4,420	0.05	45	$127.43	1%	45%	95%	0.702	0
RetaiChN5	Retail	Chiller	New	5	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.4781	15	4,420	0.76	533	$255.00	12%	95%	95%	3.776	1
RetaiChN6	Retail	Chiller	New	6	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2643	15	4,420	1.944	1,372	$362.50	31%	95%	95%	6.831	1
RetaiChN7	Retail	Chiller	New	7	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1370	15	10,592	1.728	1,219	$167.00	12%	95%	95%	13.180	1
RetaiChN8	Retail	Chiller	New	8	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.5204	15	4,420	0.044	220.9800	$115.00	5%	95%	75%	1.969	1
RetaiChN9	Retail	Chiller	New	9	Energy Recovery Units	No Energy Recovery	ton	$0.2828	15	4,420	0.174	883.9	$250.00	20%	95%	75%	3.622	1
RetaiChN10	Retail	Chiller	New	10	Duct Insulation, Add R8	No Insulation	ton	$2.8283	15	4,420	0.009	44.1960	$125.00	1%	100%	95%	0.362	0
RetaiChT1	Retail	Chiller	Turnover	1	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.5531	15	4,420	0.76	533	$295.00	12%	95%	95%	3.264	1
RetaiChT2	Retail	Chiller	Turnover	2	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.3372	15	4,420	1.944	1,372	$462.50	31%	95%	95%	5.354	1
RetaiChT3	Retail	Chiller	Turnover	3	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.5379	15	4,420	1.944	773	$416.00	18%	95%	95%	4.661	1
RetaiChN11	Retail	Chiller	New	11	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.5379	15	4,420	1.944	773	$416.00	18%	95%	95%	4.661	1
RetaiChT5	Retail	Chiller	Turnover	5	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.5747	15	4,420	0.044	220.9800	$127.00	5%	95%	75%	1.783	1
RetaiChT4	Retail	Chiller	Turnover	4	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1698	15	10,592	1.728	1,219	$207.00	12%	95%	95%	10.633	1
WarehChE1	Warehouse	Chiller	Early	1	Duct Sealing, down to 15%	Leakage of 29%	ton	$2.7743	15	3,424	0.007	34.2432	$95.00	1%	40%	$0.90	0.369	0
WarehChE2	Warehouse	Chiller	Early	2	Duct Insulation, Add R8	No Insulation	ton	$3.6504	15	3,424	0.007	34.2432	$125.00	1%	50%	95%	0.281	0
WarehChE3	Warehouse	Chiller	Early	3	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton	ton	$0.7301	15	3,424	0.034	171.2160	$125.00	5%	75%	75%	1.403	1

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	Summer Summer Peak KW Savings	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Fla
WarehChE4	Warehouse	Chiller	Early	4	Energy Recovery Units	No Energy Recovery	ton	$0.6571	15	3,424	0.135	684.9	$450.00	20%	75%	75%	1.559	1
WarehChE5	Warehouse	Chiller	Early	5	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.6656	7	3,424	0.108	548	$364.67	16%	75%	75%	0.758	0
WarehChE6	Warehouse	Chiller	Early	6	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$0.82	15	3,424	0.05	245	$200.00	7%	15%	95%	1.253	1
WarehChE7	Warehouse	Chiller	Early	7	Adding window shade film	No shade film	q ft window are	$7.0453	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.050	0
WarehChE8	Warehouse	Chiller	Early	8	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.263	0
WarehChE9	Warehouse	Chiller	Early	9	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$2.19	20	3,424	0.05	103	$225.00	3%	75%	95%	0.687	0
WarehChN1	Warehouse	Chiller	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	sq ft	$0.73	20	3,424	0.05	120	$87.00	4%	15%	95%	2.000	1
WarehChN2	Warehouse	Chiller	New	2	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.263	0
WarehChN3	Warehouse	Chiller	New	3	Adding reflective roof treatment	Std color roof	sq ft roof area	$4.50	20	3,424	0.05	10	$45.00	0%	100%	95%	1.099	1
WarehChN4	Warehouse	Chiller	New	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.63	20	3,424	0.05	35	$127.43	1%	45%	95%	0.612	0
WarehChN5	Warehouse	Chiller	New	5	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.6170	15	3,424	0.76	413	$255.00	12%	95%	95%	3.353	1
WarehChN6	Warehouse	Chiller	New	6	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.3411	15	3,424	1.944	1,063	$362.50	31%	95%	95%	6.065	1
WarehChN7	Warehouse	Chiller	New	7	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1768	15	8,207	1.728	945	$167.00	12%	95%	95%	11.703	1
WarehChN8	Warehouse	Chiller	New	8	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.6717	15	3,424	0.034	171.2160	$115.00	5%	95%	75%	1.525	1
WarehChN9	Warehouse	Chiller	New	9	Energy Recovery Units	No Energy Recovery	ton	$0.3650	15	3,424	0.135	684.9	$250.00	20%	95%	75%	2.806	1
WarehChN10	Warehouse	Chiller	New	10	Duct Insulation, Add R8	No Insulation	ton	$3.6504	15	3,424	0.007	34.2432	$125.00	1%	100%	95%	0.281	0
WarehChT1	Warehouse	Chiller	Turnover	1	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.7138	15	3,424	0.76	413	$295.00	12%	95%	95%	2.899	1
WarehChT2	Warehouse	Chiller	Turnover	2	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.4352	15	3,424	1.944	1,063	$462.50	31%	95%	95%	4.754	1
WarehChT3	Warehouse	Chiller	Turnover	3	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.6942	15	3,424	1.944	599	$416.00	18%	95%	95%	4.285	1
WarehChN11	Warehouse	Chiller	New	11	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.6942	15	3,424	1.944	599	$416.00	18%	95%	95%	4.285	1
WarehChT5	Warehouse	Chiller	Turnover	5	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.7418	15	3,424	0.034	171.2160	$127.00	5%	95%	75%	1.381	1
WarehChT4	Warehouse	Chiller	Turnover	4	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.2191	15	8,207	1.728	945	$207.00	12%	95%	95%	9.442	1
WarehHeT2	Warehouse	Heating	Turnover	2	7 day, two stage setback thermostat	Manual Thermostat - hp	ton	$0.09	10	4,016	0.009	602	$55.00	15%	100%	45%	7.283	1
GroceHeT2	Grocery	Heating	Turnover	2	7 day, two stage setback thermostat	Manual Thermostat - hp	ton	$0.08	10	4,672	0.010	701	$55.00	15%	100%	45%	8.473	1
HealtHeT2	Healthcare	Heating	Turnover	2	7 day, two stage setback thermostat	Manual Thermostat - hp	ton	$0.34	10	1,084	0.002	163	$55.00	15%	100%	45%	1.966	1
InstiHeT2	Institutional	Heating	Turnover	2	7 day, two stage setback thermostat	Manual Thermostat - hp	ton	$0.11	10	3,325	0.007	499	$55.00	15%	100%	45%	6.030	1
MiscHeT2	Misc	Heating	Turnover	2	7 day, two stage setback thermostat	Manual Thermostat - hp	ton	$0.09	10	3,870	0.009	581	$55.00	15%	100%	45%	7.019	1
OfficHeT2	Office	Heating	Turnover	2	7 day, two stage setback thermostat	Manual Thermostat - hp	ton	$0.12	10	2,985	0.007	448	$55.00	15%	100%	45%	5.412	1
RestaHeT2	Restaurant	Heating	Turnover	2	7 day, two stage setback thermostat	Manual Thermostat - hp	ton	$0.08	10	4,548	0.010	682	$55.00	15%	100%	45%	8.248	1
RetaiHeT2	Retail	Heating	Turnover	2	7 day, two stage setback thermostat	Manual Thermostat - hp	ton	$0.08	10	4,672	0.010	701	$55.00	15%	100%	45%	8.473	1
LodgiHeT2	Lodging	Heating	Turnover	2	7 day, two stage setback thermostat	Manual Thermostat - hp	ton	$0.06	10	5,659	0.013	849	$55.00	15%	100%	45%	10.263	1
OfficMoE1	Office	Motors	Early	1	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.824	1
OfficMoT23	Office	Motors	Turnover	23	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.824	1
RestaMoE1	Restaurant	Motors	Early	1	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.824	1
InstiMoT9	Institutional	Motors	Turnover	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.6348	15	84274	13.596	20478.6	$13,000.00	24%	90.0%	80%	2.121	1
RestaMoT23	Restaurant	Motors	Turnover	23	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.824	1
RetaiMoE1	Retail	Motors	Early	1	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.824	1
RetaiMoT23	Retail	Motors	Turnover	23	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.824	1
WarehMoE1	Warehouse	Motors	Early	1	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.824	1
WarehMoT23	Warehouse	Motors	Turnover	23	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.824	1

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	PJM Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
HealtChE1	Healthcare	Chiller	Early	1	Duct Sealing, down to 15%	Leakage of 29%	ton	$1.7727	15	5,359	0.011	53.5920	$95.00	1%	40%	$0.90	0.429	0
HealtChE2	Healthcare	Chiller	Early	2	Duct Insulation, Add R8	No Insulation	ton	$2.3324	15	5,359	0.011	53.5920	$125.00	1%	50%	95%	0.326	0
HealtChE3	Healthcare	Chiller	Early	3	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton	ton	$0.4665	15	5,359	0.053	267.9600	$125.00	5%	75%	75%	1.629	1
HealtChE4	Healthcare	Chiller	Early	4	Energy Recovery Units	No Energy Recovery	ton	$0.4198	15	5,359	0.212	1,071.8	$450.00	20%	75%	75%	1.810	1
HealtChE5	Healthcare	Chiller	Early	5	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.4253	7	5,359	0.169	857	$364.67	16%	75%	75%	0.766	0
HealtChE6	Healthcare	Chiller	Early	6	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$0.82	15	5,359	0.05	245	$200.00	5%	15%	95%	0.930	0
HealtChE7	Healthcare	Chiller	Early	7	Adding window shade film	No shade film	q ft window are	$7.0453	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.033	0
HealtChE8	Healthcare	Chiller	Early	8	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.195	0
HealtChE9	Healthcare	Chiller	Early	9	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.40	20	5,359	0.05	161	$225.00	3%	75%	95%	0.723	0
HealtChN1	Healthcare	Chiller	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	sq ft	$0.46	20	5,359	0.05	188	$87.00	4%	15%	95%	2.133	1
HealtChN2	Healthcare	Chiller	New	2	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.195	0
HealtChN3	Healthcare	Chiller	New	3	Adding reflective roof treatment	Std color roof	sq ft roof area	$4.50	20	5,359	0.05	10	$45.00	0%	100%	95%	0.764	0
HealtChN4	Healthcare	Chiller	New	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$2.32	20	5,359	0.05	55	$127.43	1%	45%	95%	0.570	0
HealtChN5	Healthcare	Chiller	New	5	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.3942	15	5,359	0.76	647	$255.00	12%	95%	95%	3.059	1
HealtChN6	Healthcare	Chiller	New	6	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2180	15	5,359	1.944	1,663	$362.50	31%	95%	95%	5.534	1
HealtChN7	Healthcare	Chiller	New	7	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1130	15	12,844	1.728	1,478	$167.00	12%	95%	95%	10.678	1
HealtChN8	Healthcare	Chiller	New	8	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.4292	15	5,359	0.053	267.9600	$115.00	5%	95%	75%	1.770	1
HealtChN9	Healthcare	Chiller	New	9	Energy Recovery Units	No Energy Recovery	ton	$0.2332	15	5,359	0.212	1,071.8	$250.00	20%	95%	75%	3.258	1
HealtChN10	Healthcare	Chiller	New	10	Duct Insulation, Add R8	No Insulation	ton	$2.3324	15	5,359	0.011	53.5920	$125.00	1%	100%	95%	0.326	0
HealtChT1	Healthcare	Chiller	Turnover	1	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.4561	15	5,359	0.76	647	$295.00	12%	95%	95%	2.645	1
HealtChT2	Healthcare	Chiller	Turnover	2	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.2781	15	5,359	1.944	1,663	$462.50	31%	95%	95%	4.337	1
HealtChT3	Healthcare	Chiller	Turnover	3	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.4436	15	5,359	1.944	938	$416.00	18%	95%	95%	3.656	1
HealtChN11	Healthcare	Chiller	New	11	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.4436	15	5,359	1.944	938	$416.00	18%	95%	95%	3.656	1
HealtChT5	Healthcare	Chiller	Turnover	5	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.4740	15	5,359	0.053	267.9600	$127.00	5%	95%	75%	1.603	1
HealtChT4	Healthcare	Chiller	Turnover	4	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1400	15	12,844	1.728	1,478	$207.00	12%	95%	95%	8.614	1
OfficFlE1	Office	Fluorescent	Early	1	Premium Efficiency T8 Lighting Replacement (32W lamps with low	Replace (E) T12 Lamp - Bundle	Fixture	$0.5712	14	394	0.011	97	$55.38	25%	95%	41%	1.192	1
GrocelT6	Grocery	Fluorescent	Turnover	6	LED Retrofit Tube	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$1.0146	6	163	0.007	64	$65.00	39%	40%	95%	0.260	0
OfficFlE2	Office	Fluorescent	Early	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2641	14	1,578	0.054	473	$125.00	30%	95%	80%	2.578	1
OfficFlE3	Office	Fluorescent	Early	3	Photocell dimming control	No prior dimming control	Photocell	$0.2852	9	1,578	0.091	789	$225.00	50%	95%	95%	1.367	1
LodgInE6	Lodging	Incandescent	Early	6	Hotel Occupancy Sensors	No prior control	Per Room	$0.7447	10	240	0.019	168	$125.00	70%	90%	95%	0.613	0
OfficFlN1	Office	Fluorescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1781	15	20,340	0.234	2,034	$362.18	10%	95%	100%	4.089	1
OfficFlN2	Office	Fluorescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.3561	15	20,340	0.584	5,085	$1,810.90	25%	75%	100%	2.044	1
HealtHeE1	Healthcare	Heating	Early	1	Re-commissioning	Current Controls not working properly, setpoints not optimized,	sq ft	$0.2710	7	125,500	0.297	20,080	$5,441.68	16%	95%	75%	1.039	1
HealtHeE2	Healthcare	Heating	Early	2	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$4.44	20	364	0.05	45	$200.00	12%	10%	95%	0.323	0
HealtHeE3	Healthcare	Heating	Early	3	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.67	20	364	0.05	75	$125.00	21%	10%	95%	0.724	0
HealtHeE4	Healthcare	Heating	Early	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.75	20	364	0.05	34	$127.43	9%	10%	95%	0.433	0
HealtHeE5	Healthcare	Heating	Early	5	Humidification with High pressure, Ultrasonic devices	Electric Resistive Elements	unit	$0.1893	10	2,794	0.039	2,641	$500.00	95%	100%	95%	2.233	1
HealtHeN1	Healthcare	Heating	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5 - Electric Heat	sq ft	$1.93	20	364	0.05	45	$87.00	12%	10%	95%	0.743	0
WarehHIE1	Warehouse	HID	Early	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.5670	10	1,268	0.043	378	$214.50	30%	85%	80%	0.804	0
WarehHIE2	Warehouse	HID	Early	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.4472	10	1,856	0.077	671	$300.00	36%	85%	80%	1.020	1
WarehHIE3	Warehouse	HID	Early	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.5150	10	1,268	0.052	456	$235.00	36%	85%	80%	0.886	0
WarehHIE4	Warehouse	HID	Early	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.5081	10	1,856	0.074	640	$325.00	34%	85%	80%	0.898	0
WarehHIT5	Warehouse	HID	Turnover	5	Ceramic Metal Halide lamp	Replace non-ceramic lamp lamp 400 W	Lamp	$0.1282	4	1,560	0.031	273	$35.00	18%	85%	55%	1.336	1
WarehHIE8	Warehouse	HID	Early	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2465	10	5,070	0.175	1,521	$375.00	30%	85%	85%	1.850	1
WarehHIE9	Warehouse	HID	Early	9	Photocell dimming control	No prior dimming control	Photocell	$0.2170	10	5,070	0.291	2,535	$550.00	50%	85%	85%	2.102	1
WarehHIE10	Warehouse	HID	Early	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1972	10	5,070	0.058	507	$100.00	10%	85%	45%	2.313	1
WarehHIE7	Warehouse	HID	Early	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$1.2166	15	1,268	0.065	566	$688.00	45%	85%	80%	0.598	0
WarehHIT1	Warehouse	HID	Turnover	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.2921	10	1,268	0.043	378	$110.50	30%	85%	80%	1.562	1
WarehHIT2	Warehouse	HID	Turnover	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.3354	10	1,856	0.077	671	$225.00	36%	85%	80%	1.360	1
WarehHIT3	Warehouse	HID	Turnover	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.3178	10	1,268	0.052	456	$145.00	36%	85%	80%	1.435	1
WarehHIT4	Warehouse	HID	Turnover	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.4065	10	1,856	0.074	640	$260.00	34%	85%	80%	1.122	1
WarehHIT6	Warehouse	HID	Turnover	6	Multi Lamp Hard Wired CFL	Replace HID Fixure Drawing 400 W	Fixture	$0.5140	10	1,856	0.095	827	$425.00	45%	85%	55%	0.887	0
WarehHIT7	Warehouse	HID	Turnover	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.6631	15	1,268	0.065	566	$375.00	45%	85%	80%	1.098	1
OfficInE2	Office	Incandescent	Early	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1159	14	3,594	0.124	1,078	$125.00	30%	95%	80%	5.873	1
OfficInE3	Office	Incandescent	Early	3	Photocell dimming control	No prior dimming control	Photocell	$0.1252	9	3,594	0.207	1,797	$225.00	50%	95%	95%	3.113	1
GrocelnN1	Grocery	Incandescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0572	15	9,629	0.111	963	$55.11	10%	95%	100%	12.720	1
HealtInN1	Healthcare	Incandescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0842	15	49,948	0.574	4,995	$420.44	10%	95%	100%	8.649	1
AlllLaN1	All	Large Appliances	New	1	EnergyStar vending machine	Standard vending machine	machine	$0.2672	15	3,619	0.140	1,310	$350.00	36%	100%	50%	2.701	1
AlllLaN2	All	Large Appliances	New	2	Beverage machine control	Vending machine with no sensor	machine	$0.1021	5	3,619	0.178	1,665	$170.00	46%	100%	50%	2.101	1
AlllLaN3	All	Large Appliances	New	3	Other cold product control	Vending machine with no sensor	machine	$0.1111	5	3,504	0.172	1,612	$179.00	46%	100%	50%	1.931	1
AlllLaN4	All	Large Appliances	New	4	Non-cooled snack control	Vending machine with no sensor	machine	$0.4671	5	745	0.037	343	$160.00	46%	100%	50%	0.459	0
AlllLaN5	All	Large Appliances	New	5	EnergyStar dishwasher	Std Dishwasher	dishwasher	$0.4015	12	250	0.015	137	$55.00	55%	100%	50%	1.421	1
AlllLaN6	All	Large Appliances	New	6	EnergyStar refrigerator	Std Refrigerator	refrigerator	$0.3000	12	750	0.011	100	$30.00	13%	100%	50%	1.901	1
AlllLaN7	All	Large Appliances	New	7	Low-temperature dish machine	High temp dish machine with booster heater	removed kW	$0.0634	15	17,451	0.894	8,362	$530.00	48%	100%	50%	11.387	1
AlllLaN8	All	Large Appliances	New	8	High-efficiency washer	Standard washer, electric hot water	washer	$0.4380	10	2,262	0.102	959	$420.00	42%	100%	50%	1.029	1
AlllLaN9	All	Large Appliances	New	9	High-efficiency coin-op washer w/o Electric Water Heat	Coin-op wash, w/out electric hot water	washer	$1.7872	10	1,180	0.025	235	$420.00	20%	100%	50%	0.252	0
AlllLaN10	All	Large Appliances	New	10	High-efficiency coin-op washer w/ Electric water heat	Coin-op wash, electric hot water	washer	$0.4380	10	2,262	0.102	959	$420.00	42%	100%	50%	1.029	1
AlllLaT1	All	Large Appliances	Turnover	1	EnergyStar vending machine	Standard vending machine	machine	$0.2672	15	3,619	0.140	1,310	$350.00	36%	100%	50%	2.701	1
AlllLaT2	All	Large Appliances	Turnover	2	Beverage machine control	Vending machine with no sensor	machine	$0.1021	5	3,619	0.178	1,665	$170.00	46%	100%	50%	2.101	1
AlllLaT3	All	Large Appliances	Turnover	3	Other cold product control	Vending machine with no sensor	machine	$0.1111	5	3,504	0.172	1,612	$179.00	46%	100%	50%	1.931	1
AlllLaT4	All	Large Appliances	Turnover	4	Non-cooled snack control	Vending machine with no sensor	machine	$0.4671	5	745	0.037	343	$160.00	46%	100%	50%	0.459	0
AlllLaT5	All	Large Appliances	Turnover	5	EnergyStar dishwasher	Std Dishwasher	dishwasher	$0.4015	12	250	0.015	137	$55.00	55%	100%	50%	1.421	1
AlllLaT6	All	Large Appliances	Turnover	6	EnergyStar refrigerator	Std Refrigerator	refrigerator	$0.3000	12	750	0.011	100	$30.00	13%	100%	50%	1.901	1
AlllLaT7	All	Large Appliances	Turnover	7	Low-temperature dish machine	High temp dish machine with booster heater	removed kW	$0.0634	15	17,451	0.894	8,362	$530.00	48%	100%	50%	11.387	1
AlllLaT8	All	Large Appliances	Turnover	8	High-efficiency washer	Standard washer, electric hot water	washer	$0.4380	10	2,262	0.102	959	$420.00	42%	100%	50%	1.029	1
AlllLaT9	All	Large Appliances	Turnover	9	High-efficiency coin-op washer w/o Electric Water Heat	Coin-op wash, w/out electric hot water	washer	$1.7872	10	1,180	0.025	235	$420.00	20%	100%	50%	0.252	0
AlllLaT10	All	Large Appliances	Turnover	10	High-efficiency coin-op washer w/ Electric water heat	Coin-op wash, electric hot water	washer	$0.4380	10	2,262	0.102	959	$420.00	42%	100%	50%	1.029	1
OfficMoN1	Office	Motors	New	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.3115	15	12921	0.0282	117.2	$154	0.91%	74.4%	100%	0.601	0
OfficMoN2	Office	Motors	New	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.4170	15	49501	0.0231	367.6	$521	0.74%	74.4%	100%	0.499	0
OfficMoN3	Office	Motors	New	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.2732	15	121517	0.0138	541.0	$689	0.45%	66.3%	100%	0.542	0
OfficMoN4	Office	Motors	New	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.5357	15	244333	0.0121	953.4	$511	0.39%	55.8%	100%	1.276	1
OfficMoN5	Office	Motors	New	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-500 HP	Motor	$0.4495	15	524346	0.0284	4796.5	$2,156	0.91%	55.8%	100%	1.514	1
OfficMoN6	Office	Motors	New	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.6710	15	81970	2.109	16,394	$11,000.00	20%	55.0%	100%	1.098	1
OfficMoN7	Office	Motors	New	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.5604	15	81970	12.153	23197.4	$13,000.00	28%	70.0%	100%	1.639	1
OfficMoN8	Office	Motors	New	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.5705	15	81970	0.000	22787.6	$13,000.00	28%	80.0%	100%	1.188	1
OfficMoN9	Office	Motors	New	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.6500	15	81970	12.153	20000.6	$13,000.00	24%	70.0%	100%	1.472	1
OfficMoN10	Office	Motors	New	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.5705	15	81970	9.205	22787.6	$13,000.00	28%	55.0%	100%	1.513	1
OfficMoN11	Office	Motors	New	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.6500	15	81970	12.153	20000.6	$13,000.00	24%	30.0%	100%	1.472	1
OfficMoT1	Office	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.3115	15	12921	0.0282	117.2	$154	0.91%	74.4%	100%	0.601	0
OfficMoT2	Office	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.4170	15	49501	0.0231	367.6	$521	0.74%	74.4%	100%	0.499	0
OfficMoT3	Office	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.2732	15	121517	0.0138	541.0	$689	0.45%	66.3%	100%	0.542	0
OfficMoT4	Office	Motors	Turnover	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.5357	15	244333	0.0121	953.4	$511	0.39%	55.8%	100%	1.276	1
OfficMoT5	Office	Motors	Turnover	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-250 HP	Motor	$0.4495	15	524346	0.0284	4796.5	$2,156	0.91%	55.8%	100%	1.514	1
OfficMoT6	Office	Motors	Turnover	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.6710	15	81970	2.109	16,394	$11,000.00	20%	55.0%	80%	1.098	1

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	PJM Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
OfficMoT7	Office	Motors	Turnover	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.5604	15	81970	12.153	23197.4	$13,000.00	28%	90.0%	80%	1.639	1
OfficMoT8	Office	Motors	Turnover	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.5705	15	81970	0.000	22787.6	$13,000.00	28%	90.0%	80%	1.188	1
OfficMoT9	Office	Motors	Turnover	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.6500	15	81970	12.153	20000.6	$13,000.00	24%	90.0%	80%	1.472	1
OfficMoT10	Office	Motors	Turnover	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.5705	15	81970	9.205	22787.6	$13,000.00	28%	80.0%	80%	1.513	1
OfficMoT11	Office	Motors	Turnover	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.6500	15	81970	12.153	20000.6	$13,000.00	24%	55.0%	80%	1.472	1
OfficMoT12	Office	Motors	Turnover	12	Motors: Rewind 125-200 HP	(E) Motor	Motor	$0.6069	15	245909	0.159	1235.7	$750	0.5%	35.0%	95%	1.214	1
OfficMoT13	Office	Motors	Turnover	13	Motors: Rewind 201-500 HP	(E) Motor	Motor	$0.7470	15	532803	0.344	2677.4	$2,000	0.5%	50.0%	95%	0.986	0
OfficMoT14	Office	Motors	Turnover	14	Motors: Rewind 20-50 HP	(E) Motor	Motor	$0.5601	15	50263	0.057	446.3	$250	0.9%	10.0%	95%	1.316	1
OfficMoT15	Office	Motors	Turnover	15	Motors: Rewind 500+ HP	(E) Motor	Motor	$0.6474	15	1229546	0.795	6178.6	$4,000	0.5%	70.0%	95%	1.138	1
OfficMoT16	Office	Motors	Turnover	16	Motors: Rewind 51-100 HP	(E) Motor	Motor	$0.6955	15	124291	0.092	718.9	$500	0.6%	20.0%	95%	1.059	1
OfficMoT17	Office	Motors	Turnover	17	Downsizing motor during retrofit	Larger hp standard motor	HP Reduction	$0.34	20	186,404	0.190	1,477	$500.00	0.79%	25%	95%	2.749	1
OfficMoN12	Office	Motors	New	12	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.439	1
OfficMoN13	Office	Motors	New	13	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.029	0
OfficMoN14	Office	Motors	New	14	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.443	1
OfficMoN15	Office	Motors	New	15	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.582	0
OfficMoT18	Office	Motors	Turnover	18	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.439	1
OfficMoT19	Office	Motors	Turnover	19	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.029	0
OfficMoT20	Office	Motors	Turnover	20	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.443	1
OfficMoT21	Office	Motors	Turnover	21	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.582	0
AllOfE1	All	Office Equipment	Early	1	PC network power management	No central control	PC	$0.14	5	410	0.023	215	$30.00	52.44%	75%	80%	1.537	1
AllOfE2	All	Office Equipment	Early	2	Occupancy sensor controls/Smart Strip	Computers, other plug loads	sensor	$0.60	5	413	0.010	124	$75.00	30.02%	55%	95%	0.347	0
AllOfN1	All	Office Equipment	New	1	ENERGY STAR® Office Equipment	Std Office Equipment	PC	$1.09	5	4,000	0.021	200	$218.00	5.00%	90%	80%	0.197	0
AllOfN2	All	Office Equipment	New	2	Energy Star - Water Cooler	Std Water Cooler	unit	$1.06	5	453	0.022	204	$215.67	45.08%	35%	80%	0.203	0
AllOfN3	All	Office Equipment	New	3	80 Plus® PC-desktop	Standard personal computer, desktop	PC	$0.19	5	410	0.014	130	$25.00	31.71%	100%	55%	1.115	1
AllOfN6	All	Office Equipment	New	6	Data Center - Server/Storage Virtualization	No Virtualization	unit	$1.76	5	4,818	0.452	4,227	$7,434	87.73%	70%	80%	0.122	0
AllOfT1	All	Office Equipment	Turnover	1	ENERGY STAR® Office Equipment	Std Office Equipment	PC	$1.09	5	4,000	0.021	200	$218.00	5.00%	90%	80%	0.197	0
AllOfT2	All	Office Equipment	Turnover	2	Energy Star - Water Cooler	Std Water Cooler	unit	$1.06	5	453	0.022	204	$215.67	45.08%	35%	80%	0.203	0
AllOfT3	All	Office Equipment	Turnover	3	80 Plus® PC-desktop	Standard personal computer, desktop	PC	$0.19	5	410	0.014	130	$25.00	31.71%	100%	55%	1.115	1
AllOfT6	All	Office Equipment	Turnover	6	Data Center - Server/Storage Virtualization	No Virtualization	unit	$1.76	5	4,818	0.452	4,227	$7,434	87.73%	70%	80%	0.122	0
HealtPaE1	Healthcare	Packaged DX	Early	1	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$3.13	20	825	0.05	64	$200.00	8%	15%	95%	0.404	0
HealtPaE2	Healthcare	Packaged DX	Early	2	Adding window shade film	No shade film	sq ft window are	$7.05	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.031	0
HealtPaE3	Healthcare	Packaged DX	Early	3	Adding window shade screen	No shade screen	sq ft window are	$3.90	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.187	0
HealtPaE4	Healthcare	Packaged DX	Early	4	Windows U<0.40, .55 SHGC	Existing window specifications	sq ft window are	$1.40	30	2	0.000	0	$0.28	13%	50%	95%	0.825	0
HealtPaE5	Healthcare	Packaged DX	Early	5	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$4.09	20	825	0.05	55	$225.00	7%	95%	95%	0.325	0
HealtPaE7	Healthcare	Packaged DX	Early	7	Automated control system	Baseline DX	ton	$0.57	10	872	0.005	44	$25.00	5%	100%	65%	0.799	0
HealtPaE8	Healthcare	Packaged DX	Early	8	Duct Sealing, down to 15%	Leakage of 29%	ton	$7.92	15	825	0.05	12	$95.00	1%	45%	80%	0.317	0
HealtPaE9	Healthcare	Packaged DX	Early	9	Hotel Keycard Sensors	No prior controls	oom Controlle	$0.29	10	740	0.041	342	$100.00	46%	95%	80%	1.568	1
HealtPaE10	Healthcare	Packaged DX	Early	10	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	ton	$0.55	1	897	0.05	64	$35.00	7%	100%	45%	0.093	0
HealtPaE11	Healthcare	Packaged DX	Early	11	7 day, two stage setback thermostat	Manual Thermostat	ton	$0.44	10	825	0.015	125	$55.00	15%	100%	45%	1.042	1
HealtPaE13	Healthcare	Packaged DX	Early	13	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.42	7	825	0.05	132	$55.15	16%	95%	75%	0.888	0
HealtPaN1	Healthcare	Packaged DX	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	ton	$1.36	20	825	0.05	64	$87.00	8%	100%	95%	0.929	0
HealtPaN2	Healthcare	Packaged DX	New	2	Adding reflective roof treatment	Std color roof	ton	$4.50	20	825	0.05	10	$45.00	1%	100%	95%	0.766	0
HealtPaN3	Healthcare	Packaged DX	New	3	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$2.27	20	825	0.05	55	$125.00	7%	100%	95%	0.585	0
HealtPaN4	Healthcare	Packaged DX	New	4	Green Roof (New construction or roof replacement)	Std Roof	ton	$2.32	20	825	0.05	55	$127.43	7%	45%	95%	0.574	0
HealtPaN5	Healthcare	Packaged DX	New	5	Duct Insulation, Add R8	No Insulation	ton	$10.42	20	825	0.05	12	$125.00	1%	100%	95%	0.290	0
HealtPaN6	Healthcare	Packaged DX	New	6	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$1.78	20	711	0.04	51	$90.40	7%	100%	95%	0.747	0
HealtPaN7	Healthcare	Packaged DX	New	7	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$1.91	20	711	0.08	95	$180.81	13%	100%	95%	0.697	0
HealtPaN8	Healthcare	Packaged DX	New	8	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$2.04	20	711	0.12	133	$271.21	19%	100%	95%	0.653	0
HealtPaN9	Healthcare	Packaged DX	New	9	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.00	20	825	0.05	55	$55.00	7%	100%	95%	1.329	1
HealtPaN10	Healthcare	Packaged DX	New	10	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.00	20	840	0.06	70	$70.00	8%	100%	95%	1.329	1
HealtPaN11	Healthcare	Packaged DX	New	11	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.68	20	924	0.06	68	$115.13	7%	100%	95%	0.790	0
HealtPaN12	Healthcare	Packaged DX	New	12	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$2.11	20	953	0.04	47	$98.39	5%	100%	95%	0.631	0
HealtPaN13	Healthcare	Packaged DX	New	13	Ground Source HP Open - Water	Air Source Heat Pump	ton	$2.78	15	840	0.23	270	$ 750.0	32%	20%	95%	0.387	0
HealtPaN14	Healthcare	Packaged DX	New	14	Ground Source HP Closed	Air Source Heat Pump	ton	$4.99	15	840	0.018	150	$750.00	18%	100%	95%	0.147	0
HealtPaN15	Healthcare	Packaged DX	New	15	Air-side Economizer	No Economizer	ton	$1.37	15	825	0.015	124	$170.00	15%	75%	45%	0.532	0
HealtPaN16	Healthcare	Packaged DX	New	16	Energy Recovery Units	No Energy Recovery	ton	$1.08	15	825	0.020	165	$179.00	20%	100%	95%	0.674	0
HealtPaN17	Healthcare	Packaged DX	New	17	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$2.82	15	872	0.005	39	$110.89	5%	100%	95%	0.259	0
HealtPaT1	Healthcare	Packaged DX	Turnover	1	Duct Insulation, Add R8	No Insulation	ton	$10.42	15	825	0.05	12	$125.00	1%	100%	95%	0.241	0
HealtPaT2	Healthcare	Packaged DX	Turnover	2	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$1.78	20	711	0.04	51	$90.40	7%	100%	95%	0.747	0
HealtPaT3	Healthcare	Packaged DX	Turnover	3	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$1.91	20	711	0.08	95	$180.81	13%	100%	95%	0.697	0
HealtPaT4	Healthcare	Packaged DX	Turnover	4	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$2.04	20	711	0.12	133	$271.21	19%	100%	95%	0.653	0
HealtPaT5	Healthcare	Packaged DX	Turnover	5	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.00	20	825	0.05	55	$55.00	7%	100%	95%	1.329	1
HealtPaT6	Healthcare	Packaged DX	Turnover	6	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.00	20	840	0.06	70	$70.00	8%	100%	95%	1.329	1
HealtPaT7	Healthcare	Packaged DX	Turnover	7	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$1.68	20	924	0.06	68	$115.13	7%	100%	95%	0.790	0
HealtPaT8	Healthcare	Packaged DX	Turnover	8	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$2.11	20	953	0.04	47	$98.39	5%	100%	95%	0.631	0
HealtPaT9	Healthcare	Packaged DX	Turnover	9	Ground Source HP Open - Water	Air Source Heat Pump	ton	$2.78	15	840	0.23	270	$ 750.0	32%	5%	95%	0.387	0
HealtPaT10	Healthcare	Packaged DX	Turnover	10	Ground Source HP Closed	Air Source Heat Pump	ton	$4.99	15	840	0.018	150	$750.00	18%	100%	95%	0.147	0
HealtPaT11	Healthcare	Packaged DX	Turnover	11	Air-side Economizer	No Economizer	ton	$1.37	15	825	0.015	124	$170.00	15%	75%	45%	0.532	0
HealtPaT12	Healthcare	Packaged DX	Turnover	12	Energy Recovery Units	No Energy Recovery	ton	$1.08	15	825	0.020	165	$179.00	20%	100%	95%	0.674	0
HealtPaT13	Healthcare	Packaged DX	Turnover	13	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$2.82	15	872	0.005	39	$110.89	5%	100%	95%	0.259	0
AllReT1	All	Refrigeration	Turnover	1	Vertical night covers	No covers present	linear ft	$0.34	5	4,380	0.006	44	$15.00	1.00%	50%	95%	0.647	0
AllReT2	All	Refrigeration	Turnover	2	eCube	No eCube	unit	$0.33	9	5,431	0.162	1,222	$399.00	22.50%	95%	95%	1.209	1
AllReT3	All	Refrigeration	Turnover	3	Anti-sweat heat (ASH) controls - Freezer	ASH without controls	Per Door	$0.16	12	2,985	0.029	1,882	$300.00	63%	95%	85%	3.362	1
AllReT4	All	Refrigeration	Turnover	4	Anti-sweat heat (ASH) controls - Cooler	ASH without controls	Per Door	$0.29	12	1,621	0.028	1,023	$300.00	63%	95%	85%	1.843	1
AllReT5	All	Refrigeration	Turnover	5	Floating head pressure controller	Standard head pressure control	ton	$0.46	14	18,314	0.085	641	$296.00	4%	50%	95%	1.490	1
AllReN1	All	Refrigeration	New	1	Efficient, low-temp reach-in	Standard low-temp reach-in	unit	$0.07	12	5,431	0.222	1,671	$123.33	30.77%	95%	95%	7.890	1
AllReN2	All	Refrigeration	New	2	No-heat glass doors	Standard low-temp reach-in	door	$0.67	10	3,986	0.106	797	$537.50	20.00%	95%	95%	0.685	0
AllReN3	All	Refrigeration	New	3	High Efficiency Ice Makers	Standard Ice Maker	Each	$0.16	10	11,815	0.042	318	$50.00	3%	85%	85%	2.936	1
AllReN4	All	Refrigeration	New	4	Compressor VSD	Base Refrigeration System - Grocery		$0.35	13	5,436	0.101	761	$267.00	14%	75%	86%	1.815	1
AllReN5	All	Refrigeration	New	5	VFD on cooling tower fans	Base single-speed fan		$0.29	15	7158	0.681	5,132	$1,507.40	72%	25%	95%	2.503	1
AllReN6	All	Refrigeration	New	6	Reach-in Cooler: Shaded Pole to PSC: 1-37 Watt			$0.60	15	832	0.047	352	$212.50	42%	75%	49%	1.218	1
AllReN7	All	Refrigeration	New	7	Reach-in Cooler: PSC to ECM: 1-37 Watt			$0.54	15	467	0.022	169	$91.25	36%	75%	49%	1.362	1
AllReN8	All	Refrigeration	New	8	Reach-in Cooler: Shaded Pole to ECM: 1-37 Watt			$0.59	15	832	0.069	521	$306.25	63%	75%	49%	1.251	1
AllReN9	All	Refrigeration	New	9	Reach-in Freezer: Shaded Pole to ECM: 1-14 Watt			$0.49	15	832	0.082	622	$306.25	75%	75%	49%	1.493	1
AllReN10	All	Refrigeration	New	10	Reach-in Shaded Pole to PSC Evaporator Fan Motor			$0.55	15	832	0.051	386	$212.50	46%	75%	49%	1.336	1
AllReN11	All	Refrigeration	New	11	Reach-in PSC to ECM Evaporator Fan Motor			$0.49	15	467	0.025	185	$91.25	40%	75%	49%	1.491	1
AllReN12	All	Refrigeration	New	12	Reach-in Shaded Pole to ECM Evaporator Fan Motor			$0.54	15	832	0.076	571	$306.25	69%	75%	49%	1.371	1
AllReN13	All	Refrigeration	New	13	Walk-in Cooler: PSC to ECM: 16-49 Watt			$0.35	15	711	0.034	258	$91.25	36%	75%	49%	2.079	1
AllReN14	All	Refrigeration	New	14	Walk-in Freezer: PSC to ECM: 16-49 Watt			$0.30	15	711	0.041	309	$91.25	43%	75%	49%	2.490	1
AllReN15	All	Refrigeration	New	15	Walk-in Cooler: Shaded Pole to ECM: 16-49 Watt			$0.44	15	1,175	0.093	704	$306.25	60%	75%	49%	1.690	1
AllReN16	All	Refrigeration	New	16	Walk-in Freezer: Shaded Pole to ECM: 16-49 Watt			$0.36	15	1,175	0.112	842	$306.25	72%	75%	49%	2.022	1
AllReN17	All	Refrigeration	New	17	Walk-in PSC to ECM			$0.32	15	711	0.038	283	$91.25	40%	75%	49%	2.281	1
AllReN18	All	Refrigeration	New	18	Walk-in Shaded Pole to ECM			$0.40	15	1175	0.103	773	$306.25	66%	75%	49%	1.856	1
AllReT6	All	Refrigeration	Turnover	6	High Efficiency Ice Makers	Standard Ice Making		$0.12	10	11,815	0.159	1,197	$140.00	10%	85%	85%	3.947	1

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	PJM Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
AllReN19	All	Refrigeration	New	19	High Efficiency Ice Machine Self Contained	Standard Ice Machine Self Contained		$0.31	10	4,341	0.042	318	$100.00	7%	85%	85%	1.468	1
AllReT17	All	Refrigeration	Turnover	7	Fluorescent walk-in light fixture	Incandescent walk-in light fixture	fixture	$0.42	15	792	0.065	491	$206.00	62.00%	85%	45%	1.752	1
AllReT8	All	Refrigeration	Turnover	8	LED Case Lighting	T12 or T10 fluorescent lighting	Light Bar	$0.43	15	677	0.070	526	$225.00	77.78%	95%	75%	1.720	1
AllReT9	All	Refrigeration	Turnover	9	LED Case Lighting - Occupancy Sensor	No Occupancy Sensor	Light Bar	$0.15	8	667	0.003	20	$3.00	3.00%	15%	95%	2.361	1
AllReT10	All	Refrigeration	Turnover	10	Efficient, low-temp reach-in	Standard low-temp reach-in	unit	$0.07	12	5,431	0.222	1,671	$123.33	30.77%	85%	85%	7.890	1
AllReT11	All	Refrigeration	Turnover	11	High R-Value Glass Doors		door	$0.67	10	3,986	0.106	797	$537.50	20.00%	85%	85%	0.685	0
AllReT12	All	Refrigeration	Turnover	12	Compressor VSD retrofit	Base Refrigeration System - Grocery		$0.35	13	5,436	0.101	761	$267.00	14%	75%	86%	1.815	1
AllReT13	All	Refrigeration	Turnover	13	Quick acting freezer doors			$0.62	10	38,544	4.461	33,637	$20,966.00	87%	75%	86%	0.741	0
AllReT14	All	Refrigeration	Turnover	14	VFD on cooling tower fans	Base single-speed fan		$0.29	15	7158	0.681	5,132	$1,507.40	72%	35%	85%	2.503	1
AllReT15	All	Refrigeration	Turnover	15	Reach-in Cooler: Shaded Pole to PSC: 1-37 Watt			$0.60	15	832	0.047	352	$212.50	42%	75%	49%	1.218	1
AllReT16	All	Refrigeration	Turnover	16	Reach-in Cooler: PSC to ECM: 1-37 Watt			$0.54	15	467	0.022	169	$91.25	36%	75%	49%	1.362	1
AllReT17	All	Refrigeration	Turnover	17	Reach-in Cooler: Shaded Pole to ECM: 1-37 Watt			$0.59	15	832	0.069	521	$306.25	63%	75%	49%	1.251	1
AllReT18	All	Refrigeration	Turnover	18	Reach-in Freezer: Shaded Pole to ECM: 1-14 Watt			$0.49	15	832	0.082	622	$306.25	75%	75%	49%	1.493	1
AllReT19	All	Refrigeration	Turnover	19	Reach-in Shaded Pole to PSC Evaporator Fan Motor			$0.55	15	832	0.051	386	$212.50	46%	75%	49%	1.336	1
AllReT18	All	Refrigeration	Turnover	18	Reach-in PSC to ECM Evaporator Fan Motor			$0.49	15	467	0.025	185	$91.25	40%	75%	49%	1.491	1
AllReT20	All	Refrigeration	Turnover	20	Reach-in Shaded Pole to ECM Evaporator Fan Motor			$0.54	15	832	0.076	571	$306.25	69%	75%	49%	1.371	1
AllReT21	All	Refrigeration	Turnover	21	Walk-in Cooler: PSC to ECM: 16-49 Watt			$0.35	15	711	0.034	258	$91.25	36%	75%	49%	2.079	1
AllReT22	All	Refrigeration	Turnover	22	Walk-in Freezer: PSC to ECM: 16-49 Watt			$0.30	15	711	0.041	309	$91.25	43%	75%	49%	2.490	1
AllReT23	All	Refrigeration	Turnover	23	Walk-in Cooler: Shaded Pole to ECM: 16-49 Watt			$0.44	15	1,175	0.093	704	$306.25	60%	75%	49%	1.690	1
AllReT24	All	Refrigeration	Turnover	24	Walk-in Freezer: Shaded Pole to ECM: 16-49 Watt			$0.36	15	1,175	0.112	842	$306.25	72%	75%	49%	2.022	1
AllReT25	All	Refrigeration	Turnover	25	Walk-in PSC to ECM			$0.32	15	711	0.038	283	$91.25	40%	75%	49%	2.281	1
AllReT26	All	Refrigeration	Turnover	26	Walk-in Shaded Pole to ECM			$0.40	15	1175	0.103	773	$306.25	66%	75%	49%	1.856	1
AllSiT1	All	Signage	Turnover	1	Induction Street Lighting	Base HID Streetlighting	Fixture	$0.57	15	2,762	0.101	1,619	$925.00	59%	95%	95%	1.211	1
AllSiT2	All	Signage	Turnover	2	LED exit sign - 1 sided	Incandescent exit sign	Exit Sign	$0.15	15	175	0.024	158	$23.50	90%	65%	70%	4.917	1
AllSiT3	All	Signage	Turnover	3	LED exit sign -2 sided	Incandescent exit sign	Exit Sign	$0.16	15	350	0.048	228	$37.50	65%	65%	70%	4.614	1
AllSiT4	All	Signage	Turnover	4	Photoluminescent Exit Sign	Incandescent exit sign	Exit Sign	$0.17	15	175	0.011	175	$30.00	100%	50%	70%	4.039	1
AllSiT5	All	Signage	Turnover	5	LED or equivalent sign lighting -1 sided	Replace fluorescent sign lighting	Exit Sign	$0.28	15	79	0.009	61	$17.36	78%	48%	7%	2.580	1
AllSiT6	All	Signage	Turnover	6	LED or equivalent sign lighting -2 sided	Replace fluorescent sign lighting	Exit Sign	$0.12	15	175	0.002	140	$17.36	80%	48%	7%	5.408	1
AllSiT7	All	Signage	Turnover	7	LED Street Lighting	Std HID Street Lighting	Pole	$0.63	15	2,762	0.047	756	$475.00	27%	95%	95%	1.100	1
AllSiT8	All	Signage	Turnover	8	Red LED Traffic Light	Red Traffic Light	Signal	$0.37	10	332	0.019	299	$112.00	90%	95%	75%	1.137	1
AllSiT9	All	Signage	Turnover	9	Yellow LED Traffic Light	Yellow Standard Traffic Light	Lamp	$12.10	10	12	0.001	10	$121.00	83%	95%	75%	0.035	0
AllSiT10	All	Signage	Turnover	10	Green LED Traffic Light	Green Standard Traffic Light	Lamp	$0.77	10	260	0.014	226	$174.00	87%	95%	75%	0.553	0
AllSiT11	All	Signage	Turnover	11	Hand/Man LED	Pedestrian Standard	Lamp	$0.19	10	1,016	0.059	946	$182.00	93%	95%	75%	2.213	1
AllWaT1	All	Water Heating	Turnover	1	Ultrasonic Faucet Control	Manual Faucet Control	unit	$1.000	10	1,750	0.010	125	$125	7%	75%	75%	0.439	0
AllWaT2	All	Water Heating	Turnover	2	Faucet Aerators	Std Flow faucet	unit	$0.246	12	4,122	0.006	61	$15	6%	75%	75%	2.292	1
AllWaT3	All	Water Heating	Turnover	3	Hot Water (DHW) Pipe Insulation	No insulation present	10 ln ft	$0.292	14	4,122	0.011	124.00	$36.23	3%	75%	75%	2.284	1
AllWaT4	All	Water Heating	Turnover	4	Low-Flow Showerheads	Std Flow showerhead	unit	$0.108	9	4,122	0.042	461	$50	11%	75%	75%	3.494	1
AllWaT5	All	Water Heating	Turnover	5	Water Heater Thermostat Setback	Constant setpoint	unit	$0.029	2	4,122	0.053	577.09	$17	14%	75%	75%	2.940	1
AllWaN1	All	Water Heating	New	1	Ultrasonic Faucet Control	Manual Faucet Control	unit	$0.400	10	4,122	0.011	125	$50	3%	75%	75%	1.112	1
AllWaN2	All	Water Heating	New	2	Faucet Aerators	Std Flow faucet	unit	$0.082	12	4,122	0.006	61	$5	6%	75%	75%	6.875	1
AllWaN3	All	Water Heating	New	3	Hot Water (DHW) Pipe Insulation	No insulation present	10 ln ft	$0.292	14	4,122	0.011	124.00	$36.23	3%	75%	75%	2.284	1
AllWaN4	All	Water Heating	New	4	Low-Flow Showerheads	Std Flow showerhead	unit	$0.108	9	4,122	0.042	461	$50	11%	75%	75%	3.494	1
AllWaN5	All	Water Heating	New	5	Water Heater Thermostat Setback	Constant setpoint	unit	$0.029	2	4,122	0.053	577.09	$17	14%	75%	75%	2.940	1
AllWaN6	All	Water Heating	New	6	High Efficiency Water Heater (Electric) EF .93, 28-50 Gal	Std Efficiency water heater	unit	$0.541	14	4,122	0.012	133	$72	3%	75%	100%	1.233	1
AllWaN7	All	Water Heating	New	7	Heat Pump Water Heater (air source)	Base Water Heating	unit	$0.516	14	4,122	0.176	1,914.00	$988	46%	75%	100%	1.293	1
AllWaN8	All	Water Heating	New	8	Heat Recovery Unit	Base Water Heating	unit	$0.362	14	4,122	0.190	2,073	$750	50.3%	50%	95%	1.845	1
AllWaN9	All	Water Heating	New	9	Solar Water Heater	Base Water Heating	unit	$1.206	14	4,122	0.193	2,106	$2,540	82.0%	65%	95%	0.553	0
AllWaT6	All	Water Heating	Turnover	6	High Efficiency Water Heater (Electric) EF .93, 28-50 Gal	Std Efficiency water heater	unit	$0.541	14	4,122	0.012	133	$72	8.0%	100%	75%	1.233	1
AllWaT7	All	Water Heating	Turnover	7	Heat Pump Water Heater (air source)	Base Water Heating	unit	$0.516	14	4,122	0.176	1,914.00	$988	46%	75%	100%	1.293	1
AllWaT8	All	Water Heating	Turnover	8	Heat Recovery Unit	Base Water Heating	unit	$0.458	14	4,122	0.190	2,073	$950	50.3%	50%	95%	1.456	1
AllWaT9	All	Water Heating	Turnover	9	Solar Water Heater	Base Water Heating	unit	$1.401	14	4,122	0.193	2,106	$2,950	82.0%	65%	95%	0.476	0
GroceReN1	All	Refrigeration	New	20	Demand Defrost Electric	Base Refrigeration System - Grocery		$0.91	15	4	0.000	0	$0.05	1%	95%	92%	0.810	0
AllReT27	All	Refrigeration	Turnover	27	Demand Defrost Electric	Base Refrigeration System - Grocery		$0.91	15	4	0.000	0	$0.05	1%	95%	92%	0.810	0
GroceReN3	All	Refrigeration	New	21	Demand Hot Gas Defrost	Base Refrigeration System - Grocery		$0.35	15	4	0.000	0	$0.05	3%	95%	92%	2.077	1
AllReT28	All	Refrigeration	Turnover	28	Demand Hot Gas Defrost	Base Refrigeration System - Grocery		$0.35	15	4	0.000	0	$0.05	3%	95%	92%	2.077	1
GroceReN4	All	Refrigeration	New	22	Efficient compressor motor - scroll	Base Refrigeration System - Grocery		$0.09	15	15,825	0.084	633	$60.00	4%	95%	92%	7.758	1
AllReT29	All	Refrigeration	Turnover	29	Efficient compressor motor - scroll	Base Refrigeration System - Grocery		$0.09	15	15,825	0.084	633	$60.00	4%	95%	92%	7.758	1
GroceReN6	All	Refrigeration	New	23	High R-Value Glass Doors	Base Refrigeration System - Grocery	Door	$0.67	10	3,986	0.106	797	$537.50	20.00%	95%	92%	0.685	0
GroceReN7	All	Refrigeration	New	24	Refrigeration Commissioning	Base Refrigeration System - Grocery	Per refigerator	$0.31	7	8,800	0.187	1,408	$440.00	16%	95%	92%	0.998	0
AllReE1	All	Refrigeration	Early	1	Refrigeration Commissioning	Base Refrigeration System - Grocery	Per refigerator	$0.25	7	8,800	0.117	880	$220.00	10%	95%	92%	1.247	1
GroceReN8	All	Refrigeration	New	25	Strip curtains for walk-ins	Base Refrigeration System - Grocery		$0.50	15	29,900	0.079	598	$300.00	2%	45%	78%	1.466	1
AllReT30	All	Refrigeration	Turnover	30	Strip curtains for walk-ins	Base Refrigeration System - Grocery		$0.50	15	29,900	0.079	598	$300.00	2%	45%	78%	1.466	1
HealtPaN18	Healthcare	Packaged DX	New	18	Automated control system	Baseline DX	ton	$0.57	10	872	0.005	44	$25.00	5%	100%	65%	0.799	0
HealtPaN19	Healthcare	Packaged DX	New	19	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.06	10	740	0.005	40	$43.00	5%	100%	95%	0.430	0
HealtPaT15	Healthcare	Packaged DX	Turnover	15	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.06	10	740	0.005	40	$43.00	5%	100%	95%	0.430	0
AllCoN1	All	Cooking	New	1	Commercial Hot Food Holding Cabinets (Energy Star)	Standard Cabinet	Each	$0.94	12	23,411	0.187	1,592	$1,500.00	7%	40%	95%	0.613	0
AllCoN2	All	Cooking	New	2	High Efficiency Fryers (Energy Star)	Standard Fryer	Each	$5.45	12	18,196	0.027	233	$1,271.00	1%	40%	95%	0.106	0
AllCoN3	All	Cooking	New	3	High Efficiency Griddle	Standard Griddle	Each	$0.66	12	17,056	0.304	2,595	$1,700.00	15%	40%	95%	0.881	0
AllCoN4	All	Cooking	New	4	High Efficiency Induction Cooking	Standard Cooking	Each	$1.04	12	29,376	0.248	2,118	$2,213.00	7%	40%	95%	0.552	0
AllCoN5	All	Cooking	New	5	Electric Steam cooker	Standard Cooker	Each	$0.40	12	46,813	0.439	3,745	$1,500.00	8%	40%	95%	1.441	1
AllCoN6	All	Cooking	New	6	Electric convection oven	Standard Oven	Each	$1.20	15	12,193	0.265	2,262	$2,713.00	19%	40%	95%	0.608	0
AllCoN7	All	Cooking	New	7	Electric combination oven	Standard Oven	Each	$1.12	12	39,353	1.769	15,095	$16,884.00	38%	40%	95%	0.516	0
AllCoT1	All	Cooking	Turnover	1	Commercial Hot Food Holding Cabinets (Energy Star)	Standard Cabinet	Each	$0.94	12	23,411	0.187	1,592	$1,500.00	7%	40%	95%	0.613	0
AllCoT2	All	Cooking	Turnover	2	High Efficiency Fryers (Energy Star)	Standard Fryer	Each	$5.45	12	18,196	0.027	233	$1,271.00	1%	40%	95%	0.106	0
AllCoT3	All	Cooking	Turnover	3	High Efficiency Griddle	Standard Griddle	Each	$0.66	12	17,056	0.304	2,595	$1,700.00	15%	40%	95%	0.881	0
AllCoT4	All	Cooking	Turnover	4	High Efficiency Induction Cooking	Standard Cooking	Each	$1.04	12	29,376	0.248	2,118	$2,213.00	7%	40%	95%	0.552	0
AllCoT5	All	Cooking	Turnover	5	Electric Steam cooker	Standard Cooker	Each	$0.40	12	46,813	0.439	3,745	$1,500.00	8%	40%	95%	1.441	1
AllCoT6	All	Cooking	Turnover	6	Electric convection oven	Standard Oven	Each	$1.20	15	12,193	0.265	2,262	$2,713.00	19%	40%	95%	0.608	0
AllCoT7	All	Cooking	Turnover	7	Electric combination oven	Standard Oven	Each	$1.12	12	39,353	1.769	15,095	$16,884.00	38%	40%	95%	0.516	0
InstiFlE1	Institutional	Fluorescent	Early	1	Premium Efficiency T8 Lighting Replacement (32W lamps with low	Replace (E) T12 Lamp - Bundle	Fixture	$0.6076	15	371	0.010	91	$55.38	25%	95%	11%	1.198	1
InstiFlE2	Institutional	Fluorescent	Early	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2809	14	1,483	0.051	445	$125.00	30%	95%	80%	2.424	1
InstiFlE3	Institutional	Fluorescent	Early	3	Photocell dimming control	No prior dimming control	Photocell	$0.3034	9	1,483	0.085	742	$225.00	50%	95%	95%	1.285	1
GroceFlE1	Grocery	Fluorescent	Early	1	Premium Efficiency T8 Lighting Replacement (32W lamps with low	Replace (E) T12 Lamp - Bundle	Fixture	$0.2754	11	818	0.023	201	$55.38	25%	95%	55%	1.881	1
GroceFlE2	Grocery	Fluorescent	Early	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1273	14	3,272	0.113	982	$125.00	30%	95%	80%	5.347	1
GroceFlE3	Grocery	Fluorescent	Early	3	Photocell dimming control	No prior dimming control	Photocell	$0.1375	9	3,272	0.188	1,636	$225.00	50%	95%	95%	2.834	1
LodgiFlE1	Lodging	Fluorescent	Early	1	Premium Efficiency T8 Lighting Replacement (32W lamps with low	Replace (E) T12 Lamp - Bundle	Fixture	$0.3246	10	694	0.020	171	$55.38	25%	95%	55%	1.405	1
LodgiFlE2	Lodging	Fluorescent	Early	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1501	14	2,776	0.096	833	$125.00	30%	95%	80%	4.536	1
LodgiFlE3	Lodging	Fluorescent	Early	3	Photocell dimming control	No prior dimming control	Photocell	$0.1621	9	2,776	0.160	1,388	$225.00	50%	95%	95%	2.405	1
HealtFlE1	Healthcare	Fluorescent	Early	1	Premium Efficiency T8 Lighting Replacement (32W lamps with low	Replace (E) T12 Lamp - Bundle	Fixture	$0.2970	11	759	0.021	186	$55.38	25%	95%	44%	1.744	1
HealtFlE2	Healthcare	Fluorescent	Early	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1373	14	3,034	0.105	910	$125.00	30%	95%	80%	4.958	1
HealtFlE3	Healthcare	Fluorescent	Early	3	Photocell dimming control	No prior dimming control	Photocell	$0.1483	9	3,034	0.174	1,517	$225.00	50%	95%	95%	2.628	1
RestaFlE1	Restaurant	Fluorescent	Early	1	Premium Efficiency T8 Lighting Replacement (32W lamps with low	Replace (E) T12 Lamp - Bundle	Fixture	$0.3672	11	614	0.017	151	$55.38	25%	95%	49%	1.411	1
RestaFlE2	Restaurant	Fluorescent	Early	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1698	14	2,454	0.085	736	$125.00	30%	95%	80%	4.010	1
RestaFlE3	Restaurant	Fluorescent	Early	3	Photocell dimming control	No prior dimming control	Photocell	$0.1834	9	2,454	0.141	1,227	$225.00	50%	95%	95%	2.126	1

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	PJM Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
RetaiFIE1	Retail	Fluorescent	Early	1	Premium Efficiency T8 Lighting Replacement (32W lamps with low	Replace (E) T12 Lamp - Bundle	Fixture	$0.3810	11	591	0.017	145	$55.38	25%	95%	55%	1.360	1
RetaiFIE2	Retail	Fluorescent	Early	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1761	14	2,365	0.082	710	$125.00	30%	95%	80%	3.865	1
RetaiFIE3	Retail	Fluorescent	Early	3	Photocell dimming control	No prior dimming control	Photocell	$0.1902	9	2,365	0.136	1,183	$225.00	50%	95%	95%	2.049	1
WarehFIE1	Warehouse	Fluorescent	Early	1	Premium Efficiency T8 Lighting Replacement (32W lamps with low	Replace (E) T12 Lamp - Bundle	Fixture	$0.4113	12	548	0.015	135	$55.38	25%	95%	35%	1.401	1
WarehFIE2	Warehouse	Fluorescent	Early	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1901	14	2,191	0.076	657	$125.00	30%	95%	80%	3.581	1
WarehFIE3	Warehouse	Fluorescent	Early	3	Photocell dimming control	No prior dimming control	Photocell	$0.2054	9	2,191	0.126	1,096	$225.00	50%	95%	95%	1.898	1
MiscFIE1	Misc	Fluorescent	Early	1	Premium Efficiency T8 Lighting Replacement (32W lamps with low	Replace (E) T12 Lamp - Bundle	Fixture	$0.3764	11	599	0.017	147	$55.38	25%	95%	44%	1.377	1
OfficHIN1	Office	HID	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1781	15	621	0.007	62	$11.06	10%	95%	100%	4.089	1
OfficHIN2	Office	HID	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.3561	15	621	0.018	155	$55.32	25%	85%	100%	2.044	1
OfficInN1	Office	Incandescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1781	15	2,727	0.031	273	$48.56	10%	95%	100%	4.089	1
OfficInN2	Office	Incandescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.3561	15	2,727	0.078	682	$242.78	25%	75%	100%	2.044	1
InstiFIN1	Institutional	Fluorescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1722	15	62,741	0.721	6,274	$1,080.26	10%	95%	100%	4.228	1
InstiFIN2	Institutional	Fluorescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.3444	15	62,741	1.803	15,685	$5,401.30	25%	75%	100%	2.114	1
HealtFIN1	Healthcare	Fluorescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0842	15	441,728	5.077	44,173	$3,718.25	10%	95%	100%	8.649	1
HealtFIN2	Healthcare	Fluorescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1684	15	441,728	12.691	110,432	$18,591.24	25%	75%	100%	4.324	1
GroceFIN1	Grocery	Fluorescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0572	15	60,020	0.690	6,002	$343.52	10%	95%	100%	12.720	1
GroceFIN2	Grocery	Fluorescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1145	15	60,020	1.724	15,005	$1,717.60	25%	75%	100%	6.360	1
LodgiFIN1	Lodging	Fluorescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1012	15	303,563	3.489	30,356	$3,071.87	10%	95%	100%	7.194	1
LodgiFIN2	Lodging	Fluorescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.2024	15	303,563	8.722	75,891	$15,359.37	25%	75%	100%	3.597	1
RestaFIN1	Restaurant	Fluorescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0763	15	13,140	0.151	1,314	$100.27	10%	95%	100%	9.540	1
RestaFIN2	Restaurant	Fluorescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1526	15	13,140	0.378	3,285	$501.37	25%	75%	100%	4.770	1
RetaiFIN1	Retail	Fluorescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0792	15	60,011	0.690	6,001	$475.15	10%	95%	100%	9.195	1
RetaiFIN2	Retail	Fluorescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1584	15	60,011	1.724	15,003	$2,375.74	25%	75%	100%	4.597	1
WarehFIN1	Warehouse	Fluorescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1603	15	44,747	0.514	4,475	$717.11	10%	95%	100%	4.543	1
WarehFIN2	Warehouse	Fluorescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.3205	15	44,747	1.286	11,187	$3,585.53	25%	75%	100%	2.271	1
GroceHIN1	Grocery	HID	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0572	15	3,937	0.045	394	$22.53	10%	95%	100%	12.720	1
GroceHIN2	Grocery	HID	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1145	15	3,937	0.113	984	$112.66	25%	85%	100%	6.360	1
InstiHIN1	Institutional	HID	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1722	15	2,159	0.025	216	$37.18	10%	95%	100%	4.228	1
InstiHIN2	Institutional	HID	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.3444	15	2,159	0.062	540	$185.89	25%	85%	100%	2.114	1
HealtHIN1	Healthcare	HID	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0842	15	15,203	0.175	1,520	$127.97	10%	95%	100%	8.649	1
HealtHIN2	Healthcare	HID	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1684	15	15,203	0.437	3,801	$639.84	25%	85%	100%	4.324	1
LodgiHIN1	Lodging	HID	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1012	15	10,539	0.121	1,054	$106.65	10%	95%	100%	7.194	1
LodgiHIN2	Lodging	HID	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.2024	15	10,539	0.303	2,635	$533.27	25%	85%	100%	3.597	1
RestaHIN1	Restaurant	HID	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0763	15	459	0.005	46	$3.51	10%	95%	100%	9.540	1
RestaHIN2	Restaurant	HID	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1526	15	459	0.013	115	$17.53	25%	85%	100%	4.770	1
RetaiHIN1	Retail	HID	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0792	15	10,313	0.119	1,031	$81.65	10%	95%	100%	9.195	1
RetaiHIN2	Retail	HID	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1584	15	10,313	0.296	2,578	$408.25	25%	85%	100%	4.597	1
WarehHIN1	Warehouse	HID	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1603	15	7,843	0.090	784	$125.69	10%	95%	100%	4.543	1
WarehHIN2	Warehouse	HID	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.3205	15	7,843	0.225	1,961	$628.45	25%	85%	100%	2.271	1
MiscHIN1	Misc	HID	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0988	15	4,211	0.048	421	$41.61	10%	95%	100%	7.368	1
MiscHIN2	Misc	HID	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1976	15	4,211	0.121	1,053	$208.03	25%	85%	100%	3.684	1
MiscFIN1	Misc	Fluorescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0988	15	121,285	1.394	12,128	$1,198.38	10%	95%	100%	7.368	1
MiscFIN2	Misc	Fluorescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1976	15	121,285	3.485	30,321	$5,991.88	25%	75%	100%	3.684	1
InstiInN1	Institutional	Incandescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1722	15	7,094	0.082	709	$122.15	10%	95%	100%	4.228	1
InstiInN2	Institutional	Incandescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.3444	15	7,094	0.204	1,774	$610.75	25%	75%	100%	2.114	1
GroceInT1	Grocery	Incandescent	Turnover	1	CFL Lamp - 21 Watt	EISA - 75 Watt equivalent - 53W	Lamp	$0.0161	5	309	0.021	186	$3.00	60%	75%	50%	13.568	1
HealtInT1	Healthcare	Incandescent	Turnover	1	CFL Lamp - 21 Watt	EISA - 75 Watt equivalent - 53W	Lamp	$0.0174	5	286	0.020	173	$3.00	60%	75%	50%	12.580	1
GroceInN2	Grocery	Incandescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1145	15	9,629	0.277	2,407	$275.57	25%	75%	100%	6.360	1
HealtInN2	Healthcare	Incandescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1684	15	49,948	1.435	12,487	$2,102.19	25%	75%	100%	4.324	1
LodgiInN1	Lodging	Incandescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1012	15	72,424	0.832	7,242	$732.89	10%	95%	100%	7.194	1
LodgiInN2	Lodging	Incandescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.2024	15	72,424	2.081	18,106	$3,664.46	25%	75%	100%	3.597	1
RestaInN1	Restaurant	Incandescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0763	15	8,649	0.099	865	$66.01	10%	95%	100%	9.540	1
RestaInN2	Restaurant	Incandescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1526	15	8,649	0.249	2,162	$330.03	25%	75%	100%	4.770	1
RetaiInN1	Retail	Incandescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0792	15	9,628	0.111	963	$76.23	10%	95%	100%	9.195	1
RetaiInN2	Retail	Incandescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1584	15	9,628	0.277	2,407	$381.16	25%	75%	100%	4.597	1
WarehInN1	Warehouse	Incandescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.1603	15	5,975	0.069	598	$95.76	10%	95%	100%	4.543	1
WarehInN2	Warehouse	Incandescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.3205	15	5,975	0.172	1,494	$478.78	25%	75%	100%	2.271	1
MiscInN1	Misc	Incandescent	New	1	HE Lighting Fixtures/Design 15% better than code	Code Baseline	per Building	$0.0988	15	28,936	0.333	2,894	$285.91	10%	95%	100%	7.368	1
MiscInN2	Misc	Incandescent	New	2	HE Lighting Fixtures/Design 25% better than code	Code Baseline	per Building	$0.1976	15	28,936	0.831	7,234	$1,429.55	25%	75%	100%	3.684	1
MiscFIE2	Misc	Fluorescent	Early	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1740	14	2,394	0.083	718	$125.00	30%	95%	80%	3.912	1
MiscFIE3	Misc	Fluorescent	Early	3	Photocell dimming control	No prior dimming control	Photocell	$0.1879	9	2,394	0.138	1,197	$225.00	50%	95%	95%	2.074	1
MiscFIN4	Misc	Fluorescent	New	4	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0696	14	2,394	0.083	718	$50.00	30%	95%	15%	9.781	1
MiscFIN3	Misc	Fluorescent	New	3	Photocell dimming control	No prior dimming control	Photocell	$0.1253	9	2,394	0.138	1,197	$150.00	50%	95%	75%	3.111	1
InstiFIN4	Institutional	Fluorescent	New	4	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1124	14	1,483	0.051	445	$50.00	30%	95%	15%	6.059	1
InstiFIN3	Institutional	Fluorescent	New	3	Photocell dimming control	No prior dimming control	Photocell	$0.2022	9	1,483	0.085	742	$150.00	50%	95%	75%	1.927	1
GroceFIN4	Grocery	Fluorescent	New	4	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0509	14	3,272	0.113	982	$50.00	30%	95%	15%	13.368	1
GroceFIN3	Grocery	Fluorescent	New	3	Photocell dimming control	No prior dimming control	Photocell	$0.0917	9	3,272	0.188	1,636	$150.00	50%	95%	75%	4.251	1
HealtFIN4	Healthcare	Fluorescent	New	4	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0549	14	3,034	0.105	910	$50.00	30%	95%	15%	12.394	1
HealtFIN3	Healthcare	Fluorescent	New	3	Photocell dimming control	No prior dimming control	Photocell	$0.0989	9	3,034	0.174	1,517	$150.00	50%	95%	75%	3.942	1
LodgiFIN4	Lodging	Fluorescent	New	4	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0600	14	2,776	0.096	833	$50.00	30%	95%	15%	11.341	1
LodgiFIN3	Lodging	Fluorescent	New	3	Photocell dimming control	No prior dimming control	Photocell	$0.1081	9	2,776	0.160	1,388	$150.00	50%	95%	75%	3.607	1
OfficFIN4	Office	Fluorescent	New	4	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1056	14	1,578	0.054	473	$50.00	30%	95%	15%	6.445	1
OfficFIN3	Office	Fluorescent	New	3	Photocell dimming control	No prior dimming control	Photocell	$0.1901	9	1,578	0.091	789	$150.00	50%	95%	75%	2.050	1
RestaFIN4	Restaurant	Fluorescent	New	4	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0679	14	2,454	0.085	736	$50.00	30%	95%	15%	10.026	1
RestaFIN3	Restaurant	Fluorescent	New	3	Photocell dimming control	No prior dimming control	Photocell	$0.1222	9	2,454	0.141	1,227	$150.00	50%	95%	75%	3.189	1
RetaiFIN4	Retail	Fluorescent	New	4	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0705	14	2,365	0.082	710	$50.00	30%	95%	15%	9.663	1
RetaiFIN3	Retail	Fluorescent	New	3	Photocell dimming control	No prior dimming control	Photocell	$0.1268	9	2,365	0.136	1,183	$150.00	50%	95%	75%	3.073	1
WarehFIN4	Warehouse	Fluorescent	New	4	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0761	14	2,191	0.076	657	$50.00	30%	95%	15%	8.951	1
WarehFIN3	Warehouse	Fluorescent	New	3	Photocell dimming control	No prior dimming control	Photocell	$0.1369	9	2,191	0.126	1,096	$150.00	50%	95%	75%	2.847	1
MiscFIT2	Misc	Fluorescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0696	14	2,394	0.083	718	$50.00	30%	95%	80%	9.781	1
MiscFIT3	Misc	Fluorescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.1253	9	2,394	0.138	1,197	$150.00	50%	95%	95%	3.111	1
InstiFIT2	Institutional	Fluorescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1124	14	1,483	0.051	445	$50.00	30%	95%	80%	6.059	1
InstiFIT3	Institutional	Fluorescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.2022	9	1,483	0.085	742	$150.00	50%	95%	95%	1.927	1
GroceFIT2	Grocery	Fluorescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0509	14	3,272	0.113	982	$50.00	30%	95%	80%	13.368	1
GroceFIT3	Grocery	Fluorescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.0917	9	3,272	0.188	1,636	$150.00	50%	95%	95%	4.251	1
HealtFIT2	Healthcare	Fluorescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0549	14	3,034	0.105	910	$50.00	30%	95%	80%	12.394	1
HealtFIT3	Healthcare	Fluorescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.0989	9	3,034	0.174	1,517	$150.00	50%	95%	95%	3.942	1
LodgiFIT2	Lodging	Fluorescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0600	14	2,776	0.096	833	$50.00	30%	95%	80%	11.341	1
LodgiFIT3	Lodging	Fluorescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.1081	9	2,776	0.160	1,388	$150.00	50%	95%	95%	3.607	1
OfficFIT2	Office	Fluorescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1056	14	1,578	0.054	473	$50.00	30%	95%	80%	6.445	1
OfficFIT3	Office	Fluorescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.1901	9	1,578	0.091	789	$150.00	50%	95%	95%	2.050	1
RestaFIT2	Restaurant	Fluorescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0679	14	2,454	0.085	736	$50.00	30%	95%	80%	10.026	1
RestaFIT3	Restaurant	Fluorescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.1222	9	2,454	0.141	1,227	$150.00	50%	95%	95%	3.189	1
RetaiFIT2	Retail	Fluorescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0705	14	2,365	0.082	710	$50.00	30%	95%	80%	9.663	1

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	PJM Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
RetailFIT3	Retail	Fluorescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.1268	9	2,365	0.136	1,183	$150.00	50%	95%	95%	3.073	1
WarehFIT2	Warehouse	Fluorescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0761	14	2,191	0.076	657	$50.00	30%	95%	80%	8.951	1
WarehFIT3	Warehouse	Fluorescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.1369	9	2,191	0.126	1,096	$150.00	50%	95%	95%	2.847	1
GroceFIT1	Grocery	Fluorescent	Turnover	1	Premium Efficiency T8 Lighting Replacement (28W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.0650	6	163	0.004	36	$2.32	22%	90%	95%	4.062	1
GroceFIT4	Grocery	Fluorescent	Turnover	4	Premium Efficiency T8 Lighting Replacement (25W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.0990	6	163	0.002	20	$2.02	13%	60%	95%	2.666	1
GroceFIT5	Grocery	Fluorescent	Turnover	5	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.0307	11	582	0.010	83	$2.55	14%	75%	95%	16.875	1
GroceFIE4	Grocery	Fluorescent	Early	4	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.7257	11	582	0.010	83	$60.38	14%	75%	95%	0.714	0
HealtFIT6	Healthcare	Fluorescent	Turnover	6	LED Retrofit Tube	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$1.0943	7	151	0.007	59	$65.00	39%	40%	95%	0.281	0
HealtFIT1	Healthcare	Fluorescent	Turnover	1	Premium Efficiency T8 Lighting Replacement (28W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.0701	7	151	0.004	33	$2.32	22%	90%	95%	4.389	1
HealtFIT4	Healthcare	Fluorescent	Turnover	4	Premium Efficiency T8 Lighting Replacement (25W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.1068	7	151	0.002	19	$2.02	13%	60%	95%	2.881	1
HealtFIT5	Healthcare	Fluorescent	Turnover	5	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.0331	11	540	0.009	77	$2.55	14%	75%	95%	15.646	1
HealtFIE4	Healthcare	Fluorescent	Early	4	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.7769	11	540	0.009	77	$59.93	14%	75%	95%	0.667	0
InstiFIT6	Institutional	Fluorescent	Turnover	6	LED Retrofit Tube	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$2.2383	15	74	0.003	29	$65.00	39%	40%	95%	0.325	0
InstiFIT1	Institutional	Fluorescent	Turnover	1	Premium Efficiency T8 Lighting Replacement (28W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.1433	15	74	0.002	16	$2.32	22%	90%	95%	5.079	1
InstiFIT4	Institutional	Fluorescent	Turnover	4	Premium Efficiency T8 Lighting Replacement (25W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.2184	15	74	0.001	9	$2.02	13%	60%	95%	3.334	1
InstiFIT5	Institutional	Fluorescent	Turnover	5	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.0677	11	264	0.004	38	$2.55	14%	75%	95%	7.649	1
InstiFIE4	Institutional	Fluorescent	Early	4	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.9281	11	264	0.004	38	$35.00	14%	75%	95%	0.558	0
LodgiFIT6	Lodging	Fluorescent	Turnover	6	LED Retrofit Tube	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$1.1959	8	138	0.006	54	$65.00	39%	40%	95%	0.292	0
LodgiFIT1	Lodging	Fluorescent	Turnover	1	Premium Efficiency T8 Lighting Replacement (28W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.0766	8	138	0.003	30	$2.32	22%	90%	95%	4.564	1
LodgiFIT4	Lodging	Fluorescent	Turnover	4	Premium Efficiency T8 Lighting Replacement (25W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.1167	8	138	0.002	17	$2.02	13%	60%	95%	2.996	1
LodgiFIT5	Lodging	Fluorescent	Turnover	5	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.0362	11	494	0.008	71	$2.55	14%	75%	95%	14.317	1
LodgiFIE4	Lodging	Fluorescent	Early	4	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.4959	11	494	0.008	71	$35.00	14%	75%	95%	1.045	1
MiscFIT6	Misc	Fluorescent	Turnover	6	LED Retrofit Tube	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$1.3867	9	119	0.005	47	$65.00	39%	40%	95%	0.281	0
MiscFIT1	Misc	Fluorescent	Turnover	1	Premium Efficiency T8 Lighting Replacement (28W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.0888	9	119	0.003	26	$2.32	22%	90%	95%	4.389	1
MiscFIT4	Misc	Fluorescent	Turnover	4	Premium Efficiency T8 Lighting Replacement (25W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.1353	9	119	0.002	15	$2.02	13%	60%	95%	2.881	1
MiscFIT5	Misc	Fluorescent	Turnover	5	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.0420	11	426	0.007	61	$2.55	14%	75%	95%	12.347	1
MiscFIE4	Misc	Fluorescent	Early	4	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.5750	11	426	0.007	61	$35.00	14%	75%	95%	0.901	0
OfficFIT6	Office	Fluorescent	Turnover	6	LED Retrofit Tube	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$2.1044	14	79	0.004	31	$65.00	39%	40%	95%	0.324	0
OfficFIT1	Office	Fluorescent	Turnover	1	Premium Efficiency T8 Lighting Replacement (28W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.1348	14	79	0.002	17	$2.32	22%	90%	95%	5.052	1
OfficFIT4	Office	Fluorescent	Turnover	4	Premium Efficiency T8 Lighting Replacement (25W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.2053	14	79	0.001	10	$2.02	13%	60%	95%	3.316	1
OfficFIT5	Office	Fluorescent	Turnover	5	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.0637	11	281	0.005	40	$2.55	14%	75%	95%	8.136	1
OfficFIE4	Office	Fluorescent	Early	4	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.8726	11	281	0.005	40	$35.00	14%	75%	95%	0.594	0
RestaFIT6	Restaurant	Fluorescent	Turnover	6	LED Retrofit Tube	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$1.3528	9	122	0.006	48	$65.00	39%	40%	95%	0.288	0
RestaFIT1	Restaurant	Fluorescent	Turnover	1	Premium Efficiency T8 Lighting Replacement (28W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.0866	9	122	0.003	27	$2.32	22%	90%	95%	4.499	1
RestaFIT4	Restaurant	Fluorescent	Turnover	4	Premium Efficiency T8 Lighting Replacement (25W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.1320	9	122	0.002	15	$2.02	13%	60%	95%	2.953	1
RestaFIT5	Restaurant	Fluorescent	Turnover	5	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.0409	11	437	0.007	62	$2.55	14%	75%	95%	12.656	1
RestaFIE4	Restaurant	Fluorescent	Early	4	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.5610	11	437	0.007	62	$35.00	14%	75%	95%	0.924	0
RetaiFIT6	Retail	Fluorescent	Turnover	6	LED Retrofit Tube	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$1.4036	9	118	0.005	46	$65.00	39%	40%	95%	0.278	0
RetaiFIT1	Retail	Fluorescent	Turnover	1	Premium Efficiency T8 Lighting Replacement (28W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.0899	9	118	0.003	26	$2.32	22%	90%	95%	4.336	1
RetaiFIT4	Retail	Fluorescent	Turnover	4	Premium Efficiency T8 Lighting Replacement (25W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.1369	9	118	0.002	15	$2.02	13%	60%	95%	2.846	1
RetaiFIT5	Retail	Fluorescent	Turnover	5	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.0425	11	421	0.007	60	$2.55	14%	75%	95%	12.198	1
RetaiFIE4	Retail	Fluorescent	Early	4	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.5820	11	421	0.007	60	$35.00	14%	75%	95%	0.890	0
WarehFIT6	Warehouse	Fluorescent	Turnover	6	LED Retrofit Tube	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$1.5152	10	109	0.005	43	$65.00	39%	40%	95%	0.301	0
WarehFIT1	Warehouse	Fluorescent	Turnover	1	Premium Efficiency T8 Lighting Replacement (28W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.0970	10	109	0.003	24	$2.32	22%	90%	95%	4.701	1
WarehFIT4	Warehouse	Fluorescent	Turnover	4	Premium Efficiency T8 Lighting Replacement (25W lamps)	Replace (E) high efficiency 32 W T8 Lamp	Lamp	$0.1478	10	109	0.002	14	$2.02	13%	60%	95%	3.086	1
WarehFIT5	Warehouse	Fluorescent	Turnover	5	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.0459	11	390	0.006	56	$2.55	14%	75%	95%	11.300	1
WarehFIE4	Warehouse	Fluorescent	Early	4	Low Power Ballast Replacement	NPF high efficiency 32 W T8 Lamp Ballast - 2 lamp	Lamp	$0.6283	11	390	0.006	56	$35.00	14%	75%	95%	0.825	0
GroceHIE1	Grocery	HID	Early	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.3797	10	1,893	0.065	565	$214.50	30%	85%	80%	1.201	1
GroceHIE2	Grocery	HID	Early	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.2995	10	2,772	0.115	1,002	$300.00	36%	85%	80%	1.523	1
GroceHIE3	Grocery	HID	Early	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.3449	10	1,893	0.078	681	$235.00	36%	85%	80%	1.323	1
GroceHIE4	Grocery	HID	Early	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.3403	10	2,772	0.110	955	$325.00	34%	85%	80%	1.341	1
GroceHIT5	Grocery	HID	Turnover	5	Ceramic Metal Halide lamp	Replace non-ceramic lamp lamp 400 W	Lamp	$0.0859	3	2,330	0.047	408	$35.00	18%	85%	55%	1.565	1
GroceHIE7	Grocery	HID	Early	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.8147	15	1,893	0.097	844	$688.00	45%	85%	80%	0.894	0
GroceHIT1	Grocery	HID	Turnover	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.1956	10	1,893	0.065	565	$110.50	30%	85%	80%	2.332	1
GroceHIT2	Grocery	HID	Turnover	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.2246	10	2,772	0.115	1,002	$225.00	36%	85%	80%	2.031	1
GroceHIT3	Grocery	HID	Turnover	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.2128	10	1,893	0.078	681	$145.00	36%	85%	80%	2.144	1
GroceHIT4	Grocery	HID	Turnover	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.2722	10	2,772	0.110	955	$260.00	34%	85%	80%	1.676	1
GroceHIT6	Grocery	HID	Turnover	6	Multi Lamp Hard Wired CFL	Replace HID Fixure Drawing 400 W	Fixture	$0.3442	10	2,772	0.142	1,235	$425.00	45%	85%	55%	1.325	1
GroceHIT7	Grocery	HID	Turnover	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.4441	15	1,893	0.097	844	$375.00	45%	85%	80%	1.639	1
HealtHIE1	Healthcare	HID	Early	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.4095	10	1,755	0.060	524	$214.50	30%	85%	80%	1.114	1
HealtHIE2	Healthcare	HID	Early	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.3230	10	2,570	0.107	929	$300.00	36%	85%	80%	1.412	1
HealtHIE3	Healthcare	HID	Early	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.3720	10	1,755	0.073	632	$235.00	36%	85%	80%	1.226	1
HealtHIE4	Healthcare	HID	Early	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.3670	10	2,570	0.102	886	$325.00	34%	85%	80%	1.243	1
HealtHIT5	Healthcare	HID	Turnover	5	Ceramic Metal Halide lamp	Replace non-ceramic lamp lamp 400 W	Lamp	$0.0926	3	2,160	0.043	378	$35.00	18%	85%	55%	1.451	1
HealtHIE7	Healthcare	HID	Early	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.8787	15	1,755	0.090	783	$688.00	45%	85%	80%	0.829	0
HealtHIT1	Healthcare	HID	Turnover	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.2110	10	1,755	0.060	524	$110.50	30%	85%	80%	2.162	1
HealtHIT2	Healthcare	HID	Turnover	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.2422	10	2,570	0.107	929	$225.00	36%	85%	80%	1.883	1
HealtHIT3	Healthcare	HID	Turnover	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.2295	10	1,755	0.073	632	$145.00	36%	85%	80%	1.988	1
HealtHIT4	Healthcare	HID	Turnover	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.2936	10	2,570	0.102	886	$260.00	34%	85%	80%	1.554	1
HealtHIT6	Healthcare	HID	Turnover	6	Multi Lamp Hard Wired CFL	Replace HID Fixure Drawing 400 W	Fixture	$0.3712	10	2,570	0.132	1,145	$425.00	45%	85%	55%	1.229	1
HealtHIT7	Healthcare	HID	Turnover	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.4789	15	1,755	0.090	783	$375.00	45%	85%	80%	1.520	1
InstiHIE1	Institutional	HID	Early	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.8376	10	858	0.029	256	$214.50	30%	85%	80%	0.545	0
InstiHIE2	Institutional	HID	Early	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.6607	10	1,257	0.052	454	$300.00	36%	85%	80%	0.690	0
InstiHIE3	Institutional	HID	Early	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.7608	10	858	0.035	309	$235.00	36%	85%	80%	0.600	0
InstiHIE4	Institutional	HID	Early	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.7506	10	1,257	0.050	433	$325.00	34%	85%	80%	0.608	0
InstiHIT5	Institutional	HID	Turnover	5	Ceramic Metal Halide lamp	Replace non-ceramic lamp lamp 400 W	Lamp	$0.1894	6	1,056	0.021	185	$35.00	18%	85%	55%	1.393	1
InstiHIE7	Institutional	HID	Early	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$1.7973	15	858	0.044	383	$688.00	45%	85%	80%	0.405	0
InstiHIT1	Institutional	HID	Turnover	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.4315	10	858	0.029	256	$110.50	30%	85%	80%	1.057	1
InstiHIT2	Institutional	HID	Turnover	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.4955	10	1,257	0.052	454	$225.00	36%	85%	80%	0.921	0
InstiHIT3	Institutional	HID	Turnover	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.4694	10	858	0.035	309	$145.00	36%	85%	80%	0.972	0
InstiHIT4	Institutional	HID	Turnover	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.6005	10	1,257	0.050	433	$260.00	34%	85%	80%	0.760	0
InstiHIT6	Institutional	HID	Turnover	6	Multi Lamp Hard Wired CFL	Replace HID Fixure Drawing 400 W	Fixture	$0.7594	10	1,257	0.064	560	$425.00	45%	85%	55%	0.601	0
InstiHIT7	Institutional	HID	Turnover	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.9796	15	858	0.044	383	$375.00	45%	85%	80%	0.743	0
LodgiHIE1	Lodging	HID	Early	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.4475	10	1,606	0.055	479	$214.50	30%	85%	80%	1.019	1
LodgiHIE2	Lodging	HID	Early	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.3530	10	2,352	0.098	850	$300.00	36%	85%	80%	1.292	1
LodgiHIE3	Lodging	HID	Early	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.4065	10	1,606	0.066	578	$235.00	36%	85%	80%	1.122	1
LodgiHIE4	Lodging	HID	Early	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.4011	10	2,352	0.093	810	$325.00	34%	85%	80%	1.137	1
LodgiHIT5	Lodging	HID	Turnover	5	Ceramic Metal Halide lamp	Replace non-ceramic lamp lamp 400 W	Lamp	$0.1012	3	1,976	0.040	346	$35.00	18%	85%	55%	1.328	1
LodgiHIE7	Lodging	HID	Early	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.9603	15	1,606	0.082	716	$688.00	45%	85%	80%	0.758	0
LodgiHIT1	Lodging	HID	Turnover	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF	Replace HID fixture drawing 250W	Fixture	$0.2306	10	1,606	0.055	479	$110.50	30%	85%	80%	1.978	1
LodgiHIT2	Lodging	HID	Turnover	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF	Replace HID fixture drawing 400 W	Fixture	$0.2648	10	2,352	0.098	850	$225.00	36%	85%	80%	1.723	1
LodgiHIT3	Lodging	HID	Turnover	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.2508	10	1,606	0.066	578	$145.00	36%	85%	80%	1.819	1
LodgiHIT4	Lodging	HID	Turnover	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.3209	10	2,352	0.093	810	$260.00	34%	85%	80%	1.422	1
LodgiHIT6	Lodging	HID	Turnover	6	Multi Lamp Hard Wired CFL	Replace HID Fixure Drawing 400 W	Fixture	$0.4057	10	2,352	0.120	1,047	$425.00	45%	85%	55%	1.124	1

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	PJM Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
LodgiHIT7	Lodging	HID	Turnover	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.5234	15	1,606	0.082	716	$375.00	45%	85%	80%	1.391	1
OfficHIE1	Office	HID	Early	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF[2]	Replace HID fixture drawing 250W	Fixture	$0.7875	10	913	0.031	272	$214.50	30%	85%	80%	0.579	0
OfficHIE2	Office	HID	Early	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF[2]	Replace HID fixture drawing 400 W	Fixture	$0.6211	10	1,337	0.056	483	$300.00	36%	85%	80%	0.734	0
OfficHIE3	Office	HID	Early	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.7153	10	913	0.038	329	$235.00	36%	85%	80%	0.638	0
OfficHIE4	Office	HID	Early	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.7057	10	1,337	0.053	461	$325.00	34%	85%	80%	0.646	0
OfficHIT5	Office	HID	Turnover	5	Ceramic Metal Halide lamp	Replace non-ceramic lamp lamp 400 W	Lamp	$0.1781	5	1,123	0.023	197	$35.00	18%	85%	55%	1.227	1
OfficHIE7	Office	HID	Early	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$1.6898	15	913	0.047	407	$688.00	45%	85%	80%	0.431	0
OfficHIT1	Office	HID	Turnover	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF[2]	Replace HID fixture drawing 250W	Fixture	$0.4057	10	913	0.031	272	$110.50	30%	85%	80%	1.124	1
OfficHIT2	Office	HID	Turnover	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF[2]	Replace HID fixture drawing 400 W	Fixture	$0.4659	10	1,337	0.056	483	$225.00	36%	85%	80%	0.979	0
OfficHIT3	Office	HID	Turnover	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.4414	10	913	0.038	329	$145.00	36%	85%	80%	1.034	1
OfficHIT4	Office	HID	Turnover	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.5646	10	1,337	0.053	461	$260.00	34%	85%	80%	0.808	0
OfficHIT6	Office	HID	Turnover	6	Multi Lamp Hard Wired CFL	Replace HID Fixure Drawing 400 W	Fixture	$0.7139	10	1,337	0.068	595	$425.00	45%	85%	55%	0.639	0
OfficHIT7	Office	HID	Turnover	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.9210	15	913	0.047	407	$375.00	45%	85%	80%	0.790	0
RestaHIE1	Restaurant	HID	Early	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF[2]	Replace HID fixture drawing 250W	Fixture	$0.5063	10	1,420	0.049	424	$214.50	30%	85%	80%	0.901	0
RestaHIE2	Restaurant	HID	Early	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF[2]	Replace HID fixture drawing 400 W	Fixture	$0.3993	10	2,079	0.086	751	$300.00	36%	85%	80%	1.142	1
RestaHIE3	Restaurant	HID	Early	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.4598	10	1,420	0.059	511	$235.00	36%	85%	80%	0.992	0
RestaHIE4	Restaurant	HID	Early	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.4537	10	2,079	0.082	716	$325.00	34%	85%	80%	1.005	1
RestaHIT5	Restaurant	HID	Turnover	5	Ceramic Metal Halide lamp	Replace non-ceramic lamp lamp 400 W	Lamp	$0.1145	3	1,747	0.035	306	$35.00	18%	85%	55%	1.174	1
RestaHIE7	Restaurant	HID	Early	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$1.0863	15	1,420	0.073	633	$688.00	45%	85%	80%	0.670	0
RestaHIT1	Restaurant	HID	Turnover	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF[2]	Replace HID fixture drawing 250W	Fixture	$0.2608	10	1,420	0.049	424	$110.50	30%	85%	80%	1.749	1
RestaHIT2	Restaurant	HID	Turnover	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF[2]	Replace HID fixture drawing 400 W	Fixture	$0.2995	10	2,079	0.086	751	$225.00	36%	85%	80%	1.523	1
RestaHIT3	Restaurant	HID	Turnover	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.2837	10	1,420	0.059	511	$145.00	36%	85%	80%	1.608	1
RestaHIT4	Restaurant	HID	Turnover	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.3630	10	2,079	0.082	716	$260.00	34%	85%	80%	1.257	1
RestaHIT6	Restaurant	HID	Turnover	6	Multi Lamp Hard Wired CFL	Replace HID Fixure Drawing 400 W	Fixture	$0.4590	10	2,079	0.106	926	$425.00	45%	85%	55%	0.994	0
RestaHIT7	Restaurant	HID	Turnover	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.5921	15	1,420	0.073	633	$375.00	45%	85%	80%	1.230	1
RetaiHIE1	Retail	HID	Early	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF[2]	Replace HID fixture drawing 250W	Fixture	$0.5253	10	1,368	0.047	408	$214.50	30%	85%	80%	0.868	0
RetaiHIE2	Retail	HID	Early	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF[2]	Replace HID fixture drawing 400 W	Fixture	$0.4143	10	2,004	0.083	724	$300.00	36%	85%	80%	1.101	1
RetaiHIE3	Retail	HID	Early	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.4771	10	1,368	0.057	493	$235.00	36%	85%	80%	0.956	0
RetaiHIE4	Retail	HID	Early	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.4707	10	2,004	0.079	690	$325.00	34%	85%	80%	0.969	0
RetaiHIT5	Retail	HID	Turnover	5	Ceramic Metal Halide lamp	Replace non-ceramic lamp lamp 400 W	Lamp	$0.1188	4	1,684	0.034	295	$35.00	18%	85%	55%	1.442	1
RetaiHIE7	Retail	HID	Early	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$1.1270	15	1,368	0.070	610	$688.00	45%	85%	80%	0.646	0
RetaiHIT1	Retail	HID	Turnover	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF[2]	Replace HID fixture drawing 250W	Fixture	$0.2706	10	1,368	0.047	408	$110.50	30%	85%	80%	1.686	1
RetaiHIT2	Retail	HID	Turnover	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF[2]	Replace HID fixture drawing 400 W	Fixture	$0.3107	10	2,004	0.083	724	$225.00	36%	85%	80%	1.468	1
RetaiHIT3	Retail	HID	Turnover	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.2944	10	1,368	0.057	493	$145.00	36%	85%	80%	1.550	1
RetaiHIT4	Retail	HID	Turnover	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.3766	10	2,004	0.079	690	$260.00	34%	85%	80%	1.211	1
RetaiHIT6	Retail	HID	Turnover	6	Multi Lamp Hard Wired CFL	Replace HID Fixure Drawing 400 W	Fixture	$0.4762	10	2,004	0.103	893	$425.00	45%	85%	55%	0.958	0
RetaiHIT7	Retail	HID	Turnover	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.6143	15	1,368	0.070	610	$375.00	45%	85%	80%	1.185	1
MiscHIE1	Misc	HID	Early	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF[2]	Replace HID fixture drawing 250W	Fixture	$0.5189	10	1,385	0.048	413	$214.50	30%	85%	80%	0.879	0
MiscHIE2	Misc	HID	Early	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF[2]	Replace HID fixture drawing 400 W	Fixture	$0.4093	10	2,028	0.084	733	$300.00	36%	85%	80%	1.114	1
MiscHIE3	Misc	HID	Early	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.4713	10	1,385	0.057	499	$235.00	36%	85%	80%	0.968	0
MiscHIE4	Misc	HID	Early	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.4650	10	2,028	0.080	699	$325.00	34%	85%	80%	0.981	0
MiscHIT5	Misc	HID	Turnover	5	Ceramic Metal Halide lamp	Replace non-ceramic lamp lamp 400 W	Lamp	$0.1173	4	1,705	0.034	298	$35.00	18%	85%	55%	1.460	1
MiscHIE7	Misc	HID	Early	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$1.1134	15	1,385	0.071	618	$688.00	45%	85%	80%	0.654	0
MiscHIT1	Misc	HID	Turnover	1	4' T8 High Bay fixture - 32 W - 6 lamps HPF[2]	Replace HID fixture drawing 250W	Fixture	$0.2673	10	1,385	0.048	413	$110.50	30%	85%	80%	1.706	1
MiscHIT2	Misc	HID	Turnover	2	4' T8 High Bay fixture - 32 W - 8 lamps HPF[2]	Replace HID fixture drawing 400 W	Fixture	$0.3070	10	2,028	0.084	733	$225.00	36%	85%	80%	1.486	1
MiscHIT3	Misc	HID	Turnover	3	4' T5 HO fixture - 54 W - 4 lamp	Replace HID Fixture drawing 250 W	Fixture	$0.2908	10	1,385	0.057	499	$145.00	36%	85%	80%	1.568	1
MiscHIT4	Misc	HID	Turnover	4	4' T5 HO fixture - 54 W - 6 lamp	Replace HID Fixture drawing 400 W	Fixture	$0.3720	10	2,028	0.080	699	$260.00	34%	85%	80%	1.226	1
MiscHIT6	Misc	HID	Turnover	6	Multi Lamp Hard Wired CFL	Replace HID Fixure Drawing 400 W	Fixture	$0.4704	10	2,028	0.104	903	$425.00	45%	85%	55%	0.970	0
MiscHIT7	Misc	HID	Turnover	7	Induction High Bay Lighting	Base High Bay HID, 250W	Fixture	$0.6069	15	1,385	0.071	618	$375.00	45%	85%	80%	1.200	1
GroceHIE8	Grocery	HID	Early	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1651	10	7,571	0.261	2,271	$375.00	30%	85%	85%	2.763	1
GroceHIE9	Grocery	HID	Early	9	Photocell dimming control	No prior dimming control	Photocell	$0.1453	10	7,571	0.435	3,786	$550.00	50%	85%	85%	3.140	1
GroceHIE10	Grocery	HID	Early	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1321	10	7,571	0.087	757	$100.00	10%	85%	45%	3.454	1
HealtHIE8	Healthcare	HID	Early	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1781	10	7,020	0.242	2,106	$375.00	30%	85%	85%	2.562	1
HealtHIE9	Healthcare	HID	Early	9	Photocell dimming control	No prior dimming control	Photocell	$0.1567	10	7,020	0.403	3,510	$550.00	50%	85%	85%	2.911	1
HealtHIE10	Healthcare	HID	Early	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1425	10	7,020	0.081	702	$100.00	10%	85%	45%	3.202	1
InstiHIE8	Institutional	HID	Early	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.3642	10	3,432	0.118	1,030	$375.00	30%	85%	85%	1.252	1
InstiHIE9	Institutional	HID	Early	9	Photocell dimming control	No prior dimming control	Photocell	$0.3205	10	3,432	0.197	1,716	$550.00	50%	85%	85%	1.423	1
InstiHIE10	Institutional	HID	Early	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.2914	10	3,432	0.039	343	$100.00	10%	85%	45%	1.565	1
OfficHIE8	Office	HID	Early	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.3424	10	3,650	0.126	1,095	$375.00	30%	85%	85%	1.332	1
OfficHIE9	Office	HID	Early	9	Photocell dimming control	No prior dimming control	Photocell	$0.3013	10	3,650	0.210	1,825	$550.00	50%	85%	85%	1.514	1
OfficHIE10	Office	HID	Early	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.2739	10	3,650	0.042	365	$100.00	10%	85%	45%	1.665	1
RestaHIE8	Restaurant	HID	Early	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2201	10	5,678	0.196	1,704	$375.00	30%	85%	85%	2.072	1
RestaHIE9	Restaurant	HID	Early	9	Photocell dimming control	No prior dimming control	Photocell	$0.1937	10	5,678	0.326	2,839	$550.00	50%	85%	85%	2.355	1
RestaHIE10	Restaurant	HID	Early	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1761	10	5,678	0.065	568	$100.00	10%	85%	45%	2.590	1
RetaiHIE8	Retail	HID	Early	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2284	10	5,473	0.189	1,642	$375.00	30%	85%	85%	1.997	1
RetaiHIE9	Retail	HID	Early	9	Photocell dimming control	No prior dimming control	Photocell	$0.2010	10	5,473	0.314	2,737	$550.00	50%	85%	85%	2.270	1
RetaiHIE10	Retail	HID	Early	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1827	10	5,473	0.063	547	$100.00	10%	85%	45%	2.496	1
MiscHIE8	Misc	HID	Early	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2256	10	5,540	0.191	1,662	$375.00	30%	85%	85%	2.022	1
MiscHIE9	Misc	HID	Early	9	Photocell dimming control	No prior dimming control	Photocell	$0.1986	10	5,540	0.318	2,770	$550.00	50%	85%	85%	2.297	1
MiscHIE10	Misc	HID	Early	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1805	10	5,540	0.064	554	$100.00	10%	85%	45%	2.527	1
LodgiHIE8	Lodging	HID	Early	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1946	10	6,423	0.221	1,927	$375.00	30%	85%	85%	2.344	1
LodgiHIE9	Lodging	HID	Early	9	Photocell dimming control	No prior dimming control	Photocell	$0.1713	10	6,423	0.369	3,212	$550.00	50%	85%	85%	2.664	1
LodgiHIE10	Lodging	HID	Early	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1557	10	6,423	0.074	642	$100.00	10%	85%	45%	2.930	1
LodgiHIT8	Lodging	HID	Turnover	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1427	10	6,423	0.221	1,927	$275.00	30%	85%	85%	3.196	1
LodgiHIT9	Lodging	HID	Turnover	9	Photocell dimming control	No prior dimming control	Photocell	$0.1713	10	6,423	0.369	3,212	$550.00	50%	85%	85%	2.664	1
LodgiHIT10	Lodging	HID	Turnover	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1168	10	6,423	0.074	642	$75.00	10%	85%	45%	3.907	1
GroceHIT8	Grocery	HID	Turnover	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1211	10	7,571	0.261	2,271	$275.00	30%	85%	85%	3.768	1
GroceHIT9	Grocery	HID	Turnover	9	Photocell dimming control	No prior dimming control	Photocell	$0.1453	10	7,571	0.435	3,786	$550.00	50%	85%	85%	3.140	1
GroceHIT10	Grocery	HID	Turnover	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.0991	10	7,571	0.087	757	$75.00	10%	85%	45%	4.605	1
HealtHIT8	Healthcare	HID	Turnover	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1306	10	7,020	0.242	2,106	$275.00	30%	85%	85%	3.493	1
HealtHIT9	Healthcare	HID	Turnover	9	Photocell dimming control	No prior dimming control	Photocell	$0.1567	10	7,020	0.403	3,510	$550.00	50%	85%	85%	2.911	1
HealtHIT10	Healthcare	HID	Turnover	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1068	10	7,020	0.081	702	$75.00	10%	85%	45%	4.270	1
InstiHIT8	Institutional	HID	Turnover	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2671	10	3,432	0.118	1,030	$275.00	30%	85%	85%	1.708	1
InstiHIT9	Institutional	HID	Turnover	9	Photocell dimming control	No prior dimming control	Photocell	$0.3205	10	3,432	0.197	1,716	$550.00	50%	85%	85%	1.423	1
InstiHIT10	Institutional	HID	Turnover	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.2185	10	3,432	0.039	343	$75.00	10%	85%	45%	2.087	1
OfficHIT8	Office	HID	Turnover	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2511	10	3,650	0.126	1,095	$275.00	30%	85%	85%	1.816	1
OfficHIT9	Office	HID	Turnover	9	Photocell dimming control	No prior dimming control	Photocell	$0.3013	10	3,650	0.210	1,825	$550.00	50%	85%	85%	1.514	1
OfficHIT10	Office	HID	Turnover	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.2055	10	3,650	0.042	365	$75.00	10%	85%	45%	2.220	1
MiscHIT8	Misc	HID	Turnover	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1655	10	5,540	0.191	1,662	$275.00	30%	85%	85%	2.757	1
MiscHIT9	Misc	HID	Turnover	9	Photocell dimming control	No prior dimming control	Photocell	$0.1986	10	5,540	0.318	2,770	$550.00	50%	85%	85%	2.297	1
MiscHIT10	Misc	HID	Turnover	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1354	10	5,540	0.064	554	$75.00	10%	85%	45%	3.369	1
RestaHIT8	Restaurant	HID	Turnover	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1614	10	5,678	0.196	1,704	$275.00	30%	85%	85%	2.826	1
RestaHIT9	Restaurant	HID	Turnover	9	Photocell dimming control	No prior dimming control	Photocell	$0.1937	10	5,678	0.326	2,839	$550.00	50%	85%	85%	2.355	1
RestaHIT10	Restaurant	HID	Turnover	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1321	10	5,678	0.065	568	$75.00	10%	85%	45%	3.454	1

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	PJM Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
RetaiHIT8	Retail	HID	Turnover	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1675	10	5,473	0.189	1,642	$275.00	30%	85%	85%	2.723	1
RetaiHIT9	Retail	HID	Turnover	9	Photocell dimming control	No prior dimming control	Photocell	$0.2010	10	5,473	0.314	2,737	$550.00	50%	85%	85%	2.270	1
RetaiHIT10	Retail	HID	Turnover	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1370	10	5,473	0.063	547	$75.00	10%	85%	45%	3.329	1
WarehHIT8	Warehouse	HID	Turnover	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1808	10	5,070	0.175	1,521	$275.00	30%	85%	85%	2.523	1
WarehHIT9	Warehouse	HID	Turnover	9	Photocell dimming control	No prior dimming control	Photocell	$0.2170	10	5,070	0.291	2,535	$550.00	50%	85%	85%	2.102	1
WarehHIT10	Warehouse	HID	Turnover	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1479	10	5,070	0.058	507	$75.00	10%	85%	45%	3.084	1
WarehHIN8	Warehouse	HID	New	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1781	10	4,680	0.161	1,404	$250.00	30%	85%	85%	2.562	1
WarehHIN9	Warehouse	HID	New	9	Photocell dimming control	No prior dimming control	Photocell	$0.1923	10	4,680	0.269	2,340	$450.00	50%	85%	85%	2.372	1
WarehHIN10	Warehouse	HID	New	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1389	10	4,680	0.054	468	$65.00	10%	25%	45%	3.284	1
GroceHIN8	Grocery	HID	New	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1192	10	6,989	0.241	2,097	$250.00	30%	85%	85%	3.826	1
GroceHIN9	Grocery	HID	New	9	Photocell dimming control	No prior dimming control	Photocell	$0.1288	10	6,989	0.402	3,494	$450.00	50%	85%	85%	3.542	1
GroceHIN10	Grocery	HID	New	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.0930	10	6,989	0.080	699	$65.00	10%	25%	45%	4.904	1
HealtHIN8	Healthcare	HID	New	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1286	10	6,480	0.223	1,944	$250.00	30%	85%	85%	3.547	1
HealtHIN9	Healthcare	HID	New	9	Photocell dimming control	No prior dimming control	Photocell	$0.1389	10	6,480	0.372	3,240	$450.00	50%	85%	85%	3.284	1
HealtHIN10	Healthcare	HID	New	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1003	10	6,480	0.074	648	$65.00	10%	25%	45%	4.547	1
InstiHIN8	Institutional	HID	New	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2630	10	3,168	0.109	950	$250.00	30%	85%	85%	1.734	1
InstiHIN9	Institutional	HID	New	9	Photocell dimming control	No prior dimming control	Photocell	$0.2841	10	3,168	0.182	1,584	$450.00	50%	85%	85%	1.606	1
InstiHIN10	Institutional	HID	New	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.2052	10	3,168	0.036	317	$65.00	10%	25%	45%	2.223	1
LodgiHIN8	Lodging	HID	New	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1405	10	5,929	0.204	1,779	$250.00	30%	85%	85%	3.246	1
LodgiHIN9	Lodging	HID	New	9	Photocell dimming control	No prior dimming control	Photocell	$0.1518	10	5,929	0.341	2,965	$450.00	50%	85%	85%	3.005	1
LodgiHIN10	Lodging	HID	New	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1096	10	5,929	0.068	593	$65.00	10%	25%	45%	4.161	1
OfficHIN8	Office	HID	New	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.2473	10	3,370	0.116	1,011	$250.00	30%	85%	85%	1.844	1
OfficHIN9	Office	HID	New	9	Photocell dimming control	No prior dimming control	Photocell	$0.2671	10	3,370	0.194	1,685	$450.00	50%	85%	85%	1.708	1
OfficHIN10	Office	HID	New	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1929	10	3,370	0.039	337	$65.00	10%	25%	45%	2.365	1
RestaHIN8	Restaurant	HID	New	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1590	10	5,242	0.181	1,572	$250.00	30%	85%	85%	2.869	1
RestaHIN9	Restaurant	HID	New	9	Photocell dimming control	No prior dimming control	Photocell	$0.1717	10	5,242	0.301	2,621	$450.00	50%	85%	85%	2.657	1
RestaHIN10	Restaurant	HID	New	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1240	10	5,242	0.060	524	$65.00	10%	25%	45%	3.678	1
RetaiHIN8	Retail	HID	New	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1650	10	5,052	0.174	1,516	$250.00	30%	85%	85%	2.765	1
RetaiHIN9	Retail	HID	New	9	Photocell dimming control	No prior dimming control	Photocell	$0.1781	10	5,052	0.290	2,526	$450.00	50%	85%	85%	2.561	1
RetaiHIN10	Retail	HID	New	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1287	10	5,052	0.058	505	$65.00	10%	25%	45%	3.545	1
miscHIN8	misc	HID	New	8	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1630	10	5,114	0.176	1,534	$250.00	30%	85%	85%	2.799	1
MiscHIN9	Misc	HID	New	9	Photocell dimming control	No prior dimming control	Photocell	$0.1760	10	5,114	0.294	2,557	$450.00	50%	85%	85%	2.592	1
MiscHIN10	Misc	HID	New	10	Central lighting control system	Replace manual switches or no control	Control Point	$0.1271	10	5,114	0.059	511	$65.00	10%	25%	45%	3.589	1
OfficInN3	Office	Incandescent	New	3	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0464	14	3,594	0.124	1,078	$50.00	30%	95%	15%	14.683	1
OfficInN4	Office	Incandescent	New	4	Photocell dimming control	No prior dimming control	Photocell	$0.0835	9	3,594	0.207	1,797	$150.00	50%	95%	95%	4.670	1
OfficInT2	Office	Incandescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1159	14	3,594	0.124	1,078	$125.00	30%	95%	80%	5.873	1
OfficInT3	Office	Incandescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.1252	9	3,594	0.207	1,797	$225.00	50%	95%	95%	3.113	1
GroceInN3	Grocery	Incandescent	New	3	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0224	14	7,455	0.257	2,236	$50.00	30%	95%	15%	30.453	1
GroceInT2	Grocery	Incandescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0559	14	7,455	0.257	2,236	$125.00	30%	95%	80%	12.181	1
HealtInT2	Healthcare	Incandescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0603	14	6,912	0.238	2,074	$125.00	30%	95%	80%	11.294	1
GroceInN4	Grocery	Incandescent	New	4	Photocell dimming control	No prior dimming control	Photocell	$0.0402	9	7,455	0.428	3,727	$150.00	50%	95%	95%	9.685	1
HealtInN3	Healthcare	Incandescent	New	3	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0241	14	6,912	0.238	2,074	$50.00	30%	95%	15%	28.236	1
GroceInT3	Grocery	Incandescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.0604	9	7,455	0.428	3,727	$225.00	50%	95%	95%	6.457	1
HealtInT3	Healthcare	Incandescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.0651	9	6,912	0.397	3,456	$225.00	50%	95%	95%	5.987	1
HealtInN4	Healthcare	Incandescent	New	4	Photocell dimming control	No prior dimming control	Photocell	$0.0434	9	6,912	0.397	3,456	$150.00	50%	95%	95%	8.980	1
InstiInN3	Institutional	Incandescent	New	3	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0493	14	3,379	0.117	1,014	$50.00	30%	95%	15%	13.804	1
InstiInN4	Institutional	Incandescent	New	4	Photocell dimming control	No prior dimming control	Photocell	$0.0888	9	3,379	0.194	1,690	$150.00	50%	95%	95%	4.390	1
InstiInT2	Institutional	Incandescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.1233	14	3,379	0.117	1,014	$125.00	30%	95%	80%	5.522	1
InstiInT3	Institutional	Incandescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.1332	9	3,379	0.194	1,690	$225.00	50%	95%	95%	2.927	1
LodgiInN3	Lodging	Incandescent	New	3	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0264	14	6,324	0.218	1,897	$50.00	30%	95%	15%	25.836	1
LodgiInN4	Lodging	Incandescent	New	4	Photocell dimming control	No prior dimming control	Photocell	$0.0474	9	6,324	0.363	3,162	$150.00	50%	95%	95%	8.217	1
LodgiInT2	Lodging	Incandescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0659	14	6,324	0.218	1,897	$125.00	30%	95%	80%	10.334	1
LodgiInT3	Lodging	Incandescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.0712	9	6,324	0.363	3,162	$225.00	50%	95%	95%	5.478	1
RestaInN3	Restaurant	Incandescent	New	3	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0298	14	5,591	0.193	1,677	$50.00	30%	95%	15%	22.840	1
RestaInN4	Restaurant	Incandescent	New	4	Photocell dimming control	No prior dimming control	Photocell	$0.0537	9	5,591	0.321	2,796	$150.00	50%	95%	95%	7.264	1
RestaInT2	Restaurant	Incandescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0745	14	5,591	0.193	1,677	$125.00	30%	95%	80%	9.136	1
RestaInT3	Restaurant	Incandescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.0805	9	5,591	0.321	2,796	$225.00	50%	95%	95%	4.843	1
RetaiInN3	Retail	Incandescent	New	3	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0309	14	5,389	0.186	1,617	$50.00	30%	95%	15%	22.014	1
RetaiInN4	Retail	Incandescent	New	4	Photocell dimming control	No prior dimming control	Photocell	$0.0557	9	5,389	0.310	2,694	$150.00	50%	95%	95%	7.001	1
RetaiInT2	Retail	Incandescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0773	14	5,389	0.186	1,617	$125.00	30%	95%	80%	8.805	1
RetaiInT3	Retail	Incandescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.0835	9	5,389	0.310	2,694	$225.00	50%	95%	95%	4.667	1
WarehInN3	Warehouse	Incandescent	New	3	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0334	14	4,992	0.172	1,498	$50.00	30%	95%	15%	20.393	1
WarehInN4	Warehouse	Incandescent	New	4	Photocell dimming control	No prior dimming control	Photocell	$0.0601	9	4,992	0.287	2,496	$150.00	50%	95%	95%	6.486	1
WarehInT2	Warehouse	Incandescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0835	14	4,992	0.172	1,498	$125.00	30%	95%	80%	8.157	1
WarehInT3	Warehouse	Incandescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.0901	9	4,992	0.287	2,496	$225.00	50%	95%	95%	4.324	1
MiscInN3	Misc	Incandescent	New	3	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0306	14	5,455	0.188	1,636	$50.00	30%	95%	15%	22.282	1
MiscInN4	Misc	Incandescent	New	4	Photocell dimming control	No prior dimming control	Photocell	$0.0550	9	5,455	0.313	2,727	$150.00	50%	95%	95%	7.087	1
MiscInT2	Misc	Incandescent	Turnover	2	Occupancy sensor, wall or ceiling mounted	Manual Wall Switch	Sensor	$0.0764	14	5,455	0.188	1,636	$125.00	30%	95%	80%	8.913	1
MiscInT3	Misc	Incandescent	Turnover	3	Photocell dimming control	No prior dimming control	Photocell	$0.0825	9	5,455	0.313	2,727	$225.00	50%	95%	95%	4.724	1
GroceInT4	Grocery	Incandescent	Turnover	4	LED Lamp - 12 Watt	EISA - 60 Watt equivalent - 43W	Lamp	$0.1329	5	250	0.021	181	$23.99	72%	75%	50%	1.644	1
HealtInT4	Healthcare	Incandescent	Turnover	4	LED Lamp - 12 Watt	EISA - 60 Watt equivalent - 43W	Lamp	$0.1433	5	232	0.019	167	$23.99	72%	75%	50%	1.524	1
GroceInT5	Grocery	Incandescent	Turnover	5	LED Lamp PAR - 12 Watt	Halogen PAR - 45 W	Lamp	$0.1908	5	262	0.021	181	$34.45	69%	75%	90%	1.145	1
HealtInT5	Healthcare	Incandescent	Turnover	5	LED Lamp PAR - 12 Watt	Halogen PAR - 45 W	Lamp	$0.2058	5	243	0.019	167	$34.45	69%	75%	90%	1.061	1
InstiInT1	Institutional	Incandescent	Turnover	1	CFL Lamp - 21 Watt	EISA - 75 Watt equivalent - 53W	Lamp	$0.0355	5	140	0.010	84	$3.00	60%	75%	50%	6.150	1
InstiInT4	Institutional	Incandescent	Turnover	4	LED Lamp - 12 Watt	EISA - 60 Watt equivalent - 43W	Lamp	$0.2931	5	114	0.009	82	$23.99	72%	75%	50%	0.745	0
InstiInT5	Institutional	Incandescent	Turnover	5	LED Lamp PAR - 12 Watt	Halogen PAR - 45 W	Lamp	$0.4209	5	119	0.009	82	$34.45	69%	75%	90%	0.519	0
LodgiInT1	Lodging	Incandescent	Turnover	1	CFL Lamp - 21 Watt	EISA - 75 Watt equivalent - 53W	Lamp	$0.0190	5	262	0.018	158	$3.00	60%	75%	50%	11.511	1
LodgiInT4	Lodging	Incandescent	Turnover	4	LED Lamp - 12 Watt	EISA - 60 Watt equivalent - 43W	Lamp	$0.1566	5	212	0.018	153	$23.99	72%	75%	50%	1.395	1
LodgiInT5	Lodging	Incandescent	Turnover	5	LED Lamp PAR - 12 Watt	Halogen PAR - 45 W	Lamp	$0.2249	5	222	0.018	153	$34.45	69%	75%	90%	0.971	0
OfficInT1	Office	Incandescent	Turnover	1	CFL Lamp - 21 Watt	EISA - 75 Watt equivalent - 53W	Lamp	$0.0334	5	149	0.010	90	$3.00	60%	75%	50%	6.542	1
OfficInT4	Office	Incandescent	Turnover	4	LED Lamp - 12 Watt	EISA - 60 Watt equivalent - 43W	Lamp	$0.2756	5	121	0.010	87	$23.99	72%	75%	50%	0.793	0
OfficInT5	Office	Incandescent	Turnover	5	LED Lamp PAR - 12 Watt	Halogen PAR - 45 W	Lamp	$0.3958	5	126	0.010	87	$34.45	69%	75%	90%	0.552	0
RestaInT1	Restaurant	Incandescent	Turnover	1	CFL Lamp - 21 Watt	EISA - 75 Watt equivalent - 53W	Lamp	$0.0215	5	232	0.016	140	$3.00	60%	75%	50%	10.176	1
RestaInT4	Restaurant	Incandescent	Turnover	4	LED Lamp - 12 Watt	EISA - 60 Watt equivalent - 43W	Lamp	$0.1772	5	188	0.016	135	$23.99	72%	75%	50%	1.233	1
RestaInT5	Restaurant	Incandescent	Turnover	5	LED Lamp PAR - 12 Watt	Halogen PAR - 45 W	Lamp	$0.2544	5	197	0.016	135	$34.45	69%	75%	90%	0.858	0
RetaiInT1	Retail	Incandescent	Turnover	1	CFL Lamp - 21 Watt	EISA - 75 Watt equivalent - 53W	Lamp	$0.0223	5	223	0.015	135	$3.00	60%	75%	50%	9.808	1
RetaiInT4	Retail	Incandescent	Turnover	4	LED Lamp - 12 Watt	EISA - 60 Watt equivalent - 43W	Lamp	$0.1838	5	181	0.015	131	$23.99	72%	75%	50%	1.188	1
RetaiInT5	Retail	Incandescent	Turnover	5	LED Lamp PAR - 12 Watt	Halogen PAR - 45 W	Lamp	$0.2640	5	189	0.015	131	$34.45	69%	75%	90%	0.827	0
miscInT1	misc	Incandescent	Turnover	1	CFL Lamp - 21 Watt	EISA - 75 Watt equivalent - 53W	Lamp	$0.0220	5	226	0.016	136	$3.00	60%	75%	50%	9.928	1
miscInT4	misc	Incandescent	Turnover	4	LED Lamp - 12 Watt	EISA - 60 Watt equivalent - 43W	Lamp	$0.1816	5	183	0.015	132	$23.99	72%	75%	50%	1.203	1
miscInT5	misc	Incandescent	Turnover	5	LED Lamp PAR - 12 Watt	Halogen PAR - 45 W	Lamp	$0.2608	5	192	0.015	132	$34.45	69%	75%	90%	0.838	0
WarehInT1	Warehouse	Incandescent	Turnover	1	CFL Lamp - 21 Watt	EISA - 75 Watt equivalent - 53W	Lamp	$0.0240	5	207	0.014	125	$3.00	60%	75%	50%	9.086	1
WarehInT4	Warehouse	Incandescent	Turnover	4	LED Lamp - 12 Watt	EISA - 60 Watt equivalent - 43W	Lamp	$0.1984	5	168	0.014	121	$23.99	72%	75%	50%	1.101	1
WarehInT5	Warehouse	Incandescent	Turnover	5	LED Lamp PAR - 12 Watt	Halogen PAR - 45 W	Lamp	$0.2849	5	176	0.014	121	$34.45	69%	75%	90%	0.766	0

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	PJM Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
LodgInN6	Lodging	Incandescent	New	6	Hotel Occupancy Sensors	No prior control	Per Room	$0.4468	10	240	0.019	168	$75.00	70%	90%	95%	1.021	1
LodgInT6	Lodging	Incandescent	Turnover	6	Hotel Occupancy Sensors	No prior control	Per Room	$0.5957	10	240	0.019	168	$100.00	70%	90%	95%	0.766	0
AllSiN1	All	Signage	New	1	Induction Street Lighting	Base HID Streetlighting	Fixture	$0.54	15	2,762	0.101	1,619	$875.00	59%	95%	95%	1.280	1
AllSiN2	All	Signage	New	2	LED or equivalent sign lighting	Replace fluorescent sign lighting	Exit Sign	$0.58	15	52	0.002	30	$17.36	58%	95%	7%	1.190	1
AllSiN3	All	Signage	New	3	LED Street Lighting	Std HID Street Lighting	Pole	$0.56	15	3,023	0.047	756	$425.00	25%	95%	95%	1.230	1
AllSiE1	All	Signage	Early	1	Dusk to Dawn	Time Clock Control	Pole	$0.17	15	3,023	0.076	1,209	$200.00	40%	95%	50%	4.181	1
OfficMoT22	Office	Motors	Turnover	22	Air Comp Improvements			$0.11	15	56148	1.148	8,928	$990.00	16%	28%	65%	6.645	1
OfficMoE2	Office	Motors	Early	2	Air Compressor Optimization			$0.16	15	56148	2.174	16,901	$2,750.00	30%	38%	65%	4.529	1
GroceMoE1	Grocery	Motors	Early	1	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.151	1
AllOtT1	All	Other	Turnover	1	Motor Improvements Bundle - Industrial Model	No Motor Improvements	Motor	$0.48	14	10000	0.128	1,092	$522.00	11%	90%	95%	1.427	1
AllOtT2	All	Other	Turnover	2	EE Transformer - CSL 3	NEMA Transformer - 75W	Motor	$0.60	15	4197	0.187	1,595	$950.00	23%	90%	95%	1.224	1
AllOtN1	All	Other	New	1	EE Transformer - CSL 3	NEMA Transformer - 75W	Motor	$0.60	15	4197	0.187	1,595	$950.00	23%	90%	95%	1.224	1
AllReN26	All	Refrigeration	New	26	Anti-sweat heat (ASH) controls - Freezer	ASH without controls	Per Door	$0.16	12	2,985	0.029	1,882	$300.00	63%	95%	85%	3.362	1
AllReN27	All	Refrigeration	New	27	Anti-sweat heat (ASH) controls - Cooler	ASH without controls	Per Door	$0.29	12	1,621	0.028	1,023	$300.00	63%	95%	85%	1.843	1
GroceMoN1	Grocery	Motors	New	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1015	15	15384	0.0282	139.5	$154	0.91%	74.4%	100%	0.700	0
GroceMoN2	Grocery	Motors	New	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.1901	15	58940	0.0231	437.7	$521	0.74%	74.4%	100%	0.590	0
GroceMoN3	Grocery	Motors	New	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0693	15	144688	0.0138	644.1	$689	0.45%	66.3%	100%	0.643	0
GroceMoN4	Grocery	Motors	New	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4499	15	290922	0.0121	1135.2	$511	0.39%	55.8%	100%	1.517	1
GroceMoN5	Grocery	Motors	New	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-500 HP	Motor	$0.3775	15	624328	0.0284	5711.1	$2,156	0.91%	55.8%	100%	1.801	1
GroceMoN6	Grocery	Motors	New	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5635	15	97600	2.511	19,520	$11,000.00	20%	55.0%	100%	1.308	1
GroceMoN7	Grocery	Motors	New	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4707	15	97600	9.776	27620.7	$13,000.00	28%	70.0%	100%	1.786	1
GroceMoN8	Grocery	Motors	New	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4791	15	97600	0.000	27132.7	$13,000.00	28%	80.0%	100%	1.415	1
GroceMoN9	Grocery	Motors	New	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5459	15	97600	9.776	23814.3	$13,000.00	24%	70.0%	100%	1.587	1
GroceMoN10	Grocery	Motors	New	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4791	15	97600	7.280	27132.7	$13,000.00	28%	55.0%	100%	1.672	1
GroceMoN11	Grocery	Motors	New	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5459	15	97600	9.776	23814.3	$13,000.00	24%	30.0%	100%	1.587	1
GroceMoT1	Grocery	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1015	15	15384	0.0282	139.5	$154	0.91%	74.4%	100%	0.700	0
GroceMoT2	Grocery	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.1901	15	58940	0.0231	437.7	$521	0.74%	74.4%	100%	0.590	0
GroceMoT3	Grocery	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0693	15	144688	0.0138	644.1	$689	0.45%	66.3%	100%	0.643	0
GroceMoT4	Grocery	Motors	Turnover	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4499	15	290922	0.0121	1135.2	$511	0.39%	55.8%	100%	1.517	1
GroceMoT5	Grocery	Motors	Turnover	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-250 HP	Motor	$0.3775	15	624328	0.0284	5711.1	$2,156	0.91%	55.8%	100%	1.801	1
GroceMoT6	Grocery	Motors	Turnover	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5635	15	97600	2.511	19,520	$11,000.00	20%	55.0%	80%	1.308	1
GroceMoT7	Grocery	Motors	Turnover	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4707	15	97600	9.776	27620.7	$13,000.00	28%	90.0%	80%	1.786	1
GroceMoT8	Grocery	Motors	Turnover	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4791	15	97600	0.000	27132.7	$13,000.00	28%	90.0%	80%	1.415	1
GroceMoT9	Grocery	Motors	Turnover	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5459	15	97600	9.776	23814.3	$13,000.00	24%	90.0%	80%	1.587	1
GroceMoT10	Grocery	Motors	Turnover	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4791	15	97600	7.280	27132.7	$13,000.00	28%	80.0%	80%	1.672	1
GroceMoT11	Grocery	Motors	Turnover	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5459	15	97600	9.776	23814.3	$13,000.00	24%	55.0%	80%	1.587	1
GroceMoT12	Grocery	Motors	Turnover	12	Motors: Rewind 125-200 HP	(E) Motor	Motor	$0.5097	15	292799	0.189	1471.4	$750	0.5%	35.0%	95%	1.446	1
GroceMoT13	Grocery	Motors	Turnover	13	Motors: Rewind 201-500 HP	(E) Motor	Motor	$0.6274	15	634398	0.410	3187.9	$2,000	0.5%	50.0%	95%	1.175	1
GroceMoT14	Grocery	Motors	Turnover	14	Motors: Rewind 20-50 HP	(E) Motor	Motor	$0.4704	15	59847	0.068	531.4	$250	0.9%	10.0%	95%	1.566	1
GroceMoT15	Grocery	Motors	Turnover	15	Motors: Rewind 500+ HP	(E) Motor	Motor	$0.5437	15	1463995	0.946	7356.8	$4,000	0.5%	70.0%	95%	1.355	1
GroceMoT16	Grocery	Motors	Turnover	16	Motors: Rewind 51-100 HP	(E) Motor	Motor	$0.5841	15	147991	0.110	856.0	$500	0.6%	20.0%	95%	1.261	1
GroceMoT17	Grocery	Motors	Turnover	17	Downsizing motor during retrofit	Larger hp standard motor	HP Reduction	$0.34	20	186,404	0.190	1,477	$500.00	0.79%	25%	95%	2.749	1
GroceMoN12	Grocery	Motors	New	12	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.439	1
GroceMoN13	Grocery	Motors	New	13	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.029	0
GroceMoN14	Grocery	Motors	New	14	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.443	1
GroceMoN15	Grocery	Motors	New	15	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.582	0
GroceMoT18	Grocery	Motors	Turnover	18	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.439	1
GroceMoT19	Grocery	Motors	Turnover	19	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.029	0
GroceMoT20	Grocery	Motors	Turnover	20	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.443	1
GroceMoT21	Grocery	Motors	Turnover	21	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.582	0
GroceMoT22	Grocery	Motors	Turnover	22	Air Comp Improvements			$0.11	15	56148	1.148	8,928	$990.00	16%	28%	65%	6.645	1
GroceMoE2	Grocery	Motors	Early	2	Air Compressor Optimization			$0.16	15	56148	2.174	16,901	$2,750.00	30%	38%	65%	4.529	1
GroceMoT23	Grocery	Motors	Turnover	23	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.151	1
HealtMoN1	Healthcare	Motors	New	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$0.8576	15	19759	0.0282	179.2	$154	0.91%	74.4%	100%	0.874	0
HealtMoN2	Healthcare	Motors	New	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$0.9266	15	75700	0.0231	562.2	$521	0.74%	74.4%	100%	0.752	0
HealtMoN3	Healthcare	Motors	New	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$0.8325	15	185830	0.0138	827.3	$689	0.45%	66.3%	100%	0.823	0
HealtMoN4	Healthcare	Motors	New	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.3503	15	373646	0.0121	1458.0	$511	0.39%	55.8%	100%	1.946	1
HealtMoN5	Healthcare	Motors	New	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-500 HP	Motor	$0.2939	15	801855	0.0284	7335.1	$2,156	0.91%	55.8%	100%	2.312	1
HealtMoN6	Healthcare	Motors	New	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.4388	15	125352	3.225	25,070	$11,000.00	20%	55.0%	100%	1.679	1
HealtMoN7	Healthcare	Motors	New	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.3958	15	125352	9.776	32842.2	$13,000.00	26%	70.0%	100%	2.058	1
HealtMoN8	Healthcare	Motors	New	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.3731	15	125352	0.000	34847.9	$13,000.00	28%	80.0%	100%	1.817	1
HealtMoN9	Healthcare	Motors	New	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.4915	15	125352	7.520	26449.3	$13,000.00	21%	70.0%	100%	1.645	1
HealtMoN10	Healthcare	Motors	New	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.3973	15	125352	7.280	32716.9	$13,000.00	26%	55.0%	100%	1.963	1
HealtMoN11	Healthcare	Motors	New	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.4672	15	125352	9.776	27828.2	$13,000.00	22%	30.0%	100%	1.796	1
HealtMoT1	Healthcare	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$0.8576	15	19759	0.0282	179.2	$154	0.91%	74.4%	100%	0.874	0
HealtMoT2	Healthcare	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$0.9266	15	75700	0.0231	562.2	$521	0.74%	74.4%	100%	0.752	0
HealtMoT3	Healthcare	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$0.8325	15	185830	0.0138	827.3	$689	0.45%	66.3%	100%	0.823	0
HealtMoT4	Healthcare	Motors	Turnover	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.3503	15	373646	0.0121	1458.0	$511	0.39%	55.8%	100%	1.946	1
HealtMoT5	Healthcare	Motors	Turnover	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-250 HP	Motor	$0.2939	15	801855	0.0284	7335.1	$2,156	0.91%	55.8%	100%	2.312	1
HealtMoT6	Healthcare	Motors	Turnover	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.4388	15	125352	3.225	25,070	$11,000.00	20%	55.0%	80%	1.679	1
HealtMoT7	Healthcare	Motors	Turnover	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.3958	15	125352	9.776	32842.2	$13,000.00	26%	90.0%	80%	2.058	1
HealtMoT8	Healthcare	Motors	Turnover	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.3731	15	125352	0.000	34847.9	$13,000.00	28%	90.0%	80%	1.817	1
HealtMoT9	Healthcare	Motors	Turnover	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.4915	15	125352	7.520	26449.3	$13,000.00	21%	90.0%	80%	1.645	1
HealtMoT10	Healthcare	Motors	Turnover	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.3973	15	125352	7.280	32716.9	$13,000.00	26%	80.0%	80%	1.963	1
HealtMoT11	Healthcare	Motors	Turnover	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.4672	15	125352	9.776	27828.2	$13,000.00	22%	55.0%	80%	1.796	1
HealtMoT12	Healthcare	Motors	Turnover	12	Motors: Rewind 125-200 HP	(E) Motor	Motor	$0.3969	15	376056	0.243	1889.7	$750	0.5%	35.0%	95%	1.857	1
HealtMoT13	Healthcare	Motors	Turnover	13	Motors: Rewind 201-500 HP	(E) Motor	Motor	$0.4885	15	814788	0.527	4094.4	$2,000	0.5%	50.0%	95%	1.509	1
HealtMoT14	Healthcare	Motors	Turnover	14	Motors: Rewind 20-50 HP	(E) Motor	Motor	$0.3663	15	76864	0.088	682.5	$250	0.9%	10.0%	95%	2.012	1
HealtMoT15	Healthcare	Motors	Turnover	15	Motors: Rewind 500+ HP	(E) Motor	Motor	$0.4233	15	1880281	1.216	9448.6	$4,000	0.5%	70.0%	95%	1.741	1
HealtMoT16	Healthcare	Motors	Turnover	16	Motors: Rewind 51-100 HP	(E) Motor	Motor	$0.4548	15	190072	0.141	1099.4	$500	0.6%	20.0%	95%	1.620	1
HealtMoT17	Healthcare	Motors	Turnover	17	Downsizing motor during retrofit	Larger hp standard motor	HP Reduction	$0.34	20	186,404	0.190	1,477	$500.00	0.79%	25%	95%	2.749	1
HealtMoN12	Healthcare	Motors	New	12	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.439	1
HealtMoN13	Healthcare	Motors	New	13	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.029	0
HealtMoN14	Healthcare	Motors	New	14	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.443	1
HealtMoN15	Healthcare	Motors	New	15	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.582	0
HealtMoT18	Healthcare	Motors	Turnover	18	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.439	1
HealtMoT19	Healthcare	Motors	Turnover	19	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.029	0
HealtMoT20	Healthcare	Motors	Turnover	20	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.443	1
HealtMoT21	Healthcare	Motors	Turnover	21	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.582	0
HealtMoT22	Healthcare	Motors	Turnover	22	Air Comp Improvements			$0.11	15	56148	1.148	8,928	$990.00	16%	28%	65%	6.645	1
HealtMoE2	Healthcare	Motors	Early	2	Air Compressor Optimization			$0.16	15	56148	2.174	16,901	$2,750.00	30%	38%	65%	4.529	1
HealtMoE1	Healthcare	Motors	Early	1	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.151	1
InstiMoN1	Institutional	Motors	New	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.2757	15	13284	0.0282	120.5	$154	0.91%	74.4%	100%	0.615	0
InstiMoN2	Institutional	Motors	New	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.3783	15	50893	0.0231	377.9	$521	0.74%	74.4%	100%	0.512	0

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	PJM Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
InstiMoN3	Institutional	Motors	New	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.2384	15	124933	0.0138	556.2	$689	0.45%	66.3%	100%	0.557	0
InstiMoN4	Institutional	Motors	New	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.5211	15	251201	0.0121	980.2	$511	0.39%	55.8%	100%	1.312	1
InstiMoN5	Institutional	Motors	New	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-500 HP	Motor	$0.4372	15	539086	0.0284	4931.3	$2,156	0.91%	55.8%	100%	1.556	1
InstiMoN6	Institutional	Motors	New	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.6526	15	84274	2.168	16,855	$11,000.00	20%	55.0%	100%	1.129	1
InstiMoN7	Institutional	Motors	New	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.5451	15	84274	12.062	23849.5	$13,000.00	28%	70.0%	100%	1.670	1
InstiMoN8	Institutional	Motors	New	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.5549	15	84274	0.000	23428.2	$13,000.00	28%	80.0%	100%	1.221	1
InstiMoN9	Institutional	Motors	New	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.6348	15	84274	12.062	20478.6	$13,000.00	24%	70.0%	100%	1.494	1
InstiMoN10	Institutional	Motors	New	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.5569	15	84274	9.145	23343.9	$13,000.00	28%	55.0%	100%	1.540	1
InstiMoN11	Institutional	Motors	New	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.6348	15	84274	12.062	20478.6	$13,000.00	24%	30.0%	100%	1.494	1
InstiMoT1	Institutional	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.2757	15	13284	0.0282	120.5	$154	0.91%	74.4%	100%	0.615	0
InstiMoT10	Institutional	Motors	Turnover	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.5569	15	84274	9.145	23343.9	$13,000.00	28%	80.0%	80%	1.540	1
InstiMoT11	Institutional	Motors	Turnover	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.6348	15	84274	12.062	20478.6	$13,000.00	24%	55.0%	80%	1.494	1
InstiMoT12	Institutional	Motors	Turnover	12	Motors: Rewind 125-200 HP	(E) Motor	Motor	$0.5903	15	252822	0.163	1270.5	$750	0.5%	35.0%	95%	1.248	1
InstiMoT13	Institutional	Motors	Turnover	13	Motors: Rewind 201-500 HP	(E) Motor	Motor	$0.7266	15	547781	0.354	2752.7	$2,000	0.5%	50.0%	95%	1.014	1
InstiMoT14	Institutional	Motors	Turnover	14	Motors: Rewind 20-50 HP	(E) Motor	Motor	$0.5448	15	51676	0.059	458.9	$250	0.9%	10.0%	95%	1.352	1
InstiMoT15	Institutional	Motors	Turnover	15	Motors: Rewind 500+ HP	(E) Motor	Motor	$0.6297	15	1264109	0.817	6352.3	$4,000	0.5%	70.0%	95%	1.170	1
InstiMoT16	Institutional	Motors	Turnover	16	Motors: Rewind 51-100 HP	(E) Motor	Motor	$0.6765	15	127785	0.095	739.1	$500	0.6%	20.0%	95%	1.089	1
InstiMoT17	Institutional	Motors	Turnover	17	Downsizing motor during retrofit	Larger hp standard motor	HP Reduction	$0.34	20	186,404	0.190	1,477	$500.00	0.79%	25%	95%	2.749	1
InstiMoT2	Institutional	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.3783	15	50893	0.0231	377.9	$521	0.74%	74.4%	100%	0.512	0
HealtMoT23	Healthcare	Motors	Turnover	23	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.151	1
InstiMoT3	Institutional	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.2384	15	124933	0.0138	556.2	$689	0.45%	66.3%	100%	0.557	0
InstiMoT4	Institutional	Motors	Turnover	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.5211	15	251201	0.0121	980.2	$511	0.39%	55.8%	100%	1.312	1
InstiMoT5	Institutional	Motors	Turnover	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-250 HP	Motor	$0.4372	15	539086	0.0284	4931.3	$2,156	0.91%	55.8%	100%	1.556	1
InstiMoT6	Institutional	Motors	Turnover	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.6526	15	84274	2.168	16,855	$11,000.00	20%	55.0%	80%	1.129	1
InstiMoT7	Institutional	Motors	Turnover	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.5451	15	84274	12.062	23849.5	$13,000.00	28%	90.0%	80%	1.670	1
InstiMoT8	Institutional	Motors	Turnover	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.5549	15	84274	0.000	23428.2	$13,000.00	28%	90.0%	80%	1.221	1
InstiMoN12	Institutional	Motors	New	12	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.439	1
InstiMoN13	Institutional	Motors	New	13	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.029	0
InstiMoN14	Institutional	Motors	New	14	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.443	1
InstiMoN15	Institutional	Motors	New	15	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.582	0
InstiMoT18	Institutional	Motors	Turnover	18	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.439	1
InstiMoT19	Institutional	Motors	Turnover	19	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.029	0
InstiMoT20	Institutional	Motors	Turnover	20	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.443	1
InstiMoT21	Institutional	Motors	Turnover	21	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.582	0
InstiMoT22	Institutional	Motors	Turnover	22	Air Comp Improvements			$0.11	15	56148	1.148	8,928	$990.00	16%	28%	65%	6.645	1
InstiMoE2	Institutional	Motors	Early	2	Air Compressor Optimization			$0.16	15	56148	2.174	16,901	$2,750.00	30%	38%	65%	4.529	1
InstiMoE1	Institutional	Motors	Early	1	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.151	1
LodgiMoN1	Lodging	Motors	New	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1114	15	15247	0.0282	138.3	$154	0.91%	74.4%	100%	0.694	0
LodgiMoN2	Lodging	Motors	New	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.2008	15	58416	0.0231	433.8	$521	0.74%	74.4%	100%	0.585	0
LodgiMoN3	Lodging	Motors	New	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0789	15	143401	0.0138	638.4	$689	0.45%	66.3%	100%	0.637	0
LodgiMoN4	Lodging	Motors	New	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4540	15	288334	0.0121	1125.1	$511	0.39%	55.8%	100%	1.504	1
LodgiMoN5	Lodging	Motors	New	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-500 HP	Motor	$0.3809	15	618773	0.0284	5660.3	$2,156	0.91%	55.8%	100%	1.785	1
LodgiMoN6	Lodging	Motors	New	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5686	15	96731	2.489	19,346	$11,000.00	20%	55.0%	100%	1.296	1
LodgiMoN7	Lodging	Motors	New	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4805	15	96731	10.553	27052.5	$13,000.00	28%	70.0%	100%	1.783	1
LodgiMoN8	Lodging	Motors	New	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4834	15	96731	0.000	26891.3	$13,000.00	28%	80.0%	100%	1.402	1
LodgiMoN9	Lodging	Motors	New	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5631	15	96731	10.177	23086.5	$13,000.00	24%	70.0%	100%	1.563	1
LodgiMoN10	Lodging	Motors	New	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4887	15	96731	7.911	26601.1	$13,000.00	28%	55.0%	100%	1.666	1
LodgiMoN11	Lodging	Motors	New	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5588	15	96731	10.553	23263.9	$13,000.00	24%	30.0%	100%	1.586	1
LodgiMoT1	Lodging	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1114	15	15247	0.0282	138.3	$154	0.91%	74.4%	100%	0.694	0
LodgiMoT2	Lodging	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.2008	15	58416	0.0231	433.8	$521	0.74%	74.4%	100%	0.585	0
LodgiMoT3	Lodging	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0789	15	143401	0.0138	638.4	$689	0.45%	66.3%	100%	0.637	0
LodgiMoT4	Lodging	Motors	Turnover	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4540	15	288334	0.0121	1125.1	$511	0.39%	55.8%	100%	1.504	1
LodgiMoT5	Lodging	Motors	Turnover	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-250 HP	Motor	$0.3809	15	618773	0.0284	5660.3	$2,156	0.91%	55.8%	100%	1.785	1
LodgiMoT6	Lodging	Motors	Turnover	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5686	15	96731	2.489	19,346	$11,000.00	20%	55.0%	80%	1.296	1
LodgiMoT7	Lodging	Motors	Turnover	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4805	15	96731	10.553	27052.5	$13,000.00	28%	90.0%	80%	1.783	1
LodgiMoT8	Lodging	Motors	Turnover	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4834	15	96731	0.000	26891.3	$13,000.00	28%	90.0%	80%	1.402	1
LodgiMoT9	Lodging	Motors	Turnover	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5631	15	96731	10.177	23086.5	$13,000.00	24%	90.0%	80%	1.563	1
LodgiMoT10	Lodging	Motors	Turnover	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4887	15	96731	7.911	26601.1	$13,000.00	28%	80.0%	80%	1.666	1
LodgiMoT11	Lodging	Motors	Turnover	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5588	15	96731	10.553	23263.9	$13,000.00	24%	55.0%	80%	1.586	1
LodgiMoT12	Lodging	Motors	Turnover	12	Motors: Rewind 125-200 HP	(E) Motor	Motor	$0.5143	15	290194	0.188	1458.3	$750	0.5%	35.0%	95%	1.433	1
LodgiMoT13	Lodging	Motors	Turnover	13	Motors: Rewind 201-500 HP	(E) Motor	Motor	$0.6330	15	628754	0.406	3159.6	$2,000	0.5%	50.0%	95%	1.164	1
LodgiMoT14	Lodging	Motors	Turnover	14	Motors: Rewind 20-50 HP	(E) Motor	Motor	$0.4747	15	59314	0.068	526.7	$250	0.9%	10.0%	95%	1.552	1
LodgiMoT15	Lodging	Motors	Turnover	15	Motors: Rewind 500+ HP	(E) Motor	Motor	$0.5486	15	1450970	0.938	7291.3	$4,000	0.5%	70.0%	95%	1.343	1
LodgiMoT16	Lodging	Motors	Turnover	16	Motors: Rewind 51-100 HP	(E) Motor	Motor	$0.5894	15	146674	0.109	848.4	$500	0.6%	20.0%	95%	1.250	1
LodgiMoT17	Lodging	Motors	Turnover	17	Downsizing motor during retrofit	Larger hp standard motor	HP Reduction	$0.34	20	186,404	0.190	1,477	$500.00	0.79%	25%	95%	2.749	1
LodgiMoN12	Lodging	Motors	New	12	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.439	1
LodgiMoN13	Lodging	Motors	New	13	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.029	0
LodgiMoN14	Lodging	Motors	New	14	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.443	1
LodgiMoN15	Lodging	Motors	New	15	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.582	0
LodgiMoT18	Lodging	Motors	Turnover	18	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.439	1
LodgiMoT19	Lodging	Motors	Turnover	19	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.029	0
LodgiMoT20	Lodging	Motors	Turnover	20	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.443	1
LodgiMoT21	Lodging	Motors	Turnover	21	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.582	0
LodgiMoT22	Lodging	Motors	Turnover	22	Air Comp Improvements			$0.11	15	56148	1.148	8,928	$990.00	16%	28%	65%	6.645	1
LodgiMoE2	Lodging	Motors	Early	2	Air Compressor Optimization			$0.16	15	56148	2.174	16,901	$2,750.00	30%	38%	65%	4.529	1
InstiMoT23	Institutional	Motors	Turnover	23	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.151	1
miscMoN1	misc	Motors	New	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1114	15	15247	0.0282	138.3	$154	0.91%	74.4%	100%	0.694	0
miscMoN2	misc	Motors	New	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.2008	15	58416	0.0231	433.8	$521	0.74%	74.4%	100%	0.585	0
miscMoN3	misc	Motors	New	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0789	15	143401	0.0138	638.4	$689	0.45%	66.3%	100%	0.637	0
miscMoN4	misc	Motors	New	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4540	15	288334	0.0121	1125.1	$511	0.39%	55.8%	100%	1.504	1
miscMoN5	misc	Motors	New	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-500 HP	Motor	$0.3809	15	618773	0.0284	5660.3	$2,156	0.91%	55.8%	100%	1.785	1
miscMoN6	misc	Motors	New	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5686	15	96731	2.489	19,346	$11,000.00	20%	55.0%	100%	1.296	1
miscMoN7	misc	Motors	New	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4805	15	96731	10.553	27052.5	$13,000.00	28%	70.0%	100%	1.783	1
miscMoN8	misc	Motors	New	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4834	15	96731	0.000	26891.3	$13,000.00	28%	80.0%	100%	1.402	1
miscMoN9	misc	Motors	New	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5631	15	96731	10.177	23086.5	$13,000.00	24%	70.0%	100%	1.563	1
miscMoN10	misc	Motors	New	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4887	15	96731	7.911	26601.1	$13,000.00	28%	55.0%	100%	1.666	1
miscMoN11	misc	Motors	New	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5588	15	96731	10.553	23263.9	$13,000.00	24%	30.0%	100%	1.586	1
miscMoT1	misc	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1114	15	15247	0.0282	138.3	$154	0.91%	74.4%	100%	0.694	0
miscMoT2	misc	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.2008	15	58416	0.0231	433.8	$521	0.74%	74.4%	100%	0.585	0
miscMoT3	misc	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0789	15	143401	0.0138	638.4	$689	0.45%	66.3%	100%	0.637	0
miscMoT4	misc	Motors	Turnover	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4540	15	288334	0.0121	1125.1	$511	0.39%	55.8%	100%	1.504	1
miscMoT5	misc	Motors	Turnover	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-250 HP	Motor	$0.3809	15	618773	0.0284	5660.3	$2,156	0.91%	55.8%	100%	1.785	1
miscMoT6	misc	Motors	Turnover	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5686	15	96731	2.489	19,346	$11,000.00	20%	55.0%	80%	1.296	1
miscMoT7	misc	Motors	Turnover	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4805	15	96731	10.553	27052.5	$13,000.00	28%	90.0%	80%	1.783	1

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	PJM Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
miscMoT8	misc	Motors	Turnover	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4834	15	96731	0.000	26891.3	$13,000.00	28%	90.0%	80%	1.402	1
miscMoT9	misc	Motors	Turnover	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5631	15	96731	10.177	23086.5	$13,000.00	24%	90.0%	80%	1.563	1
miscMoT10	misc	Motors	Turnover	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4887	15	96731	7.911	26601.1	$13,000.00	28%	80.0%	80%	1.666	1
miscMoT11	misc	Motors	Turnover	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5588	15	96731	10.553	23263.9	$13,000.00	24%	55.0%	80%	1.586	1
miscMoT12	misc	Motors	Turnover	12	Motors: Rewind 125-200 HP	(E) Motor	Motor	$0.5143	15	290194	0.188	1458.3	$750	0.5%	35.0%	95%	1.433	1
miscMoT13	misc	Motors	Turnover	13	Motors: Rewind 201-500 HP	(E) Motor	Motor	$0.6330	15	628754	0.406	3159.6	$2,000	0.5%	50.0%	95%	1.164	1
miscMoT14	misc	Motors	Turnover	14	Motors: Rewind 20-50 HP	(E) Motor	Motor	$0.4747	15	59314	0.068	526.7	$250	0.9%	10.0%	95%	1.552	1
miscMoT15	misc	Motors	Turnover	15	Motors: Rewind 500+ HP	(E) Motor	Motor	$0.5486	15	1450970	0.938	7291.3	$4,000	0.5%	70.0%	95%	1.343	1
miscMoT16	misc	Motors	Turnover	16	Motors: Rewind 51-100 HP	(E) Motor	Motor	$0.5894	15	146674	0.109	848.4	$500	0.6%	20.0%	95%	1.250	1
miscMoT17	misc	Motors	Turnover	17	Downsizing motor during retrofit	Larger hp standard motor	HP Reduction	$0.34	20	186,404	0.190	1,477	$500.00	0.79%	25%	95%	2.749	1
miscMoN12	misc	Motors	New	12	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.439	1
miscMoN13	misc	Motors	New	13	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.029	0
miscMoN14	misc	Motors	New	14	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.443	1
miscMoN15	misc	Motors	New	15	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.582	0
miscMoT18	misc	Motors	Turnover	18	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.439	1
miscMoT19	misc	Motors	Turnover	19	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.029	0
miscMoT20	misc	Motors	Turnover	20	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.443	1
miscMoT21	misc	Motors	Turnover	21	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.582	0
miscMoT22	misc	Motors	Turnover	22	Air Comp Improvements			$0.11	15	56148	1.148	8,928	$990.00	16%	28%	65%	6.645	1
miscMoE2	misc	Motors	Early	2	Air Compressor Optimization			$0.16	15	56148	2.174	16,901	$2,750.00	30%	38%	65%	4.529	1
LodgiMoE1	Lodging	Motors	Early	1	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.151	1
RetaiMoN1	Retail	Motors	New	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1015	15	15384	0.0282	139.5	$154	0.91%	74.4%	100%	0.700	0
RetaiMoN2	Retail	Motors	New	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.1901	15	58940	0.0231	437.7	$521	0.74%	74.4%	100%	0.590	0
RetaiMoN3	Retail	Motors	New	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0693	15	144688	0.0138	644.1	$689	0.45%	66.3%	100%	0.643	0
RetaiMoN4	Retail	Motors	New	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4499	15	290922	0.0121	1135.2	$511	0.39%	55.8%	100%	1.517	1
RetaiMoN5	Retail	Motors	New	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-500 HP	Motor	$0.3775	15	624328	0.0284	5711.1	$2,156	0.91%	55.8%	100%	1.801	1
RetaiMoN6	Retail	Motors	New	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5635	15	97600	2.511	19,520	$11,000.00	20%	55.0%	100%	1.308	1
RetaiMoN7	Retail	Motors	New	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4707	15	97600	9.776	27620.7	$13,000.00	28%	70.0%	100%	1.786	1
RetaiMoN8	Retail	Motors	New	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4791	15	97600	0.000	27132.7	$13,000.00	28%	80.0%	100%	1.415	1
RetaiMoN9	Retail	Motors	New	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5459	15	97600	9.776	23814.3	$13,000.00	24%	70.0%	100%	1.587	1
RetaiMoN10	Retail	Motors	New	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4791	15	97600	7.280	27132.7	$13,000.00	28%	55.0%	100%	1.672	1
RetaiMoN11	Retail	Motors	New	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5459	15	97600	9.776	23814.3	$13,000.00	24%	30.0%	100%	1.587	1
RetaiMoT1	Retail	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1015	15	15384	0.0282	139.5	$154	0.91%	74.4%	100%	0.700	0
RetaiMoT2	Retail	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.1901	15	58940	0.0231	437.7	$521	0.74%	74.4%	100%	0.590	0
RetaiMoT3	Retail	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0693	15	144688	0.0138	644.1	$689	0.45%	66.3%	100%	0.643	0
RetaiMoT4	Retail	Motors	Turnover	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4499	15	290922	0.0121	1135.2	$511	0.39%	55.8%	100%	1.517	1
RetaiMoT5	Retail	Motors	Turnover	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-250 HP	Motor	$0.3775	15	624328	0.0284	5711.1	$2,156	0.91%	55.8%	100%	1.801	1
RetaiMoT6	Retail	Motors	Turnover	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5635	15	97600	2.511	19,520	$11,000.00	20%	55.0%	80%	1.308	1
RetaiMoT7	Retail	Motors	Turnover	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4707	15	97600	9.776	27620.7	$13,000.00	28%	90.0%	80%	1.786	1
RetaiMoT8	Retail	Motors	Turnover	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4791	15	97600	0.000	27132.7	$13,000.00	28%	90.0%	80%	1.415	1
RetaiMoT9	Retail	Motors	Turnover	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5459	15	97600	9.776	23814.3	$13,000.00	24%	90.0%	80%	1.587	1
RetaiMoT10	Retail	Motors	Turnover	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4791	15	97600	7.280	27132.7	$13,000.00	28%	80.0%	80%	1.672	1
RetaiMoT11	Retail	Motors	Turnover	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5459	15	97600	9.776	23814.3	$13,000.00	24%	55.0%	80%	1.587	1
RetaiMoT12	Retail	Motors	Turnover	12	Motors: Rewind 125-200 HP	(E) Motor	Motor	$0.5097	15	292799	0.189	1471.4	$750	0.5%	35.0%	95%	1.446	1
RetaiMoT13	Retail	Motors	Turnover	13	Motors: Rewind 201-500 HP	(E) Motor	Motor	$0.6274	15	634398	0.410	3187.9	$2,000	0.5%	50.0%	95%	1.175	1
RetaiMoT14	Retail	Motors	Turnover	14	Motors: Rewind 20-50 HP	(E) Motor	Motor	$0.4704	15	59847	0.068	531.4	$250	0.9%	10.0%	95%	1.566	1
RetaiMoT15	Retail	Motors	Turnover	15	Motors: Rewind 500+ HP	(E) Motor	Motor	$0.5437	15	1463995	0.946	7356.8	$4,000	0.5%	70.0%	95%	1.355	1
RetaiMoT16	Retail	Motors	Turnover	16	Motors: Rewind 51-100 HP	(E) Motor	Motor	$0.5841	15	147991	0.110	856.0	$500	0.6%	20.0%	95%	1.261	1
RetaiMoT17	Retail	Motors	Turnover	17	Downsizing motor during retrofit	Larger hp standard motor	HP Reduction	$0.34	20	186,404	0.190	1,477	$500.00	0.79%	25%	95%	2.749	1
RetaiMoN12	Retail	Motors	New	12	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.439	1
RetaiMoN13	Retail	Motors	New	13	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.029	0
RetaiMoN14	Retail	Motors	New	14	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.443	1
RetaiMoN15	Retail	Motors	New	15	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.582	0
RetaiMoT18	Retail	Motors	Turnover	18	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.439	1
RetaiMoT19	Retail	Motors	Turnover	19	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.029	0
RetaiMoT20	Retail	Motors	Turnover	20	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.443	1
RetaiMoT21	Retail	Motors	Turnover	21	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.582	0
RetaiMoT22	Retail	Motors	Turnover	22	Air Comp Improvements			$0.11	15	56148	1.148	8,928	$990.00	16%	28%	65%	6.645	1
RetaiMoE2	Retail	Motors	Early	2	Air Compressor Optimization			$0.16	15	56148	2.174	16,901	$2,750.00	30%	38%	65%	4.529	1
LodgiMoT23	Lodging	Motors	Turnover	23	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.151	1
RestaMoN1	Restaurant	Motors	New	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1487	15	14753	0.0282	133.8	$154	0.91%	74.4%	100%	0.674	0
RestaMoN2	Restaurant	Motors	New	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.2410	15	56520	0.0231	419.7	$521	0.74%	74.4%	100%	0.566	0
RestaMoN3	Restaurant	Motors	New	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.1151	15	138748	0.0138	617.7	$689	0.45%	66.3%	100%	0.617	0
RestaMoN4	Restaurant	Motors	New	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4692	15	278979	0.0121	1088.6	$511	0.39%	55.8%	100%	1.455	1
RestaMoN5	Restaurant	Motors	New	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-500 HP	Motor	$0.3937	15	598698	0.0284	5476.7	$2,156	0.91%	55.8%	100%	1.728	1
RestaMoN6	Restaurant	Motors	New	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5877	15	93593	2.408	18,719	$11,000.00	20%	55.0%	100%	1.254	1
RestaMoN7	Restaurant	Motors	New	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4891	15	93593	9.776	26580.4	$13,000.00	28%	70.0%	100%	1.731	1
RestaMoN8	Restaurant	Motors	New	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4996	15	93593	0.000	26018.8	$13,000.00	28%	80.0%	100%	1.357	1
RestaMoN9	Restaurant	Motors	New	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5646	15	93593	9.776	23023.9	$13,000.00	25%	70.0%	100%	1.546	1
RestaMoN10	Restaurant	Motors	New	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4996	15	93593	7.280	26018.8	$13,000.00	28%	55.0%	100%	1.614	1
RestaMoN11	Restaurant	Motors	New	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5646	15	93593	9.776	23023.9	$13,000.00	25%	30.0%	100%	1.546	1
RestaMoT1	Restaurant	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1487	15	14753	0.0282	133.8	$154	0.91%	74.4%	100%	0.674	0
RestaMoT2	Restaurant	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.2410	15	56520	0.0231	419.7	$521	0.74%	74.4%	100%	0.566	0
RestaMoT3	Restaurant	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.1151	15	138748	0.0138	617.7	$689	0.45%	66.3%	100%	0.617	0
RestaMoT4	Restaurant	Motors	Turnover	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4692	15	278979	0.0121	1088.6	$511	0.39%	55.8%	100%	1.455	1
RestaMoT5	Restaurant	Motors	Turnover	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-250 HP	Motor	$0.3937	15	598698	0.0284	5476.7	$2,156	0.91%	55.8%	100%	1.728	1
RestaMoT6	Restaurant	Motors	Turnover	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5877	15	93593	2.408	18,719	$11,000.00	20%	55.0%	80%	1.254	1
RestaMoT7	Restaurant	Motors	Turnover	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4891	15	93593	9.776	26580.4	$13,000.00	28%	90.0%	80%	1.731	1
RestaMoT8	Restaurant	Motors	Turnover	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4996	15	93593	0.000	26018.8	$13,000.00	28%	90.0%	80%	1.357	1
RestaMoT9	Restaurant	Motors	Turnover	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5646	15	93593	9.776	23023.9	$13,000.00	25%	90.0%	80%	1.546	1
RestaMoT10	Restaurant	Motors	Turnover	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4996	15	93593	7.280	26018.8	$13,000.00	28%	80.0%	80%	1.614	1
RestaMoT11	Restaurant	Motors	Turnover	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5646	15	93593	9.776	23023.9	$13,000.00	25%	55.0%	80%	1.546	1
RestaMoT12	Restaurant	Motors	Turnover	12	Motors: Rewind 125-200 HP	(E) Motor	Motor	$0.5316	15	280779	0.182	1410.9	$750	0.5%	35.0%	95%	1.386	1
RestaMoT13	Restaurant	Motors	Turnover	13	Motors: Rewind 201-500 HP	(E) Motor	Motor	$0.6542	15	608354	0.393	3057.1	$2,000	0.5%	50.0%	95%	1.126	1
RestaMoT14	Restaurant	Motors	Turnover	14	Motors: Rewind 20-50 HP	(E) Motor	Motor	$0.4906	15	57390	0.066	509.6	$250	0.9%	10.0%	95%	1.502	1
RestaMoT15	Restaurant	Motors	Turnover	15	Motors: Rewind 500+ HP	(E) Motor	Motor	$0.5670	15	1403894	0.908	7054.7	$4,000	0.5%	70.0%	95%	1.300	1
RestaMoT16	Restaurant	Motors	Turnover	16	Motors: Rewind 51-100 HP	(E) Motor	Motor	$0.6091	15	141915	0.106	820.8	$500	0.6%	20.0%	95%	1.210	1
RestaMoT17	Restaurant	Motors	Turnover	17	Downsizing motor during retrofit	Larger hp standard motor	HP Reduction	$0.34	20	186,404	0.190	1,477	$500.00	0.79%	25%	95%	2.749	1
RestaMoN12	Restaurant	Motors	New	12	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.439	1
RestaMoN13	Restaurant	Motors	New	13	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.029	0
RestaMoN14	Restaurant	Motors	New	14	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.443	1
RestaMoN15	Restaurant	Motors	New	15	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.582	0
RestaMoT18	Restaurant	Motors	Turnover	18	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.439	1
RestaMoT19	Restaurant	Motors	Turnover	19	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.029	0

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	PJM Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
RestaMoT20	Restaurant	Motors	Turnover	20	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.443	1
RestaMoT21	Restaurant	Motors	Turnover	21	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.582	0
RestaMoT22	Restaurant	Motors	Turnover	22	Air Comp Improvements			$0.11	15	56148	1.148	8,928	$990.00	16%	28%	65%	6.645	1
RestaMoE2	Restaurant	Motors	Early	2	Air Compressor Optimization			$0.16	15	56148	2.174	16,901	$2,750.00	30%	38%	65%	4.529	1
miscMoE1	misc	Motors	Early	1	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.151	1
WarehMoN1	Warehouse	Motors	New	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1114	15	15247	0.0282	138.3	$154	0.91%	74.4%	100%	0.694	0
WarehMoN2	Warehouse	Motors	New	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.2008	15	58416	0.0231	433.8	$521	0.74%	74.4%	100%	0.585	0
WarehMoN3	Warehouse	Motors	New	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0789	15	143401	0.0138	638.4	$689	0.45%	66.3%	100%	0.637	0
WarehMoN4	Warehouse	Motors	New	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4540	15	288334	0.0121	1125.1	$511	0.39%	55.8%	100%	1.504	1
WarehMoN5	Warehouse	Motors	New	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-500 HP	Motor	$0.3809	15	618773	0.0284	5660.3	$2,156	0.91%	55.8%	100%	1.785	1
WarehMoN6	Warehouse	Motors	New	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5686	15	96731	2.489	19,346	$11,000.00	20%	55.0%	100%	1.296	1
WarehMoN7	Warehouse	Motors	New	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4805	15	96731	10.553	27052.5	$13,000.00	28%	70.0%	100%	1.783	1
WarehMoN8	Warehouse	Motors	New	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4834	15	96731	0.000	26891.3	$13,000.00	28%	80.0%	100%	1.402	1
WarehMoN9	Warehouse	Motors	New	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5631	15	96731	10.177	23086.5	$13,000.00	24%	70.0%	100%	1.563	1
WarehMoN10	Warehouse	Motors	New	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4887	15	96731	7.911	26601.1	$13,000.00	28%	55.0%	100%	1.666	1
WarehMoN11	Warehouse	Motors	New	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5588	15	96731	10.553	23263.9	$13,000.00	24%	30.0%	100%	1.586	1
WarehMoT1	Warehouse	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	NEMA-PE Motor 1-15 HP	Motor	$1.1114	15	15247	0.0282	138.3	$154	0.91%	74.4%	100%	0.694	0
WarehMoT2	Warehouse	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	NEMA-PE Motor 20-40 HP	Motor	$1.2008	15	58416	0.0231	433.8	$521	0.74%	74.4%	100%	0.585	0
WarehMoT3	Warehouse	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	NEMA-PE Motor 50-100 HP	Motor	$1.0789	15	143401	0.0138	638.4	$689	0.45%	66.3%	100%	0.637	0
WarehMoT4	Warehouse	Motors	Turnover	4	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	NEMA-PE Motor 125-200 HP	Motor	$0.4540	15	288334	0.0121	1125.1	$511	0.39%	55.8%	100%	1.504	1
WarehMoT5	Warehouse	Motors	Turnover	5	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	NEMA-PE Motor 250-250 HP	Motor	$0.3809	15	618773	0.0284	5660.3	$2,156	0.91%	55.8%	100%	1.785	1
WarehMoT6	Warehouse	Motors	Turnover	6	Variable Speed Drives on Process Equipment (1 hp - 100hp)	Constant speed control	Motor	$0.5686	15	96731	2.489	19,346	$11,000.00	20%	55.0%	80%	1.296	1
WarehMoT7	Warehouse	Motors	Turnover	7	VFD on Chilled Water Pump (Average 50HP)	Constant power control	Motor	$0.4805	15	96731	10.553	27052.5	$13,000.00	28%	90.0%	80%	1.783	1
WarehMoT8	Warehouse	Motors	Turnover	8	VFD on Heating Hot Water Pump (Average 50HP)	Constant power control	Motor	$0.4834	15	96731	0.000	26891.3	$13,000.00	28%	90.0%	80%	1.402	1
WarehMoT9	Warehouse	Motors	Turnover	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.5631	15	96731	10.177	23086.5	$13,000.00	24%	90.0%	80%	1.563	1
WarehMoT10	Warehouse	Motors	Turnover	10	VFD on HVAC Fan (Average 50HP)	Constant power control	Motor	$0.4887	15	96731	7.911	26601.1	$13,000.00	28%	80.0%	80%	1.666	1
WarehMoT11	Warehouse	Motors	Turnover	11	VFD on Cooling Tower Fan (Average 50HP)	Constant power control	Motor	$0.5588	15	96731	10.553	23263.9	$13,000.00	24%	55.0%	80%	1.586	1
WarehMoT12	Warehouse	Motors	Turnover	12	Motors: Rewind 125-200 HP	(E) Motor	Motor	$0.5143	15	290194	0.188	1458.3	$750	0.5%	35.0%	95%	1.433	1
WarehMoT13	Warehouse	Motors	Turnover	13	Motors: Rewind 201-500 HP	(E) Motor	Motor	$0.6330	15	628754	0.406	3159.6	$2,000	0.5%	50.0%	95%	1.164	1
WarehMoT14	Warehouse	Motors	Turnover	14	Motors: Rewind 20-50 HP	(E) Motor	Motor	$0.4747	15	59314	0.068	526.7	$250	0.9%	10.0%	95%	1.552	1
WarehMoT15	Warehouse	Motors	Turnover	15	Motors: Rewind 500+ HP	(E) Motor	Motor	$0.5486	15	1450970	0.938	7291.3	$4,000	0.5%	70.0%	95%	1.343	1
WarehMoT16	Warehouse	Motors	Turnover	16	Motors: Rewind 51-100 HP	(E) Motor	Motor	$0.5894	15	146674	0.109	848.4	$500	0.6%	20.0%	95%	1.250	1
WarehMoT17	Warehouse	Motors	Turnover	17	Downsizing motor during retrofit	Larger hp standard motor	HP Reduction	$0.34	20	186,404	0.190	1,477	$500.00	0.79%	25%	95%	2.749	1
WarehMoN12	Warehouse	Motors	New	12	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.439	1
WarehMoN13	Warehouse	Motors	New	13	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.029	0
WarehMoN14	Warehouse	Motors	New	14	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.443	1
WarehMoN15	Warehouse	Motors	New	15	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.582	0
WarehMoT18	Warehouse	Motors	Turnover	18	Demand Control Ventilation (DCV)	Base Standard Ventilation		$0.19	10	16,963	0.175	1,357	$257.83	8%	75%	95%	2.439	1
WarehMoT19	Warehouse	Motors	Turnover	19	Exhaust Hood Demand Controlled Ventilation	Base Exhaust Hood		$16.21	10	5,013	0.052	401	$6,500.21	8%	75%	95%	0.029	0
WarehMoT20	Warehouse	Motors	Turnover	20	Electronically Commutated Motors (ECM) on an Air Handler Unit	Assumes 67% eff. .35 HP PSC motor operating 2000 hours per year is		$0.21	15	5,194	0.120	935	$200.09	18.00%	75%	95%	3.443	1
WarehMoT21	Warehouse	Motors	Turnover	21	Separate Makeup Air / Exhaust Hoods AC	Base Fan Motor, 15hp, 1800rpm, 91.0%		$0.80	10	136,760	0.880	6,838	$5,450.00	5.00%	75%	95%	0.582	0
WarehMoT22	Warehouse	Motors	Turnover	22	Air Comp Improvements			$0.11	15	56148	1.148	8,928	$990.00	16%	28%	65%	6.645	1
WarehMoE2	Warehouse	Motors	Early	2	Air Compressor Optimization			$0.16	15	56148	2.174	16,901	$2,750.00	30%	38%	65%	4.529	1
MiscMoT23	Misc	Motors	Turnover	23	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.151	1
HealtHeN2	Healthcare	Heating	New	2	Ground Source HP Open - Water	Air Source Heat Pump	ton	$33.98	15	364	0.23	22	$ 750.0	6%	20%	95%	0.164	0
HealtHen3	Healthcare	Heating	new	3	Ground Source HP Closed	Air Source Heat Pump	ton	$33.98	15	364	0.000	22	$750.00	6%	100%	95%	0.020	0
GrocePaE1	Grocery	Packaged DX	Early	1	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$3.13	20	503	0.05	64	$200.00	13%	15%	9%	0.404	0
GrocePaE2	Grocery	Packaged DX	Early	2	Adding window shade film	No shade film	q ft window are	$7.05	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.031	0
GrocePaE3	Grocery	Packaged DX	Early	3	Adding window shade screen	No shade screen	q ft window are	$3.90	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.187	0
GrocePaE4	Grocery	Packaged DX	Early	4	Windows U<0.40, .55 SHGC	Existing window specifications	q ft window are	$1.40	30	2	0.000	0	$0.28	13%	50%	95%	0.825	0
GrocePaE5	Grocery	Packaged DX	Early	5	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$6.72	20	503	0.05	34	$225.00	7%	95%	95%	0.243	0
GrocePaE7	Grocery	Packaged DX	Early	7	Automated control system	Baseline DX	ton	$0.94	10	531	0.003	27	$25.00	5%	100%	65%	0.487	0
GrocePaE8	Grocery	Packaged DX	Early	8	Duct Sealing, down to 15%	Leakage of 29%	ton	$7.92	15	503	0.05	12	$95.00	2%	45%	80%	0.317	0
GrocePaE9	Grocery	Packaged DX	Early	9	Hotel Keycard Sensors	No prior controls	Loom Controlle	$0.29	10	451	0.041	342	$100.00	76%	95%	80%	1.568	1
GrocePaE10	Grocery	Packaged DX	Early	10	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	ton	$0.55	1	546	0.05	64	$35.00	12%	100%	45%	0.093	0
GrocePaE11	Grocery	Packaged DX	Early	11	7 day, two stage setback thermostat	Manual Thermostat	ton	$0.44	10	503	0.015	125	$55.00	25%	100%	45%	1.042	1
GrocePaE13	Grocery	Packaged DX	Early	13	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.69	7	503	0.05	80	$55.15	16%	95%	75%	0.627	0
GrocePaN1	Grocery	Packaged DX	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	ton	$1.36	20	503	0.05	64	$87.00	13%	100%	95%	0.929	0
GrocePaN2	Grocery	Packaged DX	New	2	Adding reflective roof treatment	Std color roof	ton	$4.50	20	503	0.05	10	$45.00	2%	100%	95%	0.766	0
GrocePaN3	Grocery	Packaged DX	New	3	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$3.73	20	503	0.05	34	$125.00	7%	100%	95%	0.437	0
GrocePaN4	Grocery	Packaged DX	New	4	Green Roof (New construction or roof replacement)	Std Roof	ton	$3.80	20	503	0.05	34	$127.43	7%	45%	95%	0.429	0
GrocePaN5	Grocery	Packaged DX	New	5	Duct Insulation, Add R8	No Insulation	ton	$10.42	20	503	0.05	12	$125.00	2%	100%	95%	0.290	0
GrocePaN6	Grocery	Packaged DX	New	6	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$2.92	20	433	0.04	31	$90.40	7%	100%	95%	0.558	0
GrocePaN7	Grocery	Packaged DX	New	7	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$3.13	20	433	0.08	58	$180.81	13%	100%	95%	0.521	0
GrocePaN8	Grocery	Packaged DX	New	8	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$3.34	20	433	0.12	81	$271.21	19%	100%	95%	0.488	0
GrocePaN9	Grocery	Packaged DX	New	9	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.64	20	503	0.05	34	$55.00	7%	100%	95%	0.994	0
GrocePaN10	Grocery	Packaged DX	New	10	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.64	20	512	0.06	43	$70.00	8%	100%	95%	0.994	0
GrocePaN11	Grocery	Packaged DX	New	11	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$2.76	20	563	0.06	42	$115.13	7%	100%	95%	0.591	0
GrocePaN12	Grocery	Packaged DX	New	12	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$3.46	20	580	0.04	28	$98.39	5%	100%	95%	0.472	0
GrocePaN13	Grocery	Packaged DX	New	13	Ground Source HP Open - Water	Air Source Heat Pump	ton	$4.57	15	512	0.23	164	$ 750.0	32%	20%	95%	0.292	0
GrocePaN14	Grocery	Packaged DX	New	14	Ground Source HP Closed	Air Source Heat Pump	ton	$8.18	15	512	0.011	92	$750.00	18%	100%	95%	0.089	0
GrocePaN15	Grocery	Packaged DX	New	15	Air-side Economizer	No Economizer	ton	$2.26	15	503	0.009	75	$170.00	15%	75%	45%	0.324	0
GrocePaN16	Grocery	Packaged DX	New	16	Energy Recovery Units	No Energy Recovery	ton	$1.78	15	503	0.012	101	$179.00	20%	100%	95%	0.410	0
GrocePaN17	Grocery	Packaged DX	New	17	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$4.64	15	531	0.003	24	$110.89	5%	100%	95%	0.158	0
GrocePaT1	Grocery	Packaged DX	Turnover	1	Duct Insulation, Add R8	No Insulation	ton	$10.42	15	503	0.05	12	$125.00	2%	100%	95%	0.241	0
GrocePaT2	Grocery	Packaged DX	Turnover	2	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$2.92	20	433	0.04	31	$90.40	7%	100%	95%	0.558	0
GrocePaT3	Grocery	Packaged DX	Turnover	3	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$3.13	20	433	0.08	58	$180.81	13%	100%	95%	0.521	0
GrocePaT4	Grocery	Packaged DX	Turnover	4	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$3.34	20	433	0.12	81	$271.21	19%	100%	95%	0.488	0
GrocePaT5	Grocery	Packaged DX	Turnover	5	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.64	20	503	0.05	34	$55.00	7%	100%	95%	0.994	0
GrocePaT6	Grocery	Packaged DX	Turnover	6	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.64	20	512	0.06	43	$70.00	8%	100%	95%	0.994	0
GrocePaT7	Grocery	Packaged DX	Turnover	7	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$2.76	20	563	0.06	42	$115.13	7%	100%	95%	0.591	0
GrocePaT8	Grocery	Packaged DX	Turnover	8	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$3.46	20	580	0.04	28	$98.39	5%	100%	95%	0.472	0
GrocePaT9	Grocery	Packaged DX	Turnover	9	Ground Source HP Open - Water	Air Source Heat Pump	ton	$4.57	15	512	0.23	164	$ 750.0	32%	5%	95%	0.292	0
GrocePaT10	Grocery	Packaged DX	Turnover	10	Ground Source HP Closed	Air Source Heat Pump	ton	$8.18	15	512	0.011	92	$750.00	18%	100%	95%	0.089	0
GrocePaT11	Grocery	Packaged DX	Turnover	11	Air-side Economizer	No Economizer	ton	$2.26	15	503	0.009	75	$170.00	15%	75%	45%	0.324	0
GrocePaT12	Grocery	Packaged DX	Turnover	12	Energy Recovery Units	No Energy Recovery	ton	$1.78	15	503	0.012	101	$179.00	20%	100%	95%	0.410	0
GrocePaT13	Grocery	Packaged DX	Turnover	13	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$4.64	15	531	0.003	24	$110.89	5%	100%	95%	0.158	0
GrocePaN18	Grocery	Packaged DX	New	18	Automated control system	Baseline DX	ton	$0.94	10	531	0.003	27	$25.00	5%	100%	65%	0.487	0
GrocePaN19	Grocery	Packaged DX	New	19	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.75	10	451	0.003	25	$43.00	5%	100%	95%	0.262	0
GrocePaT15	Grocery	Packaged DX	Turnover	15	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.75	10	451	0.003	25	$43.00	5%	100%	95%	0.262	0
InstiPaE1	Institutional	Packaged DX	Early	1	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$3.13	20	375	0.05	64	$200.00	17%	15%	9%	0.404	0
InstiPaE2	Institutional	Packaged DX	Early	2	Adding window shade film	No shade film	q ft window are	$7.05	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.031	0
InstiPaE3	Institutional	Packaged DX	Early	3	Adding window shade screen	No shade screen	q ft window are	$3.90	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.187	0
InstiPaE4	Institutional	Packaged DX	Early	4	Windows U<0.40, .55 SHGC	Existing window specifications	q ft window are	$1.40	30	2	0.000	0	$0.28	13%	50%	95%	0.825	0

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	PJM Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
InstiPaE5	Institutional	Packaged DX	Early	5	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$9.00	20	375	0.05	25	$225.00	7%	95%	95%	0.210	0
InstiPaE7	Institutional	Packaged DX	Early	7	Automated control system	Baseline DX	ton	$1.26	10	396	0.002	20	$25.00	5%	100%	65%	0.363	0
InstiPaE8	Institutional	Packaged DX	Early	8	Duct Sealing, down to 15%	Leakage of 29%	ton	$7.92	15	375	0.05	12	$95.00	3%	45%	80%	0.317	0
InstiPaE9	Institutional	Packaged DX	Early	9	Hotel Keycard Sensors	No prior controls	oom Controlle	$0.29	10	337	0.041	342	$100.00	102%	95%	80%	1.568	1
InstiPaE10	Institutional	Packaged DX	Early	10	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	ton	$0.55	1	408	0.05	64	$35.00	16%	100%	45%	0.093	0
InstiPaE11	Institutional	Packaged DX	Early	11	7 day, two stage setback thermostat	Manual Thermostat	ton	$0.44	10	375	0.015	125	$55.00	33%	100%	45%	1.042	1
InstiPaE13	Institutional	Packaged DX	Early	13	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.92	7	375	0.05	60	$55.15	16%	95%	75%	0.523	0
InstiPaN1	Institutional	Packaged DX	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	ton	$1.36	20	375	0.05	64	$87.00	17%	100%	95%	0.929	0
InstiPaN2	Institutional	Packaged DX	New	2	Adding reflective roof treatment	Std color roof	ton	$4.50	20	375	0.05	10	$45.00	3%	100%	95%	0.766	0
InstiPaN3	Institutional	Packaged DX	New	3	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$5.00	20	375	0.05	25	$125.00	7%	100%	95%	0.379	0
InstiPaN4	Institutional	Packaged DX	New	4	Green Roof (New construction or roof replacement)	Std Roof	ton	$5.10	20	375	0.05	25	$127.43	7%	45%	95%	0.372	0
InstiPaN5	Institutional	Packaged DX	New	5	Duct Insulation, Add R8	No Insulation	ton	$10.42	20	375	0.05	12	$125.00	3%	100%	95%	0.290	0
InstiPaN6	Institutional	Packaged DX	New	6	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$3.92	20	323	0.04	23	$90.40	7%	100%	95%	0.484	0
InstiPaN7	Institutional	Packaged DX	New	7	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$4.20	20	323	0.08	43	$180.81	13%	100%	95%	0.451	0
InstiPaN8	Institutional	Packaged DX	New	8	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$4.48	20	323	0.12	61	$271.21	19%	100%	95%	0.423	0
InstiPaN9	Institutional	Packaged DX	New	9	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$2.20	20	375	0.05	25	$55.00	7%	100%	95%	0.861	0
InstiPaN10	Institutional	Packaged DX	New	10	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$2.20	20	382	0.06	32	$70.00	8%	100%	95%	0.861	0
InstiPaN11	Institutional	Packaged DX	New	11	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$3.70	20	420	0.06	31	$115.13	7%	100%	95%	0.512	0
InstiPaN12	Institutional	Packaged DX	New	12	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$4.64	20	433	0.04	21	$98.39	5%	100%	95%	0.409	0
InstiPaN13	Institutional	Packaged DX	New	13	Ground Source HP Open - Water	Air Source Heat Pump	ton	$6.12	15	382	0.23	123	$ 750.0	32%	20%	95%	0.254	0
InstiPaN14	Institutional	Packaged DX	New	14	Ground Source HP Closed	Air Source Heat Pump	ton	$10.97	15	382	0.008	68	$750.00	18%	100%	95%	0.067	0
InstiPaN15	Institutional	Packaged DX	New	15	Air-side Economizer	No Economizer	ton	$3.02	15	375	0.007	56	$170.00	15%	75%	45%	0.242	0
InstiPaN16	Institutional	Packaged DX	New	16	Energy Recovery Units	No Energy Recovery	ton	$2.39	15	375	0.009	75	$179.00	20%	100%	95%	0.306	0
InstiPaN17	Institutional	Packaged DX	New	17	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$6.21	15	396	0.002	18	$110.89	5%	100%	95%	0.118	0
InstiPaT1	Institutional	Packaged DX	Turnover	1	Duct Insulation, Add R8	No Insulation	ton	$10.42	15	375	0.05	12	$125.00	3%	100%	95%	0.241	0
InstiPaT2	Institutional	Packaged DX	Turnover	2	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$3.92	20	323	0.04	23	$90.40	7%	100%	95%	0.484	0
InstiPaT3	Institutional	Packaged DX	Turnover	3	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$4.20	20	323	0.08	43	$180.81	13%	100%	95%	0.451	0
InstiPaT4	Institutional	Packaged DX	Turnover	4	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$4.48	20	323	0.12	61	$271.21	19%	100%	95%	0.423	0
InstiPaT5	Institutional	Packaged DX	Turnover	5	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$2.20	20	375	0.05	25	$55.00	7%	100%	95%	0.861	0
InstiPaT6	Institutional	Packaged DX	Turnover	6	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$2.20	20	382	0.06	32	$70.00	8%	100%	95%	0.861	0
InstiPaT7	Institutional	Packaged DX	Turnover	7	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$3.70	20	420	0.06	31	$115.13	7%	100%	95%	0.512	0
InstiPaT8	Institutional	Packaged DX	Turnover	8	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$4.64	20	433	0.04	21	$98.39	5%	100%	95%	0.409	0
InstiPaT9	Institutional	Packaged DX	Turnover	9	Ground Source HP Open - Water	Air Source Heat Pump	ton	$6.12	15	382	0.23	123	$ 750.0	32%	5%	95%	0.254	0
InstiPaT10	Institutional	Packaged DX	Turnover	10	Ground Source HP Closed	Air Source Heat Pump	ton	$10.97	15	382	0.008	68	$750.00	18%	100%	95%	0.067	0
InstiPaT11	Institutional	Packaged DX	Turnover	11	Air-side Economizer	No Economizer	ton	$3.02	15	375	0.007	56	$170.00	15%	75%	45%	0.242	0
InstiPaT12	Institutional	Packaged DX	Turnover	12	Energy Recovery Units	No Energy Recovery	ton	$2.39	15	375	0.009	75	$179.00	20%	100%	95%	0.306	0
InstiPaT13	Institutional	Packaged DX	Turnover	13	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$6.21	15	396	0.002	18	$110.89	5%	100%	95%	0.118	0
InstiPaN18	Institutional	Packaged DX	New	18	Automated control system	Baseline DX	ton	$1.26	10	396	0.002	20	$25.00	5%	100%	65%	0.363	0
InstiPaN19	Institutional	Packaged DX	New	19	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$2.34	10	337	0.002	18	$43.00	5%	100%	95%	0.196	0
InstiPaT15	Institutional	Packaged DX	Turnover	15	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$2.34	10	337	0.002	18	$43.00	5%	100%	95%	0.196	0
LodgiPaE1	Lodging	Packaged DX	Early	1	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$3.13	20	448	0.05	64	$200.00	14%	15%	9%	0.404	0
LodgiPaE2	Lodging	Packaged DX	Early	2	Adding window shade film	No shade film	ft window ar	$7.05	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.031	0
LodgiPaE3	Lodging	Packaged DX	Early	3	Adding window shade screen	No shade screen	ft window ar	$3.90	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.187	0
LodgiPaE4	Lodging	Packaged DX	Early	4	Windows U<0.40, .55 SHGC	Existing window specifications	ft window ar	$1.40	30	2	0.000	0	$0.28	13%	50%	95%	0.825	0
LodgiPaE5	Lodging	Packaged DX	Early	5	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$7.54	20	448	0.05	30	$225.00	7%	95%	95%	0.229	0
LodgiPaE7	Lodging	Packaged DX	Early	7	Automated control system	Baseline DX	ton	$1.06	10	473	0.003	24	$25.00	5%	100%	65%	0.434	0
LodgiPaE8	Lodging	Packaged DX	Early	8	Duct Sealing, down to 15%	Leakage of 29%	ton	$7.92	15	448	0.05	12	$95.00	3%	45%	80%	0.317	0
LodgiPaE9	Lodging	Packaged DX	Early	9	Hotel Keycard Sensors	No prior controls	oom Controlle	$0.29	10	402	0.041	342	$100.00	85%	95%	80%	1.568	1
LodgiPaE10	Lodging	Packaged DX	Early	10	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	ton	$0.55	1	487	0.05	64	$35.00	13%	100%	45%	0.093	0
LodgiPaE11	Lodging	Packaged DX	Early	11	7 day, two stage setback thermostat	Manual Thermostat	ton	$0.44	10	448	0.015	125	$55.00	28%	100%	45%	1.042	1
LodgiPaE13	Lodging	Packaged DX	Early	13	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.77	7	448	0.05	72	$55.15	16%	95%	75%	0.582	0
LodgiPaN1	Lodging	Packaged DX	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	ton	$1.36	20	448	0.05	64	$87.00	14%	100%	95%	0.929	0
LodgiPaN2	Lodging	Packaged DX	New	2	Adding reflective roof treatment	Std color roof	ton	$4.50	20	448	0.05	10	$45.00	2%	100%	95%	0.766	0
LodgiPaN3	Lodging	Packaged DX	New	3	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$4.19	20	448	0.05	30	$125.00	7%	100%	95%	0.412	0
LodgiPaN4	Lodging	Packaged DX	New	4	Green Roof (New construction or roof replacement)	Std Roof	ton	$4.27	20	448	0.05	30	$127.43	7%	45%	95%	0.404	0
LodgiPaN5	Lodging	Packaged DX	New	5	Duct Insulation, Add R8	No Insulation	ton	$10.42	20	448	0.05	12	$125.00	3%	100%	95%	0.290	0
LodgiPaN6	Lodging	Packaged DX	New	6	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$3.28	20	386	0.04	28	$90.40	7%	100%	95%	0.526	0
LodgiPaN7	Lodging	Packaged DX	New	7	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$3.51	20	386	0.08	51	$180.81	13%	100%	95%	0.491	0
LodgiPaN8	Lodging	Packaged DX	New	8	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$3.75	20	386	0.12	72	$271.21	19%	100%	95%	0.460	0
LodgiPaN9	Lodging	Packaged DX	New	9	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.84	20	448	0.05	30	$55.00	7%	100%	95%	0.937	0
LodgiPaN10	Lodging	Packaged DX	New	10	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.84	20	456	0.06	38	$70.00	8%	100%	95%	0.937	0
LodgiPaN11	Lodging	Packaged DX	New	11	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$3.10	20	502	0.06	37	$115.13	7%	100%	95%	0.557	0
LodgiPaN12	Lodging	Packaged DX	New	12	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$3.88	20	517	0.04	25	$98.39	5%	100%	95%	0.445	0
LodgiPaN13	Lodging	Packaged DX	New	13	Ground Source HP Open - Water	Air Source Heat Pump	ton	$5.12	15	456	0.23	146	$ 750.0	32%	20%	95%	0.276	0
LodgiPaN14	Lodging	Packaged DX	New	14	Ground Source HP Closed	Air Source Heat Pump	ton	$9.18	15	456	0.010	82	$750.00	18%	100%	95%	0.080	0
LodgiPaN15	Lodging	Packaged DX	New	15	Air-side Economizer	No Economizer	ton	$2.53	15	448	0.008	67	$170.00	15%	75%	45%	0.289	0
LodgiPaN16	Lodging	Packaged DX	New	16	Energy Recovery Units	No Energy Recovery	ton	$2.00	15	448	0.011	90	$179.00	20%	100%	95%	0.366	0
LodgiPaN17	Lodging	Packaged DX	New	17	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$5.20	15	473	0.003	21	$110.89	5%	100%	95%	0.140	0
LodgiPaT1	Lodging	Packaged DX	Turnover	1	Duct Insulation, Add R8	No Insulation	ton	$10.42	15	448	0.05	12	$125.00	3%	100%	95%	0.241	0
LodgiPaT2	Lodging	Packaged DX	Turnover	2	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$3.28	20	386	0.04	28	$90.40	7%	100%	95%	0.526	0
LodgiPaT3	Lodging	Packaged DX	Turnover	3	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$3.51	20	386	0.08	51	$180.81	13%	100%	95%	0.491	0
LodgiPaT4	Lodging	Packaged DX	Turnover	4	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$3.75	20	386	0.12	72	$271.21	19%	100%	95%	0.460	0
LodgiPaT5	Lodging	Packaged DX	Turnover	5	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.84	20	448	0.05	30	$55.00	7%	100%	95%	0.937	0
LodgiPaT6	Lodging	Packaged DX	Turnover	6	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.84	20	456	0.06	38	$70.00	8%	100%	95%	0.937	0
LodgiPaT7	Lodging	Packaged DX	Turnover	7	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$3.10	20	502	0.06	37	$115.13	7%	100%	95%	0.557	0
LodgiPaT8	Lodging	Packaged DX	Turnover	8	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$3.88	20	517	0.04	25	$98.39	5%	100%	95%	0.445	0
LodgiPaT9	Lodging	Packaged DX	Turnover	9	Ground Source HP Open - Water	Air Source Heat Pump	ton	$5.12	15	456	0.23	146	$ 750.0	32%	5%	95%	0.276	0
LodgiPaT10	Lodging	Packaged DX	Turnover	10	Ground Source HP Closed	Air Source Heat Pump	ton	$9.18	15	456	0.010	82	$750.00	18%	100%	95%	0.080	0
LodgiPaT11	Lodging	Packaged DX	Turnover	11	Air-side Economizer	No Economizer	ton	$2.53	15	448	0.008	67	$170.00	15%	75%	45%	0.289	0
LodgiPaT12	Lodging	Packaged DX	Turnover	12	Energy Recovery Units	No Energy Recovery	ton	$2.00	15	448	0.011	90	$179.00	20%	100%	95%	0.366	0
LodgiPaT13	Lodging	Packaged DX	Turnover	13	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$5.20	15	473	0.003	21	$110.89	5%	100%	95%	0.140	0
LodgiPaN18	Lodging	Packaged DX	New	18	Automated control system	Baseline DX	ton	$1.06	10	473	0.003	24	$25.00	5%	100%	65%	0.434	0
LodgiPaN19	Lodging	Packaged DX	New	19	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.96	10	402	0.003	22	$43.00	5%	100%	95%	0.234	0
LodgiPaT15	Lodging	Packaged DX	Turnover	15	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.96	10	402	0.003	22	$43.00	5%	100%	95%	0.234	0
MiscPaE1	Misc	Packaged DX	Early	1	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$3.13	20	516	0.05	64	$200.00	12%	15%	9%	0.404	0
MiscPaE2	Misc	Packaged DX	Early	2	Adding window shade film	No shade film	ft window ar	$7.05	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.031	0
MiscPaE3	Misc	Packaged DX	Early	3	Adding window shade screen	No shade screen	ft window ar	$3.90	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.187	0
MiscPaE4	Misc	Packaged DX	Early	4	Windows U<0.40, .55 SHGC	Existing window specifications	ft window ar	$1.40	30	2	0.000	0	$0.28	13%	50%	95%	0.825	0
MiscPaE5	Misc	Packaged DX	Early	5	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$6.54	20	516	0.05	34	$225.00	7%	95%	95%	0.246	0
MiscPaE7	Misc	Packaged DX	Early	7	Automated control system	Baseline DX	ton	$0.92	10	545	0.003	27	$25.00	5%	100%	65%	0.500	0
MiscPaE8	Misc	Packaged DX	Early	8	Duct Sealing, down to 15%	Leakage of 29%	ton	$7.92	15	516	0.05	12	$95.00	2%	45%	80%	0.317	0
MiscPaE9	Misc	Packaged DX	Early	9	Hotel Keycard Sensors	No prior controls	oom Controlle	$0.29	10	463	0.041	342	$100.00	74%	95%	80%	1.568	1
MiscPaE10	Misc	Packaged DX	Early	10	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	ton	$0.55	1	561	0.05	64	$35.00	11%	100%	45%	0.093	0
MiscPaE11	Misc	Packaged DX	Early	11	7 day, two stage setback thermostat	Manual Thermostat	ton	$0.44	10	516	0.015	125	$55.00	24%	100%	45%	1.042	1

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	PJM Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
MiscPaE13	Misc	Packaged DX	Early	13	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.67	7	516	0.05	83	$55.15	16%	95%	75%	0.638	0
MiscPaN1	Misc	Packaged DX	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	ton	$1.36	20	516	0.05	64	$87.00	12%	100%	95%	0.929	0
MiscPaN2	Misc	Packaged DX	New	2	Adding reflective roof treatment	Std color roof	ton	$4.50	20	516	0.05	10	$45.00	2%	100%	95%	0.766	0
MiscPaN3	Misc	Packaged DX	New	3	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$3.63	20	516	0.05	34	$125.00	7%	100%	95%	0.443	0
MiscPaN4	Misc	Packaged DX	New	4	Green Roof (New construction or roof replacement)	Std Roof	ton	$3.70	20	516	0.05	34	$127.43	7%	45%	95%	0.435	0
MiscPaN5	Misc	Packaged DX	New	5	Duct Insulation, Add R8	No Insulation	ton	$10.42	20	516	0.05	12	$125.00	2%	100%	95%	0.290	0
MiscPaN6	Misc	Packaged DX	New	6	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$2.85	20	445	0.04	32	$90.40	7%	100%	95%	0.566	0
MiscPaN7	Misc	Packaged DX	New	7	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$3.05	20	445	0.08	59	$180.81	13%	100%	95%	0.528	0
MiscPaN8	Misc	Packaged DX	New	8	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$3.25	20	445	0.12	83	$271.21	19%	100%	95%	0.495	0
MiscPaN9	Misc	Packaged DX	New	9	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.60	20	516	0.05	34	$55.00	7%	100%	95%	1.008	1
MiscPaN10	Misc	Packaged DX	New	10	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.60	20	526	0.06	44	$70.00	8%	100%	95%	1.008	1
MiscPaN11	Misc	Packaged DX	New	11	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$2.69	20	578	0.06	43	$115.13	7%	100%	95%	0.599	0
MiscPaN12	Misc	Packaged DX	New	12	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$3.37	20	596	0.04	29	$98.39	5%	100%	95%	0.478	0
MiscPaN13	Misc	Packaged DX	New	13	Ground Source HP Open - Water	Air Source Heat Pump	ton	$4.45	15	526	0.23	169	$ 750.0	32%	20%	95%	0.296	0
MiscPaN14	Misc	Packaged DX	New	14	Ground Source HP Closed	Air Source Heat Pump	ton	$7.97	15	526	0.011	94	$750.00	18%	100%	95%	0.092	0
MiscPaN15	Misc	Packaged DX	New	15	Air-side Economizer	No Economizer	ton	$2.20	15	516	0.009	77	$170.00	15%	75%	45%	0.333	0
MiscPaN16	Misc	Packaged DX	New	16	Energy Recovery Units	No Energy Recovery	ton	$1.73	15	516	0.012	103	$179.00	20%	100%	95%	0.421	0
MiscPaN17	Misc	Packaged DX	New	17	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$4.51	15	545	0.003	25	$110.89	5%	100%	95%	0.162	0
MiscPaT1	Misc	Packaged DX	Turnover	1	Duct Insulation, Add R8	No Insulation	ton	$10.42	15	516	0.05	12	$125.00	2%	100%	95%	0.241	0
MiscPaT2	Misc	Packaged DX	Turnover	2	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$2.85	20	445	0.04	32	$90.40	7%	100%	95%	0.566	0
MiscPaT3	Misc	Packaged DX	Turnover	3	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$3.05	20	445	0.08	59	$180.81	13%	100%	95%	0.528	0
MiscPaT4	Misc	Packaged DX	Turnover	4	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$3.25	20	445	0.12	83	$271.21	19%	100%	95%	0.495	0
MiscPaT5	Misc	Packaged DX	Turnover	5	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.60	20	516	0.05	34	$55.00	7%	100%	95%	1.008	1
MiscPaT6	Misc	Packaged DX	Turnover	6	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.60	20	526	0.06	44	$70.00	8%	100%	95%	1.008	1
MiscPaT7	Misc	Packaged DX	Turnover	7	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$2.69	20	578	0.06	43	$115.13	7%	100%	95%	0.599	0
MiscPaT8	Misc	Packaged DX	Turnover	8	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$3.37	20	596	0.04	29	$98.39	5%	100%	95%	0.478	0
MiscPaT9	Misc	Packaged DX	Turnover	9	Ground Source HP Open - Water	Air Source Heat Pump	ton	$4.45	15	526	0.23	169	$ 750.0	32%	5%	95%	0.296	0
MiscPaT10	Misc	Packaged DX	Turnover	10	Ground Source HP Closed	Air Source Heat Pump	ton	$7.97	15	526	0.011	94	$750.00	18%	100%	95%	0.092	0
MiscPaT11	Misc	Packaged DX	Turnover	11	Air-side Economizer	No Economizer	ton	$2.20	15	516	0.009	77	$170.00	15%	75%	45%	0.333	0
MiscPaT12	Misc	Packaged DX	Turnover	12	Energy Recovery Units	No Energy Recovery	ton	$1.73	15	516	0.012	103	$179.00	20%	100%	95%	0.421	0
MiscPaT13	Misc	Packaged DX	Turnover	13	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$4.51	15	545	0.003	25	$110.89	5%	100%	95%	0.162	0
MiscPaN18	Misc	Packaged DX	New	18	Automated control system	Baseline DX	ton	$0.92	10	545	0.003	27	$25.00	5%	100%	65%	0.500	0
MiscPaN19	Misc	Packaged DX	New	19	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.70	10	463	0.003	25	$43.00	5%	100%	95%	0.269	0
MiscPaT15	Misc	Packaged DX	Turnover	15	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.70	10	463	0.003	25	$43.00	5%	100%	95%	0.269	0
OfficPaE1	Office	Packaged DX	Early	1	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$3.13	20	503	0.05	64	$200.00	13%	15%	9%	0.404	0
OfficPaE2	Office	Packaged DX	Early	2	Adding window shade film	No shade film	ft window are	$7.05	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.031	0
OfficPaE3	Office	Packaged DX	Early	3	Adding window shade screen	No shade screen	ft window are	$3.90	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.187	0
OfficPaE4	Office	Packaged DX	Early	4	Windows U<0.40, .55 SHGC	Existing window specifications	ft window are	$1.40	30	2	0.000	0	$0.28	13%	50%	95%	0.825	0
OfficPaE5	Office	Packaged DX	Early	5	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$6.72	20	503	0.05	34	$225.00	7%	95%	95%	0.243	0
OfficPaE7	Office	Packaged DX	Early	7	Automated control system	Baseline DX	ton	$0.94	10	531	0.003	27	$25.00	5%	100%	65%	0.487	0
OfficPaE8	Office	Packaged DX	Early	8	Duct Sealing, down to 15%	Leakage of 29%	ton	$7.92	15	503	0.05	12	$95.00	2%	45%	80%	0.317	0
OfficPaE9	Office	Packaged DX	Early	9	Hotel Keycard Sensors	No prior controls	oom Controlle	$0.29	10	451	0.041	342	$100.00	76%	95%	80%	1.568	1
OfficPaE10	Office	Packaged DX	Early	10	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	ton	$0.55	1	546	0.05	64	$35.00	12%	100%	45%	0.093	0
OfficPaE11	Office	Packaged DX	Early	11	7 day, two stage setback thermostat	Manual Thermostat	ton	$0.44	10	503	0.015	125	$55.00	25%	100%	45%	1.042	1
OfficPaE13	Office	Packaged DX	Early	13	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.69	7	503	0.05	80	$55.15	16%	95%	75%	0.627	0
OfficPaN1	Office	Packaged DX	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	ton	$1.36	20	503	0.05	64	$87.00	13%	100%	95%	0.929	0
OfficPaN2	Office	Packaged DX	New	2	Adding reflective roof treatment	Std color roof	ton	$4.50	20	503	0.05	10	$45.00	2%	100%	95%	0.766	0
OfficPaN3	Office	Packaged DX	New	3	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$3.73	20	503	0.05	34	$125.00	7%	100%	95%	0.437	0
OfficPaN4	Office	Packaged DX	New	4	Green Roof (New construction or roof replacement)	Std Roof	ton	$3.80	20	503	0.05	34	$127.43	7%	45%	95%	0.429	0
OfficPaN5	Office	Packaged DX	New	5	Duct Insulation, Add R8	No Insulation	ton	$10.42	20	503	0.05	12	$125.00	2%	100%	95%	0.290	0
OfficPaN6	Office	Packaged DX	New	6	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$2.92	20	433	0.04	31	$90.40	7%	100%	95%	0.558	0
OfficPaN7	Office	Packaged DX	New	7	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$3.13	20	433	0.08	58	$180.81	13%	100%	95%	0.521	0
OfficPaN8	Office	Packaged DX	New	8	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$3.34	20	433	0.12	81	$271.21	19%	100%	95%	0.488	0
OfficPaN9	Office	Packaged DX	New	9	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.64	20	503	0.05	34	$55.00	7%	100%	95%	0.994	0
OfficPaN10	Office	Packaged DX	New	10	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.64	20	512	0.06	43	$70.00	8%	100%	95%	0.994	0
OfficPaN11	Office	Packaged DX	New	11	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$2.76	20	563	0.06	42	$115.13	7%	100%	95%	0.591	0
OfficPaN12	Office	Packaged DX	New	12	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$3.46	20	580	0.04	28	$98.39	5%	100%	95%	0.472	0
OfficPaN13	Office	Packaged DX	New	13	Ground Source HP Open - Water	Air Source Heat Pump	ton	$4.57	15	512	0.23	164	$ 750.0	32%	20%	95%	0.292	0
OfficPaN14	Office	Packaged DX	New	14	Ground Source HP Closed	Air Source Heat Pump	ton	$8.18	15	512	0.011	92	$750.00	18%	100%	95%	0.089	0
OfficPaN15	Office	Packaged DX	New	15	Air-side Economizer	No Economizer	ton	$2.26	15	503	0.009	75	$170.00	15%	75%	45%	0.324	0
OfficPaN16	Office	Packaged DX	New	16	Energy Recovery Units	No Energy Recovery	ton	$1.78	15	503	0.012	101	$179.00	20%	100%	95%	0.410	0
OfficPaN17	Office	Packaged DX	New	17	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$4.64	15	531	0.003	24	$110.89	5%	100%	95%	0.158	0
OfficPaT1	Office	Packaged DX	Turnover	1	Duct Insulation, Add R8	No Insulation	ton	$10.42	15	503	0.05	12	$125.00	2%	100%	95%	0.241	0
OfficPaT2	Office	Packaged DX	Turnover	2	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$2.92	20	433	0.04	31	$90.40	7%	100%	95%	0.558	0
OfficPaT3	Office	Packaged DX	Turnover	3	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$3.13	20	433	0.08	58	$180.81	13%	100%	95%	0.521	0
OfficPaT4	Office	Packaged DX	Turnover	4	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$3.34	20	433	0.12	81	$271.21	19%	100%	95%	0.488	0
OfficPaT5	Office	Packaged DX	Turnover	5	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.64	20	503	0.05	34	$55.00	7%	100%	95%	0.994	0
OfficPaT6	Office	Packaged DX	Turnover	6	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.64	20	512	0.06	43	$70.00	8%	100%	95%	0.994	0
OfficPaT7	Office	Packaged DX	Turnover	7	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$2.76	20	563	0.06	42	$115.13	7%	100%	95%	0.591	0
OfficPaT8	Office	Packaged DX	Turnover	8	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$3.46	20	580	0.04	28	$98.39	5%	100%	95%	0.472	0
OfficPaT9	Office	Packaged DX	Turnover	9	Ground Source HP Open - Water	Air Source Heat Pump	ton	$4.57	15	512	0.23	164	$ 750.0	32%	5%	95%	0.292	0
OfficPaT10	Office	Packaged DX	Turnover	10	Ground Source HP Closed	Air Source Heat Pump	ton	$8.18	15	512	0.011	92	$750.00	18%	100%	95%	0.089	0
OfficPaT11	Office	Packaged DX	Turnover	11	Air-side Economizer	No Economizer	ton	$2.26	15	503	0.009	75	$170.00	15%	75%	45%	0.324	0
OfficPaT12	Office	Packaged DX	Turnover	12	Energy Recovery Units	No Energy Recovery	ton	$1.78	15	503	0.012	101	$179.00	20%	100%	95%	0.410	0
OfficPaT13	Office	Packaged DX	Turnover	13	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$4.64	15	531	0.003	24	$110.89	5%	100%	95%	0.158	0
OfficPaN18	Office	Packaged DX	New	18	Automated control system	Baseline DX	ton	$0.94	10	531	0.003	27	$25.00	5%	100%	65%	0.487	0
OfficPaN19	Office	Packaged DX	New	19	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.75	10	451	0.003	25	$43.00	5%	100%	95%	0.262	0
OfficPaT15	Office	Packaged DX	Turnover	15	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.75	10	451	0.003	25	$43.00	5%	100%	95%	0.262	0
RestaPaE1	Restaurant	Packaged DX	Early	1	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$3.13	20	539	0.05	64	$200.00	12%	15%	9%	0.404	0
RestaPaE2	Restaurant	Packaged DX	Early	2	Adding window shade film	No shade film	ft window are	$7.05	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.031	0
RestaPaE3	Restaurant	Packaged DX	Early	3	Adding window shade screen	No shade screen	ft window are	$3.90	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.187	0
RestaPaE4	Restaurant	Packaged DX	Early	4	Windows U<0.40, .55 SHGC	Existing window specifications	ft window are	$1.40	30	2	0.000	0	$0.28	13%	50%	95%	0.825	0
RestaPaE5	Restaurant	Packaged DX	Early	5	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$6.26	20	539	0.05	36	$225.00	7%	95%	95%	0.252	0
RestaPaE7	Restaurant	Packaged DX	Early	7	Automated control system	Baseline DX	ton	$0.88	10	569	0.003	28	$25.00	5%	100%	65%	0.522	0
RestaPaE8	Restaurant	Packaged DX	Early	8	Duct Sealing, down to 15%	Leakage of 29%	ton	$7.92	15	539	0.05	12	$95.00	2%	45%	80%	0.317	0
RestaPaE9	Restaurant	Packaged DX	Early	9	Hotel Keycard Sensors	No prior controls	oom Controlle	$0.29	10	484	0.041	342	$100.00	71%	95%	80%	1.568	1
RestaPaE10	Restaurant	Packaged DX	Early	10	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	ton	$0.55	1	586	0.05	64	$35.00	11%	100%	45%	0.093	0
RestaPaE11	Restaurant	Packaged DX	Early	11	7 day, two stage setback thermostat	Manual Thermostat	ton	$0.44	10	539	0.015	125	$55.00	23%	100%	45%	1.042	1
RestaPaE13	Restaurant	Packaged DX	Early	13	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.64	7	539	0.05	86	$55.15	16%	95%	75%	0.656	0
RestaPaN1	Restaurant	Packaged DX	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	ton	$1.36	20	539	0.05	64	$87.00	12%	100%	95%	0.929	0
RestaPaN2	Restaurant	Packaged DX	New	2	Adding reflective roof treatment	Std color roof	ton	$4.50	20	539	0.05	10	$45.00	2%	100%	95%	0.766	0
RestaPaN3	Restaurant	Packaged DX	New	3	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$3.48	20	539	0.05	36	$125.00	7%	100%	95%	0.454	0
RestaPaN4	Restaurant	Packaged DX	New	4	Green Roof (New construction or roof replacement)	Std Roof	ton	$3.55	20	539	0.05	36	$127.43	7%	45%	95%	0.445	0
RestaPaN5	Restaurant	Packaged DX	New	5	Duct Insulation, Add R8	No Insulation	ton	$10.42	20	539	0.05	12	$125.00	2%	100%	95%	0.290	0

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	PJM Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
RestaPaN6	Restaurant	Packaged DX	New	6	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$2.73	20	464	0.04	33	$90.40	7%	100%	95%	0.579	0
RestaPaN7	Restaurant	Packaged DX	New	7	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$2.92	20	464	0.08	62	$180.81	13%	100%	95%	0.541	0
RestaPaN8	Restaurant	Packaged DX	New	8	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$3.12	20	464	0.12	87	$271.21	19%	100%	95%	0.507	0
RestaPaN9	Restaurant	Packaged DX	New	9	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.53	20	539	0.05	36	$55.00	7%	100%	95%	1.032	1
RestaPaN10	Restaurant	Packaged DX	New	10	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.53	20	549	0.06	46	$70.00	8%	100%	95%	1.032	1
RestaPaN11	Restaurant	Packaged DX	New	11	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$2.57	20	604	0.06	45	$115.13	7%	100%	95%	0.613	0
RestaPaN12	Restaurant	Packaged DX	New	12	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$3.23	20	622	0.04	31	$98.39	5%	100%	95%	0.490	0
RestaPaN13	Restaurant	Packaged DX	New	13	Ground Source HP Open - Water	Air Source Heat Pump	ton	$4.26	15	549	0.23	176	$ 750.0	32%	20%	95%	0.302	0
RestaPaN14	Restaurant	Packaged DX	New	14	Ground Source HP Closed	Air Source Heat Pump	ton	$7.63	15	549	0.012	98	$750.00	18%	100%	95%	0.096	0
RestaPaN15	Restaurant	Packaged DX	New	15	Air-side Economizer	No Economizer	ton	$2.10	15	539	0.010	81	$170.00	15%	75%	45%	0.347	0
RestaPaN16	Restaurant	Packaged DX	New	16	Energy Recovery Units	No Energy Recovery	ton	$1.66	15	539	0.013	108	$179.00	20%	100%	95%	0.440	0
RestaPaN17	Restaurant	Packaged DX	New	17	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$4.32	15	569	0.003	26	$110.89	5%	100%	95%	0.169	0
RestaPaT1	Restaurant	Packaged DX	Turnover	1	Duct Insulation, Add R8	No Insulation	ton	$10.42	15	539	0.05	12	$125.00	2%	100%	95%	0.241	0
RestaPaT2	Restaurant	Packaged DX	Turnover	2	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$2.73	20	464	0.04	33	$90.40	7%	100%	95%	0.579	0
RestaPaT3	Restaurant	Packaged DX	Turnover	3	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$2.92	20	464	0.08	62	$180.81	13%	100%	95%	0.541	0
RestaPaT4	Restaurant	Packaged DX	Turnover	4	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$3.12	20	464	0.12	87	$271.21	19%	100%	95%	0.507	0
RestaPaT5	Restaurant	Packaged DX	Turnover	5	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.53	20	539	0.05	36	$55.00	7%	100%	95%	1.032	1
RestaPaT6	Restaurant	Packaged DX	Turnover	6	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.53	20	549	0.06	46	$70.00	8%	100%	95%	1.032	1
RestaPaT7	Restaurant	Packaged DX	Turnover	7	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$2.57	20	604	0.06	45	$115.13	7%	100%	95%	0.613	0
RestaPaT8	Restaurant	Packaged DX	Turnover	8	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$3.23	20	622	0.04	31	$98.39	5%	100%	95%	0.490	0
RestaPaT9	Restaurant	Packaged DX	Turnover	9	Ground Source HP Open - Water	Air Source Heat Pump	ton	$4.26	15	549	0.23	176	$ 750.0	32%	5%	95%	0.302	0
RestaPaT10	Restaurant	Packaged DX	Turnover	10	Ground Source HP Closed	Air Source Heat Pump	ton	$7.63	15	549	0.012	98	$750.00	18%	100%	95%	0.096	0
RestaPaT11	Restaurant	Packaged DX	Turnover	11	Air-side Economizer	No Economizer	ton	$2.10	15	539	0.010	81	$170.00	15%	75%	45%	0.347	0
RestaPaT12	Restaurant	Packaged DX	Turnover	12	Energy Recovery Units	No Energy Recovery	ton	$1.66	15	539	0.013	108	$179.00	20%	100%	95%	0.440	0
RestaPaT13	Restaurant	Packaged DX	Turnover	13	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$4.32	15	569	0.003	26	$110.89	5%	100%	95%	0.169	0
RestaPaN18	Restaurant	Packaged DX	New	18	Automated control system	Baseline DX	ton	$0.88	10	569	0.003	28	$25.00	5%	100%	65%	0.522	0
RestaPaN19	Restaurant	Packaged DX	New	19	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.63	10	484	0.003	26	$43.00	5%	100%	95%	0.281	0
RestaPaT15	Restaurant	Packaged DX	Turnover	15	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.63	10	484	0.003	26	$43.00	5%	100%	95%	0.281	0
RetaiPaE1	Retail	Packaged DX	Early	1	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$3.13	20	528	0.05	64	$200.00	12%	15%	9%	0.404	0
RetaiPaE2	Retail	Packaged DX	Early	2	Adding window shade film	No shade film	q ft window are	$7.05	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.031	0
RetaiPaE3	Retail	Packaged DX	Early	3	Adding window shade screen	No shade screen	q ft window are	$3.90	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.187	0
RetaiPaE4	Retail	Packaged DX	Early	4	Windows U<0.40, .55 SHGC	Existing window specifications	q ft window are	$1.40	30	2	0.000	0	$0.28	13%	50%	95%	0.825	0
RetaiPaE5	Retail	Packaged DX	Early	5	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$6.39	20	528	0.05	35	$225.00	7%	95%	95%	0.249	0
RetaiPaE7	Retail	Packaged DX	Early	7	Automated control system	Baseline DX	ton	$0.90	10	558	0.003	28	$25.00	5%	100%	65%	0.512	0
RetaiPaE8	Retail	Packaged DX	Early	8	Duct Sealing, down to 15%	Leakage of 29%	ton	$7.92	15	528	0.05	12	$95.00	2%	45%	80%	0.317	0
RetaiPaE9	Retail	Packaged DX	Early	9	Hotel Keycard Sensors	No prior controls	oom Controlle	$0.29	10	474	0.041	342	$100.00	72%	95%	80%	1.568	1
RetaiPaE10	Retail	Packaged DX	Early	10	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	ton	$0.55	1	574	0.05	64	$35.00	11%	100%	45%	0.093	0
RetaiPaE11	Retail	Packaged DX	Early	11	7 day, two stage setback thermostat	Manual Thermostat	ton	$0.44	10	528	0.015	125	$55.00	24%	100%	45%	1.042	1
RetaiPaE13	Retail	Packaged DX	Early	13	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.65	7	528	0.05	85	$55.15	16%	95%	75%	0.647	0
RetaiPaN1	Retail	Packaged DX	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	ton	$1.36	20	528	0.05	64	$87.00	12%	100%	95%	0.929	0
RetaiPaN2	Retail	Packaged DX	New	2	Adding reflective roof treatment	Std color roof	ton	$4.50	20	528	0.05	10	$45.00	2%	100%	95%	0.766	0
RetaiPaN3	Retail	Packaged DX	New	3	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$3.55	20	528	0.05	35	$125.00	7%	100%	95%	0.449	0
RetaiPaN4	Retail	Packaged DX	New	4	Green Roof (New construction or roof replacement)	Std Roof	ton	$3.62	20	528	0.05	35	$127.43	7%	45%	95%	0.440	0
RetaiPaN5	Retail	Packaged DX	New	5	Duct Insulation, Add R8	No Insulation	ton	$10.42	20	528	0.05	12	$125.00	2%	100%	95%	0.290	0
RetaiPaN6	Retail	Packaged DX	New	6	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$2.78	20	455	0.04	33	$90.40	7%	100%	95%	0.573	0
RetaiPaN7	Retail	Packaged DX	New	7	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$2.98	20	455	0.08	61	$180.81	13%	100%	95%	0.535	0
RetaiPaN8	Retail	Packaged DX	New	8	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$3.18	20	455	0.12	85	$271.21	19%	100%	95%	0.501	0
RetaiPaN9	Retail	Packaged DX	New	9	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.56	20	528	0.05	35	$55.00	7%	100%	95%	1.020	1
RetaiPaN10	Retail	Packaged DX	New	10	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.56	20	538	0.06	45	$70.00	8%	100%	95%	1.020	1
RetaiPaN11	Retail	Packaged DX	New	11	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$2.63	20	592	0.06	44	$115.13	7%	100%	95%	0.607	0
RetaiPaN12	Retail	Packaged DX	New	12	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$3.29	20	610	0.04	30	$98.39	5%	100%	95%	0.484	0
RetaiPaN13	Retail	Packaged DX	New	13	Ground Source HP Open - Water	Air Source Heat Pump	ton	$4.34	15	538	0.23	173	$ 750.0	32%	20%	95%	0.299	0
RetaiPaN14	Retail	Packaged DX	New	14	Ground Source HP Closed	Air Source Heat Pump	ton	$7.79	15	538	0.011	96	$750.00	18%	100%	95%	0.094	0
RetaiPaN15	Retail	Packaged DX	New	15	Air-side Economizer	No Economizer	ton	$2.15	15	528	0.009	79	$170.00	15%	75%	45%	0.341	0
RetaiPaN16	Retail	Packaged DX	New	16	Energy Recovery Units	No Energy Recovery	ton	$1.69	15	528	0.013	106	$179.00	20%	100%	95%	0.431	0
RetaiPaN17	Retail	Packaged DX	New	17	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$4.41	15	558	0.003	25	$110.89	5%	100%	95%	0.166	0
RetaiPaT1	Retail	Packaged DX	Turnover	1	Duct Insulation, Add R8	No Insulation	ton	$10.42	15	528	0.05	12	$125.00	2%	100%	95%	0.241	0
RetaiPaT2	Retail	Packaged DX	Turnover	2	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$2.78	20	455	0.04	33	$90.40	7%	100%	95%	0.573	0
RetaiPaT3	Retail	Packaged DX	Turnover	3	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$2.98	20	455	0.08	61	$180.81	13%	100%	95%	0.535	0
RetaiPaT4	Retail	Packaged DX	Turnover	4	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$3.18	20	455	0.12	85	$271.21	19%	100%	95%	0.501	0
RetaiPaT5	Retail	Packaged DX	Turnover	5	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$1.56	20	528	0.05	35	$55.00	7%	100%	95%	1.020	1
RetaiPaT6	Retail	Packaged DX	Turnover	6	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$1.56	20	538	0.06	45	$70.00	8%	100%	95%	1.020	1
RetaiPaT7	Retail	Packaged DX	Turnover	7	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$2.63	20	592	0.06	44	$115.13	7%	100%	95%	0.607	0
RetaiPaT8	Retail	Packaged DX	Turnover	8	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$3.29	20	610	0.04	30	$98.39	5%	100%	95%	0.484	0
RetaiPaT9	Retail	Packaged DX	Turnover	9	Ground Source HP Open - Water	Air Source Heat Pump	ton	$4.34	15	538	0.23	173	$ 750.0	32%	5%	95%	0.299	0
RetaiPaT10	Retail	Packaged DX	Turnover	10	Ground Source HP Closed	Air Source Heat Pump	ton	$7.79	15	538	0.011	96	$750.00	18%	100%	95%	0.094	0
RetaiPaT11	Retail	Packaged DX	Turnover	11	Air-side Economizer	No Economizer	ton	$2.15	15	528	0.009	79	$170.00	15%	75%	45%	0.341	0
RetaiPaT12	Retail	Packaged DX	Turnover	12	Energy Recovery Units	No Energy Recovery	ton	$1.69	15	528	0.013	106	$179.00	20%	100%	95%	0.431	0
RetaiPaT13	Retail	Packaged DX	Turnover	13	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$4.41	15	558	0.003	25	$110.89	5%	100%	95%	0.166	0
RetaiPaN18	Retail	Packaged DX	New	18	Automated control system	Baseline DX	ton	$0.90	10	558	0.003	28	$25.00	5%	100%	65%	0.512	0
RetaiPaN19	Retail	Packaged DX	New	19	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.66	10	474	0.003	26	$43.00	5%	100%	95%	0.276	0
RetaiPaT15	Retail	Packaged DX	Turnover	15	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$1.66	10	474	0.003	26	$43.00	5%	100%	95%	0.276	0
WarehPaE1	Warehouse	Packaged DX	Early	1	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$3.13	20	409	0.05	64	$200.00	16%	15%	9%	0.404	0
WarehPaE2	Warehouse	Packaged DX	Early	2	Adding window shade film	No shade film	q ft window are	$7.05	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.031	0
WarehPaE3	Warehouse	Packaged DX	Early	3	Adding window shade screen	No shade screen	q ft window are	$3.90	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.187	0
WarehPaE4	Warehouse	Packaged DX	Early	4	Windows U<0.40, .55 SHGC	Existing window specifications	q ft window are	$1.40	30	2	0.000	0	$0.28	13%	50%	95%	0.825	0
WarehPaE5	Warehouse	Packaged DX	Early	5	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$8.25	20	409	0.05	27	$225.00	7%	95%	95%	0.219	0
WarehPaE7	Warehouse	Packaged DX	Early	7	Automated control system	Baseline DX	ton	$1.16	10	432	0.003	22	$25.00	5%	100%	65%	0.396	0
WarehPaE8	Warehouse	Packaged DX	Early	8	Duct Sealing, down to 15%	Leakage of 29%	ton	$7.92	15	409	0.05	12	$95.00	3%	45%	80%	0.317	0
WarehPaE9	Warehouse	Packaged DX	Early	9	Hotel Keycard Sensors	No prior controls	oom Controlle	$0.29	10	367	0.041	342	$100.00	93%	95%	80%	1.568	1
WarehPaE10	Warehouse	Packaged DX	Early	10	DX Coil Cleaning	Base DX Packaged System, EER=10.3, 10 tons	ton	$0.55	1	445	0.05	64	$35.00	14%	100%	45%	0.093	0
WarehPaE11	Warehouse	Packaged DX	Early	11	7 day, two stage setback thermostat	Manual Thermostat	ton	$0.44	10	409	0.015	125	$55.00	31%	100%	45%	1.042	1
WarehPaE13	Warehouse	Packaged DX	Early	13	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.84	7	409	0.05	65	$55.15	16%	95%	75%	0.551	0
WarehPaN1	Warehouse	Packaged DX	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	ton	$1.36	20	409	0.05	64	$87.00	16%	100%	95%	0.929	0
WarehPaN2	Warehouse	Packaged DX	New	2	Adding reflective roof treatment	Std color roof	ton	$4.50	20	409	0.05	10	$45.00	2%	100%	95%	0.766	0
WarehPaN3	Warehouse	Packaged DX	New	3	Roof Insulation Going to R-30	Existing insulation level = R16	ton	$4.58	20	409	0.05	27	$125.00	7%	100%	95%	0.395	0
WarehPaN4	Warehouse	Packaged DX	New	4	Green Roof (New construction or roof replacement)	Std Roof	ton	$4.67	20	409	0.05	27	$127.43	7%	45%	95%	0.387	0
WarehPaN5	Warehouse	Packaged DX	New	5	Duct Insulation, Add R8	No Insulation	ton	$10.42	20	409	0.05	12	$125.00	3%	100%	95%	0.290	0
WarehPaN6	Warehouse	Packaged DX	New	6	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$3.59	20	353	0.04	25	$90.40	7%	100%	95%	0.504	0
WarehPaN7	Warehouse	Packaged DX	New	7	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$3.85	20	353	0.08	47	$180.81	13%	100%	95%	0.470	0
WarehPaN8	Warehouse	Packaged DX	New	8	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$4.10	20	353	0.12	66	$271.21	19%	100%	95%	0.441	0
WarehPaN9	Warehouse	Packaged DX	New	9	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$2.02	20	409	0.05	27	$55.00	7%	100%	95%	0.897	0
WarehPaN10	Warehouse	Packaged DX	New	10	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$2.02	20	417	0.06	35	$70.00	8%	100%	95%	0.897	0
WarehPaN11	Warehouse	Packaged DX	New	11	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$3.39	20	458	0.06	34	$115.13	7%	100%	95%	0.533	0

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	PJM Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
WarehPaN12	Warehouse	Packaged DX	New	12	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$4.25	20	473	0.04	23	$98.39	5%	100%	95%	0.426	0
WarehPaN13	Warehouse	Packaged DX	New	13	Ground Source HP Open - Water	Air Source Heat Pump	ton	$5.61	15	417	0.23	134	$ 750.0	32%	20%	95%	0.264	0
WarehPaN14	Warehouse	Packaged DX	New	14	Ground Source HP Closed	Air Source Heat Pump	ton	$10.05	15	417	0.009	75	$750.00	18%	100%	95%	0.073	0
WarehPaN15	Warehouse	Packaged DX	New	15	Air-side Economizer	No Economizer	ton	$2.77	15	409	0.007	61	$170.00	15%	75%	45%	0.264	0
WarehPaN16	Warehouse	Packaged DX	New	16	Energy Recovery Units	No Energy Recovery	ton	$2.19	15	409	0.010	82	$179.00	20%	100%	95%	0.334	0
WarehPaN17	Warehouse	Packaged DX	New	17	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$5.69	15	432	0.002	19	$110.89	5%	100%	95%	0.128	0
WarehPaT1	Warehouse	Packaged DX	Turnover	1	Duct Insulation, Add R8	No Insulation	ton	$10.42	15	409	0.05	12	$125.00	3%	100%	95%	0.241	0
WarehPaT2	Warehouse	Packaged DX	Turnover	2	<65k 3-phase AC unit, Min 14 SEER	Equivalent size AC unit (13 SEER)	ton	$3.59	20	353	0.04	25	$90.40	7%	100%	95%	0.504	0
WarehPaT3	Warehouse	Packaged DX	Turnover	3	<65k, 3-phase AC unit, Min 15 SEER	Equivalent size AC unit (13 SEER)	ton	$3.85	20	353	0.08	47	$180.81	13%	100%	95%	0.470	0
WarehPaT4	Warehouse	Packaged DX	Turnover	4	<65k 3-phase AC unit, Min 16 SEER	Equivalent size AC unit (13 SEER)	ton	$4.10	20	353	0.12	66	$271.21	19%	100%	95%	0.441	0
WarehPaT5	Warehouse	Packaged DX	Turnover	5	65-135k, AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11.2 EER)	ton	$2.02	20	409	0.05	27	$55.00	7%	100%	95%	0.897	0
WarehPaT6	Warehouse	Packaged DX	Turnover	6	135-240k AC unit, min 11.5 EER (Used 12 EER)	Equivalent size AC unit, existing efficiency value (11 EER)	ton	$2.02	20	417	0.06	35	$70.00	8%	100%	95%	0.897	0
WarehPaT7	Warehouse	Packaged DX	Turnover	7	240-760k AC unit, min 10.5 EER (Used 10.8 EER)	Equivalent size AC unit, existing efficiency value (10 EER)	ton	$3.39	20	458	0.06	34	$115.13	7%	100%	95%	0.533	0
WarehPaT8	Warehouse	Packaged DX	Turnover	8	>760k or more AC unit, min 9.7 EER (Used 10.2 EER)	Equivalent size AC unit, existing efficiency value (9.7 EER)	ton	$4.25	20	473	0.04	23	$98.39	5%	100%	95%	0.426	0
WarehPaT9	Warehouse	Packaged DX	Turnover	9	Ground Source HP Open - Water	Air Source Heat Pump	ton	$5.61	15	417	0.23	134	$ 750.0	32%	5%	95%	0.264	0
WarehPaT10	Warehouse	Packaged DX	Turnover	10	Ground Source HP Closed	Air Source Heat Pump	ton	$10.05	15	417	0.009	75	$750.00	18%	100%	95%	0.073	0
WarehPaT11	Warehouse	Packaged DX	Turnover	11	Air-side Economizer	No Economizer	ton	$2.77	15	409	0.007	61	$170.00	15%	75%	45%	0.264	0
WarehPaT12	Warehouse	Packaged DX	Turnover	12	Energy Recovery Units	No Energy Recovery	ton	$2.19	15	409	0.010	82	$179.00	20%	100%	95%	0.334	0
WarehPaT13	Warehouse	Packaged DX	Turnover	13	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	ton	$5.69	15	432	0.002	19	$110.89	5%	100%	95%	0.128	0
WarehPaN18	Warehouse	Packaged DX	New	18	Automated control system	Baseline DX	ton	$1.16	10	432	0.003	22	$25.00	5%	100%	65%	0.396	0
WarehPaN19	Warehouse	Packaged DX	New	19	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$2.15	10	367	0.002	20	$43.00	5%	100%	95%	0.214	0
WarehPaT15	Warehouse	Packaged DX	Turnover	15	PTAC (12.0 EER/10,000 BTU)	PTAC (10.4 EER/10,000 BTU)	unit	$2.15	10	367	0.002	20	$43.00	5%	100%	95%	0.214	0
HealtHeN4	Healthcare	Heating	New	4	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$5.02	15	364	0.000	22	$110.89	6%	100%	95%	0.136	0
HealtHeT1	Healthcare	Heating	Turnover	1	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$5.02	15	364	0.000	22	$110.89	6%	100%	95%	0.136	0
GroceHeE1	Grocery	Heating	Early	1	Re-commissioning	Current Controls not working properly, setpoints not optimized,	sq ft	$0.2710	7	125,500	0.297	20,080	$5,441.68	16%	95%	75%	1.039	1
GroceHeE2	Grocery	Heating	Early	2	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$4.44	20	1,569	0.05	45	$200.00	3%	10%	95%	0.323	0
GroceHeE3	Grocery	Heating	Early	3	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.67	20	1,569	0.05	75	$125.00	5%	10%	95%	0.724	0
GroceHeE4	Grocery	Heating	Early	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.75	20	1,569	0.05	34	$127.43	2%	10%	95%	0.433	0
GroceHeE5	Grocery	Heating	Early	5	Humidification with High pressure, Ultrasonic devices	Electric Resistive Elements	unit	$0.1893	10	2,794	0.039	2,641	$500.00	95%	100%	95%	2.233	1
GroceHeN1	Grocery	Heating	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5 - Electric Heat	sq ft	$1.93	20	1,569	0.05	45	$87.00	3%	10%	95%	0.743	0
GroceHeN2	Grocery	Heating	New	2	Ground Source HP Open - Water	Air Source Heat Pump	ton	$7.89	15	1,569	0.23	95	$ 750.0	6%	20%	95%	0.230	0
GroceHen3	Grocery	Heating	new	3	Ground Source HP Closed	Air Source Heat Pump	ton	$7.89	15	1,569	0.001	95	$750.00	6%	100%	95%	0.087	0
GroceHeN4	Grocery	Heating	New	4	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.17	15	1,569	0.001	95	$110.89	6%	100%	95%	0.587	0
GroceHeT1	Grocery	Heating	Turnover	1	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.17	15	1,569	0.001	95	$110.89	6%	100%	95%	0.587	0
InstiHeE1	Institutional	Heating	Early	1	Re-commissioning	Current Controls not working properly, setpoints not optimized,	sq ft	$0.2710	7	125,500	0.297	20,080	$5,441.68	16%	95%	75%	1.039	1
InstiHeE2	Institutional	Heating	Early	2	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$4.44	20	1,116	0.05	45	$200.00	4%	10%	95%	0.323	0
InstiHeE3	Institutional	Heating	Early	3	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.67	20	1,116	0.05	75	$125.00	7%	10%	95%	0.724	0
InstiHeE4	Institutional	Heating	Early	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.75	20	1,116	0.05	34	$127.43	3%	10%	95%	0.433	0
InstiHeE5	Institutional	Heating	Early	5	Humidification with High pressure, Ultrasonic devices	Electric Resistive Elements	unit	$0.1893	10	2,794	0.039	2,641	$500.00	95%	100%	95%	2.233	1
InstiHeN1	Institutional	Heating	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5 - Electric Heat	sq ft	$1.93	20	1,116	0.05	45	$87.00	4%	10%	95%	0.743	0
InstiHeN2	Institutional	Heating	New	2	Ground Source HP Open - Water	Air Source Heat Pump	ton	$11.09	15	1,116	0.23	68	$ 750.0	6%	20%	95%	0.205	0
InstiHen3	Institutional	Heating	new	3	Ground Source HP Closed	Air Source Heat Pump	ton	$11.09	15	1,116	0.001	68	$750.00	6%	100%	95%	0.062	0
InstiHeN4	Institutional	Heating	New	4	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.64	15	1,116	0.001	68	$110.89	6%	100%	95%	0.417	0
InstiHeT1	Institutional	Heating	Turnover	1	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.64	15	1,116	0.001	68	$110.89	6%	100%	95%	0.417	0
LodgiHeE1	Lodging	Heating	Early	1	Re-commissioning	Current Controls not working properly, setpoints not optimized,	sq ft	$0.2710	7	125,500	0.297	20,080	$5,441.68	16%	95%	75%	1.039	1
LodgiHeE2	Lodging	Heating	Early	2	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$4.44	20	1,900	0.05	45	$200.00	2%	10%	95%	0.323	0
LodgiHeE3	Lodging	Heating	Early	3	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.67	20	1,900	0.05	75	$125.00	4%	10%	95%	0.724	0
LodgiHeE4	Lodging	Heating	Early	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.75	20	1,900	0.05	34	$127.43	2%	10%	95%	0.433	0
LodgiHeE5	Lodging	Heating	Early	5	Humidification with High pressure, Ultrasonic devices	Electric Resistive Elements	unit	$0.1893	10	2,794	0.039	2,641	$500.00	95%	100%	95%	2.233	1
LodgiHeN1	Lodging	Heating	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5 - Electric Heat	sq ft	$1.93	20	1,900	0.05	45	$87.00	2%	10%	95%	0.743	0
LodgiHeN2	Lodging	Heating	New	2	Ground Source HP Open - Water	Air Source Heat Pump	ton	$6.51	15	1,900	0.23	115	$ 750.0	6%	20%	95%	0.248	0
LodgiHen3	Lodging	Heating	new	3	Ground Source HP Closed	Air Source Heat Pump	ton	$6.51	15	1,900	0.002	115	$750.00	6%	100%	95%	0.105	0
LodgiHeN4	Lodging	Heating	New	4	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$0.96	15	1,900	0.002	115	$110.89	6%	100%	95%	0.711	0
LodgiHeT1	Lodging	Heating	Turnover	1	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$0.96	15	1,900	0.002	115	$110.89	6%	100%	95%	0.711	0
MiscHeE1	Misc	Heating	Early	1	Re-commissioning	Current Controls not working properly, setpoints not optimized,	sq ft	$0.2710	7	125,500	0.297	20,080	$5,441.68	16%	95%	75%	1.039	1
MiscHeE2	Misc	Heating	Early	2	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$4.44	20	1,300	0.05	45	$200.00	3%	10%	95%	0.323	0
MiscHeE3	Misc	Heating	Early	3	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.67	20	1,300	0.05	75	$125.00	6%	10%	95%	0.724	0
MiscHeE4	Misc	Heating	Early	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.75	20	1,300	0.05	34	$127.43	3%	10%	95%	0.433	0
MiscHeE5	Misc	Heating	Early	5	Humidification with High pressure, Ultrasonic devices	Electric Resistive Elements	unit	$0.1893	10	2,794	0.039	2,641	$500.00	95%	100%	95%	2.233	1
MiscHeN1	Misc	Heating	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5 - Electric Heat	sq ft	$1.93	20	1,300	0.05	45	$87.00	3%	10%	95%	0.743	0
MiscHeN2	Misc	Heating	New	2	Ground Source HP Open - Water	Air Source Heat Pump	ton	$9.52	15	1,300	0.23	79	$ 750.0	6%	20%	95%	0.215	0
MiscHen3	Misc	Heating	new	3	Ground Source HP Closed	Air Source Heat Pump	ton	$9.52	15	1,300	0.001	79	$750.00	6%	100%	95%	0.072	0
MiscHeN4	Misc	Heating	New	4	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.41	15	1,300	0.001	79	$110.89	6%	100%	95%	0.486	0
MiscHeT1	Misc	Heating	Turnover	1	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.41	15	1,300	0.001	79	$110.89	6%	100%	95%	0.486	0
OfficHeE1	Office	Heating	Early	1	Re-commissioning	Current Controls not working properly, setpoints not optimized,	sq ft	$0.2710	7	125,500	0.297	20,080	$5,441.68	16%	95%	75%	1.039	1
OfficHeE2	Office	Heating	Early	2	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$4.44	20	1,003	0.05	45	$200.00	4%	10%	95%	0.323	0
OfficHeE3	Office	Heating	Early	3	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.67	20	1,003	0.05	75	$125.00	7%	10%	95%	0.724	0
OfficHeE4	Office	Heating	Early	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.75	20	1,003	0.05	34	$127.43	3%	10%	95%	0.433	0
OfficHeE5	Office	Heating	Early	5	Humidification with High pressure, Ultrasonic devices	Electric Resistive Elements	unit	$0.1893	10	2,794	0.039	2,641	$500.00	95%	100%	95%	2.233	1
OfficHeN1	Office	Heating	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5 - Electric Heat	sq ft	$1.93	20	1,003	0.05	45	$87.00	4%	10%	95%	0.743	0
OfficHeN2	Office	Heating	New	2	Ground Source HP Open - Water	Air Source Heat Pump	ton	$12.34	15	1,003	0.23	61	$ 750.0	6%	20%	95%	0.199	0
OfficHen3	Office	Heating	new	3	Ground Source HP Closed	Air Source Heat Pump	ton	$12.34	15	1,003	0.001	61	$750.00	6%	100%	95%	0.055	0
OfficHeN4	Office	Heating	New	4	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.82	15	1,003	0.001	61	$110.89	6%	100%	95%	0.375	0
OfficHeT1	Office	Heating	Turnover	1	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.82	15	1,003	0.001	61	$110.89	6%	100%	95%	0.375	0
RestaHeE1	Restaurant	Heating	Early	1	Re-commissioning	Current Controls not working properly, setpoints not optimized,	sq ft	$0.2710	7	125,500	0.297	20,080	$5,441.68	16%	95%	75%	1.039	1
RestaHeE2	Restaurant	Heating	Early	2	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$4.44	20	1,527	0.05	45	$200.00	3%	10%	95%	0.323	0
RestaHeE3	Restaurant	Heating	Early	3	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.67	20	1,527	0.05	75	$125.00	5%	10%	95%	0.724	0
RestaHeE4	Restaurant	Heating	Early	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.75	20	1,527	0.05	34	$127.43	2%	10%	95%	0.433	0
RestaHeE5	Restaurant	Heating	Early	5	Humidification with High pressure, Ultrasonic devices	Electric Resistive Elements	unit	$0.1893	10	2,794	0.039	2,641	$500.00	95%	100%	95%	2.233	1
RestaHeN1	Restaurant	Heating	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5 - Electric Heat	sq ft	$1.93	20	1,527	0.05	45	$87.00	3%	10%	95%	0.743	0
RestaHeN2	Restaurant	Heating	New	2	Ground Source HP Open - Water	Air Source Heat Pump	ton	$8.10	15	1,527	0.23	93	$ 750.0	6%	20%	95%	0.227	0
RestaHen3	Restaurant	Heating	new	3	Ground Source HP Closed	Air Source Heat Pump	ton	$8.10	15	1,527	0.001	93	$750.00	6%	100%	95%	0.084	0
RestaHeN4	Restaurant	Heating	New	4	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.20	15	1,527	0.001	93	$110.89	6%	100%	95%	0.571	0
RestaHeT1	Restaurant	Heating	Turnover	1	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.20	15	1,527	0.001	93	$110.89	6%	100%	95%	0.571	0
RetaiHeE1	Retail	Heating	Early	1	Re-commissioning	Current Controls not working properly, setpoints not optimized,	sq ft	$0.2710	7	125,500	0.297	20,080	$5,441.68	16%	95%	75%	1.039	1
RetaiHeE2	Retail	Heating	Early	2	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$4.44	20	1,569	0.05	45	$200.00	3%	10%	95%	0.323	0
RetaiHeE3	Retail	Heating	Early	3	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.67	20	1,569	0.05	75	$125.00	5%	10%	95%	0.724	0
RetaiHeE4	Retail	Heating	Early	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.75	20	1,569	0.05	34	$127.43	2%	10%	95%	0.433	0
RetaiHeE5	Retail	Heating	Early	5	Humidification with High pressure, Ultrasonic devices	Electric Resistive Elements	unit	$0.1893	10	2,794	0.039	2,641	$500.00	95%	100%	95%	2.233	1
RetaiHeN1	Retail	Heating	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5 - Electric Heat	sq ft	$1.93	20	1,569	0.05	45	$87.00	3%	10%	95%	0.743	0
RetaiHeN2	Retail	Heating	New	2	Ground Source HP Open - Water	Air Source Heat Pump	ton	$7.89	15	1,569	0.23	95	$ 750.0	6%	20%	95%	0.230	0
RetaiHen3	Retail	Heating	new	3	Ground Source HP Closed	Air Source Heat Pump	ton	$7.89	15	1,569	0.001	95	$750.00	6%	100%	95%	0.087	0
RetaiHeN4	Retail	Heating	New	4	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.17	15	1,569	0.001	95	$110.89	6%	100%	95%	0.587	0
RetaiHeT1	Retail	Heating	Turnover	1	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.17	15	1,569	0.001	95	$110.89	6%	100%	95%	0.587	0

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	PJM Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
WarehHeE1	Warehouse	Heating	Early	1	Re-commissioning	Current Controls not working properly, setpoints not optimized,	sq ft	$0.2710	7	125,500	0.297	20,080	$5,441.68	16%	95%	75%	1.039	1
WarehHeE2	Warehouse	Heating	Early	2	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$4.44	20	1,348	0.05	45	$200.00	3%	10%	95%	0.323	0
WarehHeE3	Warehouse	Heating	Early	3	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$1.67	20	1,348	0.05	75	$125.00	6%	10%	95%	0.724	0
WarehHeE4	Warehouse	Heating	Early	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.75	20	1,348	0.05	34	$127.43	3%	10%	95%	0.433	0
WarehHeE5	Warehouse	Heating	Early	5	Humidification with High pressure, Ultrasonic devices	Electric Resistive Elements	unit	$0.1893	10	2,794	0.039	2,641	$500.00	95%	100%	95%	2.233	1
WarehHeN1	Warehouse	Heating	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5 - Electric Heat	sq ft	$1.93	20	1,348	0.05	45	$87.00	3%	10%	95%	0.743	0
WarehHeN2	Warehouse	Heating	New	2	Ground Source HP Open - Water	Air Source Heat Pump	ton	$9.18	15	1,348	0.23	82	$ 750.0	6%	20%	95%	0.218	0
WarehHen3	Warehouse	Heating	new	3	Ground Source HP Closed	Air Source Heat Pump	ton	$9.18	15	1,348	0.001	82	$750.00	6%	100%	95%	0.075	0
WarehHeN4	Warehouse	Heating	New	4	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.36	15	1,348	0.001	82	$110.89	6%	100%	95%	0.504	0
WarehHeT1	Warehouse	Heating	Turnover	1	Air Source Heat Pump (11.1 EER, 3.3 COP)	Standard Efficiency Air Source HP (10.6 EER, 3.2 COP)	Heating ton	$1.36	15	1,348	0.001	82	$110.89	6%	100%	95%	0.504	0
GroceChE1	Grocery	Chiller	Early	1	Duct Sealing, down to 15%	Leakage of 29%	ton	$2.7686	15	3,431	0.007	34.3128	$95.00	1%	40%	$0.90	0.274	0
GroceChE2	Grocery	Chiller	Early	2	Duct Insulation, Add R8	No Insulation	ton	$3.6430	15	3,431	0.007	34.3128	$125.00	1%	50%	95%	0.209	0
GroceChE3	Grocery	Chiller	Early	3	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton	ton	$0.7286	15	3,431	0.034	171.5640	$125.00	5%	75%	75%	1.043	1
GroceChE4	Grocery	Chiller	Early	4	Energy Recovery Units	No Energy Recovery	ton	$0.6557	15	3,431	0.135	686.3	$450.00	20%	75%	75%	1.159	1
GroceChE5	Grocery	Chiller	Early	5	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.6642	7	3,431	0.108	549	$364.67	16%	75%	75%	0.490	0
GroceChE6	Grocery	Chiller	Early	6	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$0.82	15	3,431	0.05	245	$200.00	7%	15%	95%	0.930	0
GroceChE7	Grocery	Chiller	Early	7	Adding window shade film	No shade film	q ft window are	$7.0453	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.033	0
GroceChE8	Grocery	Chiller	Early	8	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.195	0
GroceChE9	Grocery	Chiller	Early	9	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$2.19	20	3,431	0.05	103	$225.00	3%	75%	95%	0.504	0
GroceChN1	Grocery	Chiller	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	sq ft	$0.72	20	3,431	0.05	120	$87.00	4%	15%	95%	1.472	1
GroceChN2	Grocery	Chiller	New	2	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.195	0
GroceChN3	Grocery	Chiller	New	3	Adding reflective roof treatment	Std color roof	sq ft roof area	$4.50	20	3,431	0.05	10	$45.00	0%	100%	95%	0.764	0
GroceChN4	Grocery	Chiller	New	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.80	20	3,431	0.05	34	$127.43	1%	45%	95%	0.427	0
GroceChN5	Grocery	Chiller	New	5	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.6158	15	3,431	0.76	414	$255.00	12%	95%	95%	2.449	1
GroceChN6	Grocery	Chiller	New	6	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.3404	15	3,431	1.944	1,065	$362.50	31%	95%	95%	4.429	1
GroceChN7	Grocery	Chiller	New	7	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1764	15	8,223	1.728	947	$167.00	12%	95%	95%	8.547	1
GroceChN8	Grocery	Chiller	New	8	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.6703	15	3,431	0.034	171.5640	$115.00	5%	95%	75%	1.134	1
GroceChN9	Grocery	Chiller	New	9	Energy Recovery Units	No Energy Recovery	ton	$0.3643	15	3,431	0.135	686.3	$250.00	20%	95%	75%	2.086	1
GroceChN10	Grocery	Chiller	New	10	Duct Insulation, Add R8	No Insulation	ton	$3.6430	15	3,431	0.007	34.3128	$125.00	1%	100%	95%	0.209	0
GroceChT1	Grocery	Chiller	Turnover	1	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.7124	15	3,431	0.76	414	$295.00	12%	95%	95%	2.117	1
GroceChT2	Grocery	Chiller	Turnover	2	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.4343	15	3,431	1.944	1,065	$462.50	31%	95%	95%	3.472	1
GroceChT3	Grocery	Chiller	Turnover	3	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.6928	15	3,431	1.944	600	$416.00	18%	95%	95%	3.113	1
GroceChN11	Grocery	Chiller	New	11	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.6928	15	3,431	1.944	600	$416.00	18%	95%	95%	3.113	1
GroceChT5	Grocery	Chiller	Turnover	5	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.7402	15	3,431	0.034	171.5640	$127.00	5%	95%	75%	1.026	1
GroceChT4	Grocery	Chiller	Turnover	4	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.2187	15	8,223	1.728	947	$207.00	12%	95%	95%	6.895	1
InstiChE1	Institutional	Chiller	Early	1	Duct Sealing, down to 15%	Leakage of 29%	ton	$3.8998	15	2,436	0.005	24.3600	$95.00	1%	40%	$0.90	0.195	0
InstiChE2	Institutional	Chiller	Early	2	Duct Insulation, Add R8	No Insulation	ton	$5.1314	15	2,436	0.005	24.3600	$125.00	1%	50%	95%	0.148	0
InstiChE3	Institutional	Chiller	Early	3	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton	ton	$1.0263	15	2,436	0.024	121.8000	$125.00	5%	75%	75%	0.740	0
InstiChE4	Institutional	Chiller	Early	4	Energy Recovery Units	No Energy Recovery	ton	$0.9236	15	2,436	0.096	487.2	$450.00	20%	75%	75%	0.823	0
InstiChE5	Institutional	Chiller	Early	5	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.9356	7	2,436	0.077	390	$364.67	16%	75%	75%	0.348	0
InstiChE6	Institutional	Chiller	Early	6	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$0.82	15	2,436	0.05	245	$200.00	10%	15%	95%	0.930	0
InstiChE7	Institutional	Chiller	Early	7	Adding window shade film	No shade film	q ft window are	$7.0453	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.033	0
InstiChE8	Institutional	Chiller	Early	8	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.195	0
InstiChE9	Institutional	Chiller	Early	9	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$3.08	20	2,436	0.05	73	$225.00	3%	75%	95%	0.391	0
InstiChN1	Institutional	Chiller	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	sq ft	$1.02	20	2,436	0.05	85	$87.00	4%	15%	95%	1.132	1
InstiChN2	Institutional	Chiller	New	2	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.195	0
InstiChN3	Institutional	Chiller	New	3	Adding reflective roof treatment	Std color roof	sq ft roof area	$4.50	20	2,436	0.05	10	$45.00	0%	100%	95%	0.764	0
InstiChN4	Institutional	Chiller	New	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$5.10	20	2,436	0.05	25	$127.43	1%	45%	95%	0.370	0
InstiChN5	Institutional	Chiller	New	5	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.8673	15	2,436	0.76	294	$255.00	12%	95%	95%	2.134	1
InstiChN6	Institutional	Chiller	New	6	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.4795	15	2,436	1.944	756	$362.50	31%	95%	95%	3.859	1
InstiChN7	Institutional	Chiller	New	7	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.2485	15	5,838	1.728	672	$167.00	12%	95%	95%	7.446	1
InstiChN8	Institutional	Chiller	New	8	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.9442	15	2,436	0.024	121.8000	$115.00	5%	95%	75%	0.805	0
InstiChN9	Institutional	Chiller	New	9	Energy Recovery Units	No Energy Recovery	ton	$0.5131	15	2,436	0.096	487.2	$250.00	20%	95%	75%	1.481	1
InstiChN10	Institutional	Chiller	New	10	Duct Insulation, Add R8	No Insulation	ton	$5.1314	15	2,436	0.005	24.3600	$125.00	1%	100%	95%	0.148	0
InstiChT1	Institutional	Chiller	Turnover	1	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$1.0034	15	2,436	0.76	294	$295.00	12%	95%	95%	1.844	1
InstiChT2	Institutional	Chiller	Turnover	2	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.6118	15	2,436	1.944	756	$462.50	31%	95%	95%	3.025	1
InstiChT3	Institutional	Chiller	Turnover	3	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.9758	15	2,436	1.944	426	$416.00	18%	95%	95%	2.833	1
InstiChN11	Institutional	Chiller	New	11	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.9758	15	2,436	1.944	426	$416.00	18%	95%	95%	2.833	1
InstiChT5	Institutional	Chiller	Turnover	5	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$1.0427	15	2,436	0.024	121.8000	$127.00	5%	95%	75%	0.729	0
InstiChT4	Institutional	Chiller	Turnover	4	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.3080	15	5,838	1.728	672	$207.00	12%	95%	95%	6.008	1
LodgiChE1	Lodging	Chiller	Early	1	Duct Sealing, down to 15%	Leakage of 29%	ton	$3.2654	15	2,909	0.006	29.0928	$95.00	1%	40%	$0.90	0.233	0
LodgiChE2	Lodging	Chiller	Early	2	Duct Insulation, Add R8	No Insulation	ton	$4.2966	15	2,909	0.006	29.0928	$125.00	1%	50%	95%	0.177	0
LodgiChE3	Lodging	Chiller	Early	3	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton	ton	$0.8593	15	2,909	0.029	145.4640	$125.00	5%	75%	75%	0.884	0
LodgiChE4	Lodging	Chiller	Early	4	Energy Recovery Units	No Energy Recovery	ton	$0.7734	15	2,909	0.115	581.9	$450.00	20%	75%	75%	0.982	0
LodgiChE5	Lodging	Chiller	Early	5	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.7834	7	2,909	0.092	465	$364.67	16%	75%	75%	0.416	0
LodgiChE6	Lodging	Chiller	Early	6	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$0.82	15	2,909	0.05	245	$200.00	8%	15%	95%	0.930	0
LodgiChE7	Lodging	Chiller	Early	7	Adding window shade film	No shade film	q ft window are	$7.0453	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.033	0
LodgiChE8	Lodging	Chiller	Early	8	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.195	0
LodgiChE9	Lodging	Chiller	Early	9	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$2.58	20	2,909	0.05	87	$225.00	3%	75%	95%	0.445	0
LodgiChN1	Lodging	Chiller	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	sq ft	$0.85	20	2,909	0.05	102	$87.00	4%	15%	95%	1.294	1
LodgiChN2	Lodging	Chiller	New	2	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.195	0
LodgiChN3	Lodging	Chiller	New	3	Adding reflective roof treatment	Std color roof	sq ft roof area	$4.50	20	2,909	0.05	10	$45.00	0%	100%	95%	0.764	0
LodgiChN4	Lodging	Chiller	New	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$4.27	20	2,909	0.05	30	$127.43	1%	45%	95%	0.403	0
LodgiChN5	Lodging	Chiller	New	5	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.7262	15	2,909	0.76	351	$255.00	12%	95%	95%	2.283	1
LodgiChN6	Lodging	Chiller	New	6	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.4015	15	2,909	1.944	903	$362.50	31%	95%	95%	4.130	1
LodgiChN7	Lodging	Chiller	New	7	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.2081	15	6,972	1.728	803	$167.00	12%	95%	95%	7.970	1
LodgiChN8	Lodging	Chiller	New	8	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.7906	15	2,909	0.029	145.4640	$115.00	5%	95%	75%	0.961	0
LodgiChN9	Lodging	Chiller	New	9	Energy Recovery Units	No Energy Recovery	ton	$0.4297	15	2,909	0.115	581.9	$250.00	20%	95%	75%	1.768	1
LodgiChN10	Lodging	Chiller	New	10	Duct Insulation, Add R8	No Insulation	ton	$4.2966	15	2,909	0.006	29.0928	$125.00	1%	100%	95%	0.177	0
LodgiChT1	Lodging	Chiller	Turnover	1	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.8402	15	2,909	0.76	351	$295.00	12%	95%	95%	1.974	1
LodgiChT2	Lodging	Chiller	Turnover	2	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.5122	15	2,909	1.944	903	$462.50	31%	95%	95%	3.237	1
LodgiChT3	Lodging	Chiller	Turnover	3	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.8171	15	2,909	1.944	509	$416.00	18%	95%	95%	2.966	1
LodgiChN11	Lodging	Chiller	New	11	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.8171	15	2,909	1.944	509	$416.00	18%	95%	95%	2.966	1
LodgiChT5	Lodging	Chiller	Turnover	5	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.8731	15	2,909	0.029	145.4640	$127.00	5%	95%	75%	0.870	0
LodgiChT4	Lodging	Chiller	Turnover	4	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.2579	15	6,972	1.728	803	$207.00	12%	95%	95%	6.430	1
MiscChE1	Misc	Chiller	Early	1	Duct Sealing, down to 15%	Leakage of 29%	ton	$2.8158	15	3,374	0.007	33.7386	$95.00	1%	40%	$0.90	0.270	0
MiscChE2	Misc	Chiller	Early	2	Duct Insulation, Add R8	No Insulation	ton	$3.7050	15	3,374	0.007	33.7386	$125.00	1%	50%	95%	0.205	0
MiscChE3	Misc	Chiller	Early	3	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton	ton	$0.7410	15	3,374	0.033	168.6930	$125.00	5%	75%	75%	1.025	1
MiscChE4	Misc	Chiller	Early	4	Energy Recovery Units	No Energy Recovery	ton	$0.6669	15	3,374	0.133	674.8	$450.00	20%	75%	75%	1.139	1
MiscChE5	Misc	Chiller	Early	5	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.6755	7	3,374	0.107	540	$364.67	16%	75%	75%	0.482	0
MiscChE6	Misc	Chiller	Early	6	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$0.82	15	3,374	0.05	245	$200.00	7%	15%	95%	0.930	0
MiscChE7	Misc	Chiller	Early	7	Adding window shade film	No shade film	q ft window are	$7.0453	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.033	0
MiscChE8	Misc	Chiller	Early	8	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.195	0
MiscChE9	Misc	Chiller	Early	9	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$2.22	20	3,374	0.05	101	$225.00	3%	75%	95%	0.498	0

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	PJM Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
MiscChN1	Misc	Chiller	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	sq ft	$0.74	20	3,374	0.05	118	$87.00	4%	15%	95%	1.453	1
MiscChN2	Misc	Chiller	New	2	Adding window shade screen	No shade screen	sq ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.195	0
MiscChN3	Misc	Chiller	New	3	Adding reflective roof treatment	Std color roof	sq ft roof area	$4.50	20	3,374	0.05	10	$45.00	0%	100%	95%	0.764	0
MiscChN4	Misc	Chiller	New	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.70	20	3,374	0.05	34	$127.43	1%	45%	95%	0.433	0
MiscChN5	Misc	Chiller	New	5	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.6262	15	3,374	0.76	407	$255.00	12%	95%	95%	2.431	1
MiscChN6	Misc	Chiller	New	6	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.3462	15	3,374	1.944	1,047	$362.50	31%	95%	95%	4.397	1
MiscChN7	Misc	Chiller	New	7	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1794	15	8,086	1.728	931	$167.00	12%	95%	95%	8.483	1
MiscChN8	Misc	Chiller	New	8	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.6817	15	3,374	0.033	168.6930	$115.00	5%	95%	75%	1.115	1
MiscChN9	Misc	Chiller	New	9	Energy Recovery Units	No Energy Recovery	ton	$0.3705	15	3,374	0.133	674.8	$250.00	20%	95%	75%	2.051	1
MiscChN10	Misc	Chiller	New	10	Duct Insulation, Add R8	No Insulation	ton	$3.7050	15	3,374	0.007	33.7386	$125.00	1%	100%	95%	0.205	0
MiscChT1	Misc	Chiller	Turnover	1	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.7245	15	3,374	0.76	407	$295.00	12%	95%	95%	2.101	1
MiscChT2	Misc	Chiller	Turnover	2	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.4417	15	3,374	1.944	1,047	$462.50	31%	95%	95%	3.446	1
MiscChT3	Misc	Chiller	Turnover	3	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.7046	15	3,374	1.944	590	$416.00	18%	95%	95%	3.097	1
MiscChN11	Misc	Chiller	New	11	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.7046	15	3,374	1.944	590	$416.00	18%	95%	95%	3.097	1
MiscChT5	Misc	Chiller	Turnover	5	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.7528	15	3,374	0.033	168.6930	$127.00	5%	95%	75%	1.009	1
MiscChT4	Misc	Chiller	Turnover	4	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.2224	15	8,086	1.728	931	$207.00	12%	95%	95%	6.844	1
OfficChE1	Office	Chiller	Early	1	Duct Sealing, down to 15%	Leakage of 29%	ton	$2.9103	15	3,264	0.006	32.6424	$95.00	1%	40%	$0.90	0.261	0
OfficChE2	Office	Chiller	Early	2	Duct Insulation, Add R8	No Insulation	ton	$3.8294	15	3,264	0.006	32.6424	$125.00	1%	50%	95%	0.198	0
OfficChE3	Office	Chiller	Early	3	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton	ton	$0.7659	15	3,264	0.032	163.2120	$125.00	5%	75%	75%	0.992	0
OfficChE4	Office	Chiller	Early	4	Energy Recovery Units	No Energy Recovery	ton	$0.6893	15	3,264	0.129	652.8	$450.00	20%	75%	75%	1.102	1
OfficChE5	Office	Chiller	Early	5	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.6982	7	3,264	0.103	522	$364.67	16%	75%	75%	0.466	0
OfficChE6	Office	Chiller	Early	6	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$0.82	15	3,264	0.05	245	$200.00	8%	15%	95%	0.930	0
OfficChE7	Office	Chiller	Early	7	Adding window shade film	No shade film	sq ft window are	$7.0453	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.033	0
OfficChE8	Office	Chiller	Early	8	Adding window shade screen	No shade screen	sq ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.195	0
OfficChE9	Office	Chiller	Early	9	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$2.30	20	3,264	0.05	98	$225.00	3%	75%	95%	0.485	0
OfficChN1	Office	Chiller	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	sq ft	$0.76	20	3,264	0.05	114	$87.00	4%	15%	95%	1.415	1
OfficChN2	Office	Chiller	New	2	Adding window shade screen	No shade screen	sq ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.195	0
OfficChN3	Office	Chiller	New	3	Adding reflective roof treatment	Std color roof	sq ft roof area	$4.50	20	3,264	0.05	10	$45.00	0%	100%	95%	0.764	0
OfficChN4	Office	Chiller	New	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.80	20	3,264	0.05	34	$127.43	1%	45%	95%	0.427	0
OfficChN5	Office	Chiller	New	5	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.6473	15	3,264	0.76	394	$255.00	12%	95%	95%	2.396	1
OfficChN6	Office	Chiller	New	6	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.3578	15	3,264	1.944	1,013	$362.50	31%	95%	95%	4.334	1
OfficChN7	Office	Chiller	New	7	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1855	15	7,823	1.728	900	$167.00	12%	95%	95%	8.362	1
OfficChN8	Office	Chiller	New	8	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.7046	15	3,264	0.032	163.2120	$115.00	5%	95%	75%	1.078	1
OfficChN9	Office	Chiller	New	9	Energy Recovery Units	No Energy Recovery	ton	$0.3829	15	3,264	0.129	652.8	$250.00	20%	95%	75%	1.984	1
OfficChN10	Office	Chiller	New	10	Duct Insulation, Add R8	No Insulation	ton	$3.8294	15	3,264	0.006	32.6424	$125.00	1%	100%	95%	0.198	0
OfficChT1	Office	Chiller	Turnover	1	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.7488	15	3,264	0.76	394	$295.00	12%	95%	95%	2.071	1
OfficChT2	Office	Chiller	Turnover	2	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.4565	15	3,264	1.944	1,013	$462.50	31%	95%	95%	3.397	1
OfficChT3	Office	Chiller	Turnover	3	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.7282	15	3,264	1.944	571	$416.00	18%	95%	95%	3.066	1
OfficChN11	Office	Chiller	New	11	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.7282	15	3,264	1.944	571	$416.00	18%	95%	95%	3.066	1
OfficChT5	Office	Chiller	Turnover	5	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.7781	15	3,264	0.032	163.2120	$127.00	5%	95%	75%	0.976	0
OfficChT4	Office	Chiller	Turnover	4	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.2299	15	7,823	1.728	900	$207.00	12%	95%	95%	6.746	1
RestaChE1	Restaurant	Chiller	Early	1	Duct Sealing, down to 15%	Leakage of 29%	ton	$2.7136	15	3,501	0.007	35.0088	$95.00	1%	40%	$0.90	0.280	0
RestaChE2	Restaurant	Chiller	Early	2	Duct Insulation, Add R8	No Insulation	ton	$3.5705	15	3,501	0.007	35.0088	$125.00	1%	50%	95%	0.213	0
RestaChE3	Restaurant	Chiller	Early	3	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton	ton	$0.7141	15	3,501	0.035	175.0440	$125.00	5%	75%	75%	1.064	1
RestaChE4	Restaurant	Chiller	Early	4	Energy Recovery Units	No Energy Recovery	ton	$0.6427	15	3,501	0.138	700.2	$450.00	20%	75%	75%	1.182	1
RestaChE5	Restaurant	Chiller	Early	5	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.6510	7	3,501	0.111	560	$364.67	16%	75%	75%	0.500	0
RestaChE6	Restaurant	Chiller	Early	6	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$0.82	15	3,501	0.05	245	$200.00	7%	15%	95%	0.930	0
RestaChE7	Restaurant	Chiller	Early	7	Adding window shade film	No shade film	sq ft window are	$7.0453	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.033	0
RestaChE8	Restaurant	Chiller	Early	8	Adding window shade screen	No shade screen	sq ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.195	0
RestaChE9	Restaurant	Chiller	Early	9	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$2.14	20	3,501	0.05	105	$225.00	3%	75%	95%	0.512	0
RestaChN1	Restaurant	Chiller	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	sq ft	$0.71	20	3,501	0.05	123	$87.00	4%	15%	95%	1.496	1
RestaChN2	Restaurant	Chiller	New	2	Adding window shade screen	No shade screen	sq ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.195	0
RestaChN3	Restaurant	Chiller	New	3	Adding reflective roof treatment	Std color roof	sq ft roof area	$4.50	20	3,501	0.05	10	$45.00	0%	100%	95%	0.764	0
RestaChN4	Restaurant	Chiller	New	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.55	20	3,501	0.05	36	$127.43	1%	45%	95%	0.443	0
RestaChN5	Restaurant	Chiller	New	5	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.6035	15	3,501	0.76	423	$255.00	12%	95%	95%	2.471	1
RestaChN6	Restaurant	Chiller	New	6	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.3336	15	3,501	1.944	1,086	$362.50	31%	95%	95%	4.469	1
RestaChN7	Restaurant	Chiller	New	7	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1729	15	8,390	1.728	966	$167.00	12%	95%	95%	8.624	1
RestaChN8	Restaurant	Chiller	New	8	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.6570	15	3,501	0.035	175.0440	$115.00	5%	95%	75%	1.157	1
RestaChN9	Restaurant	Chiller	New	9	Energy Recovery Units	No Energy Recovery	ton	$0.3571	15	3,501	0.138	700.2	$250.00	20%	95%	75%	2.128	1
RestaChN10	Restaurant	Chiller	New	10	Duct Insulation, Add R8	No Insulation	ton	$3.5705	15	3,501	0.007	35.0088	$125.00	1%	100%	95%	0.213	0
RestaChT1	Restaurant	Chiller	Turnover	1	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.6982	15	3,501	0.76	423	$295.00	12%	95%	95%	2.136	1
RestaChT2	Restaurant	Chiller	Turnover	2	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.4257	15	3,501	1.944	1,086	$462.50	31%	95%	95%	3.503	1
RestaChT3	Restaurant	Chiller	Turnover	3	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.6790	15	3,501	1.944	613	$416.00	18%	95%	95%	3.132	1
RestaChN11	Restaurant	Chiller	New	11	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.6790	15	3,501	1.944	613	$416.00	18%	95%	95%	3.132	1
RestaChT5	Restaurant	Chiller	Turnover	5	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.7255	15	3,501	0.035	175.0440	$127.00	5%	95%	75%	1.047	1
RestaChT4	Restaurant	Chiller	Turnover	4	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.2143	15	8,390	1.728	966	$207.00	12%	95%	95%	6.957	1
RetaiChE1	Retail	Chiller	Early	1	Duct Sealing, down to 15%	Leakage of 29%	ton	$2.7686	15	3,431	0.007	34.3128	$95.00	1%	40%	$0.90	0.274	0
RetaiChE2	Retail	Chiller	Early	2	Duct Insulation, Add R8	No Insulation	ton	$3.6430	15	3,431	0.007	34.3128	$125.00	1%	50%	95%	0.209	0
RetaiChE3	Retail	Chiller	Early	3	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton	ton	$0.7286	15	3,431	0.034	171.5640	$125.00	5%	75%	75%	1.043	1
RetaiChE4	Retail	Chiller	Early	4	Energy Recovery Units	No Energy Recovery	ton	$0.6557	15	3,431	0.135	686.3	$450.00	20%	75%	75%	1.159	1
RetaiChE5	Retail	Chiller	Early	5	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.6642	7	3,431	0.108	549	$364.67	16%	75%	75%	0.490	0
RetaiChE6	Retail	Chiller	Early	6	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$0.82	15	3,431	0.05	245	$200.00	7%	15%	95%	0.930	0
RetaiChE7	Retail	Chiller	Early	7	Adding window shade film	No shade film	sq ft window are	$7.0453	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.033	0
RetaiChE8	Retail	Chiller	Early	8	Adding window shade screen	No shade screen	sq ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.195	0
RetaiChE9	Retail	Chiller	Early	9	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$2.19	20	3,431	0.05	103	$225.00	3%	75%	95%	0.504	0
RetaiChN1	Retail	Chiller	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	sq ft	$0.72	20	3,431	0.05	120	$87.00	4%	15%	95%	1.472	1
RetaiChN2	Retail	Chiller	New	2	Adding window shade screen	No shade screen	sq ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.195	0
RetaiChN3	Retail	Chiller	New	3	Adding reflective roof treatment	Std color roof	sq ft roof area	$4.50	20	3,431	0.05	10	$45.00	0%	100%	95%	0.764	0
RetaiChN4	Retail	Chiller	New	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$3.62	20	3,431	0.05	35	$127.43	1%	45%	95%	0.438	0
RetaiChN5	Retail	Chiller	New	5	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.6158	15	3,431	0.76	414	$255.00	12%	95%	95%	2.449	1
RetaiChN6	Retail	Chiller	New	6	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.3404	15	3,431	1.944	1,065	$362.50	31%	95%	95%	4.429	1
RetaiChN7	Retail	Chiller	New	7	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.1764	15	8,223	1.728	947	$167.00	12%	95%	95%	8.547	1
RetaiChN8	Retail	Chiller	New	8	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.6703	15	3,431	0.034	171.5640	$115.00	5%	95%	75%	1.134	1
RetaiChN9	Retail	Chiller	New	9	Energy Recovery Units	No Energy Recovery	ton	$0.3643	15	3,431	0.135	686.3	$250.00	20%	95%	75%	2.086	1
RetaiChN10	Retail	Chiller	New	10	Duct Insulation, Add R8	No Insulation	ton	$3.6430	15	3,431	0.007	34.3128	$125.00	1%	100%	95%	0.209	0
RetaiChT1	Retail	Chiller	Turnover	1	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.7124	15	3,431	0.76	414	$295.00	12%	95%	95%	2.117	1
RetaiChT2	Retail	Chiller	Turnover	2	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.4343	15	3,431	1.944	1,065	$462.50	31%	95%	95%	3.472	1
RetaiChT3	Retail	Chiller	Turnover	3	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.6928	15	3,431	1.944	600	$416.00	18%	95%	95%	3.113	1
RetaiChN11	Retail	Chiller	New	11	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.6928	15	3,431	1.944	600	$416.00	18%	95%	95%	3.113	1
RetaiChT5	Retail	Chiller	Turnover	5	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.7402	15	3,431	0.034	171.5640	$127.00	5%	95%	75%	1.026	1
RetaiChT4	Retail	Chiller	Turnover	4	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.2187	15	8,223	1.728	947	$207.00	12%	95%	95%	6.895	1
WarehChE1	Warehouse	Chiller	Early	1	Duct Sealing, down to 15%	Leakage of 29%	ton	$3.5731	15	2,659	0.005	26.5872	$95.00	1%	40%	$0.90	0.213	0
WarehChE2	Warehouse	Chiller	Early	2	Duct Insulation, Add R8	No Insulation	ton	$4.7015	15	2,659	0.005	26.5872	$125.00	1%	50%	95%	0.162	0
WarehChE3	Warehouse	Chiller	Early	3	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton	ton	$0.9403	15	2,659	0.026	132.9360	$125.00	5%	75%	75%	0.808	0

Measure Lookup	New Commerical Segment	New End Use	Vintage	Measure #	Measure Description	Baseline Description	Unit	Total Cost ($/kWh Saved)	Measure Life	Baseline kWh	PJM Summer Summer Peak KW Savings (meter)	Change case kWh Savings (meter)	Customer Cost ($)	Savings %	Applicability	Percent Incomplete	TRC Test	Economic Flag
WarehChE4	Warehouse	Chiller	Early	4	Energy Recovery Units	No Energy Recovery	ton	$0.8463	15	2,659	0.105	531.7	$450.00	20%	75%	75%	0.898	0
WarehChE5	Warehouse	Chiller	Early	5	Re-commissioning	Current Controls not working properly, setpoints not optimized,	ton	$0.8572	7	2,659	0.084	425	$364.67	16%	75%	75%	0.380	0
WarehChE6	Warehouse	Chiller	Early	6	Wall Insulation Going to R-19	Existing insulation level = R2.375	sq ft	$0.82	15	2,659	0.05	245	$200.00	9%	15%	95%	0.930	0
WarehChE7	Warehouse	Chiller	Early	7	Adding window shade film	No shade film	q ft window are	$7.0453	5	7.58	0.000	0.38	$2.67	5%	50%	95%	0.033	0
WarehChE8	Warehouse	Chiller	Early	8	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.195	0
WarehChE9	Warehouse	Chiller	Early	9	Roof Insulation Going to R-30	Existing insulation level = R16	sq ft	$2.82	20	2,659	0.05	80	$225.00	3%	75%	95%	0.417	0
WarehChN1	Warehouse	Chiller	New	1	Wall Insulation Going to R-19	New Construction Standard Practice = R13.5	sq ft	$0.93	20	2,659	0.05	93	$87.00	4%	15%	95%	1.208	1
WarehChN2	Warehouse	Chiller	New	2	Adding window shade screen	No shade screen	q ft window are	$3.9001	15	1.54	0.000	0.38	$1.50	25%	70%	95%	0.195	0
WarehChN3	Warehouse	Chiller	New	3	Adding reflective roof treatment	Std color roof	sq ft roof area	$4.50	20	2,659	0.05	10	$45.00	0%	100%	95%	0.764	0
WarehChN4	Warehouse	Chiller	New	4	Green Roof (New construction or roof replacement)	Std Roof	sq ft	$4.67	20	2,659	0.05	27	$127.43	1%	45%	95%	0.385	0
WarehChN5	Warehouse	Chiller	New	5	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.7947	15	2,659	0.76	321	$255.00	12%	95%	95%	2.204	1
WarehChN6	Warehouse	Chiller	New	6	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.4393	15	2,659	1.944	825	$362.50	31%	95%	95%	3.987	1
WarehChN7	Warehouse	Chiller	New	7	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.2277	15	6,372	1.728	733	$167.00	12%	95%	95%	7.693	1
WarehChN8	Warehouse	Chiller	New	8	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.8651	15	2,659	0.026	132.9360	$115.00	5%	95%	75%	0.878	0
WarehChN9	Warehouse	Chiller	New	9	Energy Recovery Units	No Energy Recovery	ton	$0.4702	15	2,659	0.105	531.7	$250.00	20%	95%	75%	1.616	1
WarehChN10	Warehouse	Chiller	New	10	Duct Insulation, Add R8	No Insulation	ton	$4.7015	15	2,659	0.005	26.5872	$125.00	1%	100%	95%	0.162	0
WarehChT1	Warehouse	Chiller	Turnover	1	High Efficiency Chiller, 0.51 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.9193	15	2,659	0.76	321	$295.00	12%	95%	95%	1.905	1
WarehChT2	Warehouse	Chiller	Turnover	2	VFD Centrifugal Chiller, .4 kW/ton	Std Chiller, 0.58 kW/Ton	ton	$0.5605	15	2,659	1.944	825	$462.50	31%	95%	95%	3.125	1
WarehChT3	Warehouse	Chiller	Turnover	3	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.8941	15	2,659	1.944	465	$416.00	18%	95%	95%	2.895	1
WarehChN11	Warehouse	Chiller	New	11	Water-side Economizer	Std Chiller, 0.58 kW/Ton	ton	$0.8941	15	2,659	1.944	465	$416.00	18%	95%	95%	2.895	1
WarehChT5	Warehouse	Chiller	Turnover	5	EMS - Chiller	Base Centrifugal Chiller, 0.58 kW/ton, 500 tons	ton	$0.9553	15	2,659	0.026	132.9360	$127.00	5%	95%	75%	0.795	0
WarehChT4	Warehouse	Chiller	Turnover	4	Air-Cooled Chillers (1.23 kW/ton)	Std Chiller, 1.39 kW/Ton	ton	$0.2822	15	6,372	1.728	733	$207.00	12%	95%	95%	6.206	1
WarehHeT2	Warehouse	Heating	Turnover	2	7 day, two stage setback thermostat	Manual Thermostat - hp	ton	$0.08	10	4,601	0.010	690	$55.00	15%	100%	45%	5.304	1
GroceHeT2	Grocery	Heating	Turnover	2	7 day, two stage setback thermostat	Manual Thermostat - hp	ton	$0.07	10	5,354	0.012	803	$55.00	15%	100%	45%	6.172	1
HealtHeT2	Healthcare	Heating	Turnover	2	7 day, two stage setback thermostat	Manual Thermostat - hp	ton	$0.30	10	1,243	0.003	186	$55.00	15%	100%	45%	1.432	1
InstiHeT2	Institutional	Heating	Turnover	2	7 day, two stage setback thermostat	Manual Thermostat - hp	ton	$0.10	10	3,809	0.008	571	$55.00	15%	100%	45%	4.391	1
MiscHeT2	Misc	Heating	Turnover	2	7 day, two stage setback thermostat	Manual Thermostat - hp	ton	$0.08	10	4,434	0.010	665	$55.00	15%	100%	45%	5.112	1
OfficHeT2	Office	Heating	Turnover	2	7 day, two stage setback thermostat	Manual Thermostat - hp	ton	$0.11	10	3,422	0.008	513	$55.00	15%	100%	45%	3.945	1
RestaHeT2	Restaurant	Heating	Turnover	2	7 day, two stage setback thermostat	Manual Thermostat - hp	ton	$0.07	10	5,210	0.012	782	$55.00	15%	100%	45%	6.007	1
RetaiHeT2	Retail	Heating	Turnover	2	7 day, two stage setback thermostat	Manual Thermostat - hp	ton	$0.07	10	5,354	0.012	803	$55.00	15%	100%	45%	6.172	1
LodgiHeT2	Lodging	Heating	Turnover	2	7 day, two stage setback thermostat	Manual Thermostat - hp	ton	$0.06	10	6,484	0.014	973	$55.00	15%	100%	45%	7.475	1
OfficMoE1	Office	Motors	Early	1	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.151	1
OfficMoT23	Office	Motors	Turnover	23	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.151	1
RestaMoE1	Restaurant	Motors	Early	1	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.151	1
InstiMoT9	Institutional	Motors	Turnover	9	VFD on Condenser Water Pump (Average 50HP)	Constant power control	Motor	$0.6348	15	84274	12.062	20478.6	$13,000.00	24%	90.0%	80%	1.494	1
RestaMoT23	Restaurant	Motors	Turnover	23	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.151	1
RetaiMoE1	Retail	Motors	Early	1	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.151	1
RetaiMoT23	Retail	Motors	Turnover	23	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.151	1
WarehMoE1	Warehouse	Motors	Early	1	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.151	1
WarehMoT23	Warehouse	Motors	Turnover	23	Motor Retrocommissiong		Motor	$0.27	7	56148	1.156	8,984	$2,450.00	16%	95%	75%	1.151	1

Measure Lookup	Industry	New Segment	New End-Use	Vintage	Measure Numbe	Measure	Applicability	Savings	Total Cost ($/kW Saved)	Equipment Cost	Labor Cost	Life	TRC Test	Economic Flag	NPV
CheCooE1	Chemical_Mfg	Mfg. Chemicals	Process Cooling	Existing	1	Clean Room: Change Filter Strategy	10.0%	40.0%	$ 0.016	$ 0.012	$ 0.005	1	1.0398655	1	17.2065387
CheCooE2	Chemical_Mfg	Mfg. Chemicals	Process Cooling	Existing	2	Clean Room: Chiller Optimize	28.3%	14.8%	$ 0.248	$ 0.124	$ 0.124	10	1.50397278	1	60.8677417
CheCooT3	Chemical_Mfg	Mfg. Chemicals	Process Cooling	Turnover	3	Clean Room: Clean Room HVAC	30.0%	9.0%	$ 0.204	$ 0.144	$ 0.061	15	2.74579901	1	56.6509962
CheCooT4	Chemical_Mfg	Mfg. Chemicals	Process Cooling	Turnover	4	Equipment: Chillers	8.0%	17.9%	$ 0.330	$ 0.249	$ 0.081	15	1.77300493	1	112.5552
CheCooE5	Chemical_Mfg	Mfg. Chemicals	Process Cooling	Existing	5	Improved Controls	33.8%	6.0%	$ 1.118	$ 0.673	$ 0.445	15	0.55089367	0	37.7673308
CheCooT6	Chemical_Mfg	Mfg. Chemicals	Process Cooling	Turnover	6	Adjustable speed drive on compressors	34.0%	11.7%	$ 0.201	$ 0.121	$ 0.080	10	1.81421624	1	47.9081625
CheCooE7	Chemical_Mfg	Mfg. Chemicals	Process Cooling	Existing	7	Optimization of operating parameters	35.0%	13.1%	$ 0.101	$ 0.039	$ 0.063	3	0.99416877	0	16.3738382
CheCooT8	Chemical_Mfg	Mfg. Chemicals	Process Cooling	Turnover	8	Cold Storage Retrofit	25.6%	20.7%	$ 0.250	$ 0.157	$ 0.093	10	1.49239295	1	84.9562095
CheCooE9	Chemical_Mfg	Mfg. Chemicals	Process Cooling	Existing	9	Cold Storage Tuneup	10.0%	15.6%	$ 0.112	$ 0.047	$ 0.065	3	0.91703236	0	19.5704567
CheHeaE1	Chemical_Mfg	Mfg. Chemicals	Process Heating	Existing	1	Improved Controls	37.9%	30.4%	$ 0.245	$ 0.147	$ 0.098	10	1.52182065	1	124.963312
CheHeaE2	Chemical_Mfg	Mfg. Chemicals	Process Heating	Existing	2	Process Heat O&M	63.4%	28.6%	$ 0.257	$ 0.225	$ 0.032	2	0.29874933	0	24.119835
CheHT1	Chemical_Mfg	Mfg. Chemicals	HVAC	Turnover	1	Equipment Upgrades	62.9%	16.4%	$ 0.296	$ 0.252	$ 0.044	15	2.00465036	1	105.4428
CheHE2	Chemical_Mfg	Mfg. Chemicals	HVAC	Existing	2	Improved Controls	32.7%	20.9%	$ 0.102	$ 0.077	$ 0.025	10	3.30049318	1	87.8214701
CheHE3	Chemical_Mfg	Mfg. Chemicals	HVAC	Existing	3	Recommissioning	72.6%	16.0%	$ 0.271	$ -	$ 0.271	7	1.01501862	1	48.0106299
CheLT1	Chemical_Mfg	Mfg. Chemicals	Lighting	Turnover	1	Efficient Lighting Equipment	30.4%	19.9%	$ 0.150	$ 0.103	$ 0.047	10	2.39141648	1	83.4951944
CheLT2	Chemical_Mfg	Mfg. Chemicals	Lighting	Turnover	2	HighBay Lighting Equipment	55.1%	34.1%	$ 0.376	$ 0.295	$ 0.081	10	1.04523497	1	142.926475
CheLE3	Chemical_Mfg	Mfg. Chemicals	Lighting	Existing	3	Lighting Controls	42.3%	30.0%	$ 0.212	$ 0.157	$ 0.055	10	1.7675556	1	125.741767
CheMT1		Mfg. Chemicals	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	42.8%	0.9%	$ 0.372	$ 0.372	$ -	15	1.60579242	1	5.80264394
CheMT10	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	10	Material Handling	52.3%	5.0%	$ 0.585	$ 0.483	$ 0.102	10	0.68454605	0	20.911631
CheMT11	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	11	Air Compressor Demand Reduction	28.0%	15.9%	$ 0.107	$ 0.081	$ 0.026	10	3.17235803	1	66.5345737
CheME6	Chemical_Mfg	Mfg. Chemicals	Motors	Existing	6	Material Handling VFD	52.3%	18.7%	$ 0.381	$ 0.229	$ 0.152	10	1.02815669	1	78.1743215
CheME13	Chemical_Mfg	Mfg. Chemicals	Motors	Existing	13	Motor Management Plan	51.6%	2.9%	$ 0.134	$ 0.054	$ 0.080	10	2.61969552	1	12.0520448
CheMT15	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	15	Motors: Rewind 101-200 HP	25.4%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.9063465	1	3.20428734
CheMT16	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	16	Motors: Rewind 201-500 HP	35.6%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.9063465	1	3.20428734
CheMT17	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	17	Motors: Rewind 20-50 HP	4.6%	0.9%	$ 0.431	$ 0.356	$ 0.075	15	1.39807205	1	5.66205638
CheMT18	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	18	Motors: Rewind 500+ HP	55.2%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.9063465	1	3.20428734
CheMT19	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	19	Motors: Rewind 51-100 HP	15.2%	0.6%	$ 0.388	$ 0.321	$ 0.067	15	1.54367486	1	3.68815634
CheMT2		Mfg. Chemicals	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	66.3%	0.4%	$ 0.799	$ 0.799	$ -	15	0.77398569	0	2.8386344
CheMT20	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	20	Properly Sized Fans	14.7%	10.4%	$ 0.202	$ 0.122	$ 0.080	10	1.83858362	1	43.5012555
CheME21	Chemical_Mfg	Mfg. Chemicals	Motors	Existing	21	Air Compressor Optimization	38.3%	30.1%	$ 0.151	$ 0.058	$ 0.093	10	2.36642504	1	125.608436
CheME22	Chemical_Mfg	Mfg. Chemicals	Motors	Existing	22	Pump Energy Management	31.4%	7.5%	$ 0.134	$ 0.054	$ 0.080	10	2.61969552	1	31.3075814
CheMT23	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	23	Pump Equipment Upgrade	34.0%	20.0%	$ 0.156	$ 0.129	$ 0.027	10	2.30075953	1	83.4868838
CheME24	Chemical_Mfg	Mfg. Chemicals	Motors	Existing	24	Pump System Optimization	15.6%	12.1%	$ 0.391	$ 0.196	$ 0.195	12	1.22319621	1	61.6248795
CheMT25	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	25	Switch from Belt drive to Direct Drive	10.4%	7.5%	$ 0.268	$ 0.221	$ 0.046	12	1.74020285	1	38.2052828
CheMT26	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	26	Synchronous Belts	20.9%	1.1%	$ 0.268	$ 0.221	$ 0.046	10	1.42602118	1	4.67233403
CheMT27	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	27	Efficient Centrifugal Fan	10.3%	20.0%	$ 0.228	$ 0.188	$ 0.040	10	1.65294795	1	83.4868838
CheMT28		Mfg. Chemicals	Motors	Turnover	28	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	74.4%	0.91%	$ 2.085	$ 2.085	$ -	15	0.30222341	0	5.78174445
CheMT29		Mfg. Chemicals	Motors	Turnover	29	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	55.8%	0.39%	$ 0.436	$ 0.436	$ -	15	1.38322304	1	2.48826021
CheME3	Chemical_Mfg	Mfg. Chemicals	Motors	Existing	3	Fan System Optimization	28.9%	7.7%	$ 0.311	$ 0.156	$ 0.155	10	1.24268169	1	32.0961096
CheMT30		Mfg. Chemicals	Motors	Turnover	30	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	74.4%	0.7%	$ 1.249	$ 1.249	$ -	15	0.50040778	0	4.73540418
CheMT4	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	4	High efficiency Compressor motors	80.8%	1.1%	$ 0.430	$ 0.355	$ 0.075	15	1.40201004	1	6.99754171
CheMT5	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	5	High Efficiency Motors	74.4%	1.5%	$ 0.545	$ 0.450	$ 0.095	15	1.11900432	1	9.46187645
CheOT1	Chemical_Mfg	Mfg. Chemicals	Other	Turnover	1	Bldg Improvements	35.0%	20.4%	$ 0.248	$ 0.162	$ 0.087	15	2.3140587	1	128.957217
CheOE2	Chemical_Mfg	Mfg. Chemicals	Other	Existing	2	Energy Project Management	27.0%	29.0%	$ 0.163	$ 0.134	$ 0.029	11	2.43781682	1	133.091611
CheOE3	Chemical_Mfg	Mfg. Chemicals	Other	Existing	3	Integrated Plant Energy Management	22.0%	50.0%	$ 0.261	$ 0.215	$ 0.047	11	1.60207469	1	229.468294
CheOE4	Chemical_Mfg	Mfg. Chemicals	Other	Existing	4	Plant Energy Management	27.0%	12.0%	$ 0.139	$ 0.114	$ 0.025	10	2.51884564	1	49.5108549
CheOT5	Chemical_Mfg	Mfg. Chemicals	Other	Turnover	5	Transformers	20.0%	1.6%	$ 0.415	$ 0.399	$ 0.016	15	1.4359709	1	10.1140747
ComCooE1	lectronic_Equipment_M	Mfg. Computers	Process Cooling	Existing	1	Clean Room: Change Filter Strategy	10.0%	40.0%	$ 0.016	$ 0.012	$ 0.005	1	1.0398655	1	17.2065387
ComCooE10	lectronic_Equipment_M	Mfg. Computers	Process Cooling	Existing	10	Cold Storage Tuneup	10.0%	15.6%	$ 0.112	$ 0.047	$ 0.065	3	0.91703236	0	19.5704567
ComCooE2	lectronic_Equipment_M	Mfg. Computers	Process Cooling	Existing	2	Clean Room: Chiller Optimize	28.3%	14.8%	$ 0.248	$ 0.124	$ 0.124	10	1.50397278	1	60.8677417
ComCooT3	lectronic_Equipment_M	Mfg. Computers	Process Cooling	Turnover	3	Clean Room: Clean Room HVAC	30.0%	9.0%	$ 0.204	$ 0.144	$ 0.061	15	2.74579901	1	56.6509962
ComCooT4	lectronic_Equipment_M	Mfg. Computers	Process Cooling	Turnover	4	Elec Chip Fab: Solidstate Chiller	20.0%	90.0%	$ 0.634	$ 0.562	$ 0.072	10	0.62318484	0	369.571476
ComCooT5	lectronic_Equipment_M	Mfg. Computers	Process Cooling	Turnover	5	Equipment: Chillers	8.0%	17.9%	$ 0.330	$ 0.249	$ 0.081	15	1.77300493	1	112.5552
ComCooE6	lectronic_Equipment_M	Mfg. Computers	Process Cooling	Existing	6	Improved Controls	33.8%	6.0%	$ 1.118	$ 0.673	$ 0.445	15	0.55089367	0	37.7673308
ComCooT7	lectronic_Equipment_M	Mfg. Computers	Process Cooling	Turnover	7	Adjustable speed drive on compressors	34.0%	11.7%	$ 0.201	$ 0.121	$ 0.080	10	1.81421624	1	47.9081625
ComCooE8	lectronic_Equipment_M	Mfg. Computers	Process Cooling	Existing	8	Optimization of operating parameters	35.0%	13.1%	$ 0.101	$ 0.039	$ 0.063	3	0.99416877	0	16.3738382
ComCooT9	lectronic_Equipment_M	Mfg. Computers	Process Cooling	Turnover	9	Cold Storage Retrofit	25.6%	20.7%	$ 0.250	$ 0.157	$ 0.093	10	1.49239295	1	84.9562095
ComHeaE1	lectronic_Equipment_M	Mfg. Computers	Process Heating	Existing	1	Improved Controls	41.5%	30.4%	$ 0.245	$ 0.147	$ 0.098	10	1.52182065	1	124.963312
ComHeaE2	lectronic_Equipment_M	Mfg. Computers	Process Heating	Existing	2	Process Heat O&M	69.5%	28.6%	$ 0.257	$ 0.225	$ 0.032	2	0.29874933	0	24.119835
ComHT1	lectronic_Equipment_M	Mfg. Computers	HVAC	Turnover	1	Equipment Upgrades	74.9%	16.4%	$ 0.296	$ 0.252	$ 0.044	15	2.00465036	1	105.4428
ComHE2	lectronic_Equipment_M	Mfg. Computers	HVAC	Existing	2	Improved Controls	38.9%	20.9%	$ 0.102	$ 0.077	$ 0.025	10	3.30049318	1	87.8214701
ComHE3	lectronic_Equipment_M	Mfg. Computers	HVAC	Existing	3	Recommissioning	86.4%	16.0%	$ 0.271	$ -	$ 0.271	7	1.01501862	1	48.0106299
ComLT1	lectronic_Equipment_M	Mfg. Computers	Lighting	Turnover	1	Efficient Lighting Equipment	30.4%	19.9%	$ 0.150	$ 0.103	$ 0.047	10	2.39141648	1	83.4951944
ComLT2	lectronic_Equipment_M	Mfg. Computers	Lighting	Turnover	2	HighBay Lighting Equipment	55.1%	34.1%	$ 0.376	$ 0.295	$ 0.081	10	1.04523497	1	142.926475
ComLE3	lectronic_Equipment_M	Mfg. Computers	Lighting	Existing	3	Lighting Controls	42.3%	30.0%	$ 0.212	$ 0.157	$ 0.055	10	1.7675556	1	125.741767
ComMT1		Mfg. Computers	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	42.8%	0.9%	$ 0.372	$ 0.372	$ -	15	1.60579242	1	5.80264394
ComMT10	lectronic_Equipment_M	Mfg. Computers	Motors	Turnover	10	Material Handling	52.9%	5.0%	$ 0.585	$ 0.483	$ 0.102	10	0.68454605	0	20.911631
ComMT11	lectronic_Equipment_M	Mfg. Computers	Motors	Turnover	11	Air Compressor Demand Reduction	25.5%	15.9%	$ 0.107	$ 0.081	$ 0.026	10	3.17235803	1	66.5345737
ComME6	lectronic_Equipment_M	Mfg. Computers	Motors	Existing	6	Material Handling VFD	52.9%	18.7%	$ 0.381	$ 0.229	$ 0.152	10	1.02815669	1	78.1743215
ComME13	lectronic_Equipment_M	Mfg. Computers	Motors	Existing	13	Motor Management Plan	49.2%	2.9%	$ 0.134	$ 0.054	$ 0.080	10	2.61969552	1	12.0520448
ComMT15	lectronic_Equipment_M	Mfg. Computers	Motors	Turnover	15	Motors: Rewind 101-200 HP	25.4%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.9063465	1	3.20428734
ComMT16	lectronic_Equipment_M	Mfg. Computers	Motors	Turnover	16	Motors: Rewind 201-500 HP	35.6%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.9063465	1	3.20428734

Measure Lookup	Industry	New Segment	New End-Use	Vintage	Measure Numbe	Measure	Applicability	Savings	Total Cost ($/kW Saved)	Equipment Cost	Labor Cost	Life	TRC Test	Economic Flag	NPV
ComMT17	lectronic_Equipment_M	Mfg. Computers	Motors	Turnover	17	Motors: Rewind 20-50 HP	4.7%	0.9%	$ 0.431	$ 0.356	$ 0.075	15	1.39807205	1	5.66205638
ComMT18	lectronic_Equipment_M	Mfg. Computers	Motors	Turnover	18	Motors: Rewind 500+ HP	55.2%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.9063465	1	3.20428734
ComMT19	lectronic_Equipment_M	Mfg. Computers	Motors	Turnover	19	Motors: Rewind 51-100 HP	15.2%	0.6%	$ 0.388	$ 0.321	$ 0.067	15	1.54367486	1	3.68815634
ComMT2		Mfg. Computers	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	66.3%	0.4%	$ 0.799	$ 0.799	$ -	15	0.77398569	0	2.8386344
ComMT20	lectronic_Equipment_M	Mfg. Computers	Motors	Turnover	20	Properly Sized Fans	14.8%	10.4%	$ 0.202	$ 0.122	$ 0.080	10	1.83858362	1	43.5012555
ComME21	lectronic_Equipment_M	Mfg. Computers	Motors	Existing	21	Air Compressor Optimization	35.0%	30.1%	$ 0.151	$ 0.058	$ 0.093	10	2.36642504	1	125.608436
ComME22	lectronic_Equipment_M	Mfg. Computers	Motors	Existing	22	Pump Energy Management	30.1%	7.5%	$ 0.134	$ 0.054	$ 0.080	10	2.61969552	1	31.3075814
ComMT23	lectronic_Equipment_M	Mfg. Computers	Motors	Turnover	23	Pump Equipment Upgrade	32.6%	20.0%	$ 0.156	$ 0.129	$ 0.027	10	2.30075953	1	83.4868838
ComME24	lectronic_Equipment_M	Mfg. Computers	Motors	Existing	24	Pump System Optimization	15.0%	12.1%	$ 0.391	$ 0.196	$ 0.195	12	1.22319621	1	61.6248795
ComMT25	lectronic_Equipment_M	Mfg. Computers	Motors	Turnover	25	Switch from Belt drive to Direct Drive	10.5%	7.5%	$ 0.268	$ 0.221	$ 0.046	12	1.74020285	1	38.2052828
ComMT26	lectronic_Equipment_M	Mfg. Computers	Motors	Turnover	26	Synchronous Belts	20.8%	1.1%	$ 0.268	$ 0.221	$ 0.046	10	1.42602118	1	4.67233403
ComMT27	lectronic_Equipment_M	Mfg. Computers	Motors	Turnover	27	Efficient Centrifugal Fan	10.3%	20.0%	$ 0.228	$ 0.188	$ 0.040	10	1.65294795	1	83.4868838
ComMT28		Mfg. Computers	Motors	Turnover	28	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	74.4%	0.91%	$ 2.085	$ 2.085	$ -	15	0.30222341	0	5.78174445
ComMT29		Mfg. Computers	Motors	Turnover	29	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	55.8%	0.39%	$ 0.436	$ 0.436	$ -	15	1.38322304	1	2.48826021
ComME3	lectronic_Equipment_M	Mfg. Computers	Motors	Existing	3	Fan System Optimization	29.1%	7.7%	$ 0.311	$ 0.156	$ 0.155	10	1.24268169	1	32.0961096
ComMT30		Mfg. Computers	Motors	Turnover	30	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	74.4%	0.7%	$ 1.249	$ 1.249	$ -	15	0.50040778	0	4.73540418
ComMT4	lectronic_Equipment_M	Mfg. Computers	Motors	Turnover	4	High efficiency Compressor motors	73.8%	1.1%	$ 0.430	$ 0.355	$ 0.075	15	1.40201004	1	6.99754171
ComMT5	lectronic_Equipment_M	Mfg. Computers	Motors	Turnover	5	High Efficiency Motors	73.8%	1.5%	$ 0.545	$ 0.450	$ 0.095	15	1.11900432	1	9.46187645
ComOT1	lectronic_Equipment_M	Mfg. Computers	Other	Turnover	1	Bldg Improvements	35.0%	20.4%	$ 0.248	$ 0.162	$ 0.087	15	2.3140587	1	128.957217
ComOT2	lectronic_Equipment_M	Mfg. Computers	Other	Turnover	2	Elec Chip Fab: Eliminate Exhaust	80.1%	5.0%	$ 0.233	$ 0.206	$ 0.026	10	1.6007229	1	20.6295229
ComOT3	lectronic_Equipment_M	Mfg. Computers	Other	Turnover	3	Elec Chip Fab: Exhaust Injector	35.0%	100.0%	$ 0.561	$ 0.498	$ 0.064	10	0.70363517	0	412.590458
ComCooT11	lectronic_Equipment_M	Mfg. Computers	Process Cooling	Turnover	11	Elec Chip Fab: Reduce Gas Pressure	5.0%	10.0%	$ 0.063	$ -	$ 0.063	10	4.69139508	1	41.0634973
ComOE5	lectronic_Equipment_M	Mfg. Computers	Other	Existing	5	Energy Project Management	27.0%	29.0%	$ 0.163	$ 0.134	$ 0.029	11	2.43781682	1	133.091611
ComOE6	lectronic_Equipment_M	Mfg. Computers	Other	Existing	6	Integrated Plant Energy Management	22.0%	50.0%	$ 0.261	$ 0.215	$ 0.047	11	1.60207469	1	229.468294
ComOE7	lectronic_Equipment_M	Mfg. Computers	Other	Existing	7	Plant Energy Management	27.0%	12.0%	$ 0.139	$ 0.114	$ 0.025	10	2.51884564	1	49.5108549
ComOT8	lectronic_Equipment_M	Mfg. Computers	Other	Turnover	8	Transformers	20.0%	1.6%	$ 0.415	$ 0.399	$ 0.016	15	1.4359709	1	10.1140747
FooCooT1	Food_Mfg	Mfg. Food	Process Cooling	Turnover	1	Equipment: Chillers	8.3%	17.9%	$ 0.330	$ 0.249	$ 0.081	15	1.77300493	1	112.5552
FooCooE2	Food_Mfg	Mfg. Food	Process Cooling	Existing	2	Improved Controls	35.2%	6.0%	$ 1.118	$ 0.673	$ 0.445	15	0.55089367	0	37.7673308
FooCooT3	Food_Mfg	Mfg. Food	Process Cooling	Turnover	3	Adjustable speed drive on compressors	34.0%	11.7%	$ 0.201	$ 0.121	$ 0.080	10	1.81421624	1	47.9081625
FooCooT4	Food_Mfg	Mfg. Food	Process Cooling	Turnover	4	Food: Cooling and Storage	15.0%	15.4%	$ 0.258	$ 0.162	$ 0.096	10	1.45089123	1	63.1666436
FooCooT5	Food_Mfg	Mfg. Food	Process Cooling	Turnover	5	Food: Refrig Storage Tuneup	7.5%	14.4%	$ 0.056	$ 0.023	$ 0.033	3	1.55049861	1	18.003519
FooCooT6	Food_Mfg	Mfg. Food	Process Cooling	Turnover	6	Fruit Storage Refer Retrofit	60.7%	38.2%	$ 0.214	$ 0.135	$ 0.079	10	1.71519072	1	156.972479
FooCooT7	Food_Mfg	Mfg. Food	Process Cooling	Turnover	7	Fruit Storage Tuneup	10.0%	15.6%	$ 0.056	$ 0.023	$ 0.033	3	1.55049861	1	19.5704567
FooCooE8	Food_Mfg	Mfg. Food	Process Cooling	Existing	8	Optimization of operating parameters	35.0%	13.1%	$ 0.101	$ 0.039	$ 0.063	3	0.99416877	0	16.3738382
FooHeaE1	Food_Mfg	Mfg. Food	Process Heating	Existing	1	Improved Controls	38.8%	30.4%	$ 0.245	$ 0.147	$ 0.098	10	1.52182065	1	124.963312
FooHeaE2	Food_Mfg	Mfg. Food	Process Heating	Existing	2	Process Heat O&M	65.0%	28.6%	$ 0.257	$ 0.225	$ 0.032	2	0.29874933	0	24.119835
FooHT1	Food_Mfg	Mfg. Food	HVAC	Turnover	1	Equipment Upgrades	62.9%	16.4%	$ 0.296	$ 0.252	$ 0.044	15	2.00465036	1	105.4428
FooHE2	Food_Mfg	Mfg. Food	HVAC	Existing	2	Improved Controls	32.7%	20.9%	$ 0.102	$ 0.077	$ 0.025	10	3.30049318	1	87.8214701
FooHE3	Food_Mfg	Mfg. Food	HVAC	Existing	3	Recommissioning	72.6%	16.0%	$ 0.271	$ -	$ 0.271	7	1.01501862	1	48.0106299
FooLT1	Food_Mfg	Mfg. Food	Lighting	Turnover	1	Efficient Lighting Equipment	30.4%	19.9%	$ 0.150	$ 0.103	$ 0.047	10	2.39141648	1	83.4951944
FooLT2	Food_Mfg	Mfg. Food	Lighting	Turnover	2	HighBay Lighting Equipment	55.1%	34.1%	$ 0.376	$ 0.295	$ 0.081	10	1.04523497	1	142.926475
FooLE3	Food_Mfg	Mfg. Food	Lighting	Existing	3	Lighting Controls	42.3%	30.0%	$ 0.212	$ 0.157	$ 0.055	10	1.7675556	1	125.741767
FooME1	Food_Mfg	Mfg. Food	Motors	Existing	1	Fan System Optimization	29.6%	7.7%	$ 0.311	$ 0.156	$ 0.155	10	1.24268169	1	32.0961096
FooME4	Food_Mfg	Mfg. Food	Motors	Existing	4	Material Handling VFD	51.6%	18.7%	$ 0.381	$ 0.229	$ 0.152	10	1.02815669	1	78.1743215
FooME11	Food_Mfg	Mfg. Food	Motors	Existing	11	Motor Management Plan	48.9%	2.9%	$ 0.134	$ 0.054	$ 0.080	10	2.61969552	1	12.0520448
FooMT13	Food_Mfg	Mfg. Food	Motors	Turnover	13	Motors: Rewind 101-200 HP	25.4%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.9063465	1	3.20428734
FooMT14	Food_Mfg	Mfg. Food	Motors	Turnover	14	Motors: Rewind 201-500 HP	35.6%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.9063465	1	3.20428734
FooMT15	Food_Mfg	Mfg. Food	Motors	Turnover	15	Motors: Rewind 20-50 HP	4.6%	0.9%	$ 0.431	$ 0.356	$ 0.075	15	1.39807205	1	5.66205638
FooMT16	Food_Mfg	Mfg. Food	Motors	Turnover	16	Motors: Rewind 500+ HP	55.2%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.9063465	1	3.20428734
FooMT17	Food_Mfg	Mfg. Food	Motors	Turnover	17	Motors: Rewind 51-100 HP	15.2%	0.6%	$ 0.388	$ 0.321	$ 0.067	15	1.54367486	1	3.68815634
FooME18	Food_Mfg	Mfg. Food	Motors	Existing	18	Air Compressor Optimization	35.0%	30.1%	$ 0.151	$ 0.058	$ 0.093	10	2.36642504	1	125.608436
FooMT19	Food_Mfg	Mfg. Food	Motors	Turnover	19	Properly Sized Fans	15.0%	10.4%	$ 0.202	$ 0.122	$ 0.080	10	1.83858362	1	43.5012555
FooMT2	Food_Mfg	Mfg. Food	Motors	Turnover	2	High efficiency Compressor motors	73.8%	1.1%	$ 0.430	$ 0.355	$ 0.075	15	1.40201004	1	6.99754171
FooME20	Food_Mfg	Mfg. Food	Motors	Existing	20	Pump Energy Management	30.5%	7.5%	$ 0.134	$ 0.054	$ 0.080	10	2.61969552	1	31.3075814
FooMT21	Food_Mfg	Mfg. Food	Motors	Turnover	21	Pump Equipment Upgrade	33.0%	20.0%	$ 0.156	$ 0.129	$ 0.027	10	2.30075953	1	83.4868838
FooME22	Food_Mfg	Mfg. Food	Motors	Existing	22	Pump System Optimization	15.2%	12.1%	$ 0.391	$ 0.196	$ 0.195	12	1.22319621	1	61.6248795
FooMT23	Food_Mfg	Mfg. Food	Motors	Turnover	23	Switch from Belt drive to Direct Drive	10.2%	7.5%	$ 0.268	$ 0.221	$ 0.046	12	1.74020285	1	38.2052828
FooMT24	Food_Mfg	Mfg. Food	Motors	Turnover	24	Synchronous Belts	20.8%	1.1%	$ 0.268	$ 0.221	$ 0.046	10	1.42602118	1	4.67233403
FooMT25	Food_Mfg	Mfg. Food	Motors	Turnover	25	Efficient Centrifugal Fan	10.5%	20.0%	$ 0.228	$ 0.188	$ 0.040	10	1.65294795	1	83.4868838
FooMT26		Mfg. Food	Motors	Turnover	26	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	74.4%	0.91%	$ 2.085	$ 2.085	$ -	15	0.30222341	0	5.78174445
FooMT27		Mfg. Food	Motors	Turnover	27	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	55.8%	0.39%	$ 0.436	$ 0.436	$ -	15	1.38322304	1	2.48826021
FooMT28		Mfg. Food	Motors	Turnover	28	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	74.4%	0.7%	$ 1.249	$ 1.249	$ -	15	0.50040778	0	4.73540418
FooMT29		Mfg. Food	Motors	Turnover	29	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	42.8%	0.9%	$ 0.372	$ 0.372	$ -	15	1.60579242	1	5.80264394
FooMT3	Food_Mfg	Mfg. Food	Motors	Turnover	3	High Efficiency Motors	74.0%	1.5%	$ 0.545	$ 0.450	$ 0.095	15	1.11900432	1	9.46187645
FooMT30		Mfg. Food	Motors	Turnover	30	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	66.3%	0.4%	$ 0.799	$ 0.799	$ -	15	0.77398569	0	2.8386344
FooMT7	Food_Mfg	Mfg. Food	Motors	Turnover	7	Air Compressor Demand Reduction	25.5%	15.9%	$ 0.107	$ 0.081	$ 0.026	10	3.17235803	1	66.5345737
FooMT9	Food_Mfg	Mfg. Food	Motors	Turnover	9	Material Handling	51.6%	5.0%	$ 0.585	$ 0.483	$ 0.102	10	0.68454605	0	20.911631
FooOT1	Food_Mfg	Mfg. Food	Other	Turnover	1	Bldg Improvements	35.0%	20.4%	$ 0.248	$ 0.162	$ 0.087	15	2.3140587	1	128.957217
FooOE2	Food_Mfg	Mfg. Food	Other	Existing	2	Energy Project Management	27.0%	29.0%	$ 0.163	$ 0.134	$ 0.029	11	2.43781682	1	133.091611
FooOE3	Food_Mfg	Mfg. Food	Other	Existing	3	Integrated Plant Energy Management	22.0%	50.0%	$ 0.261	$ 0.215	$ 0.047	11	1.60207469	1	229.468294
FooOE4	Food_Mfg	Mfg. Food	Other	Existing	4	Plant Energy Management	27.0%	12.0%	$ 0.139	$ 0.114	$ 0.025	10	2.51884564	1	49.5108549
FooOT5	Food_Mfg	Mfg. Food	Other	Turnover	5	Transformers	20.0%	1.6%	$ 0.415	$ 0.399	$ 0.016	15	1.4359709	1	10.1140747

Measure Lookup	Industry	New Segment	New End-Use	Vintage	Measure Numbe	Measure	Applicability	Savings	Total Cost ($/kW Saved)	Equipment Cost	Labor Cost	Life	TRC Test	Economic Flag	NPV
MetCooT1	Primary_Metal_Mfg	Mfg. Metals	Process Cooling	Turnover	1	Equipment: Chillers	8.0%	17.9%	$ 0.330	$ 0.249	$ 0.081	15	1.77300493	1	112.5552
MetCooe2	Primary_Metal_Mfg	Mfg. Metals	Process Cooling	existing	2	Improved Controls	33.8%	6.0%	$ 1.118	$ 0.673	$ 0.445	15	0.55089367	0	37.7673308
MetCooE3	Primary_Metal_Mfg	Mfg. Metals	Process Cooling	Existing	3	Optimization of operating parameters	35.0%	13.1%	$ 0.101	$ 0.039	$ 0.063	3	0.99416877	0	16.3738382
MetHeaE1	Primary_Metal_Mfg	Mfg. Metals	Process Heating	Existing	1	Improved Controls	40.1%	30.4%	$ 0.245	$ 0.147	$ 0.098	10	1.52182065	1	124.963312
MetHeaT2	Primary_Metal_Mfg	Mfg. Metals	Process Heating	Turnover	2	Metal: New Arc Furnace	10.3%	45.0%	$ 0.115	$ 0.102	$ 0.013	10	2.93109307	1	184.785738
MetHeaE3	Primary_Metal_Mfg	Mfg. Metals	Process Heating	Existing	3	Process Heat O&M	67.2%	28.6%	$ 0.257	$ 0.225	$ 0.032	2	0.29874933	0	24.119835
MetHT1	Primary_Metal_Mfg	Mfg. Metals	HVAC	Turnover	1	Equipment Upgrades	64.7%	16.4%	$ 0.296	$ 0.252	$ 0.044	15	2.00465036	1	105.4428
MetHE2	Primary_Metal_Mfg	Mfg. Metals	HVAC	Existing	2	Improved Controls	33.6%	20.9%	$ 0.102	$ 0.077	$ 0.025	10	3.30049318	1	87.8214701
MetHE3	Primary_Metal_Mfg	Mfg. Metals	HVAC	Existing	3	Recommissioning	74.7%	16.0%	$ 0.271	$ -	$ 0.271	7	1.01501862	1	48.0106299
MetLT1	Primary_Metal_Mfg	Mfg. Metals	Lighting	Turnover	1	Efficient Lighting Equipment	30.4%	19.9%	$ 0.150	$ 0.103	$ 0.047	10	2.39141648	1	83.4951944
MetLT2	Primary_Metal_Mfg	Mfg. Metals	Lighting	Turnover	2	HighBay Lighting Equipment	55.1%	34.1%	$ 0.376	$ 0.295	$ 0.081	10	1.04523497	1	142.926475
MetLE3	Primary_Metal_Mfg	Mfg. Metals	Lighting	Existing	3	Lighting Controls	42.3%	30.0%	$ 0.212	$ 0.157	$ 0.055	10	1.7675556	1	125.741767
MetMT1	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	1	Air Compressor Demand Reduction	25.3%	15.9%	$ 0.107	$ 0.081	$ 0.026	10	3.17235803	1	66.5345737
MetME10	Primary_Metal_Mfg	Mfg. Metals	Motors	Existing	10	Motor Management Plan	49.1%	2.9%	$ 0.134	$ 0.054	$ 0.080	10	2.61969552	1	12.0520448
MetME12	Primary_Metal_Mfg	Mfg. Metals	Motors	Existing	12	Air Compressor Optimization	34.7%	30.1%	$ 0.151	$ 0.058	$ 0.093	10	2.36642504	1	125.608436
MetMT13	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	13	Motors: Rewind 101-200 HP	25.4%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.9063465	1	3.20428734
MetMT14	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	14	Motors: Rewind 201-500 HP	35.6%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.9063465	1	3.20428734
MetMT15	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	15	Motors: Rewind 20-50 HP	4.6%	0.9%	$ 0.431	$ 0.356	$ 0.075	15	1.39807205	1	5.66205638
MetMT16	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	16	Motors: Rewind 500+ HP	55.2%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.9063465	1	3.20428734
MetMT17	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	17	Motors: Rewind 51-100 HP	15.2%	0.6%	$ 0.388	$ 0.321	$ 0.067	15	1.54367486	1	3.68815634
MetMT18	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	18	Properly Sized Fans	14.7%	10.4%	$ 0.202	$ 0.122	$ 0.080	10	1.83858362	1	43.5012555
MetME19	Primary_Metal_Mfg	Mfg. Metals	Motors	Existing	19	Pump Energy Management	29.8%	7.5%	$ 0.134	$ 0.054	$ 0.080	10	2.61969552	1	31.3075814
MetMT2	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	2	High efficiency Compressor motors	73.1%	1.1%	$ 0.430	$ 0.355	$ 0.075	15	1.40201004	1	6.99754171
MetMT20	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	20	Pump Equipment Upgrade	32.3%	20.0%	$ 0.156	$ 0.129	$ 0.027	10	2.30075953	1	83.4868838
MetME21	Primary_Metal_Mfg	Mfg. Metals	Motors	Existing	21	Pump System Optimization	14.9%	12.1%	$ 0.391	$ 0.196	$ 0.195	12	1.22319621	1	61.6248795
MetMT22	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	22	Efficient Centrifugal Fan	10.3%	20.0%	$ 0.228	$ 0.188	$ 0.040	10	1.65294795	1	83.4868838
MetMT23	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	23	Switch from Belt drive to Direct Drive	10.4%	7.5%	$ 0.268	$ 0.221	$ 0.046	12	1.74020285	1	38.2052828
MetMT24	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	24	Synchronous Belts	20.6%	1.1%	$ 0.268	$ 0.221	$ 0.046	10	1.42602118	1	4.67233403
MetMT25		Mfg. Metals	Motors	Turnover	25	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	74.4%	0.91%	$ 2.085	$ 2.085	$ -	15	0.30222341	0	5.78174445
MetMT26		Mfg. Metals	Motors	Turnover	26	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	55.8%	0.39%	$ 0.436	$ 0.436	$ -	15	1.38322304	1	2.48826021
MetMT27		Mfg. Metals	Motors	Turnover	27	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	74.4%	0.7%	$ 1.249	$ 1.249	$ -	15	0.50040778	0	4.73540418
MetMT28		Mfg. Metals	Motors	Turnover	28	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	42.8%	0.9%	$ 0.372	$ 0.372	$ -	15	1.60579242	1	5.80264394
MetMT29		Mfg. Metals	Motors	Turnover	29	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	66.3%	0.4%	$ 0.799	$ 0.799	$ -	15	0.77398569	0	2.8386344
MetMT3	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	3	High Efficiency Motors	73.3%	1.5%	$ 0.545	$ 0.450	$ 0.095	15	1.11900432	1	9.46187645
MetME30	Primary_Metal_Mfg	Mfg. Metals	Motors	Existing	30	Fan System Optimization	29.0%	7.7%	$ 0.311	$ 0.156	$ 0.155	10	1.24268169	1	32.0961096
MetMT8	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	8	Material Handling	52.4%	5.0%	$ 0.585	$ 0.483	$ 0.102	10	0.68454605	0	20.911631
MetME4	Primary_Metal_Mfg	Mfg. Metals	Motors	Existing	4	Material Handling VFD	52.4%	18.7%	$ 0.381	$ 0.229	$ 0.152	10	1.02815669	1	78.1743215
MetOT1	Primary_Metal_Mfg	Mfg. Metals	Other	Turnover	1	Bldg Improvements	35.0%	20.4%	$ 0.248	$ 0.162	$ 0.087	15	2.3140587	1	128.957217
MetOE2	Primary_Metal_Mfg	Mfg. Metals	Other	Existing	2	Energy Project Management	27.0%	29.0%	$ 0.163	$ 0.134	$ 0.029	11	2.43781682	1	133.091611
MetOE3	Primary_Metal_Mfg	Mfg. Metals	Other	Existing	3	Integrated Plant Energy Management	22.0%	50.0%	$ 0.261	$ 0.215	$ 0.047	11	1.60207469	1	229.468294
MetOE4	Primary_Metal_Mfg	Mfg. Metals	Other	Existing	4	Plant Energy Management	27.0%	12.0%	$ 0.139	$ 0.114	$ 0.025	10	2.51884564	1	49.5108549
MetOT5	Primary_Metal_Mfg	Mfg. Metals	Other	Turnover	5	Transformers	20.0%	1.6%	$ 0.415	$ 0.399	$ 0.016	15	1.4359709	1	10.1140747
OthCooT1	Miscellaneous_Mfg	Mfg. Other	Process Cooling	Turnover	1	Equipment: Chillers	8.0%	17.9%	$ 0.330	$ 0.249	$ 0.081	15	1.77300493	1	112.5552
OthCooE2	Miscellaneous_Mfg	Mfg. Other	Process Cooling	Existing	2	Improved Controls	33.8%	6.0%	$ 1.118	$ 0.673	$ 0.445	15	0.55089367	0	37.7673308
OthCooT3	one_Clay_Glass_Produc	Mfg. Other	Process Cooling	Turnover	3	Adjustable speed drive on compressors	34.0%	11.7%	$ 0.201	$ 0.121	$ 0.080	10	1.81421624	1	47.9081625
OthCooE4	Miscellaneous_Mfg	Mfg. Other	Process Cooling	Existing	4	Optimization of operating parameters	35.0%	13.1%	$ 0.101	$ 0.039	$ 0.063	3	0.99416877	0	16.3738382
OthCooT5	Miscellaneous_Mfg	Mfg. Other	Process Cooling	Turnover	5	Cold Storage Retrofit	25.6%	20.7%	$ 0.250	$ 0.157	$ 0.093	10	1.49239295	1	84.9562095
OthCooE6	Miscellaneous_Mfg	Mfg. Other	Process Cooling	Existing	6	Cold Storage Tuneup	10.0%	15.6%	$ 0.112	$ 0.047	$ 0.065	3	0.91703236	0	19.5704567
OthHeae1	Miscellaneous_Mfg	Mfg. Other	Process Heating	existing	1	Improved Controls	41.7%	30.4%	$ 0.245	$ 0.147	$ 0.098	10	1.52182065	1	124.963312
OthHeae2	Miscellaneous_Mfg	Mfg. Other	Process Heating	existing	2	Process Heat O&M	69.8%	28.6%	$ 0.257	$ 0.225	$ 0.032	2	0.29874933	0	24.119835
OthHT1	Miscellaneous_Mfg	Mfg. Other	HVAC	Turnover	1	Equipment Upgrades	64.4%	16.4%	$ 0.296	$ 0.252	$ 0.044	15	2.00465036	1	105.4428
OthHE2	Miscellaneous_Mfg	Mfg. Other	HVAC	Existing	2	Improved Controls	33.4%	20.9%	$ 0.102	$ 0.077	$ 0.025	10	3.30049318	1	87.8214701
OthHE3	Miscellaneous_Mfg	Mfg. Other	HVAC	Existing	3	Recommissioning	74.3%	16.0%	$ 0.271	$ -	$ 0.271	7	1.01501862	1	48.0106299
OthLT1	Miscellaneous_Mfg	Mfg. Other	Lighting	Turnover	1	Efficient Lighting Equipment	30.4%	19.9%	$ 0.150	$ 0.103	$ 0.047	10	2.39141648	1	83.4951944
OthLT2	Miscellaneous_Mfg	Mfg. Other	Lighting	Turnover	2	HighBay Lighting Equipment	55.1%	34.1%	$ 0.376	$ 0.295	$ 0.081	10	1.04523497	1	142.926475
OthLE3	Miscellaneous_Mfg	Mfg. Other	Lighting	Existing	3	Lighting Controls	42.3%	30.0%	$ 0.212	$ 0.157	$ 0.055	10	1.7675556	1	125.741767
OthMT1		Mfg. Other	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	74.4%	0.7%	$ 1.249	$ 1.249	$ -	15	0.50040778	0	4.73540418
OthMT11	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	11	Air Compressor Demand Reduction	26.0%	15.9%	$ 0.107	$ 0.081	$ 0.026	10	3.17235803	1	66.5345737
OthMT12	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	12	Material Handling	52.9%	5.0%	$ 0.585	$ 0.483	$ 0.102	10	0.68454605	0	20.911631
OthME13	Miscellaneous_Mfg	Mfg. Other	Motors	Existing	13	Material Handling VFD	52.9%	18.7%	$ 0.381	$ 0.229	$ 0.152	10	1.02815669	1	78.1743215
OthME14	Miscellaneous_Mfg	Mfg. Other	Motors	Existing	14	Motor Management Plan	50.0%	2.9%	$ 0.134	$ 0.054	$ 0.080	10	2.61969552	1	12.0520448
OthMT16	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	16	Motors: Rewind 101-200 HP	25.4%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.9063465	1	3.20428734
OthMT17	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	17	Motors: Rewind 201-500 HP	35.6%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.9063465	1	3.20428734
OthMT18	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	18	Motors: Rewind 20-50 HP	4.7%	0.9%	$ 0.431	$ 0.356	$ 0.075	15	1.39807205	1	5.66205638
OthMT19	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	19	Motors: Rewind 500+ HP	55.2%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.9063465	1	3.20428734
OthMT2		Mfg. Other	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	42.8%	0.9%	$ 0.372	$ 0.372	$ -	15	1.60579242	1	5.80264394
OthMT20	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	20	Motors: Rewind 51-100 HP	15.2%	0.6%	$ 0.388	$ 0.321	$ 0.067	15	1.54367486	1	3.68815634
OthMT21	one_Clay_Glass_Produc	Mfg. Other	Motors	Turnover	21	Air Compressor Equipment	17.0%	8.8%	$ 0.157	$ 0.130	$ 0.027	10	2.29094977	1	36.6067622
OthMT22	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	22	Properly Sized Fans	15.3%	10.4%	$ 0.202	$ 0.122	$ 0.080	10	1.83858362	1	43.5012555
OthME23	Miscellaneous_Mfg	Mfg. Other	Motors	Existing	23	Pump Energy Management	31.2%	7.5%	$ 0.134	$ 0.054	$ 0.080	10	2.61969552	1	31.3075814
OthMT24	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	24	Pump Equipment Upgrade	33.8%	20.0%	$ 0.156	$ 0.129	$ 0.027	10	2.30075953	1	83.4868838
OthME25	Miscellaneous_Mfg	Mfg. Other	Motors	Existing	25	Pump System Optimization	15.5%	12.1%	$ 0.391	$ 0.196	$ 0.195	12	1.22319621	1	61.6248795

Measure Lookup	Industry	New Segment	New End-Use	Vintage	Measure Numbe	Measure	Applicability	Savings	Total Cost ($/kW Saved)	Equipment Cost	Labor Cost	Life	TRC Test	Economic Flag	NPV
OthMT26	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	26	Switch from Belt drive to Direct Drive	10.5%	7.5%	$ 0.268	$ 0.221	$ 0.046	12	1.74020285	1	38.2052828
OthMT27	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	27	Synchronous Belts	21.4%	1.1%	$ 0.268	$ 0.221	$ 0.046	10	1.42602118	1	4.67233403
OthME28	Miscellaneous_Mfg	Mfg. Other	Motors	Existing	28	Air Compressor Optimization	35.6%	30.1%	$ 0.151	$ 0.058	$ 0.093	10	2.36642504	1	125.608436
OthMT29	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	29	Efficient Centrifugal Fan	10.7%	20.0%	$ 0.228	$ 0.188	$ 0.040	10	1.65294795	1	83.4868838
OthMT3		Mfg. Other	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	66.3%	0.4%	$ 0.799	$ 0.799	$ -	15	0.77398569	0	2.8386344
OthMT30		Mfg. Other	Motors	Turnover	30	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	74.4%	0.91%	$ 2.085	$ 2.085	$ -	15	0.30222341	0	5.78174445
OthMT31		Mfg. Other	Motors	Turnover	31	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	55.8%	0.39%	$ 0.436	$ 0.436	$ -	15	1.38322304	1	2.48826021
OthME4	Miscellaneous_Mfg	Mfg. Other	Motors	Existing	4	Fan System Optimization	30.1%	7.7%	$ 0.311	$ 0.156	$ 0.155	10	1.24268169	1	32.0961096
OthMT5	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	5	High efficiency Compressor motors	75.1%	1.1%	$ 0.430	$ 0.355	$ 0.075	15	1.40201004	1	6.99754171
OthMT6	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	6	High Efficiency Motors	75.6%	1.5%	$ 0.545	$ 0.450	$ 0.095	15	1.11900432	1	9.46187645
OthOT1	Miscellaneous_Mfg	Mfg. Other	Other	Turnover	1	Bldg Improvements	35.0%	20.4%	$ 0.248	$ 0.162	$ 0.087	15	2.3140587	1	128.957217
OthOE2	Miscellaneous_Mfg	Mfg. Other	Other	Existing	2	Energy Project Management	27.0%	29.0%	$ 0.163	$ 0.134	$ 0.029	11	2.43781682	1	133.091611
OthOE3	Miscellaneous_Mfg	Mfg. Other	Other	Existing	3	Integrated Plant Energy Management	22.0%	50.0%	$ 0.261	$ 0.215	$ 0.047	11	1.60207469	1	229.468294
OthOE4	Miscellaneous_Mfg	Mfg. Other	Other	Existing	4	Plant Energy Management	27.0%	12.0%	$ 0.139	$ 0.114	$ 0.025	10	2.51884564	1	49.5108549
OthOT5	Miscellaneous_Mfg	Mfg. Other	Other	Turnover	5	Transformers	20.0%	1.6%	$ 0.415	$ 0.399	$ 0.016	15	1.4359709	1	10.1140747
PapCooT1	Paper_Mfg	Mfg. Paper	Process Cooling	Turnover	1	Equipment: Chillers	8.0%	17.9%	$ 0.330	$ 0.249	$ 0.081	15	1.77300493	1	112.5552
PapCooE2	Paper_Mfg	Mfg. Paper	Process Cooling	Existing	2	Improved Controls	33.8%	6.0%	$ 1.118	$ 0.673	$ 0.445	15	0.55089367	0	37.7673308
PapCooT3	Paper_Mfg	Mfg. Paper	Process Cooling	Turnover	3	Adjustable speed drive on compressors	34.0%	11.7%	$ 0.201	$ 0.121	$ 0.080	10	1.81421624	1	47.9081625
PapCooE4	Paper_Mfg	Mfg. Paper	Process Cooling	Existing	4	Optimization of operating parameters	35.0%	13.1%	$ 0.101	$ 0.039	$ 0.063	3	0.99416877	0	16.3738382
PapHeaE1	Paper_Mfg	Mfg. Paper	Process Heating	Existing	1	Improved Controls	38.1%	30.4%	$ 0.245	$ 0.147	$ 0.098	10	1.52182065	1	124.963312
PapHeaE2	Paper_Mfg	Mfg. Paper	Process Heating	Existing	2	Process Heat O&M	63.9%	28.6%	$ 0.257	$ 0.225	$ 0.032	2	0.29874933	0	24.119835
PapHT1	Paper_Mfg	Mfg. Paper	HVAC	Turnover	1	Equipment Upgrades	62.4%	16.4%	$ 0.296	$ 0.252	$ 0.044	15	2.00465036	1	105.4428
PapHE2	Paper_Mfg	Mfg. Paper	HVAC	Existing	2	Improved Controls	32.4%	20.9%	$ 0.102	$ 0.077	$ 0.025	10	3.30049318	1	87.8214701
PapHE3	Paper_Mfg	Mfg. Paper	HVAC	Existing	3	Recommissioning	72.0%	16.0%	$ 0.271	$ -	$ 0.271	7	1.01501862	1	48.0106299
PapLT1	Paper_Mfg	Mfg. Paper	Lighting	Turnover	1	Efficient Lighting Equipment	30.4%	19.9%	$ 0.150	$ 0.103	$ 0.047	10	2.39141648	1	83.4951944
PapLT2	Paper_Mfg	Mfg. Paper	Lighting	Turnover	2	HighBay Lighting Equipment	55.1%	34.1%	$ 0.376	$ 0.295	$ 0.081	10	1.04523497	1	142.926475
PapLE3	Paper_Mfg	Mfg. Paper	Lighting	Existing	3	Lighting Controls	42.3%	30.0%	$ 0.212	$ 0.157	$ 0.055	10	1.7675556	1	125.741767
PapME1	Paper_Mfg	Mfg. Paper	Motors	Existing	1	Fan System Optimization	30.2%	7.7%	$ 0.311	$ 0.156	$ 0.155	10	1.24268169	1	32.0961096
PapME10	Paper_Mfg	Mfg. Paper	Motors	Existing	10	Motor Management Plan	50.1%	2.9%	$ 0.134	$ 0.054	$ 0.080	10	2.61969552	1	12.0520448
PapMT11	Paper_Mfg	Mfg. Paper	Motors	Turnover	11	Air Compressor Demand Reduction	25.8%	15.9%	$ 0.107	$ 0.081	$ 0.026	10	3.17235803	1	66.5345737
PapMT13	Paper_Mfg	Mfg. Paper	Motors	Turnover	13	Motors: Rewind 101-200 HP	25.4%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.9063465	1	3.20428734
PapMT14	Paper_Mfg	Mfg. Paper	Motors	Turnover	14	Motors: Rewind 201-500 HP	35.6%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.9063465	1	3.20428734
PapMT15	Paper_Mfg	Mfg. Paper	Motors	Turnover	15	Motors: Rewind 20-50 HP	4.7%	0.9%	$ 0.431	$ 0.356	$ 0.075	15	1.39807205	1	5.66205638
PapMT16	Paper_Mfg	Mfg. Paper	Motors	Turnover	16	Motors: Rewind 500+ HP	55.2%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.9063465	1	3.20428734
PapMT17	Paper_Mfg	Mfg. Paper	Motors	Turnover	17	Motors: Rewind 51-100 HP	15.2%	0.6%	$ 0.388	$ 0.321	$ 0.067	15	1.54367486	1	3.68815634
PapMT18	Paper_Mfg	Mfg. Paper	Motors	Turnover	18	Paper: Large Material Handling	25.2%	9.7%	$ 0.959	$ 0.850	$ 0.109	10	0.42425277	0	40.6506472
PapMT19	Paper_Mfg	Mfg. Paper	Motors	Turnover	19	Paper: Material Handling	25.2%	13.1%	$ 0.801	$ 0.710	$ 0.091	10	0.50512986	0	54.7220251
PapMT2	Paper_Mfg	Mfg. Paper	Motors	Turnover	2	High efficiency Compressor motors	74.7%	1.1%	$ 0.430	$ 0.355	$ 0.075	15	1.40201004	1	6.99754171
PapMT20	Paper_Mfg	Mfg. Paper	Motors	Turnover	20	Paper: Premium Control Large Material	25.2%	18.7%	$ 0.549	$ 0.486	$ 0.062	10	0.72786263	0	78.1743215
PapME21	Paper_Mfg	Mfg. Paper	Motors	Existing	21	Air Compressor Optimization	35.4%	30.1%	$ 0.151	$ 0.058	$ 0.093	10	2.36642504	1	125.608436
PapMT22	Paper_Mfg	Mfg. Paper	Motors	Turnover	22	Paper: Premium Fan	25.5%	20.0%	$ 0.227	$ 0.201	$ 0.026	10	1.65875114	1	83.4868838
PapMT23	Paper_Mfg	Mfg. Paper	Motors	Turnover	23	Properly Sized Fans	15.3%	10.4%	$ 0.202	$ 0.122	$ 0.080	10	1.83858362	1	43.5012555
PapME24	Paper_Mfg	Mfg. Paper	Motors	Existing	24	Pump Energy Management	32.3%	7.5%	$ 0.134	$ 0.054	$ 0.080	10	2.61969552	1	31.3075814
PapMT25	Paper_Mfg	Mfg. Paper	Motors	Turnover	25	Pump Equipment Upgrade	34.9%	20.0%	$ 0.156	$ 0.129	$ 0.027	10	2.30075953	1	83.4868838
PapME26	Paper_Mfg	Mfg. Paper	Motors	Existing	26	Pump System Optimization	16.1%	12.1%	$ 0.391	$ 0.196	$ 0.195	12	1.22319621	1	61.6248795
PapMT27	Paper_Mfg	Mfg. Paper	Motors	Turnover	27	Switch from Belt drive to Direct Drive	10.6%	7.5%	$ 0.268	$ 0.221	$ 0.046	12	1.74020285	1	38.2052828
PapMT28	Paper_Mfg	Mfg. Paper	Motors	Turnover	28	Synchronous Belts	21.4%	1.1%	$ 0.268	$ 0.221	$ 0.046	10	1.42602118	1	4.67233403
PapMT29	Paper_Mfg	Mfg. Paper	Motors	Turnover	29	Efficient Centrifugal Fan	10.7%	20.0%	$ 0.228	$ 0.188	$ 0.040	10	1.65294795	1	83.4868838
PapMT3	Paper_Mfg	Mfg. Paper	Motors	Turnover	3	High Efficiency Motors	76.7%	1.5%	$ 0.545	$ 0.450	$ 0.095	15	1.11900432	1	9.46187645
PapMT30		Mfg. Paper	Motors	Turnover	30	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	74.4%	0.91%	$ 2.085	$ 2.085	$ -	15	0.30222341	0	5.78174445
PapMT31		Mfg. Paper	Motors	Turnover	31	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	55.8%	0.39%	$ 0.436	$ 0.436	$ -	15	1.38322304	1	2.48826021
PapMT32		Mfg. Paper	Motors	Turnover	32	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	74.4%	0.7%	$ 1.249	$ 1.249	$ -	15	0.50040778	0	4.73540418
PapMT33		Mfg. Paper	Motors	Turnover	33	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	42.8%	0.9%	$ 0.372	$ 0.372	$ -	15	1.60579242	1	5.80264394
PapMT34		Mfg. Paper	Motors	Turnover	34	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	66.3%	0.4%	$ 0.799	$ 0.799	$ -	15	0.77398569	0	2.8386344
PapMT8	Paper_Mfg	Mfg. Paper	Motors	Turnover	8	Material Handling	53.4%	5.0%	$ 0.585	$ 0.483	$ 0.102	10	0.68454605	0	20.911631
PapME9	Paper_Mfg	Mfg. Paper	Motors	Existing	9	Material Handling VFD	53.4%	18.7%	$ 0.381	$ 0.229	$ 0.152	10	1.02815669	1	78.1743215
PapOT1	Paper_Mfg	Mfg. Paper	Other	Turnover	1	Bldg Improvements	35.0%	20.4%	$ 0.248	$ 0.162	$ 0.087	15	2.3140587	1	128.957217
PapOE10	Paper_Mfg	Mfg. Paper	Other	Existing	10	Plant Energy Management	27.0%	12.0%	$ 0.139	$ 0.114	$ 0.025	10	2.51884564	1	49.5108549
PapOT11	Paper_Mfg	Mfg. Paper	Other	Turnover	11	Transformers	20.0%	1.6%	$ 0.415	$ 0.399	$ 0.016	15	1.4359709	1	10.1140747
PapOE2	Paper_Mfg	Mfg. Paper	Other	Existing	2	Energy Project Management	27.0%	29.0%	$ 0.163	$ 0.134	$ 0.029	11	2.43781682	1	133.091611
PapOE3	Paper_Mfg	Mfg. Paper	Other	Existing	3	Integrated Plant Energy Management	22.0%	50.0%	$ 0.261	$ 0.215	$ 0.047	11	1.60207469	1	229.468294
PapOT4	Paper_Mfg	Mfg. Paper	Other	Turnover	4	Kraft: Efficient Agitator	13.8%	50.0%	$ 0.104	$ 0.093	$ 0.012	10	3.18690561	1	206.295229
PapOT5	Paper_Mfg	Mfg. Paper	Other	Turnover	5	Kraft: Effluent Treatment System	9.2%	15.0%	$ 0.092	$ 0.082	$ 0.011	10	3.51198328	1	61.8885687
PapOT6	Paper_Mfg	Mfg. Paper	Other	Turnover	6	Mech Pulp: Premium Process	22.5%	0.2%	$ 0.141	$ 0.125	$ 0.016	5	1.24341141	1	0.34728702
PapOT7	Paper_Mfg	Mfg. Paper	Other	Turnover	7	Mech Pulp: Refiner Plate Improvement	35.5%	0.4%	$ 0.045	$ 0.040	$ 0.005	1	0.62033619	0	0.19281786
PapOT8	Paper_Mfg	Mfg. Paper	Other	Turnover	8	Mech Pulp: Refiner Replacement	23.7%	10.0%	$ 0.735	$ 0.652	$ 0.084	12	0.66313488	0	50.4278305
PapOT9	Paper_Mfg	Mfg. Paper	Other	Turnover	9	Paper: Efficient Pulp Screen	13.8%	15.0%	$ 0.226	$ 0.200	$ 0.026	10	1.64656465	1	61.8885687
PlaCooE1	Chemical_Mfg	Mfg. Plastics	Process Cooling	Existing	1	Clean Room: Change Filter Strategy	10.0%	40.0%	$ 0.016	$ 0.012	$ 0.005	1	1.0398655	1	17.2065387
PlaCooE2	Chemical_Mfg	Mfg. Plastics	Process Cooling	Existing	2	Clean Room: Chiller Optimize	28.3%	14.8%	$ 0.248	$ 0.124	$ 0.124	10	1.50397278	1	60.8677417
PlaCooT3	Chemical_Mfg	Mfg. Plastics	Process Cooling	Turnover	3	Clean Room: Clean Room HVAC	30.0%	9.0%	$ 0.204	$ 0.144	$ 0.061	15	2.74579901	1	56.6509962
PlaCooT4	Chemical_Mfg	Mfg. Plastics	Process Cooling	Turnover	4	Equipment: Chillers	8.0%	17.9%	$ 0.330	$ 0.249	$ 0.081	15	1.77300493	1	112.5552
PlaCooE5	Chemical_Mfg	Mfg. Plastics	Process Cooling	Existing	5	Improved Controls	33.8%	6.0%	$ 1.118	$ 0.673	$ 0.445	15	0.55089367	0	37.7673308

Measure Lookup	Industry	New Segment	New End-Use	Vintage	Measure Numbe	Measure	Applicability	Savings	Total Cost ($/kW Saved)	Equipment Cost	Labor Cost	Life	TRC Test	Economic Flag	NPV
PlaCooT6	Chemical_Mfg	Mfg. Plastics	Process Cooling	Turnover	6	Adjustable speed drive on compressors	34.0%	11.7%	$ 0.201	$ 0.121	$ 0.080	10	1.81421624	1	47.9081625
PlaCooE7	Chemical_Mfg	Mfg. Plastics	Process Cooling	Existing	7	Optimization of operating parameters	35.0%	13.1%	$ 0.101	$ 0.039	$ 0.063	3	0.99416877	0	16.3738382
PlaCooT8	Chemical_Mfg	Mfg. Plastics	Process Cooling	Turnover	8	Cold Storage Retrofit	25.6%	20.7%	$ 0.250	$ 0.157	$ 0.093	10	1.49239295	1	84.9562095
PlaCooE9	Chemical_Mfg	Mfg. Plastics	Process Cooling	Existing	9	Cold Storage Tuneup	10.0%	15.6%	$ 0.112	$ 0.047	$ 0.065	3	0.91703236	0	19.5704567
PlaHeaE1	Chemical_Mfg	Mfg. Plastics	Process Heating	Existing	1	Improved Controls	37.9%	30.4%	$ 0.245	$ 0.147	$ 0.098	10	1.52182065	1	124.963312
PlaHeaE2	Chemical_Mfg	Mfg. Plastics	Process Heating	Existing	2	Process Heat O&M	63.4%	28.6%	$ 0.257	$ 0.225	$ 0.032	2	0.29874933	0	24.119835
PlaHT1	Chemical_Mfg	Mfg. Plastics	HVAC	Turnover	1	Equipment Upgrades	62.9%	16.4%	$ 0.296	$ 0.252	$ 0.044	15	2.00465036	1	105.4428
PlaHE2	Chemical_Mfg	Mfg. Plastics	HVAC	Existing	2	Improved Controls	32.7%	20.9%	$ 0.102	$ 0.077	$ 0.025	10	3.30049318	1	87.8214701
PlaHE3	Chemical_Mfg	Mfg. Plastics	HVAC	Existing	3	Recommissioning	72.6%	16.0%	$ 0.271	$ -	$ 0.271	7	1.01501862	1	48.0106299
PlaLT1	Chemical_Mfg	Mfg. Plastics	Lighting	Turnover	1	Efficient Lighting Equipment	30.4%	19.9%	$ 0.150	$ 0.103	$ 0.047	10	2.39141648	1	83.4951944
PlaLT2	Chemical_Mfg	Mfg. Plastics	Lighting	Turnover	2	HighBay Lighting Equipment	55.1%	34.1%	$ 0.376	$ 0.295	$ 0.081	10	1.04523497	1	142.926475
PlaLE3	Chemical_Mfg	Mfg. Plastics	Lighting	Existing	3	Lighting Controls	42.3%	30.0%	$ 0.212	$ 0.157	$ 0.055	10	1.7675556	1	125.741767
PlaMT1		Mfg. Plastics	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	42.8%	0.9%	$ 0.372	$ 0.372	$ -	15	1.60579242	1	5.80264394
PlaMT10	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	10	Material Handling	52.3%	5.0%	$ 0.585	$ 0.483	$ 0.102	10	0.68454605	0	20.911631
PlaMT11	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	11	Air Compressor Demand Reduction	28.0%	15.9%	$ 0.107	$ 0.081	$ 0.026	10	3.17235803	1	66.5345737
PlaME12	Chemical_Mfg	Mfg. Plastics	Motors	Existing	12	Material Handling VFD	52.3%	18.7%	$ 0.381	$ 0.229	$ 0.152	10	1.02815669	1	78.1743215
PlaME13	Chemical_Mfg	Mfg. Plastics	Motors	Existing	13	Motor Management Plan	51.6%	2.9%	$ 0.134	$ 0.054	$ 0.080	10	2.61969552	1	12.0520448
PlaMT15	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	15	Motors: Rewind 101-200 HP	25.4%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.9063465	1	3.20428734
PlaMT16	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	16	Motors: Rewind 201-500 HP	35.6%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.9063465	1	3.20428734
PlaMT17	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	17	Motors: Rewind 20-50 HP	4.6%	0.9%	$ 0.431	$ 0.356	$ 0.075	15	1.39807205	1	5.66205638
PlaMT18	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	18	Motors: Rewind 500+ HP	55.2%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.9063465	1	3.20428734
PlaMT19	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	19	Motors: Rewind 51-100 HP	15.2%	0.6%	$ 0.388	$ 0.321	$ 0.067	15	1.54367486	1	3.68815634
PlaMT2		Mfg. Plastics	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	66.3%	0.4%	$ 0.799	$ 0.799	$ -	15	0.77398569	0	2.8386344
PlaMT20	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	20	Properly Sized Fans	14.7%	10.4%	$ 0.202	$ 0.122	$ 0.080	10	1.83858362	1	43.5012555
PlaME21	Chemical_Mfg	Mfg. Plastics	Motors	Existing	21	Air Compressor Optimization	38.3%	30.1%	$ 0.151	$ 0.058	$ 0.093	10	2.36642504	1	125.608436
PlaME22	Chemical_Mfg	Mfg. Plastics	Motors	Existing	22	Pump Energy Management	31.4%	7.5%	$ 0.134	$ 0.054	$ 0.080	10	2.61969552	1	31.3075814
PlaMT23	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	23	Pump Equipment Upgrade	34.0%	20.0%	$ 0.156	$ 0.129	$ 0.027	10	2.30075953	1	83.4868838
PlaME24	Chemical_Mfg	Mfg. Plastics	Motors	Existing	24	Pump System Optimization	15.6%	12.1%	$ 0.391	$ 0.196	$ 0.195	12	1.22319621	1	61.6248795
PlaMT25	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	25	Switch from Belt drive to Direct Drive	10.4%	7.5%	$ 0.268	$ 0.221	$ 0.046	12	1.74020285	1	38.2052828
PlaMT26	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	26	Synchronous Belts	20.9%	1.1%	$ 0.268	$ 0.221	$ 0.046	10	1.42602118	1	4.67233403
PlaMT27	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	27	Efficient Centrifugal Fan	10.3%	20.0%	$ 0.228	$ 0.188	$ 0.040	10	1.65294795	1	83.4868838
PlaMT28		Mfg. Plastics	Motors	Turnover	28	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	74.4%	0.91%	$ 2.085	$ 2.085	$ -	15	0.30222341	0	5.78174445
PlaMT29		Mfg. Plastics	Motors	Turnover	29	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	55.8%	0.39%	$ 0.436	$ 0.436	$ -	15	1.38322304	1	2.48826021
PlaME3	Chemical_Mfg	Mfg. Plastics	Motors	Existing	3	Fan System Optimization	28.9%	7.7%	$ 0.311	$ 0.156	$ 0.155	10	1.24268169	1	32.0961096
PlaMT30		Mfg. Plastics	Motors	Turnover	30	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	74.4%	0.7%	$ 1.249	$ 1.249	$ -	15	0.50040778	0	4.73540418
PlaMT4	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	4	High efficiency Compressor motors	80.8%	1.1%	$ 0.430	$ 0.355	$ 0.075	15	1.40201004	1	6.99754171
PlaMT5	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	5	High Efficiency Motors	74.4%	1.5%	$ 0.545	$ 0.450	$ 0.095	15	1.11900432	1	9.46187645
PlaOT1	Chemical_Mfg	Mfg. Plastics	Other	Turnover	1	Bldg Improvements	35.0%	20.4%	$ 0.248	$ 0.162	$ 0.087	15	2.3140587	1	128.957217
PlaOE2	Chemical_Mfg	Mfg. Plastics	Other	Existing	2	Energy Project Management	27.0%	29.0%	$ 0.163	$ 0.134	$ 0.029	11	2.43781682	1	133.091611
PlaOE3	Chemical_Mfg	Mfg. Plastics	Other	Existing	3	Integrated Plant Energy Management	22.0%	50.0%	$ 0.261	$ 0.215	$ 0.047	11	1.60207469	1	229.468294
PlaOE4	Chemical_Mfg	Mfg. Plastics	Other	Existing	4	Plant Energy Management	27.0%	12.0%	$ 0.139	$ 0.114	$ 0.025	10	2.51884564	1	49.5108549
PlaOT5	Chemical_Mfg	Mfg. Plastics	Other	Turnover	5	Transformers	20.0%	1.6%	$ 0.415	$ 0.399	$ 0.016	15	1.4359709	1	10.1140747
MinMT1		Mining	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	74.4%	0.91%	$ 2.085	$ 2.085	$ -	15	0.30222341	0	5.78174445
MinME10	Mining	Mining	Motors	Existing	10	Motor Management Plan	50.0%	2.9%	$ 0.134	$ 0.054	$ 0.080	10	2.61969552	1	12.0520448
MinMT12	Mining	Mining	Motors	Turnover	12	Motors: Rewind 101-200 HP	25.4%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.9063465	1	3.20428734
MinMT13	Mining	Mining	Motors	Turnover	13	Motors: Rewind 201-500 HP	35.6%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.9063465	1	3.20428734
MinMT14	Mining	Mining	Motors	Turnover	14	Motors: Rewind 20-50 HP	4.7%	0.9%	$ 0.431	$ 0.356	$ 0.075	15	1.39807205	1	5.66205638
MinMT15	Mining	Mining	Motors	Turnover	15	Motors: Rewind 500+ HP	55.2%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.9063465	1	3.20428734
MinMT16	Mining	Mining	Motors	Turnover	16	Motors: Rewind 51-100 HP	15.2%	0.6%	$ 0.388	$ 0.321	$ 0.067	15	1.54367486	1	3.68815634
MinMT17	Mining	Mining	Motors	Turnover	17	Switch from Belt drive to Direct Drive	10.5%	7.5%	$ 0.268	$ 0.221	$ 0.046	12	1.74020285	1	38.2052828
MinMT18	Mining	Mining	Motors	Turnover	18	Synchronous Belts	21.0%	1.1%	$ 0.268	$ 0.221	$ 0.046	10	1.42602118	1	4.67233403
MinMT2		Mining	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	55.8%	0.39%	$ 0.436	$ 0.436	$ -	15	1.38322304	1	2.48826021
MinMT3		Mining	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	74.4%	0.7%	$ 1.249	$ 1.249	$ -	15	0.50040778	0	4.73540418
MinMT4		Mining	Motors	Turnover	4	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	42.8%	0.9%	$ 0.372	$ 0.372	$ -	15	1.60579242	1	5.80264394
MinMT5		Mining	Motors	Turnover	5	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	66.3%	0.4%	$ 0.799	$ 0.799	$ -	15	0.77398569	0	2.8386344
MinMT6	Mining	Mining	Motors	Turnover	6	High Efficiency Motors	75.0%	1.5%	$ 0.545	$ 0.450	$ 0.095	15	1.11900432	1	9.46187645
MinMT8	Mining	Mining	Motors	Turnover	8	Material Handling	53.0%	5.0%	$ 0.585	$ 0.483	$ 0.102	10	0.68454605	0	20.911631
MinME9	Mining	Mining	Motors	Existing	9	Material Handling VFD	53.0%	18.7%	$ 0.381	$ 0.229	$ 0.152	10	1.02815669	1	78.1743215
NonCooT1	Lumber_Wood_Product	Other Non Mfg.	Process Cooling	Turnover	1	Equipment: Chillers	7.7%	17.9%	$ 0.330	$ 0.249	$ 0.081	15	1.77300493	1	112.5552
NonCooE2	Lumber_Wood_Product	Other Non Mfg.	Process Cooling	Existing	2	Improved Controls	32.3%	6.0%	$ 1.118	$ 0.673	$ 0.445	15	0.55089367	0	37.7673308
NonCooT3	Agriculture	Other Non Mfg.	Process Cooling	Turnover	3	Milk Precooler - Dairy Plate Cooler	1.7%	3.24%	$ 0.660	$ 0.487	$ 0.173	15	0.91875546	0	20.4004769
NonCooT4	Lumber_Wood_Product	Other Non Mfg.	Process Cooling	Turnover	4	Adjustable speed drive on compressors	34.0%	11.7%	$ 0.201	$ 0.121	$ 0.080	10	1.81421624	1	47.9081625
NonCooE5	Lumber_Wood_Product	Other Non Mfg.	Process Cooling	Existing	5	Optimization of operating parameters	35.0%	13.1%	$ 0.101	$ 0.039	$ 0.063	3	0.99416877	0	16.3738382
NonHeaT1	Agriculture	Other Non Mfg.	Process Heating	Turnover	1	Crate Heating Pads	22.9%	17.51%	$ 0.181	$ 0.162	$ 0.019	15	3.05885906	1	110.24084
NonHeaT2	Agriculture	Other Non Mfg.	Process Heating	Turnover	2	Grain dryers	24.8%	23.52%	$ 8.260	$ 6.090	$ 2.169	15	0.07597977	0	148.038589
NonHeaE3	Agriculture	Other Non Mfg.	Process Heating	Existing	3	Heat Lamp Setback (Microzone)	22.9%	0.45%	$ 0.210	$ 0.210	$ -	15	2.67426665	1	2.83254981
NonHeaE4	Agriculture	Other Non Mfg.	Process Heating	Existing	4	Heat Lamp/Heating Pad Controller	22.9%	1.75%	$ 0.129	$ 0.129	$ -	15	4.0774464	1	11.0154715
NonHeaT5	Agriculture	Other Non Mfg.	Process Heating	Turnover	5	Heat Lamps	22.9%	3.38%	$ 0.023	$ 0.023	$ -	10	8.48857844	1	13.8589303
NonHeaE6	Lumber_Wood_Product	Other Non Mfg.	Process Heating	Existing	6	Improved Controls	37.9%	30.4%	$ 0.245	$ 0.147	$ 0.098	10	1.52182065	1	124.963312
NonHeaE7	Lumber_Wood_Product	Other Non Mfg.	Process Heating	Existing	7	Process Heat O&M	63.4%	28.6%	$ 0.257	$ 0.225	$ 0.032	2	0.29874933	0	24.119835
NonHT1	Agriculture	Other Non Mfg.	HVAC	Turnover	1	Energy-Efficient Dehumidifier	49.7%	2.00%	$ 1.072	$ 0.791	$ 0.282	15	0.58573582	0	12.8684526
NonHT2	Lumber_Wood_Product	Other Non Mfg.	HVAC	Turnover	2	Equipment Upgrades	63.2%	16.4%	$ 0.296	$ 0.252	$ 0.044	15	2.00465036	1	105.4428

Measure Lookup	Industry	New Segment	New End-Use	Vintage	Measure Numbe	Measure	Applicability	Savings	Total Cost ($/kW Saved)	Equipment Cost	Labor Cost	Life	TRC Test	Economic Flag	NPV
NonHT3	Agriculture	Other Non Mfg.	HVAC	Turnover	3	Heat Reclaimer	1.7%	42.00%	$ 0.171	$ 0.126	$ 0.045	15	3.27241269	1	269.982377
NonHT4	Agriculture	Other Non Mfg.	HVAC	Turnover	4	Heat Recovery Ventilators	49.7%	4.13%	$ 0.448	$ 0.330	$ 0.118	10	0.88974442	0	17.3437113
NonHE5	Lumber_Wood_Product	Other Non Mfg.	HVAC	Existing	5	Improved Controls	32.8%	20.9%	$ 0.102	$ 0.077	$ 0.025	10	3.30049318	1	87.8214701
NonHT6	Agriculture	Other Non Mfg.	HVAC	Turnover	6	Infrared Film for Greenhouses	0.3%	11.06%	$ 0.261	$ 0.234	$ 0.028	4	0.59646653	0	18.8982493
NonHT7	Agriculture	Other Non Mfg.	HVAC	Turnover	7	Programmable Ventilation Controller	49.7%	0.10%	$ 0.140	$ 0.140	$ -	10	2.55560817	1	0.42045361
NonHE8	Lumber_Wood_Product	Other Non Mfg.	HVAC	Existing	8	Recommissioning	72.9%	16.0%	$ 0.271	$ -	$ 0.271	7	1.01501862	1	48.0106299
NonHT9	Agriculture	Other Non Mfg.	HVAC	Turnover	9	Scroll Compressor	1.7%	7.50%	$ 1.006	$ 0.899	$ 0.107	15	0.62361578	0	48.2114027
NonLT1	Lumber_Wood_Product	Other Non Mfg.	Lighting	Turnover	1	Efficient Lighting Equipment	30.4%	19.9%	$ 0.150	$ 0.103	$ 0.047	10	2.39141648	1	83.4951944
NonLT2	Lumber_Wood_Product	Other Non Mfg.	Lighting	Turnover	2	HighBay Lighting Equipment	55.1%	34.1%	$ 0.376	$ 0.295	$ 0.081	10	1.04523497	1	142.926475
NonLE3	Lumber_Wood_Product	Other Non Mfg.	Lighting	Existing	3	Lighting Controls	42.3%	30.0%	$ 0.212	$ 0.157	$ 0.055	10	1.7675556	1	125.741767
NonMT1		Other Non Mfg.	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	55.8%	0.39%	$ 0.436	$ 0.436	$ -	15	1.38322304	1	2.48826021
NonMT11	Agriculture	Other Non Mfg.	Motors	Turnover	11	Agricultural Exhaust Fans (Rate 21 CFM/Watt+)	49.7%	5.00%	$ 0.316	$ 0.283	$ 0.034	15	1.86861554	1	31.882659
NonMT15	Agriculture	Other Non Mfg.	Motors	Turnover	15	Low Pressure Irrigation	0.4%	50.00%	$ 0.993	$ 0.732	$ 0.261	10	0.41020888	0	208.71721
NonMT16	Lumber_Wood_Product	Other Non Mfg.	Motors	Turnover	16	Material Handling	53.2%	5.0%	$ 0.585	$ 0.483	$ 0.102	10	0.68454605	0	20.911631
NonME17	Lumber_Wood_Product	Other Non Mfg.	Motors	Existing	17	Material Handling VFD	53.2%	18.7%	$ 0.381	$ 0.229	$ 0.152	10	1.02815669	1	78.1743215
NonME18	Lumber_Wood_Product	Other Non Mfg.	Motors	Existing	18	Motor Management Plan	50.9%	2.9%	$ 0.134	$ 0.054	$ 0.080	10	2.61969552	1	12.0520448
NonMT2		Other Non Mfg.	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	74.4%	0.7%	$ 1.249	$ 1.249	$ -	15	0.50040778	0	4.73540418
NonMT21	Lumber_Wood_Product	Other Non Mfg.	Motors	Turnover	21	Motors: Rewind 101-200 HP	25.4%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.9063465	1	3.20428734
NonMT22	Lumber_Wood_Product	Other Non Mfg.	Motors	Turnover	22	Air Compressor Demand Reduction	26.8%	15.9%	$ 0.107	$ 0.081	$ 0.026	10	3.17235803	1	66.5345737
NonMT23	Lumber_Wood_Product	Other Non Mfg.	Motors	Turnover	23	Motors: Rewind 201-500 HP	35.6%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.9063465	1	3.20428734
NonMT24	Lumber_Wood_Product	Other Non Mfg.	Motors	Turnover	24	Motors: Rewind 20-50 HP	4.7%	0.9%	$ 0.431	$ 0.356	$ 0.075	15	1.39807205	1	5.66205638
NonMT25	Lumber_Wood_Product	Other Non Mfg.	Motors	Turnover	25	Motors: Rewind 500+ HP	55.2%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.9063465	1	3.20428734
NonMT26	Lumber_Wood_Product	Other Non Mfg.	Motors	Turnover	26	Motors: Rewind 51-100 HP	15.2%	0.6%	$ 0.388	$ 0.321	$ 0.067	15	1.54367486	1	3.68815634
NonMT27	Lumber_Wood_Product	Other Non Mfg.	Motors	Turnover	27	Properly Sized Fans	15.3%	10.4%	$ 0.202	$ 0.122	$ 0.080	10	1.83858362	1	43.5012555
NonME28	Lumber_Wood_Product	Other Non Mfg.	Motors	Existing	28	Pump Energy Management	29.8%	7.5%	$ 0.134	$ 0.054	$ 0.080	10	2.61969552	1	31.3075814
NonMT29	Lumber_Wood_Product	Other Non Mfg.	Motors	Turnover	29	Pump Equipment Upgrade	32.3%	20.0%	$ 0.156	$ 0.129	$ 0.027	10	2.30075953	1	83.4868838
NonMT3		Other Non Mfg.	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	42.8%	0.9%	$ 0.372	$ 0.372	$ -	15	1.60579242	1	5.80264394
NonME30	Lumber_Wood_Product	Other Non Mfg.	Motors	Existing	30	Pump System Optimization	14.9%	12.1%	$ 0.391	$ 0.196	$ 0.195	12	1.22319621	1	61.6248795
NonMT31	Irrigation	Other Non Mfg.	Motors	Turnover	31	SIS	76.5%	7.5%	$ 1.051	$ 0.869	$ 0.183	7	0.27710687	0	22.3673427
NonMT32	Lumber_Wood_Product	Other Non Mfg.	Motors	Turnover	32	Air Compressor Equipment	17.6%	8.8%	$ 0.157	$ 0.130	$ 0.027	10	2.29094977	1	36.6067622
NonMT33	Lumber_Wood_Product	Other Non Mfg.	Motors	Turnover	33	Switch from Belt drive to Direct Drive	10.5%	7.5%	$ 0.268	$ 0.221	$ 0.046	12	1.74020285	1	38.2052828
NonMT34	Lumber_Wood_Product	Other Non Mfg.	Motors	Turnover	34	Synchronous Belts	20.9%	1.1%	$ 0.268	$ 0.221	$ 0.046	10	1.42602118	1	4.67233403
NonMT35	Irrigation	Other Non Mfg.	Motors	Turnover	35	System Improvements	85.0%	8.0%	$ 0.416	$ 0.344	$ 0.072	5	0.47799704	0	16.8642743
NonMT36	Agriculture	Other Non Mfg.	Motors	Turnover	36	Variable Speed Drives for Dairy Vacuum Pumps	1.7%	36.89%	$ 0.169	$ 0.151	$ 0.018	15	3.28487894	1	235.237336
NonMT37	Agriculture	Other Non Mfg.	Motors	Turnover	37	VFDs on Small Milking Machines	1.7%	3.22%	$ 0.832	$ 0.614	$ 0.219	15	0.74390011	0	20.5634224
NonMT38	Lumber_Wood_Product	Other Non Mfg.	Motors	Turnover	38	Wood: Replace Pneumatic Conveyor	50.2%	29.0%	$ 0.018	$ 0.016	$ 0.002	10	9.69069372	1	121.055982
NonME39	Lumber_Wood_Product	Other Non Mfg.	Motors	Existing	39	Air Compressor Optimization	36.8%	30.1%	$ 0.151	$ 0.058	$ 0.093	10	2.36642504	1	125.608436
NonMT4		Other Non Mfg.	Motors	Turnover	4	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	66.3%	0.4%	$ 0.799	$ 0.799	$ -	15	0.77398569	0	2.8386344
NonMT40	Agriculture	Other Non Mfg.	Motors	Turnover	40	Automatic Milker Takeoff	1.7%	3.00%	$ 0.763	$ 0.563	$ 0.200	15	0.80913281	0	19.1295954
NonMT41	Agriculture	Other Non Mfg.	Motors	Turnover	41	Circulating Fans	49.7%	5.00%	$ 0.152	$ 0.136	$ 0.016	10	2.36236726	1	20.871721
NonMT42	Lumber_Wood_Product	Other Non Mfg.	Motors	Turnover	42	Efficient Centrifugal Fan	10.7%	20.0%	$ 0.228	$ 0.188	$ 0.040	10	1.65294795	1	83.4868838
NonMT43		Other Non Mfg.	Motors	Turnover	43	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	74.4%	0.91%	$ 2.085	$ 2.085	$ -	15	0.30222341	0	5.78174445
NonME5	Lumber_Wood_Product	Other Non Mfg.	Motors	Existing	5	Fan System Optimization	30.2%	7.7%	$ 0.311	$ 0.156	$ 0.155	10	1.24268169	1	32.0961096
NonMT6	Lumber_Wood_Product	Other Non Mfg.	Motors	Turnover	6	High efficiency Compressor motors	77.5%	1.1%	$ 0.430	$ 0.355	$ 0.075	15	1.40201004	1	6.99754171
NonMT7	Irrigation	Other Non Mfg.	Motors	Turnover	7	High Efficiency Motors	74.7%	1.5%	$ 0.545	$ 0.450	$ 0.095	15	1.11900432	1	9.46187645
NonMT8	Agriculture	Other Non Mfg.	Motors	Turnover	8	High Volume Low Speed Fans	49.7%	46.61%	$ 2.004	$ 1.883	$ 0.120	15	0.31433787	0	297.223432
NonMT9	Agriculture	Other Non Mfg.	Motors	Turnover	9	High-Efficiency Ventilation System	49.7%	5.66%	$ 1.366	$ 1.366	$ -	10	0.30010678	0	23.6331704
NonOT1	Lumber_Wood_Product	Other Non Mfg.	Other	Turnover	1	Bldg Improvements	35.0%	20.4%	$ 0.248	$ 0.162	$ 0.087	15	2.3140587	1	128.957217
NonOT10	Lumber_Wood_Product	Other Non Mfg.	Other	Turnover	10	Transformers	20.0%	1.6%	$ 0.415	$ 0.399	$ 0.016	15	1.4359709	1	10.1140747
NonOT2	Agriculture	Other Non Mfg.	Other	Turnover	2	Block Heater Timer	25.0%	2.50%	$ 0.048	$ 0.048	$ -	10	5.62573407	1	10.3147614
NonOE3	Lumber_Wood_Product	Other Non Mfg.	Other	Existing	3	Energy Project Management	27.0%	29.0%	$ 0.163	$ 0.134	$ 0.029	11	2.43781682	1	133.091611
NonOT4	Agriculture	Other Non Mfg.	Other	Turnover	4	Grain bin aeration control systems	24.8%	2.25%	$ 0.168	$ 0.124	$ 0.044	15	3.28204184	1	14.2229175
NonOT5	Agriculture	Other Non Mfg.	Other	Turnover	5	Greenhouse Heat Curtain	0.3%	16.76%	$ 0.056	$ 0.056	$ -	5	2.54134671	1	34.6689462
NonOT6	Agriculture	Other Non Mfg.	Other	Turnover	6	High Efficiency Stock tank	22.9%	3.75%	$ 0.412	$ 0.368	$ 0.044	10	0.94362152	0	15.4721422
NonOE7	Lumber_Wood_Product	Other Non Mfg.	Other	Existing	7	Integrated Plant Energy Management	22.0%	50.0%	$ 0.261	$ 0.215	$ 0.047	11	1.60207469	1	229.468294
NonOT8	Agriculture	Other Non Mfg.	Other	Turnover	8	Livestock Waterers	22.9%	11.25%	$ 0.327	$ 0.292	$ 0.035	10	1.17252299	1	46.4164265
NonOE9	Lumber_Wood_Product	Other Non Mfg.	Other	Existing	9	Plant Energy Management	27.0%	12.0%	$ 0.139	$ 0.114	$ 0.025	10	2.51884564	1	49.5108549
MetPT1		Mfg. Metals	Process EC	Turnover	1	Electrical-Chemical Plating Bundle, Tank and Rectifier	65.0%	18.5%	$ 0.550	$ 0.450	$ 0.100	15	1.09470524	1	116.44927
MinHT1	Mining	Mining	HVAC	Turnover	1	Equipment Upgrades	62.9%	16.4%	$ 0.296	$ 0.252	$ 0.044	15	2.00465036	1	105.4428
MinHE2	Mining	Mining	HVAC	Existing	2	Improved Controls	32.7%	20.9%	$ 0.102	$ 0.077	$ 0.025	10	3.30049318	1	87.8214701
MinHE3	Mining	Mining	HVAC	Existing	3	Recommissioning	72.6%	16.0%	$ 0.271	$ -	$ 0.271	7	1.01501862	1	48.0106299
MinLT1	Mining	Mining	Lighting	Turnover	1	Efficient Lighting Equipment	30.4%	19.9%	$ 0.150	$ 0.103	$ 0.047	10	2.39141648	1	83.4951944
MinLT2	Mining	Mining	Lighting	Turnover	2	HighBay Lighting Equipment	55.1%	34.1%	$ 0.376	$ 0.295	$ 0.081	10	1.04523497	1	142.926475
MinLE3	Mining	Mining	Lighting	Existing	3	Lighting Controls	42.3%	30.0%	$ 0.212	$ 0.157	$ 0.055	10	1.7675556	1	125.741767

Measure Lookup	New Segment	New End-Use	Vintage	Measure Number	Measure	Applicability	Savings	Total Cost ($/kW Saved)	Equipment Co	Labor Cost	Life	TRC Test	Economic Flag
CheCooE1	Mfg. Chemicals	Process Cooling	Existing	1	Clean Room: Change Filter Strategy	10.0%	40.0%	$ 0.016	$ 0.012	$ 0.005	1	0.845229031	0
CheCooE2	Mfg. Chemicals	Process Cooling	Existing	2	Clean Room: Chiller Optimize	28.3%	14.8%	$ 0.248	$ 0.124	$ 0.124	10	1.277089473	1
CheCooT3	Mfg. Chemicals	Process Cooling	Turnover	3	Clean Room: Clean Room HVAC	30.0%	9.0%	$ 0.204	$ 0.144	$ 0.061	15	2.61155315	1
CheCooT4	Mfg. Chemicals	Process Cooling	Turnover	4	Equipment: Chillers	8.0%	17.9%	$ 0.330	$ 0.249	$ 0.081	15	1.686320303	1
CheCooE5	Mfg. Chemicals	Process Cooling	Existing	5	Improved Controls	33.8%	6.0%	$ 1.118	$ 0.673	$ 0.445	15	0.523959727	0
CheCooT6	Mfg. Chemicals	Process Cooling	Turnover	6	Adjustable speed drive on compressors	34.0%	11.7%	$ 0.201	$ 0.121	$ 0.080	10	1.540530847	1
CheCooE7	Mfg. Chemicals	Process Cooling	Existing	7	Optimization of operating parameters	35.0%	13.1%	$ 0.101	$ 0.039	$ 0.063	3	0.863115423	0
CheCooT8	Mfg. Chemicals	Process Cooling	Turnover	8	Cold Storage Retrofit	25.6%	20.7%	$ 0.250	$ 0.157	$ 0.093	10	1.267256532	1
CheCooE9	Mfg. Chemicals	Process Cooling	Existing	9	Cold Storage Tuneup	10.0%	15.6%	$ 0.112	$ 0.047	$ 0.065	3	0.796147294	0
CheHeaE1	Mfg. Chemicals	Process Heating	Existing	1	Improved Controls	37.9%	30.4%	$ 0.245	$ 0.147	$ 0.098	10	1.29224488	1
CheHeaE2	Mfg. Chemicals	Process Heating	Existing	2	Process Heat O&M	63.4%	28.6%	$ 0.257	$ 0.225	$ 0.032	2	0.260593322	0
CheHT1	Mfg. Chemicals	HVAC	Turnover	1	Equipment Upgrades	62.9%	16.4%	$ 0.296	$ 0.252	$ 0.044	15	1.936604358	1
CheHE2	Mfg. Chemicals	HVAC	Existing	2	Improved Controls	32.7%	20.9%	$ 0.102	$ 0.077	$ 0.025	10	2.879820182	1
CheHE3	Mfg. Chemicals	HVAC	Existing	3	Recommissioning	72.6%	16.0%	$ 0.271	$ -	$ 0.271	7	0.882497463	0
CheLT1	Mfg. Chemicals	Lighting	Turnover	1	Efficient Lighting Equipment	30.4%	19.9%	$ 0.150	$ 0.103	$ 0.047	10	2.083103268	1
CheLT2	Mfg. Chemicals	Lighting	Turnover	2	HighBay Lighting Equipment	55.1%	34.1%	$ 0.376	$ 0.295	$ 0.081	10	0.910478121	0
CheLE3	Mfg. Chemicals	Lighting	Existing	3	Lighting Controls	42.3%	30.0%	$ 0.212	$ 0.157	$ 0.055	10	1.539673616	1
CheMT1	Mfg. Chemicals	Motors	Turnover	1	hanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RI	42.8%	0.9%	$ 0.372	$ 0.372	$ -	15	1.536529688	1
CheMT10	Mfg. Chemicals	Motors	Turnover	10	Material Handling	52.3%	5.0%	$ 0.585	$ 0.483	$ 0.102	10	0.587742834	0
CheMT11	Mfg. Chemicals	Motors	Turnover	11	Air Compressor Demand Reduction	28.0%	15.9%	$ 0.107	$ 0.081	$ 0.026	10	2.723747645	1
CheME6	Mfg. Chemicals	Motors	Existing	6	Material Handling VFD	52.3%	18.7%	$ 0.381	$ 0.229	$ 0.152	10	0.882762707	0
CheME13	Mfg. Chemicals	Motors	Existing	13	Motor Management Plan	51.6%	2.9%	$ 0.134	$ 0.054	$ 0.080	10	2.249238401	1
CheMT15	Mfg. Chemicals	Motors	Turnover	15	Motors: Rewind 101-200 HP	25.4%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.824119948	1
CheMT16	Mfg. Chemicals	Motors	Turnover	16	Motors: Rewind 201-500 HP	35.6%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.824119948	1
CheMT17	Mfg. Chemicals	Motors	Turnover	17	Motors: Rewind 20-50 HP	4.6%	0.9%	$ 0.431	$ 0.356	$ 0.075	15	1.337768929	1
CheMT18	Mfg. Chemicals	Motors	Turnover	18	Motors: Rewind 500+ HP	55.2%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.824119948	1
CheMT19	Mfg. Chemicals	Motors	Turnover	19	Motors: Rewind 51-100 HP	15.2%	0.6%	$ 0.388	$ 0.321	$ 0.067	15	1.477091452	1
CheMT2	Mfg. Chemicals	Motors	Turnover	2	nhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RP	66.3%	0.4%	$ 0.799	$ 0.799	$ -	15	0.740601322	0
CheMT20	Mfg. Chemicals	Motors	Turnover	20	Properly Sized Fans	14.7%	10.4%	$ 0.202	$ 0.122	$ 0.080	10	1.578585319	1
CheME21	Mfg. Chemicals	Motors	Existing	21	Air Compressor Optimization	38.3%	30.1%	$ 0.151	$ 0.058	$ 0.093	10	2.031783478	1
CheME22	Mfg. Chemicals	Motors	Existing	22	Pump Energy Management	31.4%	7.5%	$ 0.134	$ 0.054	$ 0.080	10	2.249238401	1
CheMT23	Mfg. Chemicals	Motors	Turnover	23	Pump Equipment Upgrade	34.0%	20.0%	$ 0.156	$ 0.129	$ 0.027	10	1.975403878	1
CheME24	Mfg. Chemicals	Motors	Existing	24	Pump System Optimization	15.6%	12.1%	$ 0.391	$ 0.196	$ 0.195	12	1.123671222	1
CheMT25	Mfg. Chemicals	Motors	Turnover	25	Switch from Belt drive to Direct Drive	10.4%	7.5%	$ 0.268	$ 0.221	$ 0.046	12	1.59861177	1
CheMT26	Mfg. Chemicals	Motors	Turnover	26	Synchronous Belts	20.9%	1.1%	$ 0.268	$ 0.221	$ 0.046	10	1.224364273	1
CheMT27	Mfg. Chemicals	Motors	Turnover	27	Efficient Centrifugal Fan	10.3%	20.0%	$ 0.228	$ 0.188	$ 0.040	10	1.419200809	1
CheMT28	Mfg. Chemicals	Motors	Turnover	28	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	74.4%	0.91%	$ 2.085	$ 2.085	$ -	15	0.289187588	0
CheMT29	Mfg. Chemicals	Motors	Turnover	29	hanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RI	55.8%	0.39%	$ 0.436	$ 0.436	$ -	15	1.32356041	1
CheME3	Mfg. Chemicals	Motors	Existing	3	Fan System Optimization	28.9%	7.7%	$ 0.311	$ 0.156	$ 0.155	10	1.06695124	1
CheMT30	Mfg. Chemicals	Motors	Turnover	30	nhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RP	74.4%	0.7%	$ 1.249	$ 1.249	$ -	15	0.478823669	0
CheMT4	Mfg. Chemicals	Motors	Turnover	4	High efficiency Compressor motors	80.8%	1.1%	$ 0.430	$ 0.355	$ 0.075	15	1.341537069	1
CheMT5	Mfg. Chemicals	Motors	Turnover	5	High Efficiency Motors	74.4%	1.5%	$ 0.545	$ 0.450	$ 0.095	15	1.070738247	1
CheOT1	Mfg. Chemicals	Other	Turnover	1	Bldg Improvements	35.0%	20.4%	$ 0.248	$ 0.162	$ 0.087	15	2.208192407	1
CheOE2	Mfg. Chemicals	Other	Existing	2	Energy Project Management	27.0%	29.0%	$ 0.163	$ 0.134	$ 0.029	11	2.170338024	1
CheOE3	Mfg. Chemicals	Other	Existing	3	Integrated Plant Energy Management	22.0%	50.0%	$ 0.261	$ 0.215	$ 0.047	11	1.426294042	1
CheOE4	Mfg. Chemicals	Other	Existing	4	Plant Energy Management	27.0%	12.0%	$ 0.139	$ 0.114	$ 0.025	10	2.151371761	1
CheOT5	Mfg. Chemicals	Other	Turnover	5	Transformers	20.0%	1.6%	$ 0.415	$ 0.399	$ 0.016	15	1.370276408	1
ComCooE1	Mfg. Computers	Process Cooling	Existing	1	Clean Room: Change Filter Strategy	10.0%	40.0%	$ 0.016	$ 0.012	$ 0.005	1	0.845229031	0
ComCooE10	Mfg. Computers	Process Cooling	Existing	10	Cold Storage Tuneup	10.0%	15.6%	$ 0.112	$ 0.047	$ 0.065	3	0.796147294	0
ComCooE2	Mfg. Computers	Process Cooling	Existing	2	Clean Room: Chiller Optimize	28.3%	14.8%	$ 0.248	$ 0.124	$ 0.124	10	1.277089473	1
ComCooT3	Mfg. Computers	Process Cooling	Turnover	3	Clean Room: Clean Room HVAC	30.0%	9.0%	$ 0.204	$ 0.144	$ 0.061	15	2.61155315	1
ComCooT4	Mfg. Computers	Process Cooling	Turnover	4	Elec Chip Fab: Solidstate Chiller	20.0%	90.0%	$ 0.634	$ 0.562	$ 0.072	10	0.529173671	0
ComCooT5	Mfg. Computers	Process Cooling	Turnover	5	Equipment: Chillers	8.0%	17.9%	$ 0.330	$ 0.249	$ 0.081	15	1.686320303	1
ComCooE6	Mfg. Computers	Process Cooling	Existing	6	Improved Controls	33.8%	6.0%	$ 1.118	$ 0.673	$ 0.445	15	0.523959727	0
ComCooT7	Mfg. Computers	Process Cooling	Turnover	7	Adjustable speed drive on compressors	34.0%	11.7%	$ 0.201	$ 0.121	$ 0.080	10	1.540530847	1
ComCooE8	Mfg. Computers	Process Cooling	Existing	8	Optimization of operating parameters	35.0%	13.1%	$ 0.101	$ 0.039	$ 0.063	3	0.863115423	0
ComCooT9	Mfg. Computers	Process Cooling	Turnover	9	Cold Storage Retrofit	25.6%	20.7%	$ 0.250	$ 0.157	$ 0.093	10	1.267256532	1
ComHeaE1	Mfg. Computers	Process Heating	Existing	1	Improved Controls	41.5%	30.4%	$ 0.245	$ 0.147	$ 0.098	10	1.29224488	1
ComHeaE2	Mfg. Computers	Process Heating	Existing	2	Process Heat O&M	69.5%	28.6%	$ 0.257	$ 0.225	$ 0.032	2	0.260593322	0
ComHT1	Mfg. Computers	HVAC	Turnover	1	Equipment Upgrades	74.9%	16.4%	$ 0.296	$ 0.252	$ 0.044	15	1.936604358	1
ComHE2	Mfg. Computers	HVAC	Existing	2	Improved Controls	38.9%	20.9%	$ 0.102	$ 0.077	$ 0.025	10	2.879820182	1
ComHE3	Mfg. Computers	HVAC	Existing	3	Recommissioning	86.4%	16.0%	$ 0.271	$ -	$ 0.271	7	0.882497463	0
ComLT1	Mfg. Computers	Lighting	Turnover	1	Efficient Lighting Equipment	30.4%	19.9%	$ 0.150	$ 0.103	$ 0.047	10	2.083103268	1

Measure Lookup	New Segment	New End-Use	Vintage	Measure Number	Measure	Applicability	Savings	Total Cost ($/kW Saved)	Equipment Co	Labor Cost	Life	TRC Test	Economic Flag
ComLT2	Mfg. Computers	Lighting	Turnover	2	HighBay Lighting Equipment	55.1%	34.1%	$ 0.376	$ 0.295	$ 0.081	10	0.910478121	0
ComLE3	Mfg. Computers	Lighting	Existing	3	Lighting Controls	42.3%	30.0%	$ 0.212	$ 0.157	$ 0.055	10	1.539673616	1
ComMT1	Mfg. Computers	Motors	Turnover	1	hanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RI	42.8%	0.9%	$ 0.372	$ 0.372	$ -	15	1.536529688	1
ComMT10	Mfg. Computers	Motors	Turnover	10	Material Handling	52.9%	5.0%	$ 0.585	$ 0.483	$ 0.102	10	0.587742834	0
ComMT11	Mfg. Computers	Motors	Turnover	11	Air Compressor Demand Reduction	25.5%	15.9%	$ 0.107	$ 0.081	$ 0.026	10	2.723747645	1
ComME6	Mfg. Computers	Motors	Existing	6	Material Handling VFD	52.9%	18.7%	$ 0.381	$ 0.229	$ 0.152	10	0.882762707	0
ComME13	Mfg. Computers	Motors	Existing	13	Motor Management Plan	49.2%	2.9%	$ 0.134	$ 0.054	$ 0.080	10	2.249238401	1
ComMT15	Mfg. Computers	Motors	Turnover	15	Motors: Rewind 101-200 HP	25.4%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.824119948	1
ComMT16	Mfg. Computers	Motors	Turnover	16	Motors: Rewind 201-500 HP	35.6%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.824119948	1
ComMT17	Mfg. Computers	Motors	Turnover	17	Motors: Rewind 20-50 HP	4.7%	0.9%	$ 0.431	$ 0.356	$ 0.075	15	1.337768929	1
ComMT18	Mfg. Computers	Motors	Turnover	18	Motors: Rewind 500+ HP	55.2%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.824119948	1
ComMT19	Mfg. Computers	Motors	Turnover	19	Motors: Rewind 51-100 HP	15.2%	0.6%	$ 0.388	$ 0.321	$ 0.067	15	1.477091452	1
ComMT2	Mfg. Computers	Motors	Turnover	2	nhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RP	66.3%	0.4%	$ 0.799	$ 0.799	$ -	15	0.740601322	0
ComMT20	Mfg. Computers	Motors	Turnover	20	Properly Sized Fans	14.8%	10.4%	$ 0.202	$ 0.122	$ 0.080	10	1.578585319	1
ComME21	Mfg. Computers	Motors	Existing	21	Air Compressor Optimization	35.0%	30.1%	$ 0.151	$ 0.058	$ 0.093	10	2.031783478	1
ComME22	Mfg. Computers	Motors	Existing	22	Pump Energy Management	30.1%	7.5%	$ 0.134	$ 0.054	$ 0.080	10	2.249238401	1
ComMT23	Mfg. Computers	Motors	Turnover	23	Pump Equipment Upgrade	32.6%	20.0%	$ 0.156	$ 0.129	$ 0.027	10	1.975403878	1
ComME24	Mfg. Computers	Motors	Existing	24	Pump System Optimization	15.0%	12.1%	$ 0.391	$ 0.196	$ 0.195	12	1.123671222	1
ComMT25	Mfg. Computers	Motors	Turnover	25	Switch from Belt drive to Direct Drive	10.5%	7.5%	$ 0.268	$ 0.221	$ 0.046	12	1.59861177	1
ComMT26	Mfg. Computers	Motors	Turnover	26	Synchronous Belts	20.8%	1.1%	$ 0.268	$ 0.221	$ 0.046	10	1.224364273	1
ComMT27	Mfg. Computers	Motors	Turnover	27	Efficient Centrifugal Fan	10.3%	20.0%	$ 0.228	$ 0.188	$ 0.040	10	1.419200809	1
ComMT28	Mfg. Computers	Motors	Turnover	28	nhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	74.4%	0.91%	$ 2.085	$ 2.085	$ -	15	0.289187588	0
ComMT29	Mfg. Computers	Motors	Turnover	29	hanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RI	55.8%	0.39%	$ 0.436	$ 0.436	$ -	15	1.32356041	1
ComME3	Mfg. Computers	Motors	Existing	3	Fan System Optimization	29.1%	7.7%	$ 0.311	$ 0.156	$ 0.155	10	1.06695124	1
ComMT30	Mfg. Computers	Motors	Turnover	30	nhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RP	74.4%	0.7%	$ 1.249	$ 1.249	$ -	15	0.478823669	0
ComMT4	Mfg. Computers	Motors	Turnover	4	High efficiency Compressor motors	73.8%	1.1%	$ 0.430	$ 0.355	$ 0.075	15	1.341537069	1
ComMT5	Mfg. Computers	Motors	Turnover	5	High Efficiency Motors	73.8%	1.5%	$ 0.545	$ 0.450	$ 0.095	15	1.070738247	1
ComOT1	Mfg. Computers	Other	Turnover	1	Bldg Improvements	35.0%	20.4%	$ 0.248	$ 0.162	$ 0.087	15	2.208192407	1
ComOT2	Mfg. Computers	Other	Turnover	2	Elec Chip Fab: Eliminate Exhaust	80.1%	5.0%	$ 0.233	$ 0.206	$ 0.026	10	1.36719376	1
ComOT3	Mfg. Computers	Other	Turnover	3	Elec Chip Fab: Exhaust Injector	35.0%	100.0%	$ 0.561	$ 0.498	$ 0.064	10	0.60098198	0
ComCooT11	Mfg. Computers	Process Cooling	Turnover	11	Elec Chip Fab: Reduce Gas Pressure	5.0%	10.0%	$ 0.063	$ -	$ 0.063	10	3.983670017	1
ComOE5	Mfg. Computers	Other	Existing	5	Energy Project Management	27.0%	29.0%	$ 0.163	$ 0.134	$ 0.029	11	2.170338024	1
ComOE6	Mfg. Computers	Other	Existing	6	Integrated Plant Energy Management	22.0%	50.0%	$ 0.261	$ 0.215	$ 0.047	11	1.426294042	1
ComOE7	Mfg. Computers	Other	Existing	7	Plant Energy Management	27.0%	12.0%	$ 0.139	$ 0.114	$ 0.025	10	2.151371761	1
ComOT8	Mfg. Computers	Other	Turnover	8	Transformers	20.0%	1.6%	$ 0.415	$ 0.399	$ 0.016	15	1.370276408	1
FooCooT1	Mfg. Food	Process Cooling	Turnover	1	Equipment: Chillers	8.3%	17.9%	$ 0.330	$ 0.249	$ 0.081	15	1.686320303	1
FooCooE2	Mfg. Food	Process Cooling	Existing	2	Improved Controls	35.2%	6.0%	$ 1.118	$ 0.673	$ 0.445	15	0.523959727	0
FooCooT3	Mfg. Food	Process Cooling	Turnover	3	Adjustable speed drive on compressors	34.0%	11.7%	$ 0.201	$ 0.121	$ 0.080	10	1.540530847	1
FooCooT4	Mfg. Food	Process Cooling	Turnover	4	Food: Cooling and Storage	15.0%	15.4%	$ 0.258	$ 0.162	$ 0.096	10	1.232015596	1
FooCooT5	Mfg. Food	Process Cooling	Turnover	5	Food: Refrig Storage Tuneup	7.5%	14.4%	$ 0.056	$ 0.023	$ 0.033	3	1.346108735	1
FooCooT6	Mfg. Food	Process Cooling	Turnover	6	Fruit Storage Refer Retrofit	60.7%	38.2%	$ 0.214	$ 0.135	$ 0.079	10	1.456443919	1
FooCooT7	Mfg. Food	Process Cooling	Turnover	7	Fruit Storage Tuneup	10.0%	15.6%	$ 0.056	$ 0.023	$ 0.033	3	1.346108735	1
FooCooE8	Mfg. Food	Process Cooling	Existing	8	Optimization of operating parameters	35.0%	13.1%	$ 0.101	$ 0.039	$ 0.063	3	0.863115423	0
FooHeaE1	Mfg. Food	Process Heating	Existing	1	Improved Controls	38.8%	30.4%	$ 0.245	$ 0.147	$ 0.098	10	1.29224488	1
FooHeaE2	Mfg. Food	Process Heating	Existing	2	Process Heat O&M	65.0%	28.6%	$ 0.257	$ 0.225	$ 0.032	2	0.260593322	0
FooHT1	Mfg. Food	HVAC	Turnover	1	Equipment Upgrades	62.9%	16.4%	$ 0.296	$ 0.252	$ 0.044	15	1.936604358	1
FooHE2	Mfg. Food	HVAC	Existing	2	Improved Controls	32.7%	20.9%	$ 0.102	$ 0.077	$ 0.025	10	2.879820182	1
FooHE3	Mfg. Food	HVAC	Existing	3	Recommissioning	72.6%	16.0%	$ 0.271	$ -	$ 0.271	7	0.882497463	0
FooLT1	Mfg. Food	Lighting	Turnover	1	Efficient Lighting Equipment	30.4%	19.9%	$ 0.150	$ 0.103	$ 0.047	10	2.083103268	1
FooLT2	Mfg. Food	Lighting	Turnover	2	HighBay Lighting Equipment	55.1%	34.1%	$ 0.376	$ 0.295	$ 0.081	10	0.910478121	0
FooLE3	Mfg. Food	Lighting	Existing	3	Lighting Controls	42.3%	30.0%	$ 0.212	$ 0.157	$ 0.055	10	1.539673616	1
FooME1	Mfg. Food	Motors	Existing	1	Fan System Optimization	29.6%	7.7%	$ 0.311	$ 0.156	$ 0.155	10	1.06695124	1
FooME4	Mfg. Food	Motors	Existing	4	Material Handling VFD	51.6%	18.7%	$ 0.381	$ 0.229	$ 0.152	10	0.882762707	0
FooME11	Mfg. Food	Motors	Existing	11	Motor Management Plan	48.9%	2.9%	$ 0.134	$ 0.054	$ 0.080	10	2.249238401	1
FooMT13	Mfg. Food	Motors	Turnover	13	Motors: Rewind 101-200 HP	25.4%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.824119948	1
FooMT14	Mfg. Food	Motors	Turnover	14	Motors: Rewind 201-500 HP	35.6%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.824119948	1
FooMT15	Mfg. Food	Motors	Turnover	15	Motors: Rewind 20-50 HP	4.6%	0.9%	$ 0.431	$ 0.356	$ 0.075	15	1.337768929	1
FooMT16	Mfg. Food	Motors	Turnover	16	Motors: Rewind 500+ HP	55.2%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.824119948	1
FooMT17	Mfg. Food	Motors	Turnover	17	Motors: Rewind 51-100 HP	15.2%	0.6%	$ 0.388	$ 0.321	$ 0.067	15	1.477091452	1
FooME18	Mfg. Food	Motors	Existing	18	Air Compressor Optimization	35.0%	30.1%	$ 0.151	$ 0.058	$ 0.093	10	2.031783478	1
FooMT19	Mfg. Food	Motors	Turnover	19	Properly Sized Fans	15.0%	10.4%	$ 0.202	$ 0.122	$ 0.080	10	1.578585319	1
FooMT2	Mfg. Food	Motors	Turnover	2	High efficiency Compressor motors	73.8%	1.1%	$ 0.430	$ 0.355	$ 0.075	15	1.341537069	1
FooME20	Mfg. Food	Motors	Existing	20	Pump Energy Management	30.5%	7.5%	$ 0.134	$ 0.054	$ 0.080	10	2.249238401	1

Measure Lookup	New Segment	New End-Use	Vintage	Measure Number	Measure	Applicability	Savings	Total Cost ($/kW Saved)	Equipment Co	Labor Cost	Life	TRC Test	Economic Flag
FooMT21	Mfg. Food	Motors	Turnover	21	Pump Equipment Upgrade	33.0%	20.0%	$ 0.156	$ 0.129	$ 0.027	10	1.975403878	1
FooME22	Mfg. Food	Motors	Existing	22	Pump System Optimization	15.2%	12.1%	$ 0.391	$ 0.196	$ 0.195	12	1.123671222	1
FooMT23	Mfg. Food	Motors	Turnover	23	Switch from Belt drive to Direct Drive	10.2%	7.5%	$ 0.268	$ 0.221	$ 0.046	12	1.59861177	1
FooMT24	Mfg. Food	Motors	Turnover	24	Synchronous Belts	20.8%	1.1%	$ 0.268	$ 0.221	$ 0.046	10	1.224364273	1
FooMT25	Mfg. Food	Motors	Turnover	25	Efficient Centrifugal Fan	10.5%	20.0%	$ 0.228	$ 0.188	$ 0.040	10	1.419200809	1
FooMT26	Mfg. Food	Motors	Turnover	26	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	74.4%	0.91%	$ 2.085	$ 2.085	$ -	15	0.289187588	0
FooMT27	Mfg. Food	Motors	Turnover	27	hanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RI	55.8%	0.39%	$ 0.436	$ 0.436	$ -	15	1.32356041	1
FooMT28	Mfg. Food	Motors	Turnover	28	nhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RP	74.4%	0.7%	$ 1.249	$ 1.249	$ -	15	0.478823669	0
FooMT29	Mfg. Food	Motors	Turnover	29	hanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RI	42.8%	0.9%	$ 0.372	$ 0.372	$ -	15	1.536529688	1
FooMT3	Mfg. Food	Motors	Turnover	3	High Efficiency Motors	74.0%	1.5%	$ 0.545	$ 0.450	$ 0.095	15	1.070738247	1
FooMT30	Mfg. Food	Motors	Turnover	30	nhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RP	66.3%	0.4%	$ 0.799	$ 0.799	$ -	15	0.740601322	0
FooMT7	Mfg. Food	Motors	Turnover	7	Air Compressor Demand Reduction	25.5%	15.9%	$ 0.107	$ 0.081	$ 0.026	10	2.723747645	1
FooMT9	Mfg. Food	Motors	Turnover	9	Material Handling	51.6%	5.0%	$ 0.585	$ 0.483	$ 0.102	10	0.587742834	0
FooOT1	Mfg. Food	Other	Turnover	1	Bldg Improvements	35.0%	20.4%	$ 0.248	$ 0.162	$ 0.087	15	2.208192407	1
FooOE2	Mfg. Food	Other	Existing	2	Energy Project Management	27.0%	29.0%	$ 0.163	$ 0.134	$ 0.029	11	2.170338024	1
FooOE3	Mfg. Food	Other	Existing	3	Integrated Plant Energy Management	22.0%	50.0%	$ 0.261	$ 0.215	$ 0.047	11	1.426294042	1
FooOE4	Mfg. Food	Other	Existing	4	Plant Energy Management	27.0%	12.0%	$ 0.139	$ 0.114	$ 0.025	10	2.151371761	1
FooOT5	Mfg. Food	Other	Turnover	5	Transformers	20.0%	1.6%	$ 0.415	$ 0.399	$ 0.016	15	1.370276408	1
MetCooT1	Mfg. Metals	Process Cooling	Turnover	1	Equipment: Chillers	8.0%	17.9%	$ 0.330	$ 0.249	$ 0.081	15	1.686320303	1
MetCooe2	Mfg. Metals	Process Cooling	existing	2	Improved Controls	33.8%	6.0%	$ 1.118	$ 0.673	$ 0.445	15	0.523959727	0
MetCooE3	Mfg. Metals	Process Cooling	Existing	3	Optimization of operating parameters	35.0%	13.1%	$ 0.101	$ 0.039	$ 0.063	3	0.863115423	0
MetHeaE1	Mfg. Metals	Process Heating	Existing	1	Improved Controls	40.1%	30.4%	$ 0.245	$ 0.147	$ 0.098	10	1.29224488	1
MetHeaT2	Mfg. Metals	Process Heating	Turnover	2	Metal: New Arc Furnace	10.3%	45.0%	$ 0.115	$ 0.102	$ 0.013	10	2.488920113	1
MetHeaE3	Mfg. Metals	Process Heating	Existing	3	Process Heat O&M	67.2%	28.6%	$ 0.257	$ 0.225	$ 0.032	2	0.260593322	0
MetHT1	Mfg. Metals	HVAC	Turnover	1	Equipment Upgrades	64.7%	16.4%	$ 0.296	$ 0.252	$ 0.044	15	1.936604358	1
MetHE2	Mfg. Metals	HVAC	Existing	2	Improved Controls	33.6%	20.9%	$ 0.102	$ 0.077	$ 0.025	10	2.879820182	1
MetHE3	Mfg. Metals	HVAC	Existing	3	Recommissioning	74.7%	16.0%	$ 0.271	$ -	$ 0.271	7	0.882497463	0
MetLT1	Mfg. Metals	Lighting	Turnover	1	Efficient Lighting Equipment	30.4%	19.9%	$ 0.150	$ 0.103	$ 0.047	10	2.083103268	1
MetLT2	Mfg. Metals	Lighting	Turnover	2	HighBay Lighting Equipment	55.1%	34.1%	$ 0.376	$ 0.295	$ 0.081	10	0.910478121	0
MetLE3	Mfg. Metals	Lighting	Existing	3	Lighting Controls	42.3%	30.0%	$ 0.212	$ 0.157	$ 0.055	10	1.539673616	1
MetMT1	Mfg. Metals	Motors	Turnover	1	Air Compressor Demand Reduction	25.3%	15.9%	$ 0.107	$ 0.081	$ 0.026	10	2.723747645	1
MetME10	Mfg. Metals	Motors	Existing	10	Motor Management Plan	49.1%	2.9%	$ 0.134	$ 0.054	$ 0.080	10	2.249238401	1
MetME12	Mfg. Metals	Motors	Existing	12	Air Compressor Optimization	34.7%	30.1%	$ 0.151	$ 0.058	$ 0.093	10	2.031783478	1
MetMT13	Mfg. Metals	Motors	Turnover	13	Motors: Rewind 101-200 HP	25.4%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.824119948	1
MetMT14	Mfg. Metals	Motors	Turnover	14	Motors: Rewind 201-500 HP	35.6%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.824119948	1
MetMT15	Mfg. Metals	Motors	Turnover	15	Motors: Rewind 20-50 HP	4.6%	0.9%	$ 0.431	$ 0.356	$ 0.075	15	1.337768929	1
MetMT16	Mfg. Metals	Motors	Turnover	16	Motors: Rewind 500+ HP	55.2%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.824119948	1
MetMT17	Mfg. Metals	Motors	Turnover	17	Motors: Rewind 51-100 HP	15.2%	0.6%	$ 0.388	$ 0.321	$ 0.067	15	1.477091452	1
MetMT18	Mfg. Metals	Motors	Turnover	18	Properly Sized Fans	14.7%	10.4%	$ 0.202	$ 0.122	$ 0.080	10	1.578585319	1
MetME19	Mfg. Metals	Motors	Existing	19	Pump Energy Management	29.8%	7.5%	$ 0.134	$ 0.054	$ 0.080	10	2.249238401	1
MetMT2	Mfg. Metals	Motors	Turnover	2	High efficiency Compressor motors	73.1%	1.1%	$ 0.430	$ 0.355	$ 0.075	15	1.341537069	1
MetMT20	Mfg. Metals	Motors	Turnover	20	Pump Equipment Upgrade	32.3%	20.0%	$ 0.156	$ 0.129	$ 0.027	10	1.975403878	1
MetME21	Mfg. Metals	Motors	Existing	21	Pump System Optimization	14.9%	12.1%	$ 0.391	$ 0.196	$ 0.195	12	1.123671222	1
MetMT22	Mfg. Metals	Motors	Turnover	22	Efficient Centrifugal Fan	10.3%	20.0%	$ 0.228	$ 0.188	$ 0.040	10	1.419200809	1
MetMT23	Mfg. Metals	Motors	Turnover	23	Switch from Belt drive to Direct Drive	10.4%	7.5%	$ 0.268	$ 0.221	$ 0.046	12	1.59861177	1
MetMT24	Mfg. Metals	Motors	Turnover	24	Synchronous Belts	20.6%	1.1%	$ 0.268	$ 0.221	$ 0.046	10	1.224364273	1
MetMT25	Mfg. Metals	Motors	Turnover	25	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	74.4%	0.91%	$ 2.085	$ 2.085	$ -	15	0.289187588	0
MetMT26	Mfg. Metals	Motors	Turnover	26	hanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RI	55.8%	0.39%	$ 0.436	$ 0.436	$ -	15	1.32356041	1
MetMT27	Mfg. Metals	Motors	Turnover	27	nhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RP	74.4%	0.7%	$ 1.249	$ 1.249	$ -	15	0.478823669	0
MetMT28	Mfg. Metals	Motors	Turnover	28	hanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RI	42.8%	0.9%	$ 0.372	$ 0.372	$ -	15	1.536529688	1
MetMT29	Mfg. Metals	Motors	Turnover	29	nhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RP	66.3%	0.4%	$ 0.799	$ 0.799	$ -	15	0.740601322	0
MetMT3	Mfg. Metals	Motors	Turnover	3	High Efficiency Motors	73.3%	1.5%	$ 0.545	$ 0.450	$ 0.095	15	1.070738247	1
MetME30	Mfg. Metals	Motors	Existing	30	Fan System Optimization	29.0%	7.7%	$ 0.311	$ 0.156	$ 0.155	10	1.06695124	1
MetMT8	Mfg. Metals	Motors	Turnover	8	Material Handling	52.4%	5.0%	$ 0.585	$ 0.483	$ 0.102	10	0.587742834	0
MetME4	Mfg. Metals	Motors	Existing	4	Material Handling VFD	52.4%	18.7%	$ 0.381	$ 0.229	$ 0.152	10	0.882762707	0
MetOT1	Mfg. Metals	Other	Turnover	1	Bldg Improvements	35.0%	20.4%	$ 0.248	$ 0.162	$ 0.087	15	2.208192407	1
MetOE2	Mfg. Metals	Other	Existing	2	Energy Project Management	27.0%	29.0%	$ 0.163	$ 0.134	$ 0.029	11	2.170338024	1
MetOE3	Mfg. Metals	Other	Existing	3	Integrated Plant Energy Management	22.0%	50.0%	$ 0.261	$ 0.215	$ 0.047	11	1.426294042	1
MetOE4	Mfg. Metals	Other	Existing	4	Plant Energy Management	27.0%	12.0%	$ 0.139	$ 0.114	$ 0.025	10	2.151371761	1
MetOT5	Mfg. Metals	Other	Turnover	5	Transformers	20.0%	1.6%	$ 0.415	$ 0.399	$ 0.016	15	1.370276408	1
OthCooT1	Mfg. Other	Process Cooling	Turnover	1	Equipment: Chillers	8.0%	17.9%	$ 0.330	$ 0.249	$ 0.081	15	1.686320303	1
OthCooE2	Mfg. Other	Process Cooling	Existing	2	Improved Controls	33.8%	6.0%	$ 1.118	$ 0.673	$ 0.445	15	0.523959727	0
OthCooT3	Mfg. Other	Process Cooling	Turnover	3	Adjustable speed drive on compressors	34.0%	11.7%	$ 0.201	$ 0.121	$ 0.080	10	1.540530847	1

Measure Lookup	New Segment	New End-Use	Vintage	Measure Number	Measure	Applicability	Savings	Total Cost ($/kW Saved)	Equipment Co	Labor Cost	Life	TRC Test	Economic Flag
OthCooE4	Mfg. Other	Process Cooling	Existing	4	Optimization of operating parameters	35.0%	13.1%	$ 0.101	$ 0.039	$ 0.063	3	0.863115423	0
OthCooT5	Mfg. Other	Process Cooling	Turnover	5	Cold Storage Retrofit	25.6%	20.7%	$ 0.250	$ 0.157	$ 0.093	10	1.267256532	1
OthCooE6	Mfg. Other	Process Cooling	Existing	6	Cold Storage Tuneup	10.0%	15.6%	$ 0.112	$ 0.047	$ 0.065	3	0.796147294	0
OthHeae1	Mfg. Other	Process Heating	existing	1	Improved Controls	41.7%	30.4%	$ 0.245	$ 0.147	$ 0.098	10	1.29224488	1
OthHeae2	Mfg. Other	Process Heating	existing	2	Process Heat O&M	69.8%	28.6%	$ 0.257	$ 0.225	$ 0.032	2	0.260593322	0
OthHT1	Mfg. Other	HVAC	Turnover	1	Equipment Upgrades	64.4%	16.4%	$ 0.296	$ 0.252	$ 0.044	15	1.936604358	1
OthHE2	Mfg. Other	HVAC	Existing	2	Improved Controls	33.4%	20.9%	$ 0.102	$ 0.077	$ 0.025	10	2.879820182	1
OthHE3	Mfg. Other	HVAC	Existing	3	Recommissioning	74.3%	16.0%	$ 0.271	$ -	$ 0.271	7	0.882497463	0
OthLT1	Mfg. Other	Lighting	Turnover	1	Efficient Lighting Equipment	30.4%	19.9%	$ 0.150	$ 0.103	$ 0.047	10	2.083103268	1
OthLT2	Mfg. Other	Lighting	Turnover	2	HighBay Lighting Equipment	55.1%	34.1%	$ 0.376	$ 0.295	$ 0.081	10	0.910478121	0
OthLE3	Mfg. Other	Lighting	Existing	3	Lighting Controls	42.3%	30.0%	$ 0.212	$ 0.157	$ 0.055	10	1.539673616	1
OthMT1	Mfg. Other	Motors	Turnover	1	nhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RP	74.4%	0.7%	$ 1.249	$ 1.249	$ -	15	0.478823669	0
OthMT11	Mfg. Other	Motors	Turnover	11	Air Compressor Demand Reduction	26.0%	15.9%	$ 0.107	$ 0.081	$ 0.026	10	2.723747645	1
OthMT12	Mfg. Other	Motors	Turnover	12	Material Handling	52.9%	5.0%	$ 0.585	$ 0.483	$ 0.102	10	0.587742834	0
OthME13	Mfg. Other	Motors	Existing	13	Material Handling VFD	52.9%	18.7%	$ 0.381	$ 0.229	$ 0.152	10	0.882762707	0
OthME14	Mfg. Other	Motors	Existing	14	Motor Management Plan	50.0%	2.9%	$ 0.134	$ 0.054	$ 0.080	10	2.249238401	1
OthMT16	Mfg. Other	Motors	Turnover	16	Motors: Rewind 101-200 HP	25.4%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.824119948	1
OthMT17	Mfg. Other	Motors	Turnover	17	Motors: Rewind 201-500 HP	35.6%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.824119948	1
OthMT18	Mfg. Other	Motors	Turnover	18	Motors: Rewind 20-50 HP	4.7%	0.9%	$ 0.431	$ 0.356	$ 0.075	15	1.337768929	1
OthMT19	Mfg. Other	Motors	Turnover	19	Motors: Rewind 500+ HP	55.2%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.824119948	1
OthMT2	Mfg. Other	Motors	Turnover	2	hanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RI	42.8%	0.9%	$ 0.372	$ 0.372	$ -	15	1.536529688	1
OthMT20	Mfg. Other	Motors	Turnover	20	Motors: Rewind 51-100 HP	15.2%	0.6%	$ 0.388	$ 0.321	$ 0.067	15	1.477091452	1
OthMT21	Mfg. Other	Motors	Turnover	21	Air Compressor Equipment	17.0%	8.8%	$ 0.157	$ 0.130	$ 0.027	10	1.966981338	1
OthMT22	Mfg. Other	Motors	Turnover	22	Properly Sized Fans	15.3%	10.4%	$ 0.202	$ 0.122	$ 0.080	10	1.578585319	1
OthME23	Mfg. Other	Motors	Existing	23	Pump Energy Management	31.2%	7.5%	$ 0.134	$ 0.054	$ 0.080	10	2.249238401	1
OthMT24	Mfg. Other	Motors	Turnover	24	Pump Equipment Upgrade	33.8%	20.0%	$ 0.156	$ 0.129	$ 0.027	10	1.975403878	1
OthME25	Mfg. Other	Motors	Existing	25	Pump System Optimization	15.5%	12.1%	$ 0.391	$ 0.196	$ 0.195	12	1.123671222	1
OthMT26	Mfg. Other	Motors	Turnover	26	Switch from Belt drive to Direct Drive	10.5%	7.5%	$ 0.268	$ 0.221	$ 0.046	12	1.59861177	1
OthMT27	Mfg. Other	Motors	Turnover	27	Synchronous Belts	21.4%	1.1%	$ 0.268	$ 0.221	$ 0.046	10	1.224364273	1
OthME28	Mfg. Other	Motors	Existing	28	Air Compressor Optimization	35.6%	30.1%	$ 0.151	$ 0.058	$ 0.093	10	2.031783478	1
OthMT29	Mfg. Other	Motors	Turnover	29	Efficient Centrifugal Fan	10.7%	20.0%	$ 0.228	$ 0.188	$ 0.040	10	1.419200809	1
OthMT3	Mfg. Other	Motors	Turnover	3	nhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RP	66.3%	0.4%	$ 0.799	$ 0.799	$ -	15	0.740601322	0
OthMT30	Mfg. Other	Motors	Turnover	30	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	74.4%	0.91%	$ 2.085	$ 2.085	$ -	15	0.289187588	0
OthMT31	Mfg. Other	Motors	Turnover	31	hanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RI	55.8%	0.39%	$ 0.436	$ 0.436	$ -	15	1.32356041	1
OthME4	Mfg. Other	Motors	Existing	4	Fan System Optimization	30.1%	7.7%	$ 0.311	$ 0.156	$ 0.155	10	1.06695124	1
OthMT5	Mfg. Other	Motors	Turnover	5	High efficiency Compressor motors	75.1%	1.1%	$ 0.430	$ 0.355	$ 0.075	15	1.341537069	1
OthMT6	Mfg. Other	Motors	Turnover	6	High Efficiency Motors	75.6%	1.5%	$ 0.545	$ 0.450	$ 0.095	15	1.070738247	1
OthOT1	Mfg. Other	Other	Turnover	1	Bldg Improvements	35.0%	20.4%	$ 0.248	$ 0.162	$ 0.087	15	2.208192407	1
OthOE2	Mfg. Other	Other	Existing	2	Energy Project Management	27.0%	29.0%	$ 0.163	$ 0.134	$ 0.029	11	2.170338024	1
OthOE3	Mfg. Other	Other	Existing	3	Integrated Plant Energy Management	22.0%	50.0%	$ 0.261	$ 0.215	$ 0.047	11	1.426294042	1
OthOE4	Mfg. Other	Other	Existing	4	Plant Energy Management	27.0%	12.0%	$ 0.139	$ 0.114	$ 0.025	10	2.151371761	1
OthOT5	Mfg. Other	Other	Turnover	5	Transformers	20.0%	1.6%	$ 0.415	$ 0.399	$ 0.016	15	1.370276408	1
PapCooT1	Mfg. Paper	Process Cooling	Turnover	1	Equipment: Chillers	8.0%	17.9%	$ 0.330	$ 0.249	$ 0.081	15	1.686320303	1
PapCooE2	Mfg. Paper	Process Cooling	Existing	2	Improved Controls	33.8%	6.0%	$ 1.118	$ 0.673	$ 0.445	15	0.523959727	0
PapCooT3	Mfg. Paper	Process Cooling	Turnover	3	Adjustable speed drive on compressors	34.0%	11.7%	$ 0.201	$ 0.121	$ 0.080	10	1.540530847	1
PapCooE4	Mfg. Paper	Process Cooling	Existing	4	Optimization of operating parameters	35.0%	13.1%	$ 0.101	$ 0.039	$ 0.063	3	0.863115423	0
PapHeaE1	Mfg. Paper	Process Heating	Existing	1	Improved Controls	38.1%	30.4%	$ 0.245	$ 0.147	$ 0.098	10	1.29224488	1
PapHeaE2	Mfg. Paper	Process Heating	Existing	2	Process Heat O&M	63.9%	28.6%	$ 0.257	$ 0.225	$ 0.032	2	0.260593322	0
PapHT1	Mfg. Paper	HVAC	Turnover	1	Equipment Upgrades	62.4%	16.4%	$ 0.296	$ 0.252	$ 0.044	15	1.936604358	1
PapHE2	Mfg. Paper	HVAC	Existing	2	Improved Controls	32.4%	20.9%	$ 0.102	$ 0.077	$ 0.025	10	2.879820182	1
PapHE3	Mfg. Paper	HVAC	Existing	3	Recommissioning	72.0%	16.0%	$ 0.271	$ -	$ 0.271	7	0.882497463	0
PapLT1	Mfg. Paper	Lighting	Turnover	1	Efficient Lighting Equipment	30.4%	19.9%	$ 0.150	$ 0.103	$ 0.047	10	2.083103268	1
PapLT2	Mfg. Paper	Lighting	Turnover	2	HighBay Lighting Equipment	55.1%	34.1%	$ 0.376	$ 0.295	$ 0.081	10	0.910478121	0
PapLE3	Mfg. Paper	Lighting	Existing	3	Lighting Controls	42.3%	30.0%	$ 0.212	$ 0.157	$ 0.055	10	1.539673616	1
PapME1	Mfg. Paper	Motors	Existing	1	Fan System Optimization	30.2%	7.7%	$ 0.311	$ 0.156	$ 0.155	10	1.06695124	1
PapME10	Mfg. Paper	Motors	Existing	10	Motor Management Plan	50.1%	2.9%	$ 0.134	$ 0.054	$ 0.080	10	2.249238401	1
PapMT11	Mfg. Paper	Motors	Turnover	11	Air Compressor Demand Reduction	25.8%	15.9%	$ 0.107	$ 0.081	$ 0.026	10	2.723747645	1
PapMT13	Mfg. Paper	Motors	Turnover	13	Motors: Rewind 101-200 HP	25.4%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.824119948	1
PapMT14	Mfg. Paper	Motors	Turnover	14	Motors: Rewind 201-500 HP	35.6%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.824119948	1
PapMT15	Mfg. Paper	Motors	Turnover	15	Motors: Rewind 20-50 HP	4.7%	0.9%	$ 0.431	$ 0.356	$ 0.075	15	1.337768929	1
PapMT16	Mfg. Paper	Motors	Turnover	16	Motors: Rewind 500+ HP	55.2%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.824119948	1
PapMT17	Mfg. Paper	Motors	Turnover	17	Motors: Rewind 51-100 HP	15.2%	0.6%	$ 0.388	$ 0.321	$ 0.067	15	1.477091452	1
PapMT18	Mfg. Paper	Motors	Turnover	18	Paper: Large Material Handling	25.2%	9.7%	$ 0.959	$ 0.850	$ 0.109	10	0.364258216	0

Measure Lookup	New Segment	New End-Use	Vintage	Measure Number	Measure	Applicability	Savings	Total Cost ($/kW Saved)	Equipment Co	Labor Cost	Life	TRC Test	Economic Flag
PapMT19	Mfg. Paper	Motors	Turnover	19	Paper: Material Handling	25.2%	13.1%	$ 0.801	$ 0.710	$ 0.091	10	0.433698294	0
PapMT2	Mfg. Paper	Motors	Turnover	2	High efficiency Compressor motors	74.7%	1.1%	$ 0.430	$ 0.355	$ 0.075	15	1.341537069	1
PapMT20	Mfg. Paper	Motors	Turnover	20	Paper: Premium Control Large Material	25.2%	18.7%	$ 0.549	$ 0.486	$ 0.062	10	0.624933918	0
PapME21	Mfg. Paper	Motors	Existing	21	Air Compressor Optimization	35.4%	30.1%	$ 0.151	$ 0.058	$ 0.093	10	2.031783478	1
PapMT22	Mfg. Paper	Motors	Turnover	22	Paper: Premium Fan	25.5%	20.0%	$ 0.227	$ 0.201	$ 0.026	10	1.424183361	1
PapMT23	Mfg. Paper	Motors	Turnover	23	Properly Sized Fans	15.3%	10.4%	$ 0.202	$ 0.122	$ 0.080	10	1.578585319	1
PapME24	Mfg. Paper	Motors	Existing	24	Pump Energy Management	32.3%	7.5%	$ 0.134	$ 0.054	$ 0.080	10	2.249238401	1
PapMT25	Mfg. Paper	Motors	Turnover	25	Pump Equipment Upgrade	34.9%	20.0%	$ 0.156	$ 0.129	$ 0.027	10	1.975403878	1
PapME26	Mfg. Paper	Motors	Existing	26	Pump System Optimization	16.1%	12.1%	$ 0.391	$ 0.196	$ 0.195	12	1.123671222	1
PapMT27	Mfg. Paper	Motors	Turnover	27	Switch from Belt drive to Direct Drive	10.6%	7.5%	$ 0.268	$ 0.221	$ 0.046	12	1.59861177	1
PapMT28	Mfg. Paper	Motors	Turnover	28	Synchronous Belts	21.4%	1.1%	$ 0.268	$ 0.221	$ 0.046	10	1.224364273	1
PapMT29	Mfg. Paper	Motors	Turnover	29	Efficient Centrifugal Fan	10.7%	20.0%	$ 0.228	$ 0.188	$ 0.040	10	1.419200809	1
PapMT3	Mfg. Paper	Motors	Turnover	3	High Efficiency Motors	76.7%	1.5%	$ 0.545	$ 0.450	$ 0.095	15	1.070738247	1
PapMT30	Mfg. Paper	Motors	Turnover	30	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	74.4%	0.91%	$ 2.085	$ 2.085	$ -	15	0.289187588	0
PapMT31	Mfg. Paper	Motors	Turnover	31	hanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RI	55.8%	0.39%	$ 0.436	$ 0.436	$ -	15	1.32356041	1
PapMT32	Mfg. Paper	Motors	Turnover	32	nhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RP	74.4%	0.7%	$ 1.249	$ 1.249	$ -	15	0.478823669	0
PapMT33	Mfg. Paper	Motors	Turnover	33	hanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RI	42.8%	0.9%	$ 0.372	$ 0.372	$ -	15	1.536529688	1
PapMT34	Mfg. Paper	Motors	Turnover	34	hanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RP	66.3%	0.4%	$ 0.799	$ 0.799	$ -	15	0.740601322	0
PapMT8	Mfg. Paper	Motors	Turnover	8	Material Handling	53.4%	5.0%	$ 0.585	$ 0.483	$ 0.102	10	0.587742834	0
PapME9	Mfg. Paper	Motors	Existing	9	Material Handling VFD	53.4%	18.7%	$ 0.381	$ 0.229	$ 0.152	10	0.882762707	0
PapOT1	Mfg. Paper	Other	Turnover	1	Bldg Improvements	35.0%	20.4%	$ 0.248	$ 0.162	$ 0.087	15	2.208192407	1
PapOE10	Mfg. Paper	Other	Existing	10	Plant Energy Management	27.0%	12.0%	$ 0.139	$ 0.114	$ 0.025	10	2.151371761	1
PapOT11	Mfg. Paper	Other	Turnover	11	Transformers	20.0%	1.6%	$ 0.415	$ 0.399	$ 0.016	15	1.370276408	1
PapOE2	Mfg. Paper	Other	Existing	2	Energy Project Management	27.0%	29.0%	$ 0.163	$ 0.134	$ 0.029	11	2.170338024	1
PapOE3	Mfg. Paper	Other	Existing	3	Integrated Plant Energy Management	22.0%	50.0%	$ 0.261	$ 0.215	$ 0.047	11	1.426294042	1
PapOT4	Mfg. Paper	Other	Turnover	4	Kraft: Efficient Agitator	13.8%	50.0%	$ 0.104	$ 0.093	$ 0.012	10	2.721968594	1
PapOT5	Mfg. Paper	Other	Turnover	5	Kraft: Effluent Treatment System	9.2%	15.0%	$ 0.092	$ 0.082	$ 0.011	10	2.999620748	1
PapOT6	Mfg. Paper	Other	Turnover	6	Mech Pulp: Premium Process	22.5%	0.2%	$ 0.141	$ 0.125	$ 0.016	5	1.048487796	1
PapOT7	Mfg. Paper	Other	Turnover	7	Mech Pulp: Refiner Plate Improvement	35.5%	0.4%	$ 0.045	$ 0.040	$ 0.005	1	0.511034625	0
PapOT8	Mfg. Paper	Other	Turnover	8	Mech Pulp: Refiner Replacement	23.7%	10.0%	$ 0.735	$ 0.652	$ 0.084	12	0.606926984	0
PapOT9	Mfg. Paper	Other	Turnover	9	Paper: Efficient Pulp Screen	13.8%	15.0%	$ 0.226	$ 0.200	$ 0.026	10	1.406347669	1
PlaCooE1	Mfg. Plastics	Process Cooling	Existing	1	Clean Room: Change Filter Strategy	10.0%	40.0%	$ 0.016	$ 0.012	$ 0.005	1	0.845229031	0
PlaCooE2	Mfg. Plastics	Process Cooling	Existing	2	Clean Room: Chiller Optimize	28.3%	14.8%	$ 0.248	$ 0.124	$ 0.124	10	1.277089473	1
PlaCooT3	Mfg. Plastics	Process Cooling	Turnover	3	Clean Room: Clean Room HVAC	30.0%	9.0%	$ 0.204	$ 0.144	$ 0.061	15	2.61155315	1
PlaCooT4	Mfg. Plastics	Process Cooling	Turnover	4	Equipment: Chillers	8.0%	17.9%	$ 0.330	$ 0.249	$ 0.081	15	1.686320303	1
PlaCooE5	Mfg. Plastics	Process Cooling	Existing	5	Improved Controls	33.8%	6.0%	$ 1.118	$ 0.673	$ 0.445	15	0.523959727	0
PlaCooT6	Mfg. Plastics	Process Cooling	Turnover	6	Adjustable speed drive on compressors	34.0%	11.7%	$ 0.201	$ 0.121	$ 0.080	10	1.540530847	1
PlaCooE7	Mfg. Plastics	Process Cooling	Existing	7	Optimization of operating parameters	35.0%	13.1%	$ 0.101	$ 0.039	$ 0.063	3	0.863115423	0
PlaCooT8	Mfg. Plastics	Process Cooling	Turnover	8	Cold Storage Retrofit	25.6%	20.7%	$ 0.250	$ 0.157	$ 0.093	10	1.267256532	1
PlaCooE9	Mfg. Plastics	Process Cooling	Existing	9	Cold Storage Tuneup	10.0%	15.6%	$ 0.112	$ 0.047	$ 0.065	3	0.796147294	0
PlaHeaE1	Mfg. Plastics	Process Heating	Existing	1	Improved Controls	37.9%	30.4%	$ 0.245	$ 0.147	$ 0.098	10	1.29224488	1
PlaHeaE2	Mfg. Plastics	Process Heating	Existing	2	Process Heat O&M	63.4%	28.6%	$ 0.257	$ 0.225	$ 0.032	2	0.260593322	0
PlaHT1	Mfg. Plastics	HVAC	Turnover	1	Equipment Upgrades	62.9%	16.4%	$ 0.296	$ 0.252	$ 0.044	15	1.936604358	1
PlaHE2	Mfg. Plastics	HVAC	Existing	2	Improved Controls	32.7%	20.9%	$ 0.102	$ 0.077	$ 0.025	10	2.879820182	1
PlaHE3	Mfg. Plastics	HVAC	Existing	3	Recommissioning	72.6%	16.0%	$ 0.271	$ -	$ 0.271	7	0.882497463	0
PlaLT1	Mfg. Plastics	Lighting	Turnover	1	Efficient Lighting Equipment	30.4%	19.9%	$ 0.150	$ 0.103	$ 0.047	10	2.083103268	1
PlaLT2	Mfg. Plastics	Lighting	Turnover	2	HighBay Lighting Equipment	55.1%	34.1%	$ 0.376	$ 0.295	$ 0.081	10	0.910478121	0
PlaLE3	Mfg. Plastics	Lighting	Existing	3	Lighting Controls	42.3%	30.0%	$ 0.212	$ 0.157	$ 0.055	10	1.539673616	1
PlaMT1	Mfg. Plastics	Motors	Turnover	1	hanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RI	42.8%	0.9%	$ 0.372	$ 0.372	$ -	15	1.536529688	1
PlaMT10	Mfg. Plastics	Motors	Turnover	10	Material Handling	52.3%	5.0%	$ 0.585	$ 0.483	$ 0.102	10	0.587742834	0
PlaMT11	Mfg. Plastics	Motors	Turnover	11	Air Compressor Demand Reduction	28.0%	15.9%	$ 0.107	$ 0.081	$ 0.026	10	2.723747645	1
PlaME12	Mfg. Plastics	Motors	Existing	12	Material Handling VFD	52.3%	18.7%	$ 0.381	$ 0.229	$ 0.152	10	0.882762707	0
PlaME13	Mfg. Plastics	Motors	Existing	13	Motor Management Plan	51.6%	2.9%	$ 0.134	$ 0.054	$ 0.080	10	2.249238401	1
PlaMT15	Mfg. Plastics	Motors	Turnover	15	Motors: Rewind 101-200 HP	25.4%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.824119948	1
PlaMT16	Mfg. Plastics	Motors	Turnover	16	Motors: Rewind 201-500 HP	35.6%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.824119948	1
PlaMT17	Mfg. Plastics	Motors	Turnover	17	Motors: Rewind 20-50 HP	4.6%	0.9%	$ 0.431	$ 0.356	$ 0.075	15	1.337768929	1
PlaMT18	Mfg. Plastics	Motors	Turnover	18	Motors: Rewind 500+ HP	55.2%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.824119948	1
PlaMT19	Mfg. Plastics	Motors	Turnover	19	Motors: Rewind 51-100 HP	15.2%	0.6%	$ 0.388	$ 0.321	$ 0.067	15	1.477091452	1
PlaMT2	Mfg. Plastics	Motors	Turnover	2	hanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RP	66.3%	0.4%	$ 0.799	$ 0.799	$ -	15	0.740601322	0
PlaMT20	Mfg. Plastics	Motors	Turnover	20	Properly Sized Fans	14.7%	10.4%	$ 0.202	$ 0.122	$ 0.080	10	1.578585319	1
PlaME21	Mfg. Plastics	Motors	Existing	21	Air Compressor Optimization	38.3%	30.1%	$ 0.151	$ 0.058	$ 0.093	10	2.031783478	1
PlaME22	Mfg. Plastics	Motors	Existing	22	Pump Energy Management	31.4%	7.5%	$ 0.134	$ 0.054	$ 0.080	10	2.249238401	1
PlaMT23	Mfg. Plastics	Motors	Turnover	23	Pump Equipment Upgrade	34.0%	20.0%	$ 0.156	$ 0.129	$ 0.027	10	1.975403878	1

Measure Lookup	New Segment	New End-Use	Vintage	Measure Number	Measure	Applicability	Savings	Total Cost ($/kW Saved)	Equipment Co	Labor Cost	Life	TRC Test	Economic Flag
PlaME24	Mfg. Plastics	Motors	Existing	24	Pump System Optimization	15.6%	12.1%	$ 0.391	$ 0.196	$ 0.195	12	1.123671222	1
PlaMT25	Mfg. Plastics	Motors	Turnover	25	Switch from Belt drive to Direct Drive	10.4%	7.5%	$ 0.268	$ 0.221	$ 0.046	12	1.59861177	1
PlaMT26	Mfg. Plastics	Motors	Turnover	26	Synchronous Belts	20.9%	1.1%	$ 0.268	$ 0.221	$ 0.046	10	1.224364273	1
PlaMT27	Mfg. Plastics	Motors	Turnover	27	Efficient Centrifugal Fan	10.3%	20.0%	$ 0.228	$ 0.188	$ 0.040	10	1.419200809	1
PlaMT28	Mfg. Plastics	Motors	Turnover	28	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	74.4%	0.91%	$ 2.085	$ 2.085	$ -	15	0.289187588	0
PlaMT29	Mfg. Plastics	Motors	Turnover	29	hanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RI	55.8%	0.39%	$ 0.436	$ 0.436	$ -	15	1.32356041	1
PlaME3	Mfg. Plastics	Motors	Existing	3	Fan System Optimization	28.9%	7.7%	$ 0.311	$ 0.156	$ 0.155	10	1.06695124	1
PlaMT30	Mfg. Plastics	Motors	Turnover	30	nhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RP	74.4%	0.7%	$ 1.249	$ 1.249	$ -	15	0.478823669	0
PlaMT4	Mfg. Plastics	Motors	Turnover	4	High efficiency Compressor motors	80.8%	1.1%	$ 0.430	$ 0.355	$ 0.075	15	1.341537069	1
PlaMT5	Mfg. Plastics	Motors	Turnover	5	High Efficiency Motors	74.4%	1.5%	$ 0.545	$ 0.450	$ 0.095	15	1.070738247	1
PlaOT1	Mfg. Plastics	Other	Turnover	1	Bldg Improvements	35.0%	20.4%	$ 0.248	$ 0.162	$ 0.087	15	2.208192407	1
PlaOE2	Mfg. Plastics	Other	Existing	2	Energy Project Management	27.0%	29.0%	$ 0.163	$ 0.134	$ 0.029	11	2.170338024	1
PlaOE3	Mfg. Plastics	Other	Existing	3	Integrated Plant Energy Management	22.0%	50.0%	$ 0.261	$ 0.215	$ 0.047	11	1.426294042	1
PlaOE4	Mfg. Plastics	Other	Existing	4	Plant Energy Management	27.0%	12.0%	$ 0.139	$ 0.114	$ 0.025	10	2.151371761	1
PlaOT5	Mfg. Plastics	Other	Turnover	5	Transformers	20.0%	1.6%	$ 0.415	$ 0.399	$ 0.016	15	1.370276408	1
MinMT1	Mining	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	74.4%	0.91%	$ 2.085	$ 2.085	$ -	15	0.289187588	0
MinME10	Mining	Motors	Existing	10	Motor Management Plan	50.0%	2.9%	$ 0.134	$ 0.054	$ 0.080	10	2.249238401	1
MinMT12	Mining	Motors	Turnover	12	Motors: Rewind 101-200 HP	25.4%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.824119948	1
MinMT13	Mining	Motors	Turnover	13	Motors: Rewind 201-500 HP	35.6%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.824119948	1
MinMT14	Mining	Motors	Turnover	14	Motors: Rewind 20-50 HP	4.7%	0.9%	$ 0.431	$ 0.356	$ 0.075	15	1.337768929	1
MinMT15	Mining	Motors	Turnover	15	Motors: Rewind 500+ HP	55.2%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.824119948	1
MinMT16	Mining	Motors	Turnover	16	Motors: Rewind 51-100 HP	15.2%	0.6%	$ 0.388	$ 0.321	$ 0.067	15	1.477091452	1
MinMT17	Mining	Motors	Turnover	17	Switch from Belt drive to Direct Drive	10.5%	7.5%	$ 0.268	$ 0.221	$ 0.046	12	1.59861177	1
MinMT18	Mining	Motors	Turnover	18	Synchronous Belts	21.0%	1.1%	$ 0.268	$ 0.221	$ 0.046	10	1.224364273	1
MinMT2	Mining	Motors	Turnover	2	hanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RI	55.8%	0.39%	$ 0.436	$ 0.436	$ -	15	1.32356041	1
MinMT3	Mining	Motors	Turnover	3	nhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RP	74.4%	0.7%	$ 1.249	$ 1.249	$ -	15	0.478823669	0
MinMT4	Mining	Motors	Turnover	4	hanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RI	42.8%	0.9%	$ 0.372	$ 0.372	$ -	15	1.536529688	1
MinMT5	Mining	Motors	Turnover	5	nhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RP	66.3%	0.4%	$ 0.799	$ 0.799	$ -	15	0.740601322	0
MinMT6	Mining	Motors	Turnover	6	High Efficiency Motors	75.0%	1.5%	$ 0.545	$ 0.450	$ 0.095	15	1.070738247	1
MinMT8	Mining	Motors	Turnover	8	Material Handling	53.0%	5.0%	$ 0.585	$ 0.483	$ 0.102	10	0.587742834	0
MinME9	Mining	Motors	Existing	9	Material Handling VFD	53.0%	18.7%	$ 0.381	$ 0.229	$ 0.152	10	0.882762707	0
NonCooT1	Other Non Mfg.	Process Cooling	Turnover	1	Equipment: Chillers	7.7%	17.9%	$ 0.330	$ 0.249	$ 0.081	15	1.686320303	1
NonCooE2	Other Non Mfg.	Process Cooling	Existing	2	Improved Controls	32.3%	6.0%	$ 1.118	$ 0.673	$ 0.445	15	0.523959727	0
NonCooT3	Other Non Mfg.	Process Cooling	Turnover	3	Milk Precooler - Dairy Plate Cooler	1.7%	3.24%	$ 0.660	$ 0.487	$ 0.173	15	0.873836251	0
NonCooT4	Other Non Mfg.	Process Cooling	Turnover	4	Adjustable speed drive on compressors	34.0%	11.7%	$ 0.201	$ 0.121	$ 0.080	10	1.540530847	1
NonCooE5	Other Non Mfg.	Process Cooling	Existing	5	Optimization of operating parameters	35.0%	13.1%	$ 0.101	$ 0.039	$ 0.063	3	0.863115423	0
NonHeaT1	Other Non Mfg.	Process Heating	Turnover	1	Crate Heating Pads	22.9%	17.51%	$ 0.181	$ 0.162	$ 0.019	15	2.909307266	1
NonHeaT2	Other Non Mfg.	Process Heating	Turnover	2	Grain dryers	24.8%	23.52%	$ 8.260	$ 6.090	$ 2.169	15	0.072265018	0
NonHeaE3	Other Non Mfg.	Process Heating	Existing	3	Heat Lamp Setback (Microzone)	22.9%	0.45%	$ 0.210	$ 0.210	$ -	15	2.54351811	1
NonHeaE4	Other Non Mfg.	Process Heating	Existing	4	Heat Lamp/Heating Pad Controller	22.9%	1.75%	$ 0.129	$ 0.129	$ -	15	3.87809449	1
NonHeaT5	Other Non Mfg.	Process Heating	Turnover	5	Heat Lamps	22.9%	3.38%	$ 0.023	$ 0.023	$ -	10	7.208025509	1
NonHeaE6	Other Non Mfg.	Process Heating	Existing	6	Improved Controls	37.9%	30.4%	$ 0.245	$ 0.147	$ 0.098	10	1.29224488	1
NonHeaE7	Other Non Mfg.	Process Heating	Existing	7	Process Heat O&M	63.4%	28.6%	$ 0.257	$ 0.225	$ 0.032	2	0.260593322	0
NonHT1	Other Non Mfg.	HVAC	Turnover	1	Energy-Efficient Dehumidifier	49.7%	2.00%	$ 1.072	$ 0.791	$ 0.282	15	0.565853559	0
NonHT2	Other Non Mfg.	HVAC	Turnover	2	Equipment Upgrades	63.2%	16.4%	$ 0.296	$ 0.252	$ 0.044	15	1.936604358	1
NonHT3	Other Non Mfg.	HVAC	Turnover	3	Heat Reclaimer	1.7%	42.00%	$ 0.171	$ 0.126	$ 0.045	15	3.161333671	1
NonHT4	Other Non Mfg.	HVAC	Turnover	4	Heat Recovery Ventilators	49.7%	4.13%	$ 0.448	$ 0.330	$ 0.118	10	0.776339718	0
NonHE5	Other Non Mfg.	HVAC	Existing	5	Improved Controls	32.8%	20.9%	$ 0.102	$ 0.077	$ 0.025	10	2.879820182	1
NonHT6	Other Non Mfg.	HVAC	Turnover	6	Infrared Film for Greenhouses	0.3%	11.06%	$ 0.261	$ 0.234	$ 0.028	4	0.53544788	0
NonHT7	Other Non Mfg.	HVAC	Turnover	7	Programmable Ventilation Controller	49.7%	0.10%	$ 0.140	$ 0.140	$ -	10	2.22987644	1
NonHE8	Other Non Mfg.	HVAC	Existing	8	Recommissioning	72.9%	16.0%	$ 0.271	$ -	$ 0.271	7	0.882497463	0
NonHT9	Other Non Mfg.	HVAC	Turnover	9	Scroll Compressor	1.7%	7.50%	$ 1.006	$ 0.899	$ 0.107	15	0.602447717	0
NonLT1	Other Non Mfg.	Lighting	Turnover	1	Efficient Lighting Equipment	30.4%	19.9%	$ 0.150	$ 0.103	$ 0.047	10	2.083103268	1
NonLT2	Other Non Mfg.	Lighting	Turnover	2	HighBay Lighting Equipment	55.1%	34.1%	$ 0.376	$ 0.295	$ 0.081	10	0.910478121	0
NonLE3	Other Non Mfg.	Lighting	Existing	3	Lighting Controls	42.3%	30.0%	$ 0.212	$ 0.157	$ 0.055	10	1.539673616	1
NonMT1	Other Non Mfg.	Motors	Turnover	1	hanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RI	55.8%	0.39%	$ 0.436	$ 0.436	$ -	15	1.32356041	1
NonMT11	Other Non Mfg.	Motors	Turnover	11	Agricultural Exhaust Fans (Rate 21 CFM/Watt+)	49.7%	5.00%	$ 0.316	$ 0.283	$ 0.034	15	1.788016443	1
NonMT15	Other Non Mfg.	Motors	Turnover	15	Low Pressure Irrigation	0.4%	50.00%	$ 0.993	$ 0.732	$ 0.261	10	0.352200309	0
NonMT16	Other Non Mfg.	Motors	Turnover	16	Material Handling	53.2%	5.0%	$ 0.585	$ 0.483	$ 0.102	10	0.587742834	0
NonME17	Other Non Mfg.	Motors	Existing	17	Material Handling VFD	53.2%	18.7%	$ 0.381	$ 0.229	$ 0.152	10	0.882762707	0
NonME18	Other Non Mfg.	Motors	Existing	18	Motor Management Plan	50.9%	2.9%	$ 0.134	$ 0.054	$ 0.080	10	2.249238401	1
NonMT2	Other Non Mfg.	Motors	Turnover	2	nhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RP	74.4%	0.7%	$ 1.249	$ 1.249	$ -	15	0.478823669	0
NonMT21	Other Non Mfg.	Motors	Turnover	21	Motors: Rewind 101-200 HP	25.4%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.824119948	1

Measure Lookup	New Segment	New End-Use	Vintage	Measure Number	Measure	Applicability	Savings	Total Cost ($/kW Saved)	Equipment Co	Labor Cost	Life	TRC Test	Economic Flag
NonMT22	Other Non Mfg.	Motors	Turnover	22	Air Compressor Demand Reduction	26.8%	15.9%	$ 0.107	$ 0.081	$ 0.026	10	2.723747645	1
NonMT23	Other Non Mfg.	Motors	Turnover	23	Motors: Rewind 201-500 HP	35.6%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.824119948	1
NonMT24	Other Non Mfg.	Motors	Turnover	24	Motors: Rewind 20-50 HP	4.7%	0.9%	$ 0.431	$ 0.356	$ 0.075	15	1.337768929	1
NonMT25	Other Non Mfg.	Motors	Turnover	25	Motors: Rewind 500+ HP	55.2%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.824119948	1
NonMT26	Other Non Mfg.	Motors	Turnover	26	Motors: Rewind 51-100 HP	15.2%	0.6%	$ 0.388	$ 0.321	$ 0.067	15	1.477091452	1
NonMT27	Other Non Mfg.	Motors	Turnover	27	Properly Sized Fans	15.3%	10.4%	$ 0.202	$ 0.122	$ 0.080	10	1.578585319	1
NonME28	Other Non Mfg.	Motors	Existing	28	Pump Energy Management	29.8%	7.5%	$ 0.134	$ 0.054	$ 0.080	10	2.249238401	1
NonMT29	Other Non Mfg.	Motors	Turnover	29	Pump Equipment Upgrade	32.3%	20.0%	$ 0.156	$ 0.129	$ 0.027	10	1.975403878	1
NonMT3	Other Non Mfg.	Motors	Turnover	3	hanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RI	42.8%	0.9%	$ 0.372	$ 0.372	$ -	15	1.536529688	1
NonME30	Other Non Mfg.	Motors	Existing	30	Pump System Optimization	14.9%	12.1%	$ 0.391	$ 0.196	$ 0.195	12	1.123671222	1
NonMT31	Other Non Mfg.	Motors	Turnover	31	SIS	76.5%	7.5%	$ 1.051	$ 0.869	$ 0.183	7	0.235953581	0
NonMT32	Other Non Mfg.	Motors	Turnover	32	Air Compressor Equipment	17.6%	8.8%	$ 0.157	$ 0.130	$ 0.027	10	1.966981338	1
NonMT33	Other Non Mfg.	Motors	Turnover	33	Switch from Belt drive to Direct Drive	10.5%	7.5%	$ 0.268	$ 0.221	$ 0.046	12	1.59861177	1
NonMT34	Other Non Mfg.	Motors	Turnover	34	Synchronous Belts	20.9%	1.1%	$ 0.268	$ 0.221	$ 0.046	10	1.224364273	1
NonMT35	Other Non Mfg.	Motors	Turnover	35	System Improvements	85.0%	8.0%	$ 0.416	$ 0.344	$ 0.072	5	0.40595469	0
NonMT36	Other Non Mfg.	Motors	Turnover	36	Variable Speed Drives for Dairy Vacuum Pumps	1.7%	36.89%	$ 0.169	$ 0.151	$ 0.018	15	3.143192077	1
NonMT37	Other Non Mfg.	Motors	Turnover	37	VFDs on Small Milking Machines	1.7%	3.22%	$ 0.832	$ 0.614	$ 0.219	15	0.711813423	0
NonMT38	Other Non Mfg.	Motors	Turnover	38	Wood: Replace Pneumatic Conveyor	50.2%	29.0%	$ 0.018	$ 0.016	$ 0.002	10	8.320310619	1
NonME39	Other Non Mfg.	Motors	Existing	39	Air Compressor Optimization	36.8%	30.1%	$ 0.151	$ 0.058	$ 0.093	10	2.031783478	1
NonMT4	Other Non Mfg.	Motors	Turnover	4	hanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RP	66.3%	0.4%	$ 0.799	$ 0.799	$ -	15	0.740601322	0
NonMT40	Other Non Mfg.	Motors	Turnover	40	Automatic Milker Takeoff	1.7%	3.00%	$ 0.763	$ 0.563	$ 0.200	15	0.774232442	0
NonMT41	Other Non Mfg.	Motors	Turnover	41	Circulating Fans	49.7%	5.00%	$ 0.152	$ 0.136	$ 0.016	10	2.028299516	1
NonMT42	Other Non Mfg.	Motors	Turnover	42	Efficient Centrifugal Fan	10.7%	20.0%	$ 0.228	$ 0.188	$ 0.040	10	1.419200809	1
NonMT43	Other Non Mfg.	Motors	Turnover	43	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	74.4%	0.91%	$ 2.085	$ 2.085	$ -	15	0.289187588	0
NonME5	Other Non Mfg.	Motors	Existing	5	Fan System Optimization	30.2%	7.7%	$ 0.311	$ 0.156	$ 0.155	10	1.06695124	1
NonMT6	Other Non Mfg.	Motors	Turnover	6	High efficiency Compressor motors	77.5%	1.1%	$ 0.430	$ 0.355	$ 0.075	15	1.341537069	1
NonMT7	Other Non Mfg.	Motors	Turnover	7	High Efficiency Motors	74.7%	1.5%	$ 0.545	$ 0.450	$ 0.095	15	1.070738247	1
NonMT8	Other Non Mfg.	Motors	Turnover	8	High Volume Low Speed Fans	49.7%	46.61%	$ 2.004	$ 1.883	$ 0.120	15	0.300779518	0
NonMT9	Other Non Mfg.	Motors	Turnover	9	High-Efficiency Ventilation System	49.7%	5.66%	$ 1.366	$ 1.366	$ -	10	0.257667993	0
NonOT1	Other Non Mfg.	Other	Turnover	1	Bldg Improvements	35.0%	20.4%	$ 0.248	$ 0.162	$ 0.087	15	2.208192407	1
NonOT10	Other Non Mfg.	Other	Turnover	10	Transformers	20.0%	1.6%	$ 0.415	$ 0.399	$ 0.016	15	1.370276408	1
NonOT2	Other Non Mfg.	Other	Turnover	2	Block Heater Timer	25.0%	2.50%	$ 0.048	$ 0.048	$ -	10	4.804996871	1
NonOE3	Other Non Mfg.	Other	Existing	3	Energy Project Management	27.0%	29.0%	$ 0.163	$ 0.134	$ 0.029	11	2.170338024	1
NonOT4	Other Non Mfg.	Other	Turnover	4	Grain bin aeration control systems	24.8%	2.25%	$ 0.168	$ 0.124	$ 0.044	15	3.131891108	1
NonOT5	Other Non Mfg.	Other	Turnover	5	Greenhouse Heat Curtain	0.3%	16.76%	$ 0.056	$ 0.056	$ -	5	2.142952028	1
NonOT6	Other Non Mfg.	Other	Turnover	6	High Efficiency Stock tank	22.9%	3.75%	$ 0.412	$ 0.368	$ 0.044	10	0.805956768	0
NonOE7	Other Non Mfg.	Other	Existing	7	Integrated Plant Energy Management	22.0%	50.0%	$ 0.261	$ 0.215	$ 0.047	11	1.426294042	1
NonOT8	Other Non Mfg.	Other	Turnover	8	Livestock Waterers	22.9%	11.25%	$ 0.327	$ 0.292	$ 0.035	10	1.001463847	1
NonOE9	Other Non Mfg.	Other	Existing	9	Plant Energy Management	27.0%	12.0%	$ 0.139	$ 0.114	$ 0.025	10	2.151371761	1
MetPT1	Mfg. Metals	Process EC	Turnover	1	Electrical-Chemical Plating Bundle, Tank and Rectifie	65.0%	18.5%	$ 0.550	$ 0.450	$ 0.100	15	1.041183609	1
MinHT1	Mining	HVAC	Turnover	1	Equipment Upgrades	62.9%	16.4%	$ 0.296	$ 0.252	$ 0.044	15	1.936604358	1
MinHE2	Mining	HVAC	Existing	2	Improved Controls	32.7%	20.9%	$ 0.102	$ 0.077	$ 0.025	10	2.879820182	1
MinHE3	Mining	HVAC	Existing	3	Recommissioning	72.6%	16.0%	$ 0.271	$ -	$ 0.271	7	0.882497463	0
MinLT1	Mining	Lighting	Turnover	1	Efficient Lighting Equipment	30.4%	19.9%	$ 0.150	$ 0.103	$ 0.047	10	2.083103268	1
MinLT2	Mining	Lighting	Turnover	2	HighBay Lighting Equipment	55.1%	34.1%	$ 0.376	$ 0.295	$ 0.081	10	0.910478121	0
MinLE3	Mining	Lighting	Existing	3	Lighting Controls	42.3%	30.0%	$ 0.212	$ 0.157	$ 0.055	10	1.539673616	1

Measure Lookup	Industry	New Segment	New End-Use	Vintage	Measure Number	Measure	Applicability	Savings	Total Cost ($/kW Saved)	Equipment Cost	Labor Cost	Life	TRC Test	Economic Flag
CheCooE1	Chemical_Mfg	Mfg. Chemicals	Process Cooling	Existing	1	Clean Room: Change Filter Strategy	10.0%	40.0%	$ 0.016	$ 0.012	$ 0.005	1	0.96	0
CheCooE2	Chemical_Mfg	Mfg. Chemicals	Process Cooling	Existing	2	Clean Room: Chiller Optimize	28.3%	14.8%	$ 0.248	$ 0.124	$ 0.124	10	1.36	1
CheCooT3	Chemical_Mfg	Mfg. Chemicals	Process Cooling	Turnover	3	Clean Room: Clean Room HVAC	30.0%	9.0%	$ 0.204	$ 0.144	$ 0.061	15	2.25	1
CheCooT4	Chemical_Mfg	Mfg. Chemicals	Process Cooling	Turnover	4	Equipment: Chillers	8.0%	17.9%	$ 0.330	$ 0.249	$ 0.081	15	1.45	1
CheCooE5	Chemical_Mfg	Mfg. Chemicals	Process Cooling	Existing	5	Improved Controls	33.8%	6.0%	$ 1.118	$ 0.673	$ 0.445	15	0.45	0
CheCooT6	Chemical_Mfg	Mfg. Chemicals	Process Cooling	Turnover	6	Adjustable speed drive on compressors	34.0%	11.7%	$ 0.201	$ 0.121	$ 0.080	10	1.63	1
CheCooE7	Chemical_Mfg	Mfg. Chemicals	Process Cooling	Existing	7	Optimization of operating parameters	35.0%	13.1%	$ 0.101	$ 0.039	$ 0.063	3	0.95	0
CheCooT8	Chemical_Mfg	Mfg. Chemicals	Process Cooling	Turnover	8	Cold Storage Retrofit	25.6%	20.7%	$ 0.250	$ 0.157	$ 0.093	10	1.34	1
CheCooE9	Chemical_Mfg	Mfg. Chemicals	Process Cooling	Existing	9	Cold Storage Tuneup	10.0%	15.6%	$ 0.112	$ 0.047	$ 0.065	3	0.87	0
CheHeaE1	Chemical_Mfg	Mfg. Chemicals	Process Heating	Existing	1	Improved Controls	37.9%	30.4%	$ 0.245	$ 0.147	$ 0.098	10	1.37	1
CheHeaE2	Chemical_Mfg	Mfg. Chemicals	Process Heating	Existing	2	Process Heat O&M	63.4%	28.6%	$ 0.257	$ 0.225	$ 0.032	2	0.29	0
CheHT1	Chemical_Mfg	Mfg. Chemicals	HVAC	Turnover	1	Equipment Upgrades	62.9%	16.4%	$ 0.296	$ 0.252	$ 0.044	15	1.70	1
CheHE2	Chemical_Mfg	Mfg. Chemicals	HVAC	Existing	2	Improved Controls	32.7%	20.9%	$ 0.102	$ 0.077	$ 0.025	10	3.08	1
CheHE3	Chemical_Mfg	Mfg. Chemicals	HVAC	Existing	3	Recommissioning	72.6%	16.0%	$ 0.271	$ -	$ 0.271	7	0.95	0
CheLT1	Chemical_Mfg	Mfg. Chemicals	Lighting	Turnover	1	Efficient Lighting Equipment	30.4%	19.9%	$ 0.150	$ 0.103	$ 0.047	10	2.23	1
CheLT2	Chemical_Mfg	Mfg. Chemicals	Lighting	Turnover	2	HighBay Lighting Equipment	55.1%	34.1%	$ 0.376	$ 0.295	$ 0.081	10	0.97	0
CheLE3	Chemical_Mfg	Mfg. Chemicals	Lighting	Existing	3	Lighting Controls	42.3%	30.0%	$ 0.212	$ 0.157	$ 0.055	10	1.64	1
CheMT1		Mfg. Chemicals	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	42.8%	0.9%	$ 0.372	$ 0.372	$ -	15	1.34	1
CheMT10	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	10	Material Handling	52.3%	5.0%	$ 0.585	$ 0.483	$ 0.102	10	0.63	0
CheMT11	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	11	Air Compressor Demand Reduction	28.0%	15.9%	$ 0.107	$ 0.081	$ 0.026	10	2.91	1
CheME6	Chemical_Mfg	Mfg. Chemicals	Motors	Existing	6	Material Handling VFD	52.3%	18.7%	$ 0.381	$ 0.229	$ 0.152	10	0.94	0
CheME13	Chemical_Mfg	Mfg. Chemicals	Motors	Existing	13	Motor Management Plan	51.6%	2.9%	$ 0.134	$ 0.054	$ 0.080	10	2.41	1
CheMT15	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	15	Motors: Rewind 101-200 HP	25.4%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.60	1
CheMT16	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	16	Motors: Rewind 201-500 HP	35.6%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.60	1
CheMT17	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	17	Motors: Rewind 20-50 HP	4.6%	0.9%	$ 0.431	$ 0.356	$ 0.075	15	1.17	1
CheMT18	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	18	Motors: Rewind 500+ HP	55.2%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.60	1
CheMT19	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	19	Motors: Rewind 51-100 HP	15.2%	0.6%	$ 0.388	$ 0.321	$ 0.067	15	1.29	1
CheMT2		Mfg. Chemicals	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	66.3%	0.4%	$ 0.799	$ 0.799	$ -	15	0.65	0
CheMT20	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	20	Properly Sized Fans	14.7%	10.4%	$ 0.202	$ 0.122	$ 0.080	10	1.69	1
CheME21	Chemical_Mfg	Mfg. Chemicals	Motors	Existing	21	Air Compressor Optimization	38.3%	30.1%	$ 0.151	$ 0.058	$ 0.093	10	2.17	1
CheME22	Chemical_Mfg	Mfg. Chemicals	Motors	Existing	22	Pump Energy Management	31.4%	7.5%	$ 0.134	$ 0.054	$ 0.080	10	2.41	1
CheMT23	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	23	Pump Equipment Upgrade	34.0%	20.0%	$ 0.156	$ 0.129	$ 0.027	10	2.11	1
CheME24	Chemical_Mfg	Mfg. Chemicals	Motors	Existing	24	Pump System Optimization	15.6%	12.1%	$ 0.391	$ 0.196	$ 0.195	12	1.07	1
CheMT25	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	25	Switch from Belt drive to Direct Drive	10.4%	7.5%	$ 0.268	$ 0.221	$ 0.046	12	1.53	1
CheMT26	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	26	Synchronous Belts	20.9%	1.1%	$ 0.268	$ 0.221	$ 0.046	10	1.31	1
CheMT27	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	27	Efficient Centrifugal Fan	10.3%	20.0%	$ 0.228	$ 0.188	$ 0.040	10	1.52	1
CheMT28		Mfg. Chemicals	Motors	Turnover	28	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	74.4%	0.91%	$ 2.085	$ 2.085	$ -	15	0.25	0
CheMT29		Mfg. Chemicals	Motors	Turnover	29	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	55.8%	0.39%	$ 0.436	$ 0.436	$ -	15	1.16	1
CheME3	Chemical_Mfg	Mfg. Chemicals	Motors	Existing	3	Fan System Optimization	28.9%	7.7%	$ 0.311	$ 0.156	$ 0.155	10	1.14	1
CheMT30		Mfg. Chemicals	Motors	Turnover	30	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	74.4%	0.7%	$ 1.249	$ 1.249	$ -	15	0.42	0
CheMT4	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	4	High efficiency Compressor motors	80.8%	1.1%	$ 0.430	$ 0.355	$ 0.075	15	1.17	1
CheMT5	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	5	High Efficiency Motors	74.4%	1.5%	$ 0.545	$ 0.450	$ 0.095	15	0.94	0
CheOT1	Chemical_Mfg	Mfg. Chemicals	Other	Turnover	1	Bldg Improvements	35.0%	20.4%	$ 0.248	$ 0.162	$ 0.087	15	1.91	1
CheOE2	Chemical_Mfg	Mfg. Chemicals	Other	Existing	2	Energy Project Management	27.0%	29.0%	$ 0.163	$ 0.134	$ 0.029	11	2.15	1
CheOE3	Chemical_Mfg	Mfg. Chemicals	Other	Existing	3	Integrated Plant Energy Management	22.0%	50.0%	$ 0.261	$ 0.215	$ 0.047	11	1.42	1
CheOE4	Chemical_Mfg	Mfg. Chemicals	Other	Existing	4	Plant Energy Management	27.0%	12.0%	$ 0.139	$ 0.114	$ 0.025	10	2.29	1
CheOT5	Chemical_Mfg	Mfg. Chemicals	Other	Turnover	5	Transformers	20.0%	1.6%	$ 0.415	$ 0.399	$ 0.016	15	1.18	1
ComCooE1	ectronic_Equipment_M	Mfg. Computers	Process Cooling	Existing	1	Clean Room: Change Filter Strategy	10.0%	40.0%	$ 0.016	$ 0.012	$ 0.005	1	0.96	0
ComCooE10	ectronic_Equipment_M	Mfg. Computers	Process Cooling	Existing	10	Cold Storage Tuneup	10.0%	15.6%	$ 0.112	$ 0.047	$ 0.065	3	0.87	0
ComCooE2	ectronic_Equipment_M	Mfg. Computers	Process Cooling	Existing	2	Clean Room: Chiller Optimize	28.3%	14.8%	$ 0.248	$ 0.124	$ 0.124	10	1.36	1
ComCooT3	ectronic_Equipment_M	Mfg. Computers	Process Cooling	Turnover	3	Clean Room: Clean Room HVAC	30.0%	9.0%	$ 0.204	$ 0.144	$ 0.061	15	2.25	1
ComCooT4	ectronic_Equipment_M	Mfg. Computers	Process Cooling	Turnover	4	Elec Chip Fab: Solidstate Chiller	20.0%	90.0%	$ 0.634	$ 0.562	$ 0.072	10	0.56	0
ComCooT5	ectronic_Equipment_M	Mfg. Computers	Process Cooling	Turnover	5	Equipment: Chillers	8.0%	17.9%	$ 0.330	$ 0.249	$ 0.081	15	1.45	1
ComCooE6	ectronic_Equipment_M	Mfg. Computers	Process Cooling	Existing	6	Improved Controls	33.8%	6.0%	$ 1.118	$ 0.673	$ 0.445	15	0.45	0
ComCooT7	ectronic_Equipment_M	Mfg. Computers	Process Cooling	Turnover	7	Adjustable speed drive on compressors	34.0%	11.7%	$ 0.201	$ 0.121	$ 0.080	10	1.63	1
ComCooE8	ectronic_Equipment_M	Mfg. Computers	Process Cooling	Existing	8	Optimization of operating parameters	35.0%	13.1%	$ 0.101	$ 0.039	$ 0.063	3	0.95	0
ComCooT9	ectronic_Equipment_M	Mfg. Computers	Process Cooling	Turnover	9	Cold Storage Retrofit	25.6%	20.7%	$ 0.250	$ 0.157	$ 0.093	10	1.34	1
ComHeaE1	ectronic_Equipment_M	Mfg. Computers	Process Heating	Existing	1	Improved Controls	41.5%	30.4%	$ 0.245	$ 0.147	$ 0.098	10	1.37	1
ComHeaE2	ectronic_Equipment_M	Mfg. Computers	Process Heating	Existing	2	Process Heat O&M	69.5%	28.6%	$ 0.257	$ 0.225	$ 0.032	2	0.29	0
ComHT1	ectronic_Equipment_M	Mfg. Computers	HVAC	Turnover	1	Equipment Upgrades	74.9%	16.4%	$ 0.296	$ 0.252	$ 0.044	15	1.70	1
ComHE2	ectronic_Equipment_M	Mfg. Computers	HVAC	Existing	2	Improved Controls	38.9%	20.9%	$ 0.102	$ 0.077	$ 0.025	10	3.08	1
ComHE3	ectronic_Equipment_M	Mfg. Computers	HVAC	Existing	3	Recommissioning	86.4%	16.0%	$ 0.271	$ -	$ 0.271	7	0.95	0
ComLT1	ectronic_Equipment_M	Mfg. Computers	Lighting	Turnover	1	Efficient Lighting Equipment	30.4%	19.9%	$ 0.150	$ 0.103	$ 0.047	10	2.23	1
ComLT2	ectronic_Equipment_M	Mfg. Computers	Lighting	Turnover	2	HighBay Lighting Equipment	55.1%	34.1%	$ 0.376	$ 0.295	$ 0.081	10	0.97	0
ComLE3	ectronic_Equipment_M	Mfg. Computers	Lighting	Existing	3	Lighting Controls	42.3%	30.0%	$ 0.212	$ 0.157	$ 0.055	10	1.64	1
ComMT1		Mfg. Computers	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	42.8%	0.9%	$ 0.372	$ 0.372	$ -	15	1.34	1
ComMT10	ectronic_Equipment_M	Mfg. Computers	Motors	Turnover	10	Material Handling	52.9%	5.0%	$ 0.585	$ 0.483	$ 0.102	10	0.63	0
ComMT11	ectronic_Equipment_M	Mfg. Computers	Motors	Turnover	11	Air Compressor Demand Reduction	25.5%	15.9%	$ 0.107	$ 0.081	$ 0.026	10	2.91	1
ComME6	ectronic_Equipment_M	Mfg. Computers	Motors	Existing	6	Material Handling VFD	52.9%	18.7%	$ 0.381	$ 0.229	$ 0.152	10	0.94	0
ComME13	ectronic_Equipment_M	Mfg. Computers	Motors	Existing	13	Motor Management Plan	49.2%	2.9%	$ 0.134	$ 0.054	$ 0.080	10	2.41	1

Measure Lookup	Industry	New Segment	New End-Use	Vintage	Measure Number	Measure	Applicability	Savings	Total Cost ($/kW Saved)	Equipment Cost	Labor Cost	Life	TRC Test	Economic Flag
ComMT15	ectronic_Equipment_M	Mfg. Computers	Motors	Turnover	15	Motors: Rewind 101-200 HP	25.4%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.60	1
ComMT16	ectronic_Equipment_M	Mfg. Computers	Motors	Turnover	16	Motors: Rewind 201-500 HP	35.6%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.60	1
ComMT17	ectronic_Equipment_M	Mfg. Computers	Motors	Turnover	17	Motors: Rewind 20-50 HP	4.7%	0.9%	$ 0.431	$ 0.356	$ 0.075	15	1.17	1
ComMT18	ectronic_Equipment_M	Mfg. Computers	Motors	Turnover	18	Motors: Rewind 500+ HP	55.2%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.60	1
ComMT19	ectronic_Equipment_M	Mfg. Computers	Motors	Turnover	19	Motors: Rewind 51-100 HP	15.2%	0.6%	$ 0.388	$ 0.321	$ 0.067	15	1.29	1
ComMT2		Mfg. Computers	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	66.3%	0.4%	$ 0.799	$ 0.799	$ -	15	0.65	0
ComMT20	ectronic_Equipment_M	Mfg. Computers	Motors	Turnover	20	Properly Sized Fans	14.8%	10.4%	$ 0.202	$ 0.122	$ 0.080	10	1.69	1
ComME21	ectronic_Equipment_M	Mfg. Computers	Motors	Existing	21	Air Compressor Optimization	35.0%	30.1%	$ 0.151	$ 0.058	$ 0.093	10	2.17	1
ComME22	ectronic_Equipment_M	Mfg. Computers	Motors	Existing	22	Pump Energy Management	30.1%	7.5%	$ 0.134	$ 0.054	$ 0.080	10	2.41	1
ComMT23	ectronic_Equipment_M	Mfg. Computers	Motors	Turnover	23	Pump Equipment Upgrade	32.6%	20.0%	$ 0.156	$ 0.129	$ 0.027	10	2.11	1
ComME24	ectronic_Equipment_M	Mfg. Computers	Motors	Existing	24	Pump System Optimization	15.0%	12.1%	$ 0.391	$ 0.196	$ 0.195	12	1.07	1
ComMT25	ectronic_Equipment_M	Mfg. Computers	Motors	Turnover	25	Switch from Belt drive to Direct Drive	10.5%	7.5%	$ 0.268	$ 0.221	$ 0.046	12	1.53	1
ComMT26	ectronic_Equipment_M	Mfg. Computers	Motors	Turnover	26	Synchronous Belts	20.8%	1.1%	$ 0.268	$ 0.221	$ 0.046	10	1.31	1
ComMT27	ectronic_Equipment_M	Mfg. Computers	Motors	Turnover	27	Efficient Centrifugal Fan	10.3%	20.0%	$ 0.228	$ 0.188	$ 0.040	10	1.52	1
ComMT28		Mfg. Computers	Motors	Turnover	28	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	74.4%	0.91%	$ 2.085	$ 2.085	$ -	15	0.25	0
ComMT29		Mfg. Computers	Motors	Turnover	29	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	55.8%	0.39%	$ 0.436	$ 0.436	$ -	15	1.16	1
ComME3	ectronic_Equipment_M	Mfg. Computers	Motors	Existing	3	Fan System Optimization	29.1%	7.7%	$ 0.311	$ 0.156	$ 0.155	10	1.14	1
ComMT30		Mfg. Computers	Motors	Turnover	30	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	74.4%	0.7%	$ 1.249	$ 1.249	$ -	15	0.42	0
ComMT4	ectronic_Equipment_M	Mfg. Computers	Motors	Turnover	4	High efficiency Compressor motors	73.8%	1.1%	$ 0.430	$ 0.355	$ 0.075	15	1.17	1
ComMT5	ectronic_Equipment_M	Mfg. Computers	Motors	Turnover	5	High Efficiency Motors	73.8%	1.5%	$ 0.545	$ 0.450	$ 0.095	15	0.94	0
ComOT1	ectronic_Equipment_M	Mfg. Computers	Other	Turnover	1	Bldg Improvements	35.0%	20.4%	$ 0.248	$ 0.162	$ 0.087	15	1.91	1
ComOT2	ectronic_Equipment_M	Mfg. Computers	Other	Turnover	2	Elec Chip Fab: Eliminate Exhaust	80.1%	5.0%	$ 0.233	$ 0.206	$ 0.026	10	1.45	1
ComOT3	ectronic_Equipment_M	Mfg. Computers	Other	Turnover	3	Elec Chip Fab: Exhaust Injector	35.0%	100.0%	$ 0.561	$ 0.498	$ 0.064	10	0.64	0
ComCooT11	ectronic_Equipment_M	Mfg. Computers	Process Cooling	Turnover	11	Elec Chip Fab: Reduce Gas Pressure	5.0%	10.0%	$ 0.063	$ -	$ 0.063	10	4.23	1
ComOE5	ectronic_Equipment_M	Mfg. Computers	Other	Existing	5	Energy Project Management	27.0%	29.0%	$ 0.163	$ 0.134	$ 0.029	11	2.15	1
ComOE6	ectronic_Equipment_M	Mfg. Computers	Other	Existing	6	Integrated Plant Energy Management	22.0%	50.0%	$ 0.261	$ 0.215	$ 0.047	11	1.42	1
ComOE7	ectronic_Equipment_M	Mfg. Computers	Other	Existing	7	Plant Energy Management	27.0%	12.0%	$ 0.139	$ 0.114	$ 0.025	10	2.29	1
ComOT8	ectronic_Equipment_M	Mfg. Computers	Other	Turnover	8	Transformers	20.0%	1.6%	$ 0.415	$ 0.399	$ 0.016	15	1.18	1
FooCooT1	Food_Mfg	Mfg. Food	Process Cooling	Turnover	1	Equipment: Chillers	8.3%	17.9%	$ 0.330	$ 0.249	$ 0.081	15	1.45	1
FooCooE2	Food_Mfg	Mfg. Food	Process Cooling	Existing	2	Improved Controls	35.2%	6.0%	$ 1.118	$ 0.673	$ 0.445	15	0.45	0
FooCooT3	Food_Mfg	Mfg. Food	Process Cooling	Turnover	3	Adjustable speed drive on compressors	34.0%	11.7%	$ 0.201	$ 0.121	$ 0.080	10	1.63	1
FooCooT4	Food_Mfg	Mfg. Food	Process Cooling	Turnover	4	Food: Cooling and Storage	15.0%	15.4%	$ 0.258	$ 0.162	$ 0.096	10	1.31	1
FooCooT5	Food_Mfg	Mfg. Food	Process Cooling	Turnover	5	Food: Refrig Storage Tuneup	7.5%	14.4%	$ 0.056	$ 0.023	$ 0.033	3	1.48	1
FooCooT6	Food_Mfg	Mfg. Food	Process Cooling	Turnover	6	Fruit Storage Refer Retrofit	60.7%	38.2%	$ 0.214	$ 0.135	$ 0.079	10	1.55	1
FooCooT7	Food_Mfg	Mfg. Food	Process Cooling	Turnover	7	Fruit Storage Tuneup	10.0%	15.6%	$ 0.056	$ 0.023	$ 0.033	3	1.48	1
FooCooE8	Food_Mfg	Mfg. Food	Process Cooling	Existing	8	Optimization of operating parameters	35.0%	13.1%	$ 0.101	$ 0.039	$ 0.063	3	0.95	0
FooHeaE1	Food_Mfg	Mfg. Food	Process Heating	Existing	1	Improved Controls	38.8%	30.4%	$ 0.245	$ 0.147	$ 0.098	10	1.37	1
FooHeaE2	Food_Mfg	Mfg. Food	Process Heating	Existing	2	Process Heat O&M	65.0%	28.6%	$ 0.257	$ 0.225	$ 0.032	2	0.29	0
FooHT1	Food_Mfg	Mfg. Food	HVAC	Turnover	1	Equipment Upgrades	62.9%	16.4%	$ 0.296	$ 0.252	$ 0.044	15	1.70	1
FooHE2	Food_Mfg	Mfg. Food	HVAC	Existing	2	Improved Controls	32.7%	20.9%	$ 0.102	$ 0.077	$ 0.025	10	3.08	1
FooHE3	Food_Mfg	Mfg. Food	HVAC	Existing	3	Recommissioning	72.6%	16.0%	$ 0.271	$ -	$ 0.271	7	0.95	0
FooLT1	Food_Mfg	Mfg. Food	Lighting	Turnover	1	Efficient Lighting Equipment	30.4%	19.9%	$ 0.150	$ 0.103	$ 0.047	10	2.23	1
FooLT2	Food_Mfg	Mfg. Food	Lighting	Turnover	2	HighBay Lighting Equipment	55.1%	34.1%	$ 0.376	$ 0.295	$ 0.081	10	0.97	0
FooLE3	Food_Mfg	Mfg. Food	Lighting	Existing	3	Lighting Controls	42.3%	30.0%	$ 0.212	$ 0.157	$ 0.055	10	1.64	1
FooME1	Food_Mfg	Mfg. Food	Motors	Existing	1	Fan System Optimization	29.6%	7.7%	$ 0.311	$ 0.156	$ 0.155	10	1.14	1
FooME4	Food_Mfg	Mfg. Food	Motors	Existing	4	Material Handling VFD	51.6%	18.7%	$ 0.381	$ 0.229	$ 0.152	10	0.94	0
FooME11	Food_Mfg	Mfg. Food	Motors	Existing	11	Motor Management Plan	48.9%	2.9%	$ 0.134	$ 0.054	$ 0.080	10	2.41	1
FooMT13	Food_Mfg	Mfg. Food	Motors	Turnover	13	Motors: Rewind 101-200 HP	25.4%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.60	1
FooMT14	Food_Mfg	Mfg. Food	Motors	Turnover	14	Motors: Rewind 201-500 HP	35.6%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.60	1
FooMT15	Food_Mfg	Mfg. Food	Motors	Turnover	15	Motors: Rewind 20-50 HP	4.6%	0.9%	$ 0.431	$ 0.356	$ 0.075	15	1.17	1
FooMT16	Food_Mfg	Mfg. Food	Motors	Turnover	16	Motors: Rewind 500+ HP	55.2%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.60	1
FooMT17	Food_Mfg	Mfg. Food	Motors	Turnover	17	Motors: Rewind 51-100 HP	15.2%	0.6%	$ 0.388	$ 0.321	$ 0.067	15	1.29	1
FooME18	Food_Mfg	Mfg. Food	Motors	Existing	18	Air Compressor Optimization	35.0%	30.1%	$ 0.151	$ 0.058	$ 0.093	10	2.17	1
FooMT19	Food_Mfg	Mfg. Food	Motors	Turnover	19	Properly Sized Fans	15.0%	10.4%	$ 0.202	$ 0.122	$ 0.080	10	1.69	1
FooMT2	Food_Mfg	Mfg. Food	Motors	Turnover	2	High efficiency Compressor motors	73.8%	1.1%	$ 0.430	$ 0.355	$ 0.075	15	1.17	1
FooME20	Food_Mfg	Mfg. Food	Motors	Existing	20	Pump Energy Management	30.5%	7.5%	$ 0.134	$ 0.054	$ 0.080	10	2.41	1
FooMT21	Food_Mfg	Mfg. Food	Motors	Turnover	21	Pump Equipment Upgrade	33.0%	20.0%	$ 0.156	$ 0.129	$ 0.027	10	2.11	1
FooME22	Food_Mfg	Mfg. Food	Motors	Existing	22	Pump System Optimization	15.2%	12.1%	$ 0.391	$ 0.196	$ 0.195	12	1.07	1
FooMT23	Food_Mfg	Mfg. Food	Motors	Turnover	23	Switch from Belt drive to Direct Drive	10.2%	7.5%	$ 0.268	$ 0.221	$ 0.046	12	1.53	1
FooMT24	Food_Mfg	Mfg. Food	Motors	Turnover	24	Synchronous Belts	20.8%	1.1%	$ 0.268	$ 0.221	$ 0.046	10	1.31	1
FooMT25	Food_Mfg	Mfg. Food	Motors	Turnover	25	Efficient Centrifugal Fan	10.5%	20.0%	$ 0.228	$ 0.188	$ 0.040	10	1.52	1
FooMT26		Mfg. Food	Motors	Turnover	26	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	74.4%	0.91%	$ 2.085	$ 2.085	$ -	15	0.25	0
FooMT27		Mfg. Food	Motors	Turnover	27	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	55.8%	0.39%	$ 0.436	$ 0.436	$ -	15	1.16	1
FooMT28		Mfg. Food	Motors	Turnover	28	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	74.4%	0.7%	$ 1.249	$ 1.249	$ -	15	0.42	0
FooMT29		Mfg. Food	Motors	Turnover	29	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	42.8%	0.9%	$ 0.372	$ 0.372	$ -	15	1.34	1
FooMT3	Food_Mfg	Mfg. Food	Motors	Turnover	3	High Efficiency Motors	74.0%	1.5%	$ 0.545	$ 0.450	$ 0.095	15	0.94	0
FooMT30		Mfg. Food	Motors	Turnover	30	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	66.3%	0.4%	$ 0.799	$ 0.799	$ -	15	0.65	0
FooMT7	Food_Mfg	Mfg. Food	Motors	Turnover	7	Air Compressor Demand Reduction	25.5%	15.9%	$ 0.107	$ 0.081	$ 0.026	10	2.91	1
FooMT9	Food_Mfg	Mfg. Food	Motors	Turnover	9	Material Handling	51.6%	5.0%	$ 0.585	$ 0.483	$ 0.102	10	0.63	0
FooOT1	Food_Mfg	Mfg. Food	Other	Turnover	1	Bldg Improvements	35.0%	20.4%	$ 0.248	$ 0.162	$ 0.087	15	1.91	1

Measure Lookup	Industry	New Segment	New End-Use	Vintage	Measure Number	Measure	Applicability	Savings	Total Cost ($/kW Saved)	Equipment Cost	Labor Cost	Life	TRC Test	Economic Flag
FooOE2	Food_Mfg	Mfg. Food	Other	Existing	2	Energy Project Management	27.0%	29.0%	$ 0.163	$ 0.134	$ 0.029	11	2.15	1
FooOE3	Food_Mfg	Mfg. Food	Other	Existing	3	Integrated Plant Energy Management	22.0%	50.0%	$ 0.261	$ 0.215	$ 0.047	11	1.42	1
FooOE4	Food_Mfg	Mfg. Food	Other	Existing	4	Plant Energy Management	27.0%	12.0%	$ 0.139	$ 0.114	$ 0.025	10	2.29	1
FooOT5	Food_Mfg	Mfg. Food	Other	Turnover	5	Transformers	20.0%	1.6%	$ 0.415	$ 0.399	$ 0.016	15	1.18	1
MetCooT1	Primary_Metal_Mfg	Mfg. Metals	Process Cooling	Turnover	1	Equipment: Chillers	8.0%	17.9%	$ 0.330	$ 0.249	$ 0.081	15	1.45	1
MetCooe2	Primary_Metal_Mfg	Mfg. Metals	Process Cooling	existing	2	Improved Controls	33.8%	6.0%	$ 1.118	$ 0.673	$ 0.445	15	0.45	0
MetCooE3	Primary_Metal_Mfg	Mfg. Metals	Process Cooling	Existing	3	Optimization of operating parameters	35.0%	13.1%	$ 0.101	$ 0.039	$ 0.063	3	0.95	0
MetHeaE1	Primary_Metal_Mfg	Mfg. Metals	Process Heating	Existing	1	Improved Controls	40.1%	30.4%	$ 0.245	$ 0.147	$ 0.098	10	1.37	1
MetHeaT2	Primary_Metal_Mfg	Mfg. Metals	Process Heating	Turnover	2	Metal: New Arc Furnace	10.3%	45.0%	$ 0.115	$ 0.102	$ 0.013	10	2.64	1
MetHeaE3	Primary_Metal_Mfg	Mfg. Metals	Process Heating	Existing	3	Process Heat O&M	67.2%	28.6%	$ 0.257	$ 0.225	$ 0.032	2	0.29	0
MetHT1	Primary_Metal_Mfg	Mfg. Metals	HVAC	Turnover	1	Equipment Upgrades	64.7%	16.4%	$ 0.296	$ 0.252	$ 0.044	15	1.70	1
MetHE2	Primary_Metal_Mfg	Mfg. Metals	HVAC	Existing	2	Improved Controls	33.6%	20.9%	$ 0.102	$ 0.077	$ 0.025	10	3.08	1
MetHE3	Primary_Metal_Mfg	Mfg. Metals	HVAC	Existing	3	Recommissioning	74.7%	16.0%	$ 0.271	$ -	$ 0.271	7	0.95	0
MetLT1	Primary_Metal_Mfg	Mfg. Metals	Lighting	Turnover	1	Efficient Lighting Equipment	30.4%	19.9%	$ 0.150	$ 0.103	$ 0.047	10	2.23	1
MetLT2	Primary_Metal_Mfg	Mfg. Metals	Lighting	Turnover	2	HighBay Lighting Equipment	55.1%	34.1%	$ 0.376	$ 0.295	$ 0.081	10	0.97	0
MetLE3	Primary_Metal_Mfg	Mfg. Metals	Lighting	Existing	3	Lighting Controls	42.3%	30.0%	$ 0.212	$ 0.157	$ 0.055	10	1.64	1
MetMT1	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	1	Air Compressor Demand Reduction	25.3%	15.9%	$ 0.107	$ 0.081	$ 0.026	10	2.91	1
MetME10	Primary_Metal_Mfg	Mfg. Metals	Motors	Existing	10	Motor Management Plan	49.1%	2.9%	$ 0.134	$ 0.054	$ 0.080	10	2.41	1
MetME12	Primary_Metal_Mfg	Mfg. Metals	Motors	Existing	12	Air Compressor Optimization	34.7%	30.1%	$ 0.151	$ 0.058	$ 0.093	10	2.17	1
MetMT13	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	13	Motors: Rewind 101-200 HP	25.4%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.60	1
MetMT14	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	14	Motors: Rewind 201-500 HP	35.6%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.60	1
MetMT15	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	15	Motors: Rewind 20-50 HP	4.6%	0.9%	$ 0.431	$ 0.356	$ 0.075	15	1.17	1
MetMT16	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	16	Motors: Rewind 500+ HP	55.2%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.60	1
MetMT17	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	17	Motors: Rewind 51-100 HP	15.2%	0.6%	$ 0.388	$ 0.321	$ 0.067	15	1.29	1
MetMT18	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	18	Properly Sized Fans	14.7%	10.4%	$ 0.202	$ 0.122	$ 0.080	10	1.69	1
MetME19	Primary_Metal_Mfg	Mfg. Metals	Motors	Existing	19	Pump Energy Management	29.8%	7.5%	$ 0.134	$ 0.054	$ 0.080	10	2.41	1
MetMT2	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	2	High efficiency Compressor motors	73.1%	1.1%	$ 0.430	$ 0.355	$ 0.075	15	1.17	1
MetMT20	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	20	Pump Equipment Upgrade	32.3%	20.0%	$ 0.156	$ 0.129	$ 0.027	10	2.11	1
MetME21	Primary_Metal_Mfg	Mfg. Metals	Motors	Existing	21	Pump System Optimization	14.9%	12.1%	$ 0.391	$ 0.196	$ 0.195	12	1.07	1
MetMT22	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	22	Efficient Centrifugal Fan	10.3%	20.0%	$ 0.228	$ 0.188	$ 0.040	10	1.52	1
MetMT23	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	23	Switch from Belt drive to Direct Drive	10.4%	7.5%	$ 0.268	$ 0.221	$ 0.046	12	1.53	1
MetMT24	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	24	Synchronous Belts	20.6%	1.1%	$ 0.268	$ 0.221	$ 0.046	10	1.31	1
MetMT25		Mfg. Metals	Motors	Turnover	25	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	74.4%	0.91%	$ 2.085	$ 2.085	$ -	15	0.25	0
MetMT26		Mfg. Metals	Motors	Turnover	26	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	55.8%	0.39%	$ 0.436	$ 0.436	$ -	15	1.16	1
MetMT27		Mfg. Metals	Motors	Turnover	27	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	74.4%	0.7%	$ 1.249	$ 1.249	$ -	15	0.42	0
MetMT28		Mfg. Metals	Motors	Turnover	28	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	42.8%	0.9%	$ 0.372	$ 0.372	$ -	15	1.34	1
MetMT29		Mfg. Metals	Motors	Turnover	29	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	66.3%	0.4%	$ 0.799	$ 0.799	$ -	15	0.65	0
MetMT3	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	3	High Efficiency Motors	73.3%	1.5%	$ 0.545	$ 0.450	$ 0.095	15	0.94	0
MetME30	Primary_Metal_Mfg	Mfg. Metals	Motors	Existing	30	Fan System Optimization	29.0%	7.7%	$ 0.311	$ 0.156	$ 0.155	10	1.14	1
MetMT8	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	8	Material Handling	52.4%	5.0%	$ 0.585	$ 0.483	$ 0.102	10	0.63	0
MetME4	Primary_Metal_Mfg	Mfg. Metals	Motors	Existing	4	Material Handling VFD	52.4%	18.7%	$ 0.381	$ 0.229	$ 0.152	10	0.94	0
MetOT1	Primary_Metal_Mfg	Mfg. Metals	Other	Turnover	1	Bldg Improvements	35.0%	20.4%	$ 0.248	$ 0.162	$ 0.087	15	1.91	1
MetOE2	Primary_Metal_Mfg	Mfg. Metals	Other	Existing	2	Energy Project Management	27.0%	29.0%	$ 0.163	$ 0.134	$ 0.029	11	2.15	1
MetOE3	Primary_Metal_Mfg	Mfg. Metals	Other	Existing	3	Integrated Plant Energy Management	22.0%	50.0%	$ 0.261	$ 0.215	$ 0.047	11	1.42	1
MetOE4	Primary_Metal_Mfg	Mfg. Metals	Other	Existing	4	Plant Energy Management	27.0%	12.0%	$ 0.139	$ 0.114	$ 0.025	10	2.29	1
MetOT5	Primary_Metal_Mfg	Mfg. Metals	Other	Turnover	5	Transformers	20.0%	1.6%	$ 0.415	$ 0.399	$ 0.016	15	1.18	1
OthCooT1	Miscellaneous_Mfg	Mfg. Other	Process Cooling	Turnover	1	Equipment: Chillers	8.0%	17.9%	$ 0.330	$ 0.249	$ 0.081	15	1.45	1
OthCooE2	Miscellaneous_Mfg	Mfg. Other	Process Cooling	Existing	2	Improved Controls	33.8%	6.0%	$ 1.118	$ 0.673	$ 0.445	15	0.45	0
OthCooT3	one_Clay_Glass_Produc	Mfg. Other	Process Cooling	Turnover	3	Adjustable speed drive on compressors	34.0%	11.7%	$ 0.201	$ 0.121	$ 0.080	10	1.63	1
OthCooE4	Miscellaneous_Mfg	Mfg. Other	Process Cooling	Existing	4	Optimization of operating parameters	35.0%	13.1%	$ 0.101	$ 0.039	$ 0.063	3	0.95	0
OthCooT5	Miscellaneous_Mfg	Mfg. Other	Process Cooling	Turnover	5	Cold Storage Retrofit	25.6%	20.7%	$ 0.250	$ 0.157	$ 0.093	10	1.34	1
OthCooE6	Miscellaneous_Mfg	Mfg. Other	Process Cooling	Existing	6	Cold Storage Tuneup	10.0%	15.6%	$ 0.112	$ 0.047	$ 0.065	3	0.87	0
OthHeae1	Miscellaneous_Mfg	Mfg. Other	Process Heating	existing	1	Improved Controls	41.7%	30.4%	$ 0.245	$ 0.147	$ 0.098	10	1.37	1
OthHeae2	Miscellaneous_Mfg	Mfg. Other	Process Heating	existing	2	Process Heat O&M	69.8%	28.6%	$ 0.257	$ 0.225	$ 0.032	2	0.29	0
OthHT1	Miscellaneous_Mfg	Mfg. Other	HVAC	Turnover	1	Equipment Upgrades	64.4%	16.4%	$ 0.296	$ 0.252	$ 0.044	15	1.70	1
OthHE2	Miscellaneous_Mfg	Mfg. Other	HVAC	Existing	2	Improved Controls	33.4%	20.9%	$ 0.102	$ 0.077	$ 0.025	10	3.08	1
OthHE3	Miscellaneous_Mfg	Mfg. Other	HVAC	Existing	3	Recommissioning	74.3%	16.0%	$ 0.271	$ -	$ 0.271	7	0.95	0
OthLT1	Miscellaneous_Mfg	Mfg. Other	Lighting	Turnover	1	Efficient Lighting Equipment	30.4%	19.9%	$ 0.150	$ 0.103	$ 0.047	10	2.23	1
OthLT2	Miscellaneous_Mfg	Mfg. Other	Lighting	Turnover	2	HighBay Lighting Equipment	55.1%	34.1%	$ 0.376	$ 0.295	$ 0.081	10	0.97	0
OthLE3	Miscellaneous_Mfg	Mfg. Other	Lighting	Existing	3	Lighting Controls	42.3%	30.0%	$ 0.212	$ 0.157	$ 0.055	10	1.64	1
OthMT1		Mfg. Other	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	74.4%	0.7%	$ 1.249	$ 1.249	$ -	15	0.42	0
OthMT11	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	11	Air Compressor Demand Reduction	26.0%	15.9%	$ 0.107	$ 0.081	$ 0.026	10	2.91	1
OthMT12	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	12	Material Handling	52.9%	5.0%	$ 0.585	$ 0.483	$ 0.102	10	0.63	0
OthME13	Miscellaneous_Mfg	Mfg. Other	Motors	Existing	13	Material Handling VFD	52.9%	18.7%	$ 0.381	$ 0.229	$ 0.152	10	0.94	0
OthME14	Miscellaneous_Mfg	Mfg. Other	Motors	Existing	14	Motor Management Plan	50.0%	2.9%	$ 0.134	$ 0.054	$ 0.080	10	2.41	1
OthMT16	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	16	Motors: Rewind 101-200 HP	25.4%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.60	1
OthMT17	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	17	Motors: Rewind 201-500 HP	35.6%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.60	1
OthMT18	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	18	Motors: Rewind 20-50 HP	4.7%	0.9%	$ 0.431	$ 0.356	$ 0.075	15	1.17	1
OthMT19	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	19	Motors: Rewind 500+ HP	55.2%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.60	1
OthMT2		Mfg. Other	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	42.8%	0.9%	$ 0.372	$ 0.372	$ -	15	1.34	1

Measure Lookup	Industry	New Segment	New End-Use	Vintage	Measure Number	Measure	Applicability	Savings	Total Cost ($/kW Saved)	Equipment Cost	Labor Cost	Life	TRC Test	Economic Flag
OthMT20	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	20	Motors: Rewind 51-100 HP	15.2%	0.6%	$ 0.388	$ 0.321	$ 0.067	15	1.29	1
OthMT21	one_Clay_Glass_Produ	Mfg. Other	Motors	Turnover	21	Air Compressor Equipment	17.0%	8.8%	$ 0.157	$ 0.130	$ 0.027	10	2.10	1
OthMT22	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	22	Properly Sized Fans	15.3%	10.4%	$ 0.202	$ 0.122	$ 0.080	10	1.69	1
OthME23	Miscellaneous_Mfg	Mfg. Other	Motors	Existing	23	Pump Energy Management	31.2%	7.5%	$ 0.134	$ 0.054	$ 0.080	10	2.41	1
OthMT24	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	24	Pump Equipment Upgrade	33.8%	20.0%	$ 0.156	$ 0.129	$ 0.027	10	2.11	1
OthME25	Miscellaneous_Mfg	Mfg. Other	Motors	Existing	25	Pump System Optimization	15.5%	12.1%	$ 0.391	$ 0.196	$ 0.195	12	1.07	1
OthMT26	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	26	Switch from Belt drive to Direct Drive	10.5%	7.5%	$ 0.268	$ 0.221	$ 0.046	12	1.53	1
OthMT27	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	27	Synchronous Belts	21.4%	1.1%	$ 0.268	$ 0.221	$ 0.046	10	1.31	1
OthME28	Miscellaneous_Mfg	Mfg. Other	Motors	Existing	28	Air Compressor Optimization	35.6%	30.1%	$ 0.151	$ 0.058	$ 0.093	10	2.17	1
OthMT29	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	29	Efficient Centrifugal Fan	10.7%	20.0%	$ 0.228	$ 0.188	$ 0.040	10	1.52	1
OthMT3		Mfg. Other	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	66.3%	0.4%	$ 0.799	$ 0.799	$ -	15	0.65	0
OthMT30		Mfg. Other	Motors	Turnover	30	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	74.4%	0.91%	$ 2.085	$ 2.085	$ -	15	0.25	0
OthMT31		Mfg. Other	Motors	Turnover	31	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	55.8%	0.39%	$ 0.436	$ 0.436	$ -	15	1.16	1
OthME4	Miscellaneous_Mfg	Mfg. Other	Motors	Existing	4	Fan System Optimization	30.1%	7.7%	$ 0.311	$ 0.156	$ 0.155	10	1.14	1
OthMT5	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	5	High efficiency Compressor motors	75.1%	1.1%	$ 0.430	$ 0.355	$ 0.075	15	1.17	1
OthMT6	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	6	High Efficiency Motors	75.6%	1.5%	$ 0.545	$ 0.450	$ 0.095	15	0.94	0
OthOT1	Miscellaneous_Mfg	Mfg. Other	Other	Turnover	1	Bldg Improvements	35.0%	20.4%	$ 0.248	$ 0.162	$ 0.087	15	1.91	1
OthOE2	Miscellaneous_Mfg	Mfg. Other	Other	Existing	2	Energy Project Management	27.0%	29.0%	$ 0.163	$ 0.134	$ 0.029	11	2.15	1
OthOE3	Miscellaneous_Mfg	Mfg. Other	Other	Existing	3	Integrated Plant Energy Management	22.0%	50.0%	$ 0.261	$ 0.215	$ 0.047	11	1.42	1
OthOE4	Miscellaneous_Mfg	Mfg. Other	Other	Existing	4	Plant Energy Management	27.0%	12.0%	$ 0.139	$ 0.114	$ 0.025	10	2.29	1
OthOT5	Miscellaneous_Mfg	Mfg. Other	Other	Turnover	5	Transformers	20.0%	1.6%	$ 0.415	$ 0.399	$ 0.016	15	1.18	1
PapCooT1	Paper_Mfg	Mfg. Paper	Process Cooling	Turnover	1	Equipment: Chillers	8.0%	17.9%	$ 0.330	$ 0.249	$ 0.081	15	1.45	1
PapCooE2	Paper_Mfg	Mfg. Paper	Process Cooling	Existing	2	Improved Controls	33.8%	6.0%	$ 1.118	$ 0.673	$ 0.445	15	0.45	0
PapCooT3	Paper_Mfg	Mfg. Paper	Process Cooling	Turnover	3	Adjustable speed drive on compressors	34.0%	11.7%	$ 0.201	$ 0.121	$ 0.080	10	1.63	1
PapCooE4	Paper_Mfg	Mfg. Paper	Process Cooling	Existing	4	Optimization of operating parameters	35.0%	13.1%	$ 0.101	$ 0.039	$ 0.063	3	0.95	0
PapHeaE1	Paper_Mfg	Mfg. Paper	Process Heating	Existing	1	Improved Controls	38.1%	30.4%	$ 0.245	$ 0.147	$ 0.098	10	1.37	1
PapHeaE2	Paper_Mfg	Mfg. Paper	Process Heating	Existing	2	Process Heat O&M	63.9%	28.6%	$ 0.257	$ 0.225	$ 0.032	2	0.29	0
PapHT1	Paper_Mfg	Mfg. Paper	HVAC	Turnover	1	Equipment Upgrades	62.4%	16.4%	$ 0.296	$ 0.252	$ 0.044	15	1.70	1
PapHE2	Paper_Mfg	Mfg. Paper	HVAC	Existing	2	Improved Controls	32.4%	20.9%	$ 0.102	$ 0.077	$ 0.025	10	3.08	1
PapHE3	Paper_Mfg	Mfg. Paper	HVAC	Existing	3	Recommissioning	72.0%	16.0%	$ 0.271	$ -	$ 0.271	7	0.95	0
PapLT1	Paper_Mfg	Mfg. Paper	Lighting	Turnover	1	Efficient Lighting Equipment	30.4%	19.9%	$ 0.150	$ 0.103	$ 0.047	10	2.23	1
PapLT2	Paper_Mfg	Mfg. Paper	Lighting	Turnover	2	HighBay Lighting Equipment	55.1%	34.1%	$ 0.376	$ 0.295	$ 0.081	10	0.97	0
PapLE3	Paper_Mfg	Mfg. Paper	Lighting	Existing	3	Lighting Controls	42.3%	30.0%	$ 0.212	$ 0.157	$ 0.055	10	1.64	1
PapME1	Paper_Mfg	Mfg. Paper	Motors	Existing	1	Fan System Optimization	30.2%	7.7%	$ 0.311	$ 0.156	$ 0.155	10	1.14	1
PapME10	Paper_Mfg	Mfg. Paper	Motors	Existing	10	Motor Management Plan	50.1%	2.9%	$ 0.134	$ 0.054	$ 0.080	10	2.41	1
PapMT11	Paper_Mfg	Mfg. Paper	Motors	Turnover	11	Air Compressor Demand Reduction	25.8%	15.9%	$ 0.107	$ 0.081	$ 0.026	10	2.91	1
PapMT13	Paper_Mfg	Mfg. Paper	Motors	Turnover	13	Motors: Rewind 101-200 HP	25.4%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.60	1
PapMT14	Paper_Mfg	Mfg. Paper	Motors	Turnover	14	Motors: Rewind 201-500 HP	35.6%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.60	1
PapMT15	Paper_Mfg	Mfg. Paper	Motors	Turnover	15	Motors: Rewind 20-50 HP	4.7%	0.9%	$ 0.431	$ 0.356	$ 0.075	15	1.17	1
PapMT16	Paper_Mfg	Mfg. Paper	Motors	Turnover	16	Motors: Rewind 500+ HP	55.2%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.60	1
PapMT17	Paper_Mfg	Mfg. Paper	Motors	Turnover	17	Motors: Rewind 51-100 HP	15.2%	0.6%	$ 0.388	$ 0.321	$ 0.067	15	1.29	1
PapMT18	Paper_Mfg	Mfg. Paper	Motors	Turnover	18	Paper: Large Material Handling	25.2%	9.7%	$ 0.959	$ 0.850	$ 0.109	10	0.39	0
PapMT19	Paper_Mfg	Mfg. Paper	Motors	Turnover	19	Paper: Material Handling	25.2%	13.1%	$ 0.801	$ 0.710	$ 0.091	10	0.46	0
PapMT2	Paper_Mfg	Mfg. Paper	Motors	Turnover	2	High efficiency Compressor motors	74.7%	1.1%	$ 0.430	$ 0.355	$ 0.075	15	1.17	1
PapMT20	Paper_Mfg	Mfg. Paper	Motors	Turnover	20	Paper: Premium Control Large Material	25.2%	18.7%	$ 0.549	$ 0.486	$ 0.062	10	0.67	0
PapME21	Paper_Mfg	Mfg. Paper	Motors	Existing	21	Air Compressor Optimization	35.4%	30.1%	$ 0.151	$ 0.058	$ 0.093	10	2.17	1
PapMT22	Paper_Mfg	Mfg. Paper	Motors	Turnover	22	Paper: Premium Fan	25.5%	20.0%	$ 0.227	$ 0.201	$ 0.026	10	1.52	1
PapMT23	Paper_Mfg	Mfg. Paper	Motors	Turnover	23	Properly Sized Fans	15.3%	10.4%	$ 0.202	$ 0.122	$ 0.080	10	1.69	1
PapME24	Paper_Mfg	Mfg. Paper	Motors	Existing	24	Pump Energy Management	32.3%	7.5%	$ 0.134	$ 0.054	$ 0.080	10	2.41	1
PapMT25	Paper_Mfg	Mfg. Paper	Motors	Turnover	25	Pump Equipment Upgrade	34.9%	20.0%	$ 0.156	$ 0.129	$ 0.027	10	2.11	1
PapME26	Paper_Mfg	Mfg. Paper	Motors	Existing	26	Pump System Optimization	16.1%	12.1%	$ 0.391	$ 0.196	$ 0.195	12	1.07	1
PapMT27	Paper_Mfg	Mfg. Paper	Motors	Turnover	27	Switch from Belt drive to Direct Drive	10.6%	7.5%	$ 0.268	$ 0.221	$ 0.046	12	1.53	1
PapMT28	Paper_Mfg	Mfg. Paper	Motors	Turnover	28	Synchronous Belts	21.4%	1.1%	$ 0.268	$ 0.221	$ 0.046	10	1.31	1
PapMT29	Paper_Mfg	Mfg. Paper	Motors	Turnover	29	Efficient Centrifugal Fan	10.7%	20.0%	$ 0.228	$ 0.188	$ 0.040	10	1.52	1
PapMT3	Paper_Mfg	Mfg. Paper	Motors	Turnover	3	High Efficiency Motors	76.7%	1.5%	$ 0.545	$ 0.450	$ 0.095	15	0.94	0
PapMT30		Mfg. Paper	Motors	Turnover	30	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	74.4%	0.91%	$ 2.085	$ 2.085	$ -	15	0.25	0
PapMT31		Mfg. Paper	Motors	Turnover	31	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	55.8%	0.39%	$ 0.436	$ 0.436	$ -	15	1.16	1
PapMT32		Mfg. Paper	Motors	Turnover	32	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	74.4%	0.7%	$ 1.249	$ 1.249	$ -	15	0.42	0
PapMT33		Mfg. Paper	Motors	Turnover	33	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	42.8%	0.9%	$ 0.372	$ 0.372	$ -	15	1.34	1
PapMT34		Mfg. Paper	Motors	Turnover	34	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	66.3%	0.4%	$ 0.799	$ 0.799	$ -	15	0.65	0
PapMT8	Paper_Mfg	Mfg. Paper	Motors	Turnover	8	Material Handling	53.4%	5.0%	$ 0.585	$ 0.483	$ 0.102	10	0.63	0
PapME9	Paper_Mfg	Mfg. Paper	Motors	Existing	9	Material Handling VFD	53.4%	18.7%	$ 0.381	$ 0.229	$ 0.152	10	0.94	0
PapOT1	Paper_Mfg	Mfg. Paper	Other	Turnover	1	Bldg Improvements	35.0%	20.4%	$ 0.248	$ 0.162	$ 0.087	15	1.91	1
PapOE10	Paper_Mfg	Mfg. Paper	Other	Existing	10	Plant Energy Management	27.0%	12.0%	$ 0.139	$ 0.114	$ 0.025	10	2.29	1
PapOT11	Paper_Mfg	Mfg. Paper	Other	Turnover	11	Transformers	20.0%	1.6%	$ 0.415	$ 0.399	$ 0.016	15	1.18	1
PapOE2	Paper_Mfg	Mfg. Paper	Other	Existing	2	Energy Project Management	27.0%	29.0%	$ 0.163	$ 0.134	$ 0.029	11	2.15	1
PapOE3	Paper_Mfg	Mfg. Paper	Other	Existing	3	Integrated Plant Energy Management	22.0%	50.0%	$ 0.261	$ 0.215	$ 0.047	11	1.42	1
PapOT4	Paper_Mfg	Mfg. Paper	Other	Turnover	4	Kraft: Efficient Agitator	13.8%	50.0%	$ 0.104	$ 0.093	$ 0.012	10	2.89	1
PapOT5	Paper_Mfg	Mfg. Paper	Other	Turnover	5	Kraft: Effluent Treatment System	9.2%	15.0%	$ 0.092	$ 0.082	$ 0.011	10	3.19	1
PapOT6	Paper_Mfg	Mfg. Paper	Other	Turnover	6	Mech Pulp: Premium Process	22.5%	0.2%	$ 0.141	$ 0.125	$ 0.016	5	1.17	1

Measure Lookup	Industry	New Segment	New End-Use	Vintage	Measure Number	Measure	Applicability	Savings	Total Cost ($/kW Saved)	Equipment Cost	Labor Cost	Life	TRC Test	Economic Flag
PapOT7	Paper_Mfg	Mfg. Paper	Other	Turnover	7	Mech Pulp: Refiner Plate Improvement	35.5%	0.4%	$ 0.045	$ 0.040	$ 0.005	1	0.58	0
PapOT8	Paper_Mfg	Mfg. Paper	Other	Turnover	8	Mech Pulp: Refiner Replacement	23.7%	10.0%	$ 0.735	$ 0.652	$ 0.084	12	0.57	0
PapOT9	Paper_Mfg	Mfg. Paper	Other	Turnover	9	Paper: Efficient Pulp Screen	13.8%	15.0%	$ 0.226	$ 0.200	$ 0.026	10	1.49	1
PlaCooE1	Chemical_Mfg	Mfg. Plastics	Process Cooling	Existing	1	Clean Room: Change Filter Strategy	10.0%	40.0%	$ 0.016	$ 0.012	$ 0.005	1	0.96	0
PlaCooE2	Chemical_Mfg	Mfg. Plastics	Process Cooling	Existing	2	Clean Room: Chiller Optimize	28.3%	14.8%	$ 0.248	$ 0.124	$ 0.124	10	1.36	1
PlaCooT3	Chemical_Mfg	Mfg. Plastics	Process Cooling	Turnover	3	Clean Room: Clean Room HVAC	30.0%	9.0%	$ 0.204	$ 0.144	$ 0.061	15	2.25	1
PlaCooT4	Chemical_Mfg	Mfg. Plastics	Process Cooling	Turnover	4	Equipment: Chillers	8.0%	17.9%	$ 0.330	$ 0.249	$ 0.081	15	1.45	1
PlaCooE5	Chemical_Mfg	Mfg. Plastics	Process Cooling	Existing	5	Improved Controls	33.8%	6.0%	$ 1.118	$ 0.673	$ 0.445	15	0.45	0
PlaCooT6	Chemical_Mfg	Mfg. Plastics	Process Cooling	Turnover	6	Adjustable speed drive on compressors	34.0%	11.7%	$ 0.201	$ 0.121	$ 0.080	10	1.63	1
PlaCooE7	Chemical_Mfg	Mfg. Plastics	Process Cooling	Existing	7	Optimization of operating parameters	35.0%	13.1%	$ 0.101	$ 0.039	$ 0.063	3	0.95	0
PlaCooT8	Chemical_Mfg	Mfg. Plastics	Process Cooling	Turnover	8	Cold Storage Retrofit	25.6%	20.7%	$ 0.250	$ 0.157	$ 0.093	10	1.34	1
PlaCooE9	Chemical_Mfg	Mfg. Plastics	Process Cooling	Existing	9	Cold Storage Tuneup	10.0%	15.6%	$ 0.112	$ 0.047	$ 0.065	3	0.87	0
PlaHeaE1	Chemical_Mfg	Mfg. Plastics	Process Heating	Existing	1	Improved Controls	37.9%	30.4%	$ 0.245	$ 0.147	$ 0.098	10	1.37	1
PlaHeaE2	Chemical_Mfg	Mfg. Plastics	Process Heating	Existing	2	Process Heat O&M	63.4%	28.6%	$ 0.257	$ 0.225	$ 0.032	2	0.29	0
PlaHT1	Chemical_Mfg	Mfg. Plastics	HVAC	Turnover	1	Equipment Upgrades	62.9%	16.4%	$ 0.296	$ 0.252	$ 0.044	15	1.70	1
PlaHE2	Chemical_Mfg	Mfg. Plastics	HVAC	Existing	2	Improved Controls	32.7%	20.9%	$ 0.102	$ 0.077	$ 0.025	10	3.08	1
PlaHE3	Chemical_Mfg	Mfg. Plastics	HVAC	Existing	3	Recommissioning	72.6%	16.0%	$ 0.271	$ -	$ 0.271	7	0.95	0
PlaLT1	Chemical_Mfg	Mfg. Plastics	Lighting	Turnover	1	Efficient Lighting Equipment	30.4%	19.9%	$ 0.150	$ 0.103	$ 0.047	10	2.23	1
PlaLT2	Chemical_Mfg	Mfg. Plastics	Lighting	Turnover	2	HighBay Lighting Equipment	55.1%	34.1%	$ 0.376	$ 0.295	$ 0.081	10	0.97	0
PlaLE3	Chemical_Mfg	Mfg. Plastics	Lighting	Existing	3	Lighting Controls	42.3%	30.0%	$ 0.212	$ 0.157	$ 0.055	10	1.64	1
PlaMT1		Mfg. Plastics	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	42.8%	0.9%	$ 0.372	$ 0.372	$ -	15	1.34	1
PlaMT10	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	10	Material Handling	52.3%	5.0%	$ 0.585	$ 0.483	$ 0.102	10	0.63	0
PlaMT11	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	11	Air Compressor Demand Reduction	28.0%	15.9%	$ 0.107	$ 0.081	$ 0.026	10	2.91	1
PlaME12	Chemical_Mfg	Mfg. Plastics	Motors	Existing	12	Material Handling VFD	52.3%	18.7%	$ 0.381	$ 0.229	$ 0.152	10	0.94	0
PlaME13	Chemical_Mfg	Mfg. Plastics	Motors	Existing	13	Motor Management Plan	51.6%	2.9%	$ 0.134	$ 0.054	$ 0.080	10	2.41	1
PlaMT15	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	15	Motors: Rewind 101-200 HP	25.4%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.60	1
PlaMT16	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	16	Motors: Rewind 201-500 HP	35.6%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.60	1
PlaMT17	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	17	Motors: Rewind 20-50 HP	4.6%	0.9%	$ 0.431	$ 0.356	$ 0.075	15	1.17	1
PlaMT18	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	18	Motors: Rewind 500+ HP	55.2%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.60	1
PlaMT19	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	19	Motors: Rewind 51-100 HP	15.2%	0.6%	$ 0.388	$ 0.321	$ 0.067	15	1.29	1
PlaMT2		Mfg. Plastics	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	66.3%	0.4%	$ 0.799	$ 0.799	$ -	15	0.65	0
PlaMT20	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	20	Properly Sized Fans	14.7%	10.4%	$ 0.202	$ 0.122	$ 0.080	10	1.69	1
PlaME21	Chemical_Mfg	Mfg. Plastics	Motors	Existing	21	Air Compressor Optimization	38.3%	30.1%	$ 0.151	$ 0.058	$ 0.093	10	2.17	1
PlaME22	Chemical_Mfg	Mfg. Plastics	Motors	Existing	22	Pump Energy Management	31.4%	7.5%	$ 0.134	$ 0.054	$ 0.080	10	2.41	1
PlaMT23	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	23	Pump Equipment Upgrade	34.0%	20.0%	$ 0.156	$ 0.129	$ 0.027	10	2.11	1
PlaME24	Chemical_Mfg	Mfg. Plastics	Motors	Existing	24	Pump System Optimization	15.6%	12.1%	$ 0.391	$ 0.196	$ 0.195	12	1.07	1
PlaMT25	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	25	Switch from Belt drive to Direct Drive	10.4%	7.5%	$ 0.268	$ 0.221	$ 0.046	12	1.53	1
PlaMT26	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	26	Synchronous Belts	20.9%	1.1%	$ 0.268	$ 0.221	$ 0.046	10	1.31	1
PlaMT27	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	27	Efficient Centrifugal Fan	10.3%	20.0%	$ 0.228	$ 0.188	$ 0.040	10	1.52	1
PlaMT28		Mfg. Plastics	Motors	Turnover	28	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	74.4%	0.91%	$ 2.085	$ 2.085	$ -	15	0.25	0
PlaMT29		Mfg. Plastics	Motors	Turnover	29	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	55.8%	0.39%	$ 0.436	$ 0.436	$ -	15	1.16	1
PlaME3	Chemical_Mfg	Mfg. Plastics	Motors	Existing	3	Fan System Optimization	28.9%	7.7%	$ 0.311	$ 0.156	$ 0.155	10	1.14	1
PlaMT30		Mfg. Plastics	Motors	Turnover	30	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	74.4%	0.7%	$ 1.249	$ 1.249	$ -	15	0.42	0
PlaMT4	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	4	High efficiency Compressor motors	80.8%	1.1%	$ 0.430	$ 0.355	$ 0.075	15	1.17	1
PlaMT5	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	5	High Efficiency Motors	74.4%	1.5%	$ 0.545	$ 0.450	$ 0.095	15	0.94	0
PlaOT1	Chemical_Mfg	Mfg. Plastics	Other	Turnover	1	Bldg Improvements	35.0%	20.4%	$ 0.248	$ 0.162	$ 0.087	15	1.91	1
PlaOE2	Chemical_Mfg	Mfg. Plastics	Other	Existing	2	Energy Project Management	27.0%	29.0%	$ 0.163	$ 0.134	$ 0.029	11	2.15	1
PlaOE3	Chemical_Mfg	Mfg. Plastics	Other	Existing	3	Integrated Plant Energy Management	22.0%	50.0%	$ 0.261	$ 0.215	$ 0.047	11	1.42	1
PlaOE4	Chemical_Mfg	Mfg. Plastics	Other	Existing	4	Plant Energy Management	27.0%	12.0%	$ 0.139	$ 0.114	$ 0.025	10	2.29	1
PlaOT5	Chemical_Mfg	Mfg. Plastics	Other	Turnover	5	Transformers	20.0%	1.6%	$ 0.415	$ 0.399	$ 0.016	15	1.18	1
MinMT1		Mining	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	74.4%	0.91%	$ 2.085	$ 2.085	$ -	15	0.25	0
MinME10	Mining	Mining	Motors	Existing	10	Motor Management Plan	50.0%	2.9%	$ 0.134	$ 0.054	$ 0.080	10	2.41	1
MinMT12	Mining	Mining	Motors	Turnover	12	Motors: Rewind 101-200 HP	25.4%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.60	1
MinMT13	Mining	Mining	Motors	Turnover	13	Motors: Rewind 201-500 HP	35.6%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.60	1
MinMT14	Mining	Mining	Motors	Turnover	14	Motors: Rewind 20-50 HP	4.7%	0.9%	$ 0.431	$ 0.356	$ 0.075	15	1.17	1
MinMT15	Mining	Mining	Motors	Turnover	15	Motors: Rewind 500+ HP	55.2%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.60	1
MinMT16	Mining	Mining	Motors	Turnover	16	Motors: Rewind 51-100 HP	15.2%	0.6%	$ 0.388	$ 0.321	$ 0.067	15	1.29	1
MinMT17	Mining	Mining	Motors	Turnover	17	Switch from Belt drive to Direct Drive	10.5%	7.5%	$ 0.268	$ 0.221	$ 0.046	12	1.53	1
MinMT18	Mining	Mining	Motors	Turnover	18	Synchronous Belts	21.0%	1.1%	$ 0.268	$ 0.221	$ 0.046	10	1.31	1
MinMT2		Mining	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	55.8%	0.39%	$ 0.436	$ 0.436	$ -	15	1.16	1
MinMT3		Mining	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	74.4%	0.7%	$ 1.249	$ 1.249	$ -	15	0.42	0
MinMT4		Mining	Motors	Turnover	4	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	42.8%	0.9%	$ 0.372	$ 0.372	$ -	15	1.34	1
MinMT5		Mining	Motors	Turnover	5	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	66.3%	0.4%	$ 0.799	$ 0.799	$ -	15	0.65	0
MinMT6	Mining	Mining	Motors	Turnover	6	High Efficiency Motors	75.0%	1.5%	$ 0.545	$ 0.450	$ 0.095	15	0.94	0
MinMT8	Mining	Mining	Motors	Turnover	8	Material Handling	53.0%	5.0%	$ 0.585	$ 0.483	$ 0.102	10	0.63	0
MinME9	Mining	Mining	Motors	Existing	9	Material Handling VFD	53.0%	18.7%	$ 0.381	$ 0.229	$ 0.152	10	0.94	0
NonCooT1	umber_Wood_Product	Other Non Mfg.	Process Cooling	Turnover	1	Equipment: Chillers	7.7%	17.9%	$ 0.330	$ 0.249	$ 0.081	15	1.45	1
NonCooE2	umber_Wood_Product	Other Non Mfg.	Process Cooling	Existing	2	Improved Controls	32.3%	6.0%	$ 1.118	$ 0.673	$ 0.445	15	0.45	0
NonCooT3	Agriculture	Other Non Mfg.	Process Cooling	Turnover	3	Milk Precooler - Dairy Plate Cooler	1.7%	3.24%	$ 0.660	$ 0.487	$ 0.173	15	0.75	0
NonCooT4	umber_Wood_Product	Other Non Mfg.	Process Cooling	Turnover	4	Adjustable speed drive on compressors	34.0%	11.7%	$ 0.201	$ 0.121	$ 0.080	10	1.63	1

Measure Lookup	Industry	New Segment	New End-Use	Vintage	Measure Number	Measure	Applicability	Savings	Total Cost ($/kW Saved)	Equipment Cost	Labor Cost	Life	TRC Test	Economic Flag
NonCooE5	umber_Wood_Product	Other Non Mfg.	Process Cooling	Existing	5	Optimization of operating parameters	35.0%	13.1%	$ 0.101	$ 0.039	$ 0.063	3	0.95	0
NonHeaT1	Agriculture	Other Non Mfg.	Process Heating	Turnover	1	Crate Heating Pads	22.9%	17.51%	$ 0.181	$ 0.162	$ 0.019	15	2.50	1
NonHeaT2	Agriculture	Other Non Mfg.	Process Heating	Turnover	2	Grain dryers	24.8%	23.52%	$ 8.260	$ 6.090	$ 2.169	15	0.06	0
NonHeaE3	Agriculture	Other Non Mfg.	Process Heating	Existing	3	Heat Lamp Setback (Microzone)	22.9%	0.45%	$ 0.210	$ 0.210	$ -	15	2.19	1
NonHeaE4	Agriculture	Other Non Mfg.	Process Heating	Existing	4	Heat Lamp/Heating Pad Controller	22.9%	1.75%	$ 0.129	$ 0.129	$ -	15	3.34	1
NonHeaT5	Agriculture	Other Non Mfg.	Process Heating	Turnover	5	Heat Lamps	22.9%	3.38%	$ 0.023	$ 0.023	$ -	10	7.65	1
NonHeaE6	umber_Wood_Product	Other Non Mfg.	Process Heating	Existing	6	Improved Controls	37.9%	30.4%	$ 0.245	$ 0.147	$ 0.098	10	1.37	1
NonHeaE7	umber_Wood_Product	Other Non Mfg.	Process Heating	Existing	7	Process Heat O&M	63.4%	28.6%	$ 0.257	$ 0.225	$ 0.032	2	0.29	0
NonHT1	Agriculture	Other Non Mfg.	HVAC	Turnover	1	Energy-Efficient Dehumidifier	49.7%	2.00%	$ 1.072	$ 0.791	$ 0.282	15	0.50	0
NonHT2	umber_Wood_Product	Other Non Mfg.	HVAC	Turnover	2	Equipment Upgrades	63.2%	16.4%	$ 0.296	$ 0.252	$ 0.044	15	1.70	1
NonHT3	Agriculture	Other Non Mfg.	HVAC	Turnover	3	Heat Reclaimer	1.7%	42.00%	$ 0.171	$ 0.126	$ 0.045	15	2.78	1
NonHT4	Agriculture	Other Non Mfg.	HVAC	Turnover	4	Heat Recovery Ventilators	49.7%	4.13%	$ 0.448	$ 0.330	$ 0.118	10	0.83	0
NonHE5	umber_Wood_Product	Other Non Mfg.	HVAC	Existing	5	Improved Controls	32.8%	20.9%	$ 0.102	$ 0.077	$ 0.025	10	3.08	1
NonHT6	Agriculture	Other Non Mfg.	HVAC	Turnover	6	Infrared Film for Greenhouses	0.3%	11.06%	$ 0.261	$ 0.234	$ 0.028	4	0.58	0
NonHT7	Agriculture	Other Non Mfg.	HVAC	Turnover	7	Programmable Ventilation Controller	49.7%	0.10%	$ 0.140	$ 0.140	$ -	10	2.39	1
NonHE8	umber_Wood_Product	Other Non Mfg.	HVAC	Existing	8	Recommissioning	72.9%	16.0%	$ 0.271	$ -	$ 0.271	7	0.95	0
NonHT9	Agriculture	Other Non Mfg.	HVAC	Turnover	9	Scroll Compressor	1.7%	7.50%	$ 1.006	$ 0.899	$ 0.107	15	0.53	0
NonLT1	umber_Wood_Product	Other Non Mfg.	Lighting	Turnover	1	Efficient Lighting Equipment	30.4%	19.9%	$ 0.150	$ 0.103	$ 0.047	10	2.23	1
NonLT2	umber_Wood_Product	Other Non Mfg.	Lighting	Turnover	2	HighBay Lighting Equipment	55.1%	34.1%	$ 0.376	$ 0.295	$ 0.081	10	0.97	0
NonLE3	umber_Wood_Product	Other Non Mfg.	Lighting	Existing	3	Lighting Controls	42.3%	30.0%	$ 0.212	$ 0.157	$ 0.055	10	1.64	1
NonMT1		Other Non Mfg.	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	55.8%	0.39%	$ 0.436	$ 0.436	$ -	15	1.16	1
NonMT11	Agriculture	Other Non Mfg.	Motors	Turnover	11	Agricultural Exhaust Fans (Rate 21 CFM/Watt+)	49.7%	5.00%	$ 0.316	$ 0.283	$ 0.034	15	1.56	1
NonMT15	Agriculture	Other Non Mfg.	Motors	Turnover	15	Low Pressure Irrigation	0.4%	50.00%	$ 0.993	$ 0.732	$ 0.261	10	0.38	0
NonMT16	umber_Wood_Product	Other Non Mfg.	Motors	Turnover	16	Material Handling	53.2%	5.0%	$ 0.585	$ 0.483	$ 0.102	10	0.63	0
NonME17	umber_Wood_Product	Other Non Mfg.	Motors	Existing	17	Material Handling VFD	53.2%	18.7%	$ 0.381	$ 0.229	$ 0.152	10	0.94	0
NonME18	umber_Wood_Product	Other Non Mfg.	Motors	Existing	18	Motor Management Plan	50.9%	2.9%	$ 0.134	$ 0.054	$ 0.080	10	2.41	1
NonMT2		Other Non Mfg.	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	74.4%	0.7%	$ 1.249	$ 1.249	$ -	15	0.42	0
NonMT21	umber_Wood_Product	Other Non Mfg.	Motors	Turnover	21	Motors: Rewind 101-200 HP	25.4%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.60	1
NonMT22	umber_Wood_Product	Other Non Mfg.	Motors	Turnover	22	Air Compressor Demand Reduction	26.8%	15.9%	$ 0.107	$ 0.081	$ 0.026	10	2.91	1
NonMT23	umber_Wood_Product	Other Non Mfg.	Motors	Turnover	23	Motors: Rewind 201-500 HP	35.6%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.60	1
NonMT24	umber_Wood_Product	Other Non Mfg.	Motors	Turnover	24	Motors: Rewind 20-50 HP	4.7%	0.9%	$ 0.431	$ 0.356	$ 0.075	15	1.17	1
NonMT25	umber_Wood_Product	Other Non Mfg.	Motors	Turnover	25	Motors: Rewind 500+ HP	55.2%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.60	1
NonMT26	umber_Wood_Product	Other Non Mfg.	Motors	Turnover	26	Motors: Rewind 51-100 HP	15.2%	0.6%	$ 0.388	$ 0.321	$ 0.067	15	1.29	1
NonMT27	umber_Wood_Product	Other Non Mfg.	Motors	Turnover	27	Properly Sized Fans	15.3%	10.4%	$ 0.202	$ 0.122	$ 0.080	10	1.69	1
NonME28	umber_Wood_Product	Other Non Mfg.	Motors	Existing	28	Pump Energy Management	29.8%	7.5%	$ 0.134	$ 0.054	$ 0.080	10	2.41	1
NonMT29	umber_Wood_Product	Other Non Mfg.	Motors	Turnover	29	Pump Equipment Upgrade	32.3%	20.0%	$ 0.156	$ 0.129	$ 0.027	10	2.11	1
NonMT3		Other Non Mfg.	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	42.8%	0.9%	$ 0.372	$ 0.372	$ -	15	1.34	1
NonME30	umber_Wood_Product	Other Non Mfg.	Motors	Existing	30	Pump System Optimization	14.9%	12.1%	$ 0.391	$ 0.196	$ 0.195	12	1.07	1
NonMT31	Irrigation	Other Non Mfg.	Motors	Turnover	31	SIS	76.5%	7.5%	$ 1.051	$ 0.869	$ 0.183	7	0.25	0
NonMT32	umber_Wood_Product	Other Non Mfg.	Motors	Turnover	32	Air Compressor Equipment	17.6%	8.8%	$ 0.157	$ 0.130	$ 0.027	10	2.10	1
NonMT33	umber_Wood_Product	Other Non Mfg.	Motors	Turnover	33	Switch from Belt drive to Direct Drive	10.5%	7.5%	$ 0.268	$ 0.221	$ 0.046	12	1.53	1
NonMT34	umber_Wood_Product	Other Non Mfg.	Motors	Turnover	34	Synchronous Belts	20.9%	1.1%	$ 0.268	$ 0.221	$ 0.046	10	1.31	1
NonMT35	Irrigation	Other Non Mfg.	Motors	Turnover	35	System Improvements	85.0%	8.0%	$ 0.416	$ 0.344	$ 0.072	5	0.45	0
NonMT36	Agriculture	Other Non Mfg.	Motors	Turnover	36	Variable Speed Drives for Dairy Vacuum Pumps	1.7%	36.89%	$ 0.169	$ 0.151	$ 0.018	15	2.75	1
NonMT37	Agriculture	Other Non Mfg.	Motors	Turnover	37	VFDs on Small Milking Machines	1.7%	3.22%	$ 0.832	$ 0.614	$ 0.219	15	0.62	0
NonMT38	umber_Wood_Product	Other Non Mfg.	Motors	Turnover	38	Wood: Replace Pneumatic Conveyor	50.2%	29.0%	$ 0.018	$ 0.016	$ 0.002	10	8.90	1
NonME39	umber_Wood_Product	Other Non Mfg.	Motors	Existing	39	Air Compressor Optimization	36.8%	30.1%	$ 0.151	$ 0.058	$ 0.093	10	2.17	1
NonMT4		Other Non Mfg.	Motors	Turnover	4	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	66.3%	0.4%	$ 0.799	$ 0.799	$ -	15	0.65	0
NonMT40	Agriculture	Other Non Mfg.	Motors	Turnover	40	Automatic Milker Takeoff	1.7%	3.00%	$ 0.763	$ 0.563	$ 0.200	15	0.68	0
NonMT41	Agriculture	Other Non Mfg.	Motors	Turnover	41	Circulating Fans	49.7%	5.00%	$ 0.152	$ 0.136	$ 0.016	10	2.17	1
NonMT42	umber_Wood_Product	Other Non Mfg.	Motors	Turnover	42	Efficient Centrifugal Fan	10.7%	20.0%	$ 0.228	$ 0.188	$ 0.040	10	1.52	1
NonMT43		Other Non Mfg.	Motors	Turnover	43	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	74.4%	0.91%	$ 2.085	$ 2.085	$ -	15	0.25	0
NonME5	umber_Wood_Product	Other Non Mfg.	Motors	Existing	5	Fan System Optimization	30.2%	7.7%	$ 0.311	$ 0.156	$ 0.155	10	1.14	1
NonMT6	umber_Wood_Product	Other Non Mfg.	Motors	Turnover	6	High efficiency Compressor motors	77.5%	1.1%	$ 0.430	$ 0.355	$ 0.075	15	1.17	1
NonMT7	Irrigation	Other Non Mfg.	Motors	Turnover	7	High Efficiency Motors	74.7%	1.5%	$ 0.545	$ 0.450	$ 0.095	15	0.94	0
NonMT8	Agriculture	Other Non Mfg.	Motors	Turnover	8	High Volume Low Speed Fans	49.7%	46.61%	$ 2.004	$ 1.883	$ 0.120	15	0.26	0
NonMT9	Agriculture	Other Non Mfg.	Motors	Turnover	9	High-Efficiency Ventilation System	49.7%	5.66%	$ 1.366	$ 1.366	$ -	10	0.28	0
NonOT1	umber_Wood_Product	Other Non Mfg.	Other	Turnover	1	Bldg Improvements	35.0%	20.4%	$ 0.248	$ 0.162	$ 0.087	15	1.91	1
NonOT10	umber_Wood_Product	Other Non Mfg.	Other	Turnover	10	Transformers	20.0%	1.6%	$ 0.415	$ 0.399	$ 0.016	15	1.18	1
NonOT2	Agriculture	Other Non Mfg.	Other	Turnover	2	Block Heater Timer	25.0%	2.50%	$ 0.048	$ 0.048	$ -	10	5.11	1
NonOE3	umber_Wood_Product	Other Non Mfg.	Other	Existing	3	Energy Project Management	27.0%	29.0%	$ 0.163	$ 0.134	$ 0.029	11	2.15	1
NonOT4	Agriculture	Other Non Mfg.	Other	Turnover	4	Grain bin aeration control systems	24.8%	2.25%	$ 0.168	$ 0.124	$ 0.044	15	2.71	1
NonOT5	Agriculture	Other Non Mfg.	Other	Turnover	5	Greenhouse Heat Curtain	0.3%	16.76%	$ 0.056	$ 0.056	$ -	5	2.39	1
NonOT6	Agriculture	Other Non Mfg.	Other	Turnover	6	High Efficiency Stock tank	22.9%	3.75%	$ 0.412	$ 0.368	$ 0.044	10	0.86	0
NonOE7	umber_Wood_Product	Other Non Mfg.	Other	Existing	7	Integrated Plant Energy Management	22.0%	50.0%	$ 0.261	$ 0.215	$ 0.047	11	1.42	1
NonOT8	Agriculture	Other Non Mfg.	Other	Turnover	8	Livestock Waterers	22.9%	11.25%	$ 0.327	$ 0.292	$ 0.035	10	1.06	1
NonOE9	umber_Wood_Product	Other Non Mfg.	Other	Existing	9	Plant Energy Management	27.0%	12.0%	$ 0.139	$ 0.114	$ 0.025	10	2.29	1
MetPT1		Mfg. Metals	Process EC	Turnover	1	Electrical-Chemical Plating Bundle, Tank and Rectifier	65.0%	18.5%	$ 0.550	$ 0.450	$ 0.100	15	0.90	0
MinHT1	Mining	Mining	HVAC	Turnover	1	Equipment Upgrades	62.9%	16.4%	$ 0.296	$ 0.252	$ 0.044	15	1.70	1
MinHE2	Mining	Mining	HVAC	Existing	2	Improved Controls	32.7%	20.9%	$ 0.102	$ 0.077	$ 0.025	10	3.08	1

Measure Lookup	Industry	New Segment	New End-Use	Vintage	Measure Number	Measure	Applicability	Savings	Total Cost ($/kW Saved)	Equipment Cost	Labor Cost	Life	TRC Test	Economic Flag
MinHE3	Mining	Mining	HVAC	Existing	3	Recommissioning	72.6%	16.0%	$ 0.271	$ -	$ 0.271	7	0.95	0
MinLT1	Mining	Mining	Lighting	Turnover	1	Efficient Lighting Equipment	30.4%	19.9%	$ 0.150	$ 0.103	$ 0.047	10	2.23	1
MinLT2	Mining	Mining	Lighting	Turnover	2	HighBay Lighting Equipment	55.1%	34.1%	$ 0.376	$ 0.295	$ 0.081	10	0.97	0
MinLE3	Mining	Mining	Lighting	Existing	3	Lighting Controls	42.3%	30.0%	$ 0.212	$ 0.157	$ 0.055	10	1.64	1

Measure Lookup	Industry	New Segment	New End-Use	Vintage	Measure Number	Measure	Applicability	Savings	Total Cost ($/kW Saved)	Equipment Cost	Labor Cost	Life	TRC Test	Economic Flag
CheCooE1	Chemical_Mfg	Mfg. Chemicals	Process Cooling	Existing	1	Clean Room: Change Filter Strategy	10.0%	40.0%	$ 0.016	$ 0.012	$ 0.005	1	0.845229	0
CheCooE2	Chemical_Mfg	Mfg. Chemicals	Process Cooling	Existing	2	Clean Room: Chiller Optimize	28.3%	14.8%	$ 0.248	$ 0.124	$ 0.124	10	1.2770895	1
CheCooT3	Chemical_Mfg	Mfg. Chemicals	Process Cooling	Turnover	3	Clean Room: Clean Room HVAC	30.0%	9.0%	$ 0.204	$ 0.144	$ 0.061	15	2.6115532	1
CheCooT4	Chemical_Mfg	Mfg. Chemicals	Process Cooling	Turnover	4	Equipment: Chillers	8.0%	17.9%	$ 0.330	$ 0.249	$ 0.081	15	1.6863203	1
CheCooE5	Chemical_Mfg	Mfg. Chemicals	Process Cooling	Existing	5	Improved Controls	33.8%	6.0%	$ 1.118	$ 0.673	$ 0.445	15	0.5239597	0
CheCooT6	Chemical_Mfg	Mfg. Chemicals	Process Cooling	Turnover	6	Adjustable speed drive on compressors	34.0%	11.7%	$ 0.201	$ 0.121	$ 0.080	10	1.5405308	1
CheCooE7	Chemical_Mfg	Mfg. Chemicals	Process Cooling	Existing	7	Optimization of operating parameters	35.0%	13.1%	$ 0.101	$ 0.039	$ 0.063	3	0.8631154	0
CheCooT8	Chemical_Mfg	Mfg. Chemicals	Process Cooling	Turnover	8	Cold Storage Retrofit	25.6%	20.7%	$ 0.250	$ 0.157	$ 0.093	10	1.2672565	1
CheCooE9	Chemical_Mfg	Mfg. Chemicals	Process Cooling	Existing	9	Cold Storage Tuneup	10.0%	15.6%	$ 0.112	$ 0.047	$ 0.065	3	0.7961473	0
CheHeaE1	Chemical_Mfg	Mfg. Chemicals	Process Heating	Existing	1	Improved Controls	37.9%	30.4%	$ 0.245	$ 0.147	$ 0.098	10	1.2922449	1
CheHeaE2	Chemical_Mfg	Mfg. Chemicals	Process Heating	Existing	2	Process Heat O&M	63.4%	28.6%	$ 0.257	$ 0.225	$ 0.032	2	0.2605933	0
CheHT1	Chemical_Mfg	Mfg. Chemicals	HVAC	Turnover	1	Equipment Upgrades	62.9%	16.4%	$ 0.296	$ 0.252	$ 0.044	15	1.9366044	1
CheHE2	Chemical_Mfg	Mfg. Chemicals	HVAC	Existing	2	Improved Controls	32.7%	20.9%	$ 0.102	$ 0.077	$ 0.025	10	2.8798202	1
CheHE3	Chemical_Mfg	Mfg. Chemicals	HVAC	Existing	3	Recommissioning	72.6%	16.0%	$ 0.271	$ -	$ 0.271	7	0.8824975	0
CheLT1	Chemical_Mfg	Mfg. Chemicals	Lighting	Turnover	1	Efficient Lighting Equipment	30.4%	19.9%	$ 0.150	$ 0.103	$ 0.047	10	2.0831033	1
CheLT2	Chemical_Mfg	Mfg. Chemicals	Lighting	Turnover	2	HighBay Lighting Equipment	55.1%	34.1%	$ 0.376	$ 0.295	$ 0.081	10	0.9104781	0
CheLE3	Chemical_Mfg	Mfg. Chemicals	Lighting	Existing	3	Lighting Controls	42.3%	30.0%	$ 0.212	$ 0.157	$ 0.055	10	1.5396736	1
CheMT1		Mfg. Chemicals	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	42.8%	0.9%	$ 0.372	$ 0.372	$ -	15	1.5365297	1
CheMT10	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	10	Material Handling	52.3%	5.0%	$ 0.585	$ 0.483	$ 0.102	10	0.5877428	0
CheMT11	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	11	Air Compressor Demand Reduction	28.0%	15.9%	$ 0.107	$ 0.081	$ 0.026	10	2.7237476	1
CheME6	Chemical_Mfg	Mfg. Chemicals	Motors	Existing	6	Material Handling VFD	52.3%	18.7%	$ 0.381	$ 0.229	$ 0.152	10	0.8827627	0
CheME13	Chemical_Mfg	Mfg. Chemicals	Motors	Existing	13	Motor Management Plan	51.6%	2.9%	$ 0.134	$ 0.054	$ 0.080	10	2.2492384	1
CheMT15	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	15	Motors: Rewind 101-200 HP	25.4%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.8241199	1
CheMT16	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	16	Motors: Rewind 201-500 HP	35.6%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.8241199	1
CheMT17	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	17	Motors: Rewind 20-50 HP	4.6%	0.9%	$ 0.431	$ 0.356	$ 0.075	15	1.3377689	1
CheMT18	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	18	Motors: Rewind 500+ HP	55.2%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.8241199	1
CheMT19	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	19	Motors: Rewind 51-100 HP	15.2%	0.6%	$ 0.388	$ 0.321	$ 0.067	15	1.4770915	1
CheMT2		Mfg. Chemicals	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	66.3%	0.4%	$ 0.799	$ 0.799	$ -	15	0.7406013	0
CheMT20	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	20	Properly Sized Fans	14.7%	10.4%	$ 0.202	$ 0.122	$ 0.080	10	1.5785853	1
CheME21	Chemical_Mfg	Mfg. Chemicals	Motors	Existing	21	Air Compressor Optimization	38.3%	30.1%	$ 0.151	$ 0.058	$ 0.093	10	2.0317835	1
CheME22	Chemical_Mfg	Mfg. Chemicals	Motors	Existing	22	Pump Energy Management	31.4%	7.5%	$ 0.134	$ 0.054	$ 0.080	10	2.2492384	1
CheMT23	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	23	Pump Equipment Upgrade	34.0%	20.0%	$ 0.156	$ 0.129	$ 0.027	10	1.9754039	1
CheME24	Chemical_Mfg	Mfg. Chemicals	Motors	Existing	24	Pump System Optimization	15.6%	12.1%	$ 0.391	$ 0.196	$ 0.195	12	1.1236712	1
CheMT25	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	25	Switch from Belt drive to Direct Drive	10.4%	7.5%	$ 0.268	$ 0.221	$ 0.046	12	1.5986118	1
CheMT26	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	26	Synchronous Belts	20.9%	1.1%	$ 0.268	$ 0.221	$ 0.046	10	1.2243643	1
CheMT27	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	27	Efficient Centrifugal Fan	10.3%	20.0%	$ 0.228	$ 0.188	$ 0.040	10	1.4192008	1
CheMT28		Mfg. Chemicals	Motors	Turnover	28	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	74.4%	0.91%	$ 2.085	$ 2.085	$ -	15	0.2891876	0
CheMT29		Mfg. Chemicals	Motors	Turnover	29	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	55.8%	0.39%	$ 0.436	$ 0.436	$ -	15	1.3235604	1
CheME3	Chemical_Mfg	Mfg. Chemicals	Motors	Existing	3	Fan System Optimization	28.9%	7.7%	$ 0.311	$ 0.156	$ 0.155	10	1.0669512	1
CheMT30		Mfg. Chemicals	Motors	Turnover	30	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	74.4%	0.7%	$ 1.249	$ 1.249	$ -	15	0.4788237	0
CheMT4	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	4	High efficiency Compressor motors	80.8%	1.1%	$ 0.430	$ 0.355	$ 0.075	15	1.3415371	1
CheMT5	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	5	High Efficiency Motors	74.4%	1.5%	$ 0.545	$ 0.450	$ 0.095	15	1.0707382	1
CheOT1	Chemical_Mfg	Mfg. Chemicals	Other	Turnover	1	Bldg Improvements	35.0%	20.4%	$ 0.248	$ 0.162	$ 0.087	15	2.2081924	1
CheOE2	Chemical_Mfg	Mfg. Chemicals	Other	Existing	2	Energy Project Management	27.0%	29.0%	$ 0.163	$ 0.134	$ 0.029	11	2.170338	1
CheOE3	Chemical_Mfg	Mfg. Chemicals	Other	Existing	3	Integrated Plant Energy Management	22.0%	50.0%	$ 0.261	$ 0.215	$ 0.047	11	1.426294	1
CheOE4	Chemical_Mfg	Mfg. Chemicals	Other	Existing	4	Plant Energy Management	27.0%	12.0%	$ 0.139	$ 0.114	$ 0.025	10	2.1513718	1
CheOT5	Chemical_Mfg	Mfg. Chemicals	Other	Turnover	5	Transformers	20.0%	1.6%	$ 0.415	$ 0.399	$ 0.016	15	1.3702764	1
ComCooE1	ectronic_Equipment_M	Mfg. Computers	Process Cooling	Existing	1	Clean Room: Change Filter Strategy	10.0%	40.0%	$ 0.016	$ 0.012	$ 0.005	1	0.845229	0
ComCooE10	ectronic_Equipment_M	Mfg. Computers	Process Cooling	Existing	10	Cold Storage Tuneup	10.0%	15.6%	$ 0.112	$ 0.047	$ 0.065	3	0.7961473	0
ComCooE2	ectronic_Equipment_M	Mfg. Computers	Process Cooling	Existing	2	Clean Room: Chiller Optimize	28.3%	14.8%	$ 0.248	$ 0.124	$ 0.124	10	1.2770895	1
ComCooT3	ectronic_Equipment_M	Mfg. Computers	Process Cooling	Turnover	3	Clean Room: Clean Room HVAC	30.0%	9.0%	$ 0.204	$ 0.144	$ 0.061	15	2.6115532	1
ComCooT4	ectronic_Equipment_M	Mfg. Computers	Process Cooling	Turnover	4	Elec Chip Fab: Solidstate Chiller	20.0%	90.0%	$ 0.634	$ 0.562	$ 0.072	10	0.5291737	0
ComCooT5	ectronic_Equipment_M	Mfg. Computers	Process Cooling	Turnover	5	Equipment: Chillers	8.0%	17.9%	$ 0.330	$ 0.249	$ 0.081	15	1.6863203	1
ComCooE6	ectronic_Equipment_M	Mfg. Computers	Process Cooling	Existing	6	Improved Controls	33.8%	6.0%	$ 1.118	$ 0.673	$ 0.445	15	0.5239597	0
ComCooT7	ectronic_Equipment_M	Mfg. Computers	Process Cooling	Turnover	7	Adjustable speed drive on compressors	34.0%	11.7%	$ 0.201	$ 0.121	$ 0.080	10	1.5405308	1
ComCooE8	ectronic_Equipment_M	Mfg. Computers	Process Cooling	Existing	8	Optimization of operating parameters	35.0%	13.1%	$ 0.101	$ 0.039	$ 0.063	3	0.8631154	0
ComCooT9	ectronic_Equipment_M	Mfg. Computers	Process Cooling	Turnover	9	Cold Storage Retrofit	25.6%	20.7%	$ 0.250	$ 0.157	$ 0.093	10	1.2672565	1
ComHeaE1	ectronic_Equipment_M	Mfg. Computers	Process Heating	Existing	1	Improved Controls	41.5%	30.4%	$ 0.245	$ 0.147	$ 0.098	10	1.2922449	1
ComHeaE2	ectronic_Equipment_M	Mfg. Computers	Process Heating	Existing	2	Process Heat O&M	69.5%	28.6%	$ 0.257	$ 0.225	$ 0.032	2	0.2605933	0
ComHT1	ectronic_Equipment_M	Mfg. Computers	HVAC	Turnover	1	Equipment Upgrades	74.9%	16.4%	$ 0.296	$ 0.252	$ 0.044	15	1.9366044	1
ComHE2	ectronic_Equipment_M	Mfg. Computers	HVAC	Existing	2	Improved Controls	38.9%	20.9%	$ 0.102	$ 0.077	$ 0.025	10	2.8798202	1
ComHE3	ectronic_Equipment_M	Mfg. Computers	HVAC	Existing	3	Recommissioning	86.4%	16.0%	$ 0.271	$ -	$ 0.271	7	0.8824975	0
ComLT1	ectronic_Equipment_M	Mfg. Computers	Lighting	Turnover	1	Efficient Lighting Equipment	30.4%	19.9%	$ 0.150	$ 0.103	$ 0.047	10	2.0831033	1
ComLT2	ectronic_Equipment_M	Mfg. Computers	Lighting	Turnover	2	HighBay Lighting Equipment	55.1%	34.1%	$ 0.376	$ 0.295	$ 0.081	10	0.9104781	0
ComLE3	ectronic_Equipment_M	Mfg. Computers	Lighting	Existing	3	Lighting Controls	42.3%	30.0%	$ 0.212	$ 0.157	$ 0.055	10	1.5396736	1
ComMT1		Mfg. Computers	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	42.8%	0.9%	$ 0.372	$ 0.372	$ -	15	1.5365297	1
ComMT10	ectronic_Equipment_M	Mfg. Computers	Motors	Turnover	10	Material Handling	52.9%	5.0%	$ 0.585	$ 0.483	$ 0.102	10	0.5877428	0
ComMT11	ectronic_Equipment_M	Mfg. Computers	Motors	Turnover	11	Air Compressor Demand Reduction	25.5%	15.9%	$ 0.107	$ 0.081	$ 0.026	10	2.7237476	1
ComME6	ectronic_Equipment_M	Mfg. Computers	Motors	Existing	6	Material Handling VFD	52.9%	18.7%	$ 0.381	$ 0.229	$ 0.152	10	0.8827627	0
ComME13	ectronic_Equipment_M	Mfg. Computers	Motors	Existing	13	Motor Management Plan	49.2%	2.9%	$ 0.134	$ 0.054	$ 0.080	10	2.2492384	1

Measure Lookup	Industry	New Segment	New End-Use	Vintage	Measure Number	Measure	Applicability	Savings	Total Cost ($/kW Saved)	Equipment Cost	Labor Cost	Life	TRC Test	Economic Flag
ComMT15	ectronic_Equipment_M	Mfg. Computers	Motors	Turnover	15	Motors: Rewind 101-200 HP	25.4%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.8241199	1
ComMT16	ectronic_Equipment_M	Mfg. Computers	Motors	Turnover	16	Motors: Rewind 201-500 HP	35.6%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.8241199	1
ComMT17	ectronic_Equipment_M	Mfg. Computers	Motors	Turnover	17	Motors: Rewind 20-50 HP	4.7%	0.9%	$ 0.431	$ 0.356	$ 0.075	15	1.3377689	1
ComMT18	ectronic_Equipment_M	Mfg. Computers	Motors	Turnover	18	Motors: Rewind 500+ HP	55.2%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.8241199	1
ComMT19	ectronic_Equipment_M	Mfg. Computers	Motors	Turnover	19	Motors: Rewind 51-100 HP	15.2%	0.6%	$ 0.388	$ 0.321	$ 0.067	15	1.4770915	1
ComMT2		Mfg. Computers	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	66.3%	0.4%	$ 0.799	$ 0.799	$ -	15	0.7406013	0
ComMT20	ectronic_Equipment_M	Mfg. Computers	Motors	Turnover	20	Properly Sized Fans	14.8%	10.4%	$ 0.202	$ 0.122	$ 0.080	10	1.5785853	1
ComME21	ectronic_Equipment_M	Mfg. Computers	Motors	Existing	21	Air Compressor Optimization	35.0%	30.1%	$ 0.151	$ 0.058	$ 0.093	10	2.0317835	1
ComME22	ectronic_Equipment_M	Mfg. Computers	Motors	Existing	22	Pump Energy Management	30.1%	7.5%	$ 0.134	$ 0.054	$ 0.080	10	2.2492384	1
ComMT23	ectronic_Equipment_M	Mfg. Computers	Motors	Turnover	23	Pump Equipment Upgrade	32.6%	20.0%	$ 0.156	$ 0.129	$ 0.027	10	1.9754039	1
ComME24	ectronic_Equipment_M	Mfg. Computers	Motors	Existing	24	Pump System Optimization	15.0%	12.1%	$ 0.391	$ 0.196	$ 0.195	12	1.1236712	1
ComMT25	ectronic_Equipment_M	Mfg. Computers	Motors	Turnover	25	Switch from Belt drive to Direct Drive	10.5%	7.5%	$ 0.268	$ 0.221	$ 0.046	12	1.5986118	1
ComMT26	ectronic_Equipment_M	Mfg. Computers	Motors	Turnover	26	Synchronous Belts	20.8%	1.1%	$ 0.268	$ 0.221	$ 0.046	10	1.2243643	1
ComMT27	ectronic_Equipment_M	Mfg. Computers	Motors	Turnover	27	Efficient Centrifugal Fan	10.3%	20.0%	$ 0.228	$ 0.188	$ 0.040	10	1.4192008	1
ComMT28		Mfg. Computers	Motors	Turnover	28	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	74.4%	0.91%	$ 2.085	$ 2.085	$ -	15	0.2891876	0
ComMT29		Mfg. Computers	Motors	Turnover	29	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	55.8%	0.39%	$ 0.436	$ 0.436	$ -	15	1.3235604	1
ComME3	ectronic_Equipment_M	Mfg. Computers	Motors	Existing	3	Fan System Optimization	29.1%	7.7%	$ 0.311	$ 0.156	$ 0.155	10	1.0669512	1
ComMT30		Mfg. Computers	Motors	Turnover	30	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	74.4%	0.7%	$ 1.249	$ 1.249	$ -	15	0.4788237	0
ComMT4	ectronic_Equipment_M	Mfg. Computers	Motors	Turnover	4	High efficiency Compressor motors	73.8%	1.1%	$ 0.430	$ 0.355	$ 0.075	15	1.3415371	1
ComMT5	ectronic_Equipment_M	Mfg. Computers	Motors	Turnover	5	High Efficiency Motors	73.8%	1.5%	$ 0.545	$ 0.450	$ 0.095	15	1.0707382	1
ComOT1	ectronic_Equipment_M	Mfg. Computers	Other	Turnover	1	Bldg Improvements	35.0%	20.4%	$ 0.248	$ 0.162	$ 0.087	15	2.2081924	1
ComOT2	ectronic_Equipment_M	Mfg. Computers	Other	Turnover	2	Elec Chip Fab: Eliminate Exhaust	80.1%	5.0%	$ 0.233	$ 0.206	$ 0.026	10	1.3671938	1
ComOT3	ectronic_Equipment_M	Mfg. Computers	Other	Turnover	3	Elec Chip Fab: Exhaust Injector	35.0%	100.0%	$ 0.561	$ 0.498	$ 0.064	10	0.600982	0
ComCooT11	ectronic_Equipment_M	Mfg. Computers	Process Cooling	Turnover	11	Elec Chip Fab: Reduce Gas Pressure	5.0%	10.0%	$ 0.063	$ -	$ 0.063	10	3.98367	1
ComOE5	ectronic_Equipment_M	Mfg. Computers	Other	Existing	5	Energy Project Management	27.0%	29.0%	$ 0.163	$ 0.134	$ 0.029	11	2.170338	1
ComOE6	ectronic_Equipment_M	Mfg. Computers	Other	Existing	6	Integrated Plant Energy Management	22.0%	50.0%	$ 0.261	$ 0.215	$ 0.047	11	1.426294	1
ComOE7	ectronic_Equipment_M	Mfg. Computers	Other	Existing	7	Plant Energy Management	27.0%	12.0%	$ 0.139	$ 0.114	$ 0.025	10	2.1513718	1
ComOT8	ectronic_Equipment_M	Mfg. Computers	Other	Turnover	8	Transformers	20.0%	1.6%	$ 0.415	$ 0.399	$ 0.016	15	1.3702764	1
FooCooT1	Food_Mfg	Mfg. Food	Process Cooling	Turnover	1	Equipment: Chillers	8.3%	17.9%	$ 0.330	$ 0.249	$ 0.081	15	1.6863203	1
FooCooE2	Food_Mfg	Mfg. Food	Process Cooling	Existing	2	Improved Controls	35.2%	6.0%	$ 1.118	$ 0.673	$ 0.445	15	0.5239597	0
FooCooT3	Food_Mfg	Mfg. Food	Process Cooling	Turnover	3	Adjustable speed drive on compressors	34.0%	11.7%	$ 0.201	$ 0.121	$ 0.080	10	1.5405308	1
FooCooT4	Food_Mfg	Mfg. Food	Process Cooling	Turnover	4	Food: Cooling and Storage	15.0%	15.4%	$ 0.258	$ 0.162	$ 0.096	10	1.2320156	1
FooCooT5	Food_Mfg	Mfg. Food	Process Cooling	Turnover	5	Food: Refrig Storage Tuneup	7.5%	14.4%	$ 0.056	$ 0.023	$ 0.033	3	1.3461087	1
FooCooT6	Food_Mfg	Mfg. Food	Process Cooling	Turnover	6	Fruit Storage Refer Retrofit	60.7%	38.2%	$ 0.214	$ 0.135	$ 0.079	10	1.4564439	1
FooCooT7	Food_Mfg	Mfg. Food	Process Cooling	Turnover	7	Fruit Storage Tuneup	10.0%	15.6%	$ 0.056	$ 0.023	$ 0.033	3	1.3461087	1
FooCooE8	Food_Mfg	Mfg. Food	Process Cooling	Existing	8	Optimization of operating parameters	35.0%	13.1%	$ 0.101	$ 0.039	$ 0.063	3	0.8631154	0
FooHeaE1	Food_Mfg	Mfg. Food	Process Heating	Existing	1	Improved Controls	38.8%	30.4%	$ 0.245	$ 0.147	$ 0.098	10	1.2922449	1
FooHeaE2	Food_Mfg	Mfg. Food	Process Heating	Existing	2	Process Heat O&M	65.0%	28.6%	$ 0.257	$ 0.225	$ 0.032	2	0.2605933	0
FooHT1	Food_Mfg	Mfg. Food	HVAC	Turnover	1	Equipment Upgrades	62.9%	16.4%	$ 0.296	$ 0.252	$ 0.044	15	1.9366044	1
FooHE2	Food_Mfg	Mfg. Food	HVAC	Existing	2	Improved Controls	32.7%	20.9%	$ 0.102	$ 0.077	$ 0.025	10	2.8798202	1
FooHE3	Food_Mfg	Mfg. Food	HVAC	Existing	3	Recommissioning	72.6%	16.0%	$ 0.271	$ -	$ 0.271	7	0.8824975	0
FooLT1	Food_Mfg	Mfg. Food	Lighting	Turnover	1	Efficient Lighting Equipment	30.4%	19.9%	$ 0.150	$ 0.103	$ 0.047	10	2.0831033	1
FooLT2	Food_Mfg	Mfg. Food	Lighting	Turnover	2	HighBay Lighting Equipment	55.1%	34.1%	$ 0.376	$ 0.295	$ 0.081	10	0.9104781	0
FooLE3	Food_Mfg	Mfg. Food	Lighting	Existing	3	Lighting Controls	42.3%	30.0%	$ 0.212	$ 0.157	$ 0.055	10	1.5396736	1
FooME1	Food_Mfg	Mfg. Food	Motors	Existing	1	Fan System Optimization	29.6%	7.7%	$ 0.311	$ 0.156	$ 0.155	10	1.0669512	1
FooME4	Food_Mfg	Mfg. Food	Motors	Existing	4	Material Handling VFD	51.6%	18.7%	$ 0.381	$ 0.229	$ 0.152	10	0.8827627	0
FooME11	Food_Mfg	Mfg. Food	Motors	Existing	11	Motor Management Plan	48.9%	2.9%	$ 0.134	$ 0.054	$ 0.080	10	2.2492384	1
FooMT13	Food_Mfg	Mfg. Food	Motors	Turnover	13	Motors: Rewind 101-200 HP	25.4%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.8241199	1
FooMT14	Food_Mfg	Mfg. Food	Motors	Turnover	14	Motors: Rewind 201-500 HP	35.6%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.8241199	1
FooMT15	Food_Mfg	Mfg. Food	Motors	Turnover	15	Motors: Rewind 20-50 HP	4.6%	0.9%	$ 0.431	$ 0.356	$ 0.075	15	1.3377689	1
FooMT16	Food_Mfg	Mfg. Food	Motors	Turnover	16	Motors: Rewind 500+ HP	55.2%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.8241199	1
FooMT17	Food_Mfg	Mfg. Food	Motors	Turnover	17	Motors: Rewind 51-100 HP	15.2%	0.6%	$ 0.388	$ 0.321	$ 0.067	15	1.4770915	1
FooME18	Food_Mfg	Mfg. Food	Motors	Existing	18	Air Compressor Optimization	35.0%	30.1%	$ 0.151	$ 0.058	$ 0.093	10	2.0317835	1
FooMT19	Food_Mfg	Mfg. Food	Motors	Turnover	19	Properly Sized Fans	15.0%	10.4%	$ 0.202	$ 0.122	$ 0.080	10	1.5785853	1
FooMT2	Food_Mfg	Mfg. Food	Motors	Turnover	2	High efficiency Compressor motors	73.8%	1.1%	$ 0.430	$ 0.355	$ 0.075	15	1.3415371	1
FooME20	Food_Mfg	Mfg. Food	Motors	Existing	20	Pump Energy Management	30.5%	7.5%	$ 0.134	$ 0.054	$ 0.080	10	2.2492384	1
FooMT21	Food_Mfg	Mfg. Food	Motors	Turnover	21	Pump Equipment Upgrade	33.0%	20.0%	$ 0.156	$ 0.129	$ 0.027	10	1.9754039	1
FooME22	Food_Mfg	Mfg. Food	Motors	Existing	22	Pump System Optimization	15.2%	12.1%	$ 0.391	$ 0.196	$ 0.195	12	1.1236712	1
FooMT23	Food_Mfg	Mfg. Food	Motors	Turnover	23	Switch from Belt drive to Direct Drive	10.2%	7.5%	$ 0.268	$ 0.221	$ 0.046	12	1.5986118	1
FooMT24	Food_Mfg	Mfg. Food	Motors	Turnover	24	Synchronous Belts	20.8%	1.1%	$ 0.268	$ 0.221	$ 0.046	10	1.2243643	1
FooMT25	Food_Mfg	Mfg. Food	Motors	Turnover	25	Efficient Centrifugal Fan	10.5%	20.0%	$ 0.228	$ 0.188	$ 0.040	10	1.4192008	1
FooMT26		Mfg. Food	Motors	Turnover	26	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	74.4%	0.91%	$ 2.085	$ 2.085	$ -	15	0.2891876	0
FooMT27		Mfg. Food	Motors	Turnover	27	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	55.8%	0.39%	$ 0.436	$ 0.436	$ -	15	1.3235604	1
FooMT28		Mfg. Food	Motors	Turnover	28	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	74.4%	0.7%	$ 1.249	$ 1.249	$ -	15	0.4788237	0
FooMT29		Mfg. Food	Motors	Turnover	29	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	42.8%	0.9%	$ 0.372	$ 0.372	$ -	15	1.5365297	1
FooMT3	Food_Mfg	Mfg. Food	Motors	Turnover	3	High Efficiency Motors	74.0%	1.5%	$ 0.545	$ 0.450	$ 0.095	15	1.0707382	1
FooMT30		Mfg. Food	Motors	Turnover	30	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	66.3%	0.4%	$ 0.799	$ 0.799	$ -	15	0.7406013	0
FooMT7	Food_Mfg	Mfg. Food	Motors	Turnover	7	Air Compressor Demand Reduction	25.5%	15.9%	$ 0.107	$ 0.081	$ 0.026	10	2.7237476	1
FooMT9	Food_Mfg	Mfg. Food	Motors	Turnover	9	Material Handling	51.6%	5.0%	$ 0.585	$ 0.483	$ 0.102	10	0.5877428	0
FooOT1	Food_Mfg	Mfg. Food	Other	Turnover	1	Bldg Improvements	35.0%	20.4%	$ 0.248	$ 0.162	$ 0.087	15	2.2081924	1

Measure Lookup	Industry	New Segment	New End-Use	Vintage	Measure Number	Measure	Applicability	Savings	Total Cost ($/kW Saved)	Equipment Cost	Labor Cost	Life	TRC Test	Economic Flag
FooOE2	Food_Mfg	Mfg. Food	Other	Existing	2	Energy Project Management	27.0%	29.0%	$ 0.163	$ 0.134	$ 0.029	11	2.170338	1
FooOE3	Food_Mfg	Mfg. Food	Other	Existing	3	Integrated Plant Energy Management	22.0%	50.0%	$ 0.261	$ 0.215	$ 0.047	11	1.426294	1
FooOE4	Food_Mfg	Mfg. Food	Other	Existing	4	Plant Energy Management	27.0%	12.0%	$ 0.139	$ 0.114	$ 0.025	10	2.1513718	1
FooOT5	Food_Mfg	Mfg. Food	Other	Turnover	5	Transformers	20.0%	1.6%	$ 0.415	$ 0.399	$ 0.016	15	1.3702764	1
MetCooT1	Primary_Metal_Mfg	Mfg. Metals	Process Cooling	Turnover	1	Equipment: Chillers	8.0%	17.9%	$ 0.330	$ 0.249	$ 0.081	15	1.6863203	1
MetCooe2	Primary_Metal_Mfg	Mfg. Metals	Process Cooling	existing	2	Improved Controls	33.8%	6.0%	$ 1.118	$ 0.673	$ 0.445	15	0.5239597	0
MetCooE3	Primary_Metal_Mfg	Mfg. Metals	Process Cooling	Existing	3	Optimization of operating parameters	35.0%	13.1%	$ 0.101	$ 0.039	$ 0.063	3	0.8631154	0
MetHeaE1	Primary_Metal_Mfg	Mfg. Metals	Process Heating	Existing	1	Improved Controls	40.1%	30.4%	$ 0.245	$ 0.147	$ 0.098	10	1.2922449	1
MetHeaT2	Primary_Metal_Mfg	Mfg. Metals	Process Heating	Turnover	2	Metal: New Arc Furnace	10.3%	45.0%	$ 0.115	$ 0.102	$ 0.013	10	2.4889201	1
MetHeaE3	Primary_Metal_Mfg	Mfg. Metals	Process Heating	Existing	3	Process Heat O&M	67.2%	28.6%	$ 0.257	$ 0.225	$ 0.032	2	0.2605933	0
MetHT1	Primary_Metal_Mfg	Mfg. Metals	HVAC	Turnover	1	Equipment Upgrades	64.7%	16.4%	$ 0.296	$ 0.252	$ 0.044	15	1.9366044	1
MetHE2	Primary_Metal_Mfg	Mfg. Metals	HVAC	Existing	2	Improved Controls	33.6%	20.9%	$ 0.102	$ 0.077	$ 0.025	10	2.8798202	1
MetHE3	Primary_Metal_Mfg	Mfg. Metals	HVAC	Existing	3	Recommissioning	74.7%	16.0%	$ 0.271	$ -	$ 0.271	7	0.8824975	0
MetLT1	Primary_Metal_Mfg	Mfg. Metals	Lighting	Turnover	1	Efficient Lighting Equipment	30.4%	19.9%	$ 0.150	$ 0.103	$ 0.047	10	2.0831033	1
MetLT2	Primary_Metal_Mfg	Mfg. Metals	Lighting	Turnover	2	HighBay Lighting Equipment	55.1%	34.1%	$ 0.376	$ 0.295	$ 0.081	10	0.9104781	0
MetLE3	Primary_Metal_Mfg	Mfg. Metals	Lighting	Existing	3	Lighting Controls	42.3%	30.0%	$ 0.212	$ 0.157	$ 0.055	10	1.5396736	1
MetMT1	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	1	Air Compressor Demand Reduction	25.3%	15.9%	$ 0.107	$ 0.081	$ 0.026	10	2.7237476	1
MetME10	Primary_Metal_Mfg	Mfg. Metals	Motors	Existing	10	Motor Management Plan	49.1%	2.9%	$ 0.134	$ 0.054	$ 0.080	10	2.2492384	1
MetME12	Primary_Metal_Mfg	Mfg. Metals	Motors	Existing	12	Air Compressor Optimization	34.7%	30.1%	$ 0.151	$ 0.058	$ 0.093	10	2.0317835	1
MetMT13	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	13	Motors: Rewind 101-200 HP	25.4%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.8241199	1
MetMT14	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	14	Motors: Rewind 201-500 HP	35.6%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.8241199	1
MetMT15	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	15	Motors: Rewind 20-50 HP	4.6%	0.9%	$ 0.431	$ 0.356	$ 0.075	15	1.3377689	1
MetMT16	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	16	Motors: Rewind 500+ HP	55.2%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.8241199	1
MetMT17	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	17	Motors: Rewind 51-100 HP	15.2%	0.6%	$ 0.388	$ 0.321	$ 0.067	15	1.4770915	1
MetMT18	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	18	Properly Sized Fans	14.7%	10.4%	$ 0.202	$ 0.122	$ 0.080	10	1.5785853	1
MetME19	Primary_Metal_Mfg	Mfg. Metals	Motors	Existing	19	Pump Energy Management	29.8%	7.5%	$ 0.134	$ 0.054	$ 0.080	10	2.2492384	1
MetMT2	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	2	High efficiency Compressor motors	73.1%	1.1%	$ 0.430	$ 0.355	$ 0.075	15	1.3415371	1
MetMT20	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	20	Pump Equipment Upgrade	32.3%	20.0%	$ 0.156	$ 0.129	$ 0.027	10	1.9754039	1
MetME21	Primary_Metal_Mfg	Mfg. Metals	Motors	Existing	21	Pump System Optimization	14.9%	12.1%	$ 0.391	$ 0.196	$ 0.195	12	1.1236712	1
MetMT22	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	22	Efficient Centrifugal Fan	10.3%	20.0%	$ 0.228	$ 0.188	$ 0.040	10	1.4192008	1
MetMT23	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	23	Switch from Belt drive to Direct Drive	10.4%	7.5%	$ 0.268	$ 0.221	$ 0.046	12	1.5986118	1
MetMT24	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	24	Synchronous Belts	20.6%	1.1%	$ 0.268	$ 0.221	$ 0.046	10	1.2243643	1
MetMT25		Mfg. Metals	Motors	Turnover	25	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	74.4%	0.91%	$ 2.085	$ 2.085	$ -	15	0.2891876	0
MetMT26		Mfg. Metals	Motors	Turnover	26	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	55.8%	0.39%	$ 0.436	$ 0.436	$ -	15	1.3235604	1
MetMT27		Mfg. Metals	Motors	Turnover	27	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	74.4%	0.7%	$ 1.249	$ 1.249	$ -	15	0.4788237	0
MetMT28		Mfg. Metals	Motors	Turnover	28	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	42.8%	0.9%	$ 0.372	$ 0.372	$ -	15	1.5365297	1
MetMT29		Mfg. Metals	Motors	Turnover	29	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	66.3%	0.4%	$ 0.799	$ 0.799	$ -	15	0.7406013	0
MetMT3	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	3	High Efficiency Motors	73.3%	1.5%	$ 0.545	$ 0.450	$ 0.095	15	1.0707382	1
MetME30	Primary_Metal_Mfg	Mfg. Metals	Motors	Existing	30	Fan System Optimization	29.0%	7.7%	$ 0.311	$ 0.156	$ 0.155	10	1.0669512	1
MetMT8	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	8	Material Handling	52.4%	5.0%	$ 0.585	$ 0.483	$ 0.102	10	0.5877428	0
MetME4	Primary_Metal_Mfg	Mfg. Metals	Motors	Existing	4	Material Handling VFD	52.4%	18.7%	$ 0.381	$ 0.229	$ 0.152	10	0.8827627	0
MetOT1	Primary_Metal_Mfg	Mfg. Metals	Other	Turnover	1	Bldg Improvements	35.0%	20.4%	$ 0.248	$ 0.162	$ 0.087	15	2.2081924	1
MetOE2	Primary_Metal_Mfg	Mfg. Metals	Other	Existing	2	Energy Project Management	27.0%	29.0%	$ 0.163	$ 0.134	$ 0.029	11	2.170338	1
MetOE3	Primary_Metal_Mfg	Mfg. Metals	Other	Existing	3	Integrated Plant Energy Management	22.0%	50.0%	$ 0.261	$ 0.215	$ 0.047	11	1.426294	1
MetOE4	Primary_Metal_Mfg	Mfg. Metals	Other	Existing	4	Plant Energy Management	27.0%	12.0%	$ 0.139	$ 0.114	$ 0.025	10	2.1513718	1
MetOT5	Primary_Metal_Mfg	Mfg. Metals	Other	Turnover	5	Transformers	20.0%	1.6%	$ 0.415	$ 0.399	$ 0.016	15	1.3702764	1
OthCooT1	Miscellaneous_Mfg	Mfg. Other	Process Cooling	Turnover	1	Equipment: Chillers	8.0%	17.9%	$ 0.330	$ 0.249	$ 0.081	15	1.6863203	1
OthCooE2	Miscellaneous_Mfg	Mfg. Other	Process Cooling	Existing	2	Improved Controls	33.8%	6.0%	$ 1.118	$ 0.673	$ 0.445	15	0.5239597	0
OthCooT3	one_Clay_Glass_Produ	Mfg. Other	Process Cooling	Turnover	3	Adjustable speed drive on compressors	34.0%	11.7%	$ 0.201	$ 0.121	$ 0.080	10	1.5405308	1
OthCooE4	Miscellaneous_Mfg	Mfg. Other	Process Cooling	Existing	4	Optimization of operating parameters	35.0%	13.1%	$ 0.101	$ 0.039	$ 0.063	3	0.8631154	0
OthCooT5	Miscellaneous_Mfg	Mfg. Other	Process Cooling	Turnover	5	Cold Storage Retrofit	25.6%	20.7%	$ 0.250	$ 0.157	$ 0.093	10	1.2672565	1
OthCooE6	Miscellaneous_Mfg	Mfg. Other	Process Cooling	Existing	6	Cold Storage Tuneup	10.0%	15.6%	$ 0.112	$ 0.047	$ 0.065	3	0.7961473	0
OthHeae1	Miscellaneous_Mfg	Mfg. Other	Process Heating	existing	1	Improved Controls	41.7%	30.4%	$ 0.245	$ 0.147	$ 0.098	10	1.2922449	1
OthHeac2	Miscellaneous_Mfg	Mfg. Other	Process Heating	existing	2	Process Heat O&M	69.8%	28.6%	$ 0.257	$ 0.225	$ 0.032	2	0.2605933	0
OthHT1	Miscellaneous_Mfg	Mfg. Other	HVAC	Turnover	1	Equipment Upgrades	64.4%	16.4%	$ 0.296	$ 0.252	$ 0.044	15	1.9366044	1
OthHE2	Miscellaneous_Mfg	Mfg. Other	HVAC	Existing	2	Improved Controls	33.4%	20.9%	$ 0.102	$ 0.077	$ 0.025	10	2.8798202	1
OthHE3	Miscellaneous_Mfg	Mfg. Other	HVAC	Existing	3	Recommissioning	74.3%	16.0%	$ 0.271	$ -	$ 0.271	7	0.8824975	0
OthLT1	Miscellaneous_Mfg	Mfg. Other	Lighting	Turnover	1	Efficient Lighting Equipment	30.4%	19.9%	$ 0.150	$ 0.103	$ 0.047	10	2.0831033	1
OthLT2	Miscellaneous_Mfg	Mfg. Other	Lighting	Turnover	2	HighBay Lighting Equipment	55.1%	34.1%	$ 0.376	$ 0.295	$ 0.081	10	0.9104781	0
OthLE3	Miscellaneous_Mfg	Mfg. Other	Lighting	Existing	3	Lighting Controls	42.3%	30.0%	$ 0.212	$ 0.157	$ 0.055	10	1.5396736	1
OthMT1		Mfg. Other	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	74.4%	0.7%	$ 1.249	$ 1.249	$ -	15	0.4788237	0
OthMT11	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	11	Air Compressor Demand Reduction	26.0%	15.9%	$ 0.107	$ 0.081	$ 0.026	10	2.7237476	1
OthMT12	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	12	Material Handling	52.9%	5.0%	$ 0.585	$ 0.483	$ 0.102	10	0.5877428	0
OthME13	Miscellaneous_Mfg	Mfg. Other	Motors	Existing	13	Material Handling VFD	52.9%	18.7%	$ 0.381	$ 0.229	$ 0.152	10	0.8827627	0
OthME14	Miscellaneous_Mfg	Mfg. Other	Motors	Existing	14	Motor Management Plan	50.0%	2.9%	$ 0.134	$ 0.054	$ 0.080	10	2.2492384	1
OthMT16	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	16	Motors: Rewind 101-200 HP	25.4%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.8241199	1
OthMT17	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	17	Motors: Rewind 201-500 HP	35.6%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.8241199	1
OthMT18	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	18	Motors: Rewind 20-50 HP	4.7%	0.9%	$ 0.431	$ 0.356	$ 0.075	15	1.3377689	1
OthMT19	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	19	Motors: Rewind 500+ HP	55.2%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.8241199	1
OthMT2		Mfg. Other	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	42.8%	0.9%	$ 0.372	$ 0.372	$ -	15	1.5365297	1

Measure Lookup	Industry	New Segment	New End-Use	Vintage	Measure Number	Measure	Applicability	Savings	Total Cost ($/kW Saved)	Equipment Cost	Labor Cost	Life	TRC Test	Economic Flag
OthMT20	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	20	Motors: Rewind 51-100 HP	15.2%	0.6%	$ 0.388	$ 0.321	$ 0.067	15	1.4770915	1
OthMT21	one_Clay_Glass_Produ	Mfg. Other	Motors	Turnover	21	Air Compressor Equipment	17.0%	8.8%	$ 0.157	$ 0.130	$ 0.027	10	1.9669813	1
OthMT22	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	22	Properly Sized Fans	15.3%	10.4%	$ 0.202	$ 0.122	$ 0.080	10	1.5785853	1
OthME23	Miscellaneous_Mfg	Mfg. Other	Motors	Existing	23	Pump Energy Management	31.2%	7.5%	$ 0.134	$ 0.054	$ 0.080	10	2.2492384	1
OthMT24	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	24	Pump Equipment Upgrade	33.8%	20.0%	$ 0.156	$ 0.129	$ 0.027	10	1.9754039	1
OthME25	Miscellaneous_Mfg	Mfg. Other	Motors	Existing	25	Pump System Optimization	15.5%	12.1%	$ 0.391	$ 0.196	$ 0.195	12	1.1236712	1
OthMT26	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	26	Switch from Belt drive to Direct Drive	10.5%	7.5%	$ 0.268	$ 0.221	$ 0.046	12	1.5986118	1
OthMT27	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	27	Synchronous Belts	21.4%	1.1%	$ 0.268	$ 0.221	$ 0.046	10	1.2243643	1
OthME28	Miscellaneous_Mfg	Mfg. Other	Motors	Existing	28	Air Compressor Optimization	35.6%	30.1%	$ 0.151	$ 0.058	$ 0.093	10	2.0317835	1
OthMT29	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	29	Efficient Centrifugal Fan	10.7%	20.0%	$ 0.228	$ 0.188	$ 0.040	10	1.4192008	1
OthMT3		Mfg. Other	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	66.3%	0.4%	$ 0.799	$ 0.799	$ -	15	0.7406013	0
OthMT30		Mfg. Other	Motors	Turnover	30	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	74.4%	0.91%	$ 2.085	$ 2.085	$ -	15	0.2891876	0
OthMT31		Mfg. Other	Motors	Turnover	31	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	55.8%	0.39%	$ 0.436	$ 0.436	$ -	15	1.3235604	1
OthME4	Miscellaneous_Mfg	Mfg. Other	Motors	Existing	4	Fan System Optimization	30.1%	7.7%	$ 0.311	$ 0.156	$ 0.155	10	1.0669512	1
OthMT5	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	5	High efficiency Compressor motors	75.1%	1.1%	$ 0.430	$ 0.355	$ 0.075	15	1.3415371	1
OthMT6	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	6	High Efficiency Motors	75.6%	1.5%	$ 0.545	$ 0.450	$ 0.095	15	1.0707382	1
OthOT1	Miscellaneous_Mfg	Mfg. Other	Other	Turnover	1	Bldg Improvements	35.0%	20.4%	$ 0.248	$ 0.162	$ 0.087	15	2.2081924	1
OthOE2	Miscellaneous_Mfg	Mfg. Other	Other	Existing	2	Energy Project Management	27.0%	29.0%	$ 0.163	$ 0.134	$ 0.029	11	2.170338	1
OthOE3	Miscellaneous_Mfg	Mfg. Other	Other	Existing	3	Integrated Plant Energy Management	22.0%	50.0%	$ 0.261	$ 0.215	$ 0.047	11	1.426294	1
OthOE4	Miscellaneous_Mfg	Mfg. Other	Other	Existing	4	Plant Energy Management	27.0%	12.0%	$ 0.139	$ 0.114	$ 0.025	10	2.1513718	1
OthOT5	Miscellaneous_Mfg	Mfg. Other	Other	Turnover	5	Transformers	20.0%	1.6%	$ 0.415	$ 0.399	$ 0.016	15	1.3702764	1
PapCooT1	Paper_Mfg	Mfg. Paper	Process Cooling	Turnover	1	Equipment: Chillers	8.0%	17.9%	$ 0.330	$ 0.249	$ 0.081	15	1.6863203	1
PapCooE2	Paper_Mfg	Mfg. Paper	Process Cooling	Existing	2	Improved Controls	33.8%	6.0%	$ 1.118	$ 0.673	$ 0.445	15	0.5239597	0
PapCooT3	Paper_Mfg	Mfg. Paper	Process Cooling	Turnover	3	Adjustable speed drive on compressors	34.0%	11.7%	$ 0.201	$ 0.121	$ 0.080	10	1.5405308	1
PapCooE4	Paper_Mfg	Mfg. Paper	Process Cooling	Existing	4	Optimization of operating parameters	35.0%	13.1%	$ 0.101	$ 0.039	$ 0.063	3	0.8631154	0
PapHeaE1	Paper_Mfg	Mfg. Paper	Process Heating	Existing	1	Improved Controls	38.1%	30.4%	$ 0.245	$ 0.147	$ 0.098	10	1.2922449	1
PapHeaE2	Paper_Mfg	Mfg. Paper	Process Heating	Existing	2	Process Heat O&M	63.9%	28.6%	$ 0.257	$ 0.225	$ 0.032	2	0.2605933	0
PapHT1	Paper_Mfg	Mfg. Paper	HVAC	Turnover	1	Equipment Upgrades	62.4%	16.4%	$ 0.296	$ 0.252	$ 0.044	15	1.9366044	1
PapHE2	Paper_Mfg	Mfg. Paper	HVAC	Existing	2	Improved Controls	32.4%	20.9%	$ 0.102	$ 0.077	$ 0.025	10	2.8798202	1
PapHE3	Paper_Mfg	Mfg. Paper	HVAC	Existing	3	Recommissioning	72.0%	16.0%	$ 0.271	$ -	$ 0.271	7	0.8824975	0
PapLT1	Paper_Mfg	Mfg. Paper	Lighting	Turnover	1	Efficient Lighting Equipment	30.4%	19.9%	$ 0.150	$ 0.103	$ 0.047	10	2.0831033	1
PapLT2	Paper_Mfg	Mfg. Paper	Lighting	Turnover	2	HighBay Lighting Equipment	55.1%	34.1%	$ 0.376	$ 0.295	$ 0.081	10	0.9104781	0
PapLE3	Paper_Mfg	Mfg. Paper	Lighting	Existing	3	Lighting Controls	42.3%	30.0%	$ 0.212	$ 0.157	$ 0.055	10	1.5396736	1
PapME1	Paper_Mfg	Mfg. Paper	Motors	Existing	1	Fan System Optimization	30.2%	7.7%	$ 0.311	$ 0.156	$ 0.155	10	1.0669512	1
PapME10	Paper_Mfg	Mfg. Paper	Motors	Existing	10	Motor Management Plan	50.1%	2.9%	$ 0.134	$ 0.054	$ 0.080	10	2.2492384	1
PapMT11	Paper_Mfg	Mfg. Paper	Motors	Turnover	11	Air Compressor Demand Reduction	25.8%	15.9%	$ 0.107	$ 0.081	$ 0.026	10	2.7237476	1
PapMT13	Paper_Mfg	Mfg. Paper	Motors	Turnover	13	Motors: Rewind 101-200 HP	25.4%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.8241199	1
PapMT14	Paper_Mfg	Mfg. Paper	Motors	Turnover	14	Motors: Rewind 201-500 HP	35.6%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.8241199	1
PapMT15	Paper_Mfg	Mfg. Paper	Motors	Turnover	15	Motors: Rewind 20-50 HP	4.7%	0.9%	$ 0.431	$ 0.356	$ 0.075	15	1.3377689	1
PapMT16	Paper_Mfg	Mfg. Paper	Motors	Turnover	16	Motors: Rewind 500+ HP	55.2%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.8241199	1
PapMT17	Paper_Mfg	Mfg. Paper	Motors	Turnover	17	Motors: Rewind 51-100 HP	15.2%	0.6%	$ 0.388	$ 0.321	$ 0.067	15	1.4770915	1
PapMT18	Paper_Mfg	Mfg. Paper	Motors	Turnover	18	Paper: Large Material Handling	25.2%	9.7%	$ 0.959	$ 0.850	$ 0.109	10	0.3642582	0
PapMT19	Paper_Mfg	Mfg. Paper	Motors	Turnover	19	Paper: Material Handling	25.2%	13.1%	$ 0.801	$ 0.710	$ 0.091	10	0.4336983	0
PapMT2	Paper_Mfg	Mfg. Paper	Motors	Turnover	2	High efficiency Compressor motors	74.7%	1.1%	$ 0.430	$ 0.355	$ 0.075	15	1.3415371	1
PapMT20	Paper_Mfg	Mfg. Paper	Motors	Turnover	20	Paper: Premium Control Large Material	25.2%	18.7%	$ 0.549	$ 0.486	$ 0.062	10	0.6249339	0
PapME21	Paper_Mfg	Mfg. Paper	Motors	Existing	21	Air Compressor Optimization	35.4%	30.1%	$ 0.151	$ 0.058	$ 0.093	10	2.0317835	1
PapMT22	Paper_Mfg	Mfg. Paper	Motors	Turnover	22	Paper: Premium Fan	25.5%	20.0%	$ 0.227	$ 0.201	$ 0.026	10	1.4241834	1
PapMT23	Paper_Mfg	Mfg. Paper	Motors	Turnover	23	Properly Sized Fans	15.3%	10.4%	$ 0.202	$ 0.122	$ 0.080	10	1.5785853	1
PapME24	Paper_Mfg	Mfg. Paper	Motors	Existing	24	Pump Energy Management	32.3%	7.5%	$ 0.134	$ 0.054	$ 0.080	10	2.2492384	1
PapMT25	Paper_Mfg	Mfg. Paper	Motors	Turnover	25	Pump Equipment Upgrade	34.9%	20.0%	$ 0.156	$ 0.129	$ 0.027	10	1.9754039	1
PapME26	Paper_Mfg	Mfg. Paper	Motors	Existing	26	Pump System Optimization	16.1%	12.1%	$ 0.391	$ 0.196	$ 0.195	12	1.1236712	1
PapMT27	Paper_Mfg	Mfg. Paper	Motors	Turnover	27	Switch from Belt drive to Direct Drive	10.6%	7.5%	$ 0.268	$ 0.221	$ 0.046	12	1.5986118	1
PapMT28	Paper_Mfg	Mfg. Paper	Motors	Turnover	28	Synchronous Belts	21.4%	1.1%	$ 0.268	$ 0.221	$ 0.046	10	1.2243643	1
PapMT29	Paper_Mfg	Mfg. Paper	Motors	Turnover	29	Efficient Centrifugal Fan	10.7%	20.0%	$ 0.228	$ 0.188	$ 0.040	10	1.4192008	1
PapMT3	Paper_Mfg	Mfg. Paper	Motors	Turnover	3	High Efficiency Motors	76.7%	1.5%	$ 0.545	$ 0.450	$ 0.095	15	1.0707382	1
PapMT30		Mfg. Paper	Motors	Turnover	30	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	74.4%	0.91%	$ 2.085	$ 2.085	$ -	15	0.2891876	0
PapMT31		Mfg. Paper	Motors	Turnover	31	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	55.8%	0.39%	$ 0.436	$ 0.436	$ -	15	1.3235604	1
PapMT32		Mfg. Paper	Motors	Turnover	32	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	74.4%	0.7%	$ 1.249	$ 1.249	$ -	15	0.4788237	0
PapMT33		Mfg. Paper	Motors	Turnover	33	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	42.8%	0.9%	$ 0.372	$ 0.372	$ -	15	1.5365297	1
PapMT34		Mfg. Paper	Motors	Turnover	34	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	66.3%	0.4%	$ 0.799	$ 0.799	$ -	15	0.7406013	0
PapMT8	Paper_Mfg	Mfg. Paper	Motors	Turnover	8	Material Handling	53.4%	5.0%	$ 0.585	$ 0.483	$ 0.102	10	0.5877428	0
PapME9	Paper_Mfg	Mfg. Paper	Motors	Existing	9	Material Handling VFD	53.4%	18.7%	$ 0.381	$ 0.229	$ 0.152	10	0.8827627	0
PapOT1	Paper_Mfg	Mfg. Paper	Other	Turnover	1	Bldg Improvements	35.0%	20.4%	$ 0.248	$ 0.162	$ 0.087	15	2.2081924	1
PapOE10	Paper_Mfg	Mfg. Paper	Other	Existing	10	Plant Energy Management	27.0%	12.0%	$ 0.139	$ 0.114	$ 0.025	10	2.1513718	1
PapOT11	Paper_Mfg	Mfg. Paper	Other	Turnover	11	Transformers	20.0%	1.6%	$ 0.415	$ 0.399	$ 0.016	15	1.3702764	1
PapOE2	Paper_Mfg	Mfg. Paper	Other	Existing	2	Energy Project Management	27.0%	29.0%	$ 0.163	$ 0.134	$ 0.029	11	2.170338	1
PapOE3	Paper_Mfg	Mfg. Paper	Other	Existing	3	Integrated Plant Energy Management	22.0%	50.0%	$ 0.261	$ 0.215	$ 0.047	11	1.426294	1
PapOT4	Paper_Mfg	Mfg. Paper	Other	Turnover	4	Kraft: Efficient Agitator	13.8%	50.0%	$ 0.104	$ 0.093	$ 0.012	10	2.7219686	1
PapOT5	Paper_Mfg	Mfg. Paper	Other	Turnover	5	Kraft: Effluent Treatment System	9.2%	15.0%	$ 0.092	$ 0.082	$ 0.011	10	2.9996207	1
PapOT6	Paper_Mfg	Mfg. Paper	Other	Turnover	6	Mech Pulp: Premium Process	22.5%	0.2%	$ 0.141	$ 0.125	$ 0.016	5	1.0484878	1

Measure Lookup	Industry	New Segment	New End-Use	Vintage	Measure Number	Measure	Applicability	Savings	Total Cost ($/kW Saved)	Equipment Cost	Labor Cost	Life	TRC Test	Economic Flag
PapOT7	Paper_Mfg	Mfg. Paper	Other	Turnover	7	Mech Pulp: Refiner Plate Improvement	35.5%	0.4%	$ 0.045	$ 0.040	$ 0.005	1	0.5110346	0
PapOT8	Paper_Mfg	Mfg. Paper	Other	Turnover	8	Mech Pulp: Refiner Replacement	23.7%	10.0%	$ 0.735	$ 0.652	$ 0.084	12	0.606927	0
PapOT9	Paper_Mfg	Mfg. Paper	Other	Turnover	9	Paper: Efficient Pulp Screen	13.8%	15.0%	$ 0.226	$ 0.200	$ 0.026	10	1.4063477	1
PlaCooE1	Chemical_Mfg	Mfg. Plastics	Process Cooling	Existing	1	Clean Room: Change Filter Strategy	10.0%	40.0%	$ 0.016	$ 0.012	$ 0.005	1	0.845229	0
PlaCooE2	Chemical_Mfg	Mfg. Plastics	Process Cooling	Existing	2	Clean Room: Chiller Optimize	28.3%	14.8%	$ 0.248	$ 0.124	$ 0.124	10	1.2770895	1
PlaCooT3	Chemical_Mfg	Mfg. Plastics	Process Cooling	Turnover	3	Clean Room: Clean Room HVAC	30.0%	9.0%	$ 0.204	$ 0.144	$ 0.061	15	2.6115532	1
PlaCooT4	Chemical_Mfg	Mfg. Plastics	Process Cooling	Turnover	4	Equipment: Chillers	8.0%	17.9%	$ 0.330	$ 0.249	$ 0.081	15	1.6863203	1
PlaCooE5	Chemical_Mfg	Mfg. Plastics	Process Cooling	Existing	5	Improved Controls	33.8%	6.0%	$ 1.118	$ 0.673	$ 0.445	15	0.5239597	0
PlaCooT6	Chemical_Mfg	Mfg. Plastics	Process Cooling	Turnover	6	Adjustable speed drive on compressors	34.0%	11.7%	$ 0.201	$ 0.121	$ 0.080	10	1.5405308	1
PlaCooE7	Chemical_Mfg	Mfg. Plastics	Process Cooling	Existing	7	Optimization of operating parameters	35.0%	13.1%	$ 0.101	$ 0.039	$ 0.063	3	0.8631154	0
PlaCooT8	Chemical_Mfg	Mfg. Plastics	Process Cooling	Turnover	8	Cold Storage Retrofit	25.6%	20.7%	$ 0.250	$ 0.157	$ 0.093	10	1.2672565	1
PlaCooE9	Chemical_Mfg	Mfg. Plastics	Process Cooling	Existing	9	Cold Storage Tuneup	10.0%	15.6%	$ 0.112	$ 0.047	$ 0.065	3	0.7961473	0
PlaHeaE1	Chemical_Mfg	Mfg. Plastics	Process Heating	Existing	1	Improved Controls	37.9%	30.4%	$ 0.245	$ 0.147	$ 0.098	10	1.2922449	1
PlaHeaE2	Chemical_Mfg	Mfg. Plastics	Process Heating	Existing	2	Process Heat O&M	63.4%	28.6%	$ 0.257	$ 0.225	$ 0.032	2	0.2605933	0
PlaHT1	Chemical_Mfg	Mfg. Plastics	HVAC	Turnover	1	Equipment Upgrades	62.9%	16.4%	$ 0.296	$ 0.252	$ 0.044	15	1.9366044	1
PlaHE2	Chemical_Mfg	Mfg. Plastics	HVAC	Existing	2	Improved Controls	32.7%	20.9%	$ 0.102	$ 0.077	$ 0.025	10	2.8798202	1
PlaHE3	Chemical_Mfg	Mfg. Plastics	HVAC	Existing	3	Recommissioning	72.6%	16.0%	$ 0.271	$ -	$ 0.271	7	0.8824975	0
PlaLT1	Chemical_Mfg	Mfg. Plastics	Lighting	Turnover	1	Efficient Lighting Equipment	30.4%	19.9%	$ 0.150	$ 0.103	$ 0.047	10	2.0831033	1
PlaLT2	Chemical_Mfg	Mfg. Plastics	Lighting	Turnover	2	HighBay Lighting Equipment	55.1%	34.1%	$ 0.376	$ 0.295	$ 0.081	10	0.9104781	0
PlaLE3	Chemical_Mfg	Mfg. Plastics	Lighting	Existing	3	Lighting Controls	42.3%	30.0%	$ 0.212	$ 0.157	$ 0.055	10	1.5396736	1
PlaMT1		Mfg. Plastics	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	42.8%	0.9%	$ 0.372	$ 0.372	$ -	15	1.5365297	1
PlaMT10	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	10	Material Handling	52.3%	5.0%	$ 0.585	$ 0.483	$ 0.102	10	0.5877428	0
PlaMT11	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	11	Air Compressor Demand Reduction	28.0%	15.9%	$ 0.107	$ 0.081	$ 0.026	10	2.7237476	1
PlaME12	Chemical_Mfg	Mfg. Plastics	Motors	Existing	12	Material Handling VFD	52.3%	18.7%	$ 0.381	$ 0.229	$ 0.152	10	0.8827627	0
PlaME13	Chemical_Mfg	Mfg. Plastics	Motors	Existing	13	Motor Management Plan	51.6%	2.9%	$ 0.134	$ 0.054	$ 0.080	10	2.2492384	1
PlaMT15	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	15	Motors: Rewind 101-200 HP	25.4%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.8241199	1
PlaMT16	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	16	Motors: Rewind 201-500 HP	35.6%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.8241199	1
PlaMT17	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	17	Motors: Rewind 20-50 HP	4.6%	0.9%	$ 0.431	$ 0.356	$ 0.075	15	1.3377689	1
PlaMT18	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	18	Motors: Rewind 500+ HP	55.2%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.8241199	1
PlaMT19	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	19	Motors: Rewind 51-100 HP	15.2%	0.6%	$ 0.388	$ 0.321	$ 0.067	15	1.4770915	1
PlaMT2		Mfg. Plastics	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	66.3%	0.4%	$ 0.799	$ 0.799	$ -	15	0.7406013	0
PlaMT20	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	20	Properly Sized Fans	14.7%	10.4%	$ 0.202	$ 0.122	$ 0.080	10	1.5785853	1
PlaME21	Chemical_Mfg	Mfg. Plastics	Motors	Existing	21	Air Compressor Optimization	38.3%	30.1%	$ 0.151	$ 0.058	$ 0.093	10	2.0317835	1
PlaME22	Chemical_Mfg	Mfg. Plastics	Motors	Existing	22	Pump Energy Management	31.4%	7.5%	$ 0.134	$ 0.054	$ 0.080	10	2.2492384	1
PlaMT23	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	23	Pump Equipment Upgrade	34.0%	20.0%	$ 0.156	$ 0.129	$ 0.027	10	1.9754039	1
PlaME24	Chemical_Mfg	Mfg. Plastics	Motors	Existing	24	Pump System Optimization	15.6%	12.1%	$ 0.391	$ 0.196	$ 0.195	12	1.1236712	1
PlaMT25	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	25	Switch from Belt drive to Direct Drive	10.4%	7.5%	$ 0.268	$ 0.221	$ 0.046	12	1.5986118	1
PlaMT26	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	26	Synchronous Belts	20.9%	1.1%	$ 0.268	$ 0.221	$ 0.046	10	1.2243643	1
PlaMT27	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	27	Efficient Centrifugal Fan	10.3%	20.0%	$ 0.228	$ 0.188	$ 0.040	10	1.4192008	1
PlaMT28		Mfg. Plastics	Motors	Turnover	28	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	74.4%	0.91%	$ 2.085	$ 2.085	$ -	15	0.2891876	0
PlaMT29		Mfg. Plastics	Motors	Turnover	29	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	55.8%	0.39%	$ 0.436	$ 0.436	$ -	15	1.3235604	1
PlaME3	Chemical_Mfg	Mfg. Plastics	Motors	Existing	3	Fan System Optimization	28.9%	7.7%	$ 0.311	$ 0.156	$ 0.155	10	1.0669512	1
PlaMT30		Mfg. Plastics	Motors	Turnover	30	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	74.4%	0.7%	$ 1.249	$ 1.249	$ -	15	0.4788237	0
PlaMT4	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	4	High efficiency Compressor motors	80.8%	1.1%	$ 0.430	$ 0.355	$ 0.075	15	1.3415371	1
PlaMT5	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	5	High Efficiency Motors	74.4%	1.5%	$ 0.545	$ 0.450	$ 0.095	15	1.0707382	1
PlaOT1	Chemical_Mfg	Mfg. Plastics	Other	Turnover	1	Bldg Improvements	35.0%	20.4%	$ 0.248	$ 0.162	$ 0.087	15	2.2081924	1
PlaOE2	Chemical_Mfg	Mfg. Plastics	Other	Existing	2	Energy Project Management	27.0%	29.0%	$ 0.163	$ 0.134	$ 0.029	11	2.170338	1
PlaOE3	Chemical_Mfg	Mfg. Plastics	Other	Existing	3	Integrated Plant Energy Management	22.0%	50.0%	$ 0.261	$ 0.215	$ 0.047	11	1.426294	1
PlaOE4	Chemical_Mfg	Mfg. Plastics	Other	Existing	4	Plant Energy Management	27.0%	12.0%	$ 0.139	$ 0.114	$ 0.025	10	2.1513718	1
PlaOT5	Chemical_Mfg	Mfg. Plastics	Other	Turnover	5	Transformers	20.0%	1.6%	$ 0.415	$ 0.399	$ 0.016	15	1.3702764	1
MinMT1		Mining	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	74.4%	0.91%	$ 2.085	$ 2.085	$ -	15	0.2891876	0
MinME10	Mining	Mining	Motors	Existing	10	Motor Management Plan	50.0%	2.9%	$ 0.134	$ 0.054	$ 0.080	10	2.2492384	1
MinMT12	Mining	Mining	Motors	Turnover	12	Motors: Rewind 101-200 HP	25.4%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.8241199	1
MinMT13	Mining	Mining	Motors	Turnover	13	Motors: Rewind 201-500 HP	35.6%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.8241199	1
MinMT14	Mining	Mining	Motors	Turnover	14	Motors: Rewind 20-50 HP	4.7%	0.9%	$ 0.431	$ 0.356	$ 0.075	15	1.3377689	1
MinMT15	Mining	Mining	Motors	Turnover	15	Motors: Rewind 500+ HP	55.2%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.8241199	1
MinMT16	Mining	Mining	Motors	Turnover	16	Motors: Rewind 51-100 HP	15.2%	0.6%	$ 0.388	$ 0.321	$ 0.067	15	1.4770915	1
MinMT17	Mining	Mining	Motors	Turnover	17	Switch from Belt drive to Direct Drive	10.5%	7.5%	$ 0.268	$ 0.221	$ 0.046	12	1.5986118	1
MinMT18	Mining	Mining	Motors	Turnover	18	Synchronous Belts	21.0%	1.1%	$ 0.268	$ 0.221	$ 0.046	10	1.2243643	1
MinMT2		Mining	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	55.8%	0.39%	$ 0.436	$ 0.436	$ -	15	1.3235604	1
MinMT3		Mining	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	74.4%	0.7%	$ 1.249	$ 1.249	$ -	15	0.4788237	0
MinMT4		Mining	Motors	Turnover	4	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	42.8%	0.9%	$ 0.372	$ 0.372	$ -	15	1.5365297	1
MinMT5		Mining	Motors	Turnover	5	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	66.3%	0.4%	$ 0.799	$ 0.799	$ -	15	0.7406013	0
MinMT6	Mining	Mining	Motors	Turnover	6	High Efficiency Motors	75.0%	1.5%	$ 0.545	$ 0.450	$ 0.095	15	1.0707382	1
MinMT8	Mining	Mining	Motors	Turnover	8	Material Handling	53.0%	5.0%	$ 0.585	$ 0.483	$ 0.102	10	0.5877428	0
MinME9	Mining	Mining	Motors	Existing	9	Material Handling VFD	53.0%	18.7%	$ 0.381	$ 0.229	$ 0.152	10	0.8827627	0
NonCooT1	umber_Wood_Product	Other Non Mfg.	Process Cooling	Turnover	1	Equipment: Chillers	7.7%	17.9%	$ 0.330	$ 0.249	$ 0.081	15	1.6863203	1
NonCooE2	umber_Wood_Product	Other Non Mfg.	Process Cooling	Existing	2	Improved Controls	32.3%	6.0%	$ 1.118	$ 0.673	$ 0.445	15	0.5239597	0
NonCooT3	Agriculture	Other Non Mfg.	Process Cooling	Turnover	3	Milk Precooler - Dairy Plate Cooler	1.7%	3.24%	$ 0.660	$ 0.487	$ 0.173	15	0.8738363	0
NonCooT4	umber_Wood_Product	Other Non Mfg.	Process Cooling	Turnover	4	Adjustable speed drive on compressors	34.0%	11.7%	$ 0.201	$ 0.121	$ 0.080	10	1.5405308	1

Measure Lookup	Industry	New Segment	New End-Use	Vintage	Measure Number	Measure	Applicability	Savings	Total Cost ($/kW Saved)	Equipment Cost	Labor Cost	Life	TRC Test	Economic Flag
NonCooE5	umber_Wood_Product	Other Non Mfg.	Process Cooling	Existing	5	Optimization of operating parameters	35.0%	13.1%	$ 0.101	$ 0.039	$ 0.063	3	0.8631154	0
NonHeaT1	Agriculture	Other Non Mfg.	Process Heating	Turnover	1	Crate Heating Pads	22.9%	17.51%	$ 0.181	$ 0.162	$ 0.019	15	2.9093073	1
NonHeaT2	Agriculture	Other Non Mfg.	Process Heating	Turnover	2	Grain dryers	24.8%	23.52%	$ 8.260	$ 6.090	$ 2.169	15	0.072265	0
NonHeaE3	Agriculture	Other Non Mfg.	Process Heating	Existing	3	Heat Lamp Setback (Microzone)	22.9%	0.45%	$ 0.210	$ 0.210	$ -	15	2.5435181	1
NonHeaE4	Agriculture	Other Non Mfg.	Process Heating	Existing	4	Heat Lamp/Heating Pad Controller	22.9%	1.75%	$ 0.129	$ 0.129	$ -	15	3.8780945	1
NonHeaT5	Agriculture	Other Non Mfg.	Process Heating	Turnover	5	Heat Lamps	22.9%	3.38%	$ 0.023	$ 0.023	$ -	10	7.2080255	1
NonHeaE6	umber_Wood_Product	Other Non Mfg.	Process Heating	Existing	6	Improved Controls	37.9%	30.4%	$ 0.245	$ 0.147	$ 0.098	10	1.2922449	1
NonHeaE7	umber_Wood_Product	Other Non Mfg.	Process Heating	Existing	7	Process Heat O&M	63.4%	28.6%	$ 0.257	$ 0.225	$ 0.032	2	0.2605933	0
NonHT1	Agriculture	Other Non Mfg.	HVAC	Turnover	1	Energy-Efficient Dehumidifier	49.7%	2.00%	$ 1.072	$ 0.791	$ 0.282	15	0.5658536	0
NonHT2	umber_Wood_Product	Other Non Mfg.	HVAC	Turnover	2	Equipment Upgrades	63.2%	16.4%	$ 0.296	$ 0.252	$ 0.044	15	1.9366044	1
NonHT3	Agriculture	Other Non Mfg.	HVAC	Turnover	3	Heat Reclaimer	1.7%	42.00%	$ 0.171	$ 0.126	$ 0.045	15	3.1613337	1
NonHT4	Agriculture	Other Non Mfg.	HVAC	Turnover	4	Heat Recovery Ventilators	49.7%	4.13%	$ 0.448	$ 0.330	$ 0.118	10	0.7763397	0
NonHE5	umber_Wood_Product	Other Non Mfg.	HVAC	Existing	5	Improved Controls	32.8%	20.9%	$ 0.102	$ 0.077	$ 0.025	10	2.8798202	1
NonHT6	Agriculture	Other Non Mfg.	HVAC	Turnover	6	Infrared Film for Greenhouses	0.3%	11.06%	$ 0.261	$ 0.234	$ 0.028	4	0.5354479	0
NonHT7	Agriculture	Other Non Mfg.	HVAC	Turnover	7	Programmable Ventilation Controller	49.7%	0.10%	$ 0.140	$ 0.140	$ -	10	2.2298764	1
NonHE8	umber_Wood_Product	Other Non Mfg.	HVAC	Existing	8	Recommissioning	72.9%	16.0%	$ 0.271	$ -	$ 0.271	7	0.8824975	0
NonHT9	Agriculture	Other Non Mfg.	HVAC	Turnover	9	Scroll Compressor	1.7%	7.50%	$ 1.006	$ 0.899	$ 0.107	15	0.6024477	0
NonLT1	umber_Wood_Product	Other Non Mfg.	Lighting	Turnover	1	Efficient Lighting Equipment	30.4%	19.9%	$ 0.150	$ 0.103	$ 0.047	10	2.0831033	1
NonLT2	umber_Wood_Product	Other Non Mfg.	Lighting	Turnover	2	HighBay Lighting Equipment	55.1%	34.1%	$ 0.376	$ 0.295	$ 0.081	10	0.9104781	0
NonLE3	umber_Wood_Product	Other Non Mfg.	Lighting	Existing	3	Lighting Controls	42.3%	30.0%	$ 0.212	$ 0.157	$ 0.055	10	1.5396736	1
NonMT1		Other Non Mfg.	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	55.8%	0.39%	$ 0.436	$ 0.436	$ -	15	1.3235604	1
NonMT11	Agriculture	Other Non Mfg.	Motors	Turnover	11	Agricultural Exhaust Fans (Rate 21 CFM/Watt+)	49.7%	5.00%	$ 0.316	$ 0.283	$ 0.034	15	1.7880164	1
NonMT15	Agriculture	Other Non Mfg.	Motors	Turnover	15	Low Pressure Irrigation	0.4%	50.00%	$ 0.993	$ 0.732	$ 0.261	10	0.3522003	0
NonMT16	umber_Wood_Product	Other Non Mfg.	Motors	Turnover	16	Material Handling	53.2%	5.0%	$ 0.585	$ 0.483	$ 0.102	10	0.5877428	0
NonME17	umber_Wood_Product	Other Non Mfg.	Motors	Existing	17	Material Handling VFD	53.2%	18.7%	$ 0.381	$ 0.229	$ 0.152	10	0.8827627	0
NonME18	umber_Wood_Product	Other Non Mfg.	Motors	Existing	18	Motor Management Plan	50.9%	2.9%	$ 0.134	$ 0.054	$ 0.080	10	2.2492384	1
NonMT2		Other Non Mfg.	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	74.4%	0.7%	$ 1.249	$ 1.249	$ -	15	0.4788237	0
NonMT21	umber_Wood_Product	Other Non Mfg.	Motors	Turnover	21	Motors: Rewind 101-200 HP	25.4%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.8241199	1
NonMT22	umber_Wood_Product	Other Non Mfg.	Motors	Turnover	22	Air Compressor Demand Reduction	26.8%	15.9%	$ 0.107	$ 0.081	$ 0.026	10	2.7237476	1
NonMT23	umber_Wood_Product	Other Non Mfg.	Motors	Turnover	23	Motors: Rewind 201-500 HP	35.6%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.8241199	1
NonMT24	umber_Wood_Product	Other Non Mfg.	Motors	Turnover	24	Motors: Rewind 20-50 HP	4.7%	0.9%	$ 0.431	$ 0.356	$ 0.075	15	1.3377689	1
NonMT25	umber_Wood_Product	Other Non Mfg.	Motors	Turnover	25	Motors: Rewind 500+ HP	55.2%	0.5%	$ 0.309	$ 0.256	$ 0.054	15	1.8241199	1
NonMT26	umber_Wood_Product	Other Non Mfg.	Motors	Turnover	26	Motors: Rewind 51-100 HP	15.2%	0.6%	$ 0.388	$ 0.321	$ 0.067	15	1.4770915	1
NonMT27	umber_Wood_Product	Other Non Mfg.	Motors	Turnover	27	Properly Sized Fans	15.3%	10.4%	$ 0.202	$ 0.122	$ 0.080	10	1.5785853	1
NonME28	umber_Wood_Product	Other Non Mfg.	Motors	Existing	28	Pump Energy Management	29.8%	7.5%	$ 0.134	$ 0.054	$ 0.080	10	2.2492384	1
NonMT29	umber_Wood_Product	Other Non Mfg.	Motors	Turnover	29	Pump Equipment Upgrade	32.3%	20.0%	$ 0.156	$ 0.129	$ 0.027	10	1.9754039	1
NonMT3		Other Non Mfg.	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	42.8%	0.9%	$ 0.372	$ 0.372	$ -	15	1.5365297	1
NonME30	umber_Wood_Product	Other Non Mfg.	Motors	Existing	30	Pump System Optimization	14.9%	12.1%	$ 0.391	$ 0.196	$ 0.195	12	1.1236712	1
NonMT31	Irrigation	Other Non Mfg.	Motors	Turnover	31	SIS	76.5%	7.5%	$ 1.051	$ 0.869	$ 0.183	7	0.2359536	0
NonMT32	umber_Wood_Product	Other Non Mfg.	Motors	Turnover	32	Air Compressor Equipment	17.6%	8.8%	$ 0.157	$ 0.130	$ 0.027	10	1.9669813	1
NonMT33	umber_Wood_Product	Other Non Mfg.	Motors	Turnover	33	Switch from Belt drive to Direct Drive	10.5%	7.5%	$ 0.268	$ 0.221	$ 0.046	12	1.5986118	1
NonMT34	umber_Wood_Product	Other Non Mfg.	Motors	Turnover	34	Synchronous Belts	20.9%	1.1%	$ 0.268	$ 0.221	$ 0.046	10	1.2243643	1
NonMT35	Irrigation	Other Non Mfg.	Motors	Turnover	35	System Improvements	85.0%	8.0%	$ 0.416	$ 0.344	$ 0.072	5	0.4059547	0
NonMT36	Agriculture	Other Non Mfg.	Motors	Turnover	36	Variable Speed Drives for Dairy Vacuum Pumps	1.7%	36.89%	$ 0.169	$ 0.151	$ 0.018	15	3.1431921	1
NonMT37	Agriculture	Other Non Mfg.	Motors	Turnover	37	VFDs on Small Milking Machines	1.7%	3.22%	$ 0.832	$ 0.614	$ 0.219	15	0.7118134	0
NonMT38	umber_Wood_Product	Other Non Mfg.	Motors	Turnover	38	Wood: Replace Pneumatic Conveyor	50.2%	29.0%	$ 0.018	$ 0.016	$ 0.002	10	8.3203106	1
NonME39	umber_Wood_Product	Other Non Mfg.	Motors	Existing	39	Air Compressor Optimization	36.8%	30.1%	$ 0.151	$ 0.058	$ 0.093	10	2.0317835	1
NonMT4		Other Non Mfg.	Motors	Turnover	4	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	66.3%	0.4%	$ 0.799	$ 0.799	$ -	15	0.7406013	0
NonMT40	Agriculture	Other Non Mfg.	Motors	Turnover	40	Automatic Milker Takeoff	1.7%	3.00%	$ 0.763	$ 0.563	$ 0.200	15	0.7742324	0
NonMT41	Agriculture	Other Non Mfg.	Motors	Turnover	41	Circulating Fans	49.7%	5.00%	$ 0.152	$ 0.136	$ 0.016	10	2.0282995	1
NonMT42	umber_Wood_Product	Other Non Mfg.	Motors	Turnover	42	Efficient Centrifugal Fan	10.7%	20.0%	$ 0.228	$ 0.188	$ 0.040	10	1.4192008	1
NonMT43		Other Non Mfg.	Motors	Turnover	43	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	74.4%	0.91%	$ 2.085	$ 2.085	$ -	15	0.2891876	0
NonME5	umber_Wood_Product	Other Non Mfg.	Motors	Existing	5	Fan System Optimization	30.2%	7.7%	$ 0.311	$ 0.156	$ 0.155	10	1.0669512	1
NonMT6	umber_Wood_Product	Other Non Mfg.	Motors	Turnover	6	High efficiency Compressor motors	77.5%	1.1%	$ 0.430	$ 0.355	$ 0.075	15	1.3415371	1
NonMT7	Irrigation	Other Non Mfg.	Motors	Turnover	7	High Efficiency Motors	74.7%	1.5%	$ 0.545	$ 0.450	$ 0.095	15	1.0707382	1
NonMT8	Agriculture	Other Non Mfg.	Motors	Turnover	8	High Volume Low Speed Fans	49.7%	46.61%	$ 2.004	$ 1.883	$ 0.120	15	0.3007795	0
NonMT9	Agriculture	Other Non Mfg.	Motors	Turnover	9	High-Efficiency Ventilation System	49.7%	5.66%	$ 1.366	$ 1.366	$ -	10	0.257668	0
NonOT1	umber_Wood_Product	Other Non Mfg.	Other	Turnover	1	Bldg Improvements	35.0%	20.4%	$ 0.248	$ 0.162	$ 0.087	15	2.2081924	1
NonOT10	umber_Wood_Product	Other Non Mfg.	Other	Turnover	10	Transformers	20.0%	1.6%	$ 0.415	$ 0.399	$ 0.016	15	1.3702764	1
NonOT2	Agriculture	Other Non Mfg.	Other	Turnover	2	Block Heater Timer	25.0%	2.50%	$ 0.048	$ 0.048	$ -	10	4.8049969	1
NonOE3	umber_Wood_Product	Other Non Mfg.	Other	Existing	3	Energy Project Management	27.0%	29.0%	$ 0.163	$ 0.134	$ 0.029	11	2.170338	1
NonOT4	Agriculture	Other Non Mfg.	Other	Turnover	4	Grain bin aeration control systems	24.8%	2.25%	$ 0.168	$ 0.124	$ 0.044	15	3.1318911	1
NonOT5	Agriculture	Other Non Mfg.	Other	Turnover	5	Greenhouse Heat Curtain	0.3%	16.76%	$ 0.056	$ 0.056	$ -	5	2.142952	1
NonOT6	Agriculture	Other Non Mfg.	Other	Turnover	6	High Efficiency Stock tank	22.9%	3.75%	$ 0.412	$ 0.368	$ 0.044	10	0.8059568	0
NonOE7	umber_Wood_Product	Other Non Mfg.	Other	Existing	7	Integrated Plant Energy Management	22.0%	50.0%	$ 0.261	$ 0.215	$ 0.047	11	1.426294	1
NonOT8	Agriculture	Other Non Mfg.	Other	Turnover	8	Livestock Waterers	22.9%	11.25%	$ 0.327	$ 0.292	$ 0.035	10	1.0014638	1
NonOE9	umber_Wood_Product	Other Non Mfg.	Other	Existing	9	Plant Energy Management	27.0%	12.0%	$ 0.139	$ 0.114	$ 0.025	10	2.1513718	1
MetPT1		Mfg. Metals	Process EC	Turnover	1	Electrical-Chemical Plating Bundle, Tank and Rectifier	65.0%	18.5%	$ 0.550	$ 0.450	$ 0.100	15	1.0411836	1
MinHT1	Mining	Mining	HVAC	Turnover	1	Equipment Upgrades	62.9%	16.4%	$ 0.296	$ 0.252	$ 0.044	15	1.9366044	1
MinHE2	Mining	Mining	HVAC	Existing	2	Improved Controls	32.7%	20.9%	$ 0.102	$ 0.077	$ 0.025	10	2.8798202	1

Measure Lookup	Industry	New Segment	New End-Use	Vintage	Measure Number	Measure	Applicability	Savings	Total Cost ($/kW Saved)	Equipment Cost	Labor Cost	Life	TRC Test	Economic Flag
MinHE3	Mining	Mining	HVAC	Existing	3	Recommissioning	72.6%	16.0%	$ 0.271	$ -	$ 0.271	7	0.8824975	0
MinLT1	Mining	Mining	Lighting	Turnover	1	Efficient Lighting Equipment	30.4%	19.9%	$ 0.150	$ 0.103	$ 0.047	10	2.0831033	1
MinLT2	Mining	Mining	Lighting	Turnover	2	HighBay Lighting Equipment	55.1%	34.1%	$ 0.376	$ 0.295	$ 0.081	10	0.9104781	0
MinLE3	Mining	Mining	Lighting	Existing	3	Lighting Controls	42.3%	30.0%	$ 0.212	$ 0.157	$ 0.055	10	1.5396736	1

Measure Lookup	Industry	New Segment	New End-Use	Vintage	easure Numb	Measure	Applicability	Savings	Total Cost ($/kW Saved)	Equipment Cost	Labor Cost	Admin Costs ($/kWh Saved)	Life	TRC Test	Economic Flag
CheCooE1	Chemical_Mfg	Mfg. Chemicals	Process Cooling	Existing	1	Clean Room: Change Filter Strategy	10.0%	40.0%	$ 0.016	$ 0.012	$ 0.005	$ 0.025	1	0.7730571	0
CheCooE2	Chemical_Mfg	Mfg. Chemicals	Process Cooling	Existing	2	Clean Room: Chiller Optimize	28.3%	14.8%	$ 0.248	$ 0.124	$ 0.124	$ 0.025	10	1.2693096	1
CheCooT3	Chemical_Mfg	Mfg. Chemicals	Process Cooling	Turnover	3	Clean Room: Clean Room HVAC	30.0%	9.0%	$ 0.204	$ 0.144	$ 0.061	$ 0.025	15	2.612798	1
CheCooT4	Chemical_Mfg	Mfg. Chemicals	Process Cooling	Turnover	4	Equipment: Chillers	8.0%	17.9%	$ 0.330	$ 0.249	$ 0.081	$ 0.025	15	1.6871241	1
CheCooE5	Chemical_Mfg	Mfg. Chemicals	Process Cooling	Existing	5	Improved Controls	33.8%	6.0%	$ 1.118	$ 0.673	$ 0.445	$ 0.025	15	0.5242095	0
CheCooT6	Chemical_Mfg	Mfg. Chemicals	Process Cooling	Turnover	6	Adjustable speed drive on compressors	34.0%	11.7%	$ 0.201	$ 0.121	$ 0.080	$ 0.025	10	1.5311461	1
CheCooE7	Chemical_Mfg	Mfg. Chemicals	Process Cooling	Existing	7	Optimization of operating parameters	35.0%	13.1%	$ 0.101	$ 0.039	$ 0.063	$ 0.025	3	0.8070835	0
CheCooT8	Chemical_Mfg	Mfg. Chemicals	Process Cooling	Turnover	8	Cold Storage Retrofit	25.6%	20.7%	$ 0.250	$ 0.157	$ 0.093	$ 0.025	10	1.2595366	1
CheCooE9	Chemical_Mfg	Mfg. Chemicals	Process Cooling	Existing	9	Cold Storage Tuneup	10.0%	15.6%	$ 0.112	$ 0.047	$ 0.065	$ 0.025	3	0.7444628	0
CheHeaE1	Chemical_Mfg	Mfg. Chemicals	Process Heating	Existing	1	Improved Controls	37.9%	30.4%	$ 0.245	$ 0.147	$ 0.098	$ 0.025	10	1.2843727	1
CheHeaE2	Chemical_Mfg	Mfg. Chemicals	Process Heating	Existing	2	Process Heat O&M	63.4%	28.6%	$ 0.257	$ 0.225	$ 0.032	$ 0.025	2	0.2324913	0
CheHT1	Chemical_Mfg	Mfg. Chemicals	HVAC	Turnover	1	Equipment Upgrades	62.9%	16.4%	$ 0.296	$ 0.252	$ 0.044	$ 0.025	15	1.8861037	1
CheHE2	Chemical_Mfg	Mfg. Chemicals	HVAC	Existing	2	Improved Controls	32.7%	20.9%	$ 0.102	$ 0.077	$ 0.025	$ 0.025	10	2.7610834	1
CheHE3	Chemical_Mfg	Mfg. Chemicals	HVAC	Existing	3	Recommissioning	72.6%	16.0%	$ 0.271	$ -	$ 0.271	$ 0.025	7	0.8341842	0
CheLT1	Chemical_Mfg	Mfg. Chemicals	Lighting	Turnover	1	Efficient Lighting Equipment	30.4%	19.9%	$ 0.150	$ 0.103	$ 0.047	$ 0.025	10	1.9987264	1
CheLT2	Chemical_Mfg	Mfg. Chemicals	Lighting	Turnover	2	HighBay Lighting Equipment	55.1%	34.1%	$ 0.376	$ 0.295	$ 0.081	$ 0.025	10	0.8735989	0
CheLE3	Chemical_Mfg	Mfg. Chemicals	Lighting	Existing	3	Lighting Controls	42.3%	30.0%	$ 0.212	$ 0.157	$ 0.055	$ 0.025	10	1.4773086	1
CheMT1		Mfg. Chemicals	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	42.8%	0.9%	$ 0.372	$ 0.372	$ -	$ 0.025	15	1.5269248	1
CheMT10	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	10	Material Handling	52.3%	5.0%	$ 0.585	$ 0.483	$ 0.102	$ 0.025	10	0.5786809	0
CheMT11	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	11	Air Compressor Demand Reduction	28.0%	15.9%	$ 0.107	$ 0.081	$ 0.026	$ 0.025	10	2.6817522	1
CheME6	Chemical_Mfg	Mfg. Chemicals	Motors	Existing	6	Material Handling VFD	52.3%	18.7%	$ 0.381	$ 0.229	$ 0.152	$ 0.025	10	0.869152	0
CheME13	Chemical_Mfg	Mfg. Chemicals	Motors	Existing	13	Motor Management Plan	51.6%	2.9%	$ 0.134	$ 0.054	$ 0.080	$ 0.025	10	2.214559	1
CheMT15	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	15	Motors: Rewind 101-200 HP	25.4%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	1.8127173	1
CheMT16	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	16	Motors: Rewind 201-500 HP	35.6%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	1.8127173	1
CheMT17	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	17	Motors: Rewind 20-50 HP	4.6%	0.9%	$ 0.431	$ 0.356	$ 0.075	$ 0.025	15	1.3294065	1
CheMT18	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	18	Motors: Rewind 500+ HP	55.2%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	1.8127173	1
CheMT19	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	19	Motors: Rewind 51-100 HP	15.2%	0.6%	$ 0.388	$ 0.321	$ 0.067	$ 0.025	15	1.4678581	1
CheMT2		Mfg. Chemicals	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	66.3%	0.4%	$ 0.799	$ 0.799	$ -	$ 0.025	15	0.7359718	0
CheMT20	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	20	Properly Sized Fans	14.7%	10.4%	$ 0.202	$ 0.122	$ 0.080	$ 0.025	10	1.5542463	1
CheME21	Chemical_Mfg	Mfg. Chemicals	Motors	Existing	21	Air Compressor Optimization	38.3%	30.1%	$ 0.151	$ 0.058	$ 0.093	$ 0.025	10	2.0004569	1
CheME22	Chemical_Mfg	Mfg. Chemicals	Motors	Existing	22	Pump Energy Management	31.4%	7.5%	$ 0.134	$ 0.054	$ 0.080	$ 0.025	10	2.214559	1
CheMT23	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	23	Pump Equipment Upgrade	34.0%	20.0%	$ 0.156	$ 0.129	$ 0.027	$ 0.025	10	1.9449466	1
CheME24	Chemical_Mfg	Mfg. Chemicals	Motors	Existing	24	Pump System Optimization	15.6%	12.1%	$ 0.391	$ 0.196	$ 0.195	$ 0.025	12	1.1122362	1
CheMT25	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	25	Switch from Belt drive to Direct Drive	10.4%	7.5%	$ 0.268	$ 0.221	$ 0.046	$ 0.025	12	1.5823435	1
CheMT26	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	26	Synchronous Belts	20.9%	1.1%	$ 0.268	$ 0.221	$ 0.046	$ 0.025	10	1.2054867	1
CheMT27	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	27	Efficient Centrifugal Fan	10.3%	20.0%	$ 0.228	$ 0.188	$ 0.040	$ 0.025	10	1.3973192	1
CheMT28		Mfg. Chemicals	Motors	Turnover	28	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	74.4%	0.91%	$ 2.085	$ 2.085	$ -	$ 0.025	15	0.2873799	0
CheMT29		Mfg. Chemicals	Motors	Turnover	29	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	55.8%	0.39%	$ 0.436	$ 0.436	$ -	$ 0.025	15	1.3152868	1
CheME3	Chemical_Mfg	Mfg. Chemicals	Motors	Existing	3	Fan System Optimization	28.9%	7.7%	$ 0.311	$ 0.156	$ 0.155	$ 0.025	10	1.0505007	1
CheMT30		Mfg. Chemicals	Motors	Turnover	30	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	74.4%	0.7%	$ 1.249	$ 1.249	$ -	$ 0.025	15	0.4758305	0
CheMT4	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	4	High efficiency Compressor motors	80.8%	1.1%	$ 0.430	$ 0.355	$ 0.075	$ 0.025	15	1.3331511	1
CheMT5	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	5	High Efficiency Motors	74.4%	1.5%	$ 0.545	$ 0.450	$ 0.095	$ 0.025	15	1.064045	1
CheOT1	Chemical_Mfg	Mfg. Chemicals	Other	Turnover	1	Bldg Improvements	35.0%	20.4%	$ 0.248	$ 0.162	$ 0.087	$ 0.025	15	2.1868274	1
CheOE2	Chemical_Mfg	Mfg. Chemicals	Other	Existing	2	Energy Project Management	27.0%	29.0%	$ 0.163	$ 0.134	$ 0.029	$ 0.025	11	2.1355652	1
CheOE3	Chemical_Mfg	Mfg. Chemicals	Other	Existing	3	Integrated Plant Energy Management	22.0%	50.0%	$ 0.261	$ 0.215	$ 0.047	$ 0.025	11	1.4034422	1
CheOE4	Chemical_Mfg	Mfg. Chemicals	Other	Existing	4	Plant Energy Management	27.0%	12.0%	$ 0.139	$ 0.114	$ 0.025	$ 0.025	10	2.1101009	1
CheOT5	Chemical_Mfg	Mfg. Chemicals	Other	Turnover	5	Transformers	20.0%	1.6%	$ 0.415	$ 0.399	$ 0.016	$ 0.025	15	1.3570186	1
ComCooE1	lectronic_Equipment_M	Mfg. Computers	Process Cooling	Existing	1	Clean Room: Change Filter Strategy	10.0%	40.0%	$ 0.016	$ 0.012	$ 0.005	$ 0.025	1	0.7730571	0
ComCooE10	lectronic_Equipment_M	Mfg. Computers	Process Cooling	Existing	10	Cold Storage Tuneup	10.0%	15.6%	$ 0.112	$ 0.047	$ 0.065	$ 0.025	3	0.7444628	0
ComCooE2	lectronic_Equipment_M	Mfg. Computers	Process Cooling	Existing	2	Clean Room: Chiller Optimize	28.3%	14.8%	$ 0.248	$ 0.124	$ 0.124	$ 0.025	10	1.2693096	1
ComCooT3	lectronic_Equipment_M	Mfg. Computers	Process Cooling	Turnover	3	Clean Room: Clean Room HVAC	30.0%	9.0%	$ 0.204	$ 0.144	$ 0.061	$ 0.025	15	2.612798	1
ComCooT4	lectronic_Equipment_M	Mfg. Computers	Process Cooling	Turnover	4	Elec Chip Fab: Solidstate Chiller	20.0%	90.0%	$ 0.634	$ 0.562	$ 0.072	$ 0.025	10	0.52595	0
ComCooT5	lectronic_Equipment_M	Mfg. Computers	Process Cooling	Turnover	5	Equipment: Chillers	8.0%	17.9%	$ 0.330	$ 0.249	$ 0.081	$ 0.025	15	1.6871241	1
ComCooE6	lectronic_Equipment_M	Mfg. Computers	Process Cooling	Existing	6	Improved Controls	33.8%	6.0%	$ 1.118	$ 0.673	$ 0.445	$ 0.025	15	0.5242095	0
ComCooT7	lectronic_Equipment_M	Mfg. Computers	Process Cooling	Turnover	7	Adjustable speed drive on compressors	34.0%	11.7%	$ 0.201	$ 0.121	$ 0.080	$ 0.025	10	1.5311461	1
ComCooE8	lectronic_Equipment_M	Mfg. Computers	Process Cooling	Existing	8	Optimization of operating parameters	35.0%	13.1%	$ 0.101	$ 0.039	$ 0.063	$ 0.025	3	0.8070835	0
ComCooT9	lectronic_Equipment_M	Mfg. Computers	Process Cooling	Turnover	9	Cold Storage Retrofit	25.6%	20.7%	$ 0.250	$ 0.157	$ 0.093	$ 0.025	10	1.2595366	1
ComHeaE1	lectronic_Equipment_M	Mfg. Computers	Process Heating	Existing	1	Improved Controls	41.5%	30.4%	$ 0.245	$ 0.147	$ 0.098	$ 0.025	10	1.2843727	1
ComHeaE2	lectronic_Equipment_M	Mfg. Computers	Process Heating	Existing	2	Process Heat O&M	69.5%	28.6%	$ 0.257	$ 0.225	$ 0.032	$ 0.025	2	0.2324913	0
ComHT1	lectronic_Equipment_M	Mfg. Computers	HVAC	Turnover	1	Equipment Upgrades	74.9%	16.4%	$ 0.296	$ 0.252	$ 0.044	$ 0.025	15	1.8861037	1
ComHE2	lectronic_Equipment_M	Mfg. Computers	HVAC	Existing	2	Improved Controls	38.9%	20.9%	$ 0.102	$ 0.077	$ 0.025	$ 0.025	10	2.7610834	1
ComHE3	lectronic_Equipment_M	Mfg. Computers	HVAC	Existing	3	Recommissioning	86.4%	16.0%	$ 0.271	$ -	$ 0.271	$ 0.025	7	0.8341842	0
ComLT1	lectronic_Equipment_M	Mfg. Computers	Lighting	Turnover	1	Efficient Lighting Equipment	30.4%	19.9%	$ 0.150	$ 0.103	$ 0.047	$ 0.025	10	1.9987264	1
ComLT2	lectronic_Equipment_M	Mfg. Computers	Lighting	Turnover	2	HighBay Lighting Equipment	55.1%	34.1%	$ 0.376	$ 0.295	$ 0.081	$ 0.025	10	0.8735989	0
ComLE3	lectronic_Equipment_M	Mfg. Computers	Lighting	Existing	3	Lighting Controls	42.3%	30.0%	$ 0.212	$ 0.157	$ 0.055	$ 0.025	10	1.4773086	1
ComMT1		Mfg. Computers	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	42.8%	0.9%	$ 0.372	$ 0.372	$ -	$ 0.025	15	1.5269248	1
ComMT10	lectronic_Equipment_M	Mfg. Computers	Motors	Turnover	10	Material Handling	52.9%	5.0%	$ 0.585	$ 0.483	$ 0.102	$ 0.025	10	0.5786809	0
ComMT11	lectronic_Equipment_M	Mfg. Computers	Motors	Turnover	11	Air Compressor Demand Reduction	25.5%	15.9%	$ 0.107	$ 0.081	$ 0.026	$ 0.025	10	2.6817522	1
ComME6	lectronic_Equipment_M	Mfg. Computers	Motors	Existing	6	Material Handling VFD	52.9%	18.7%	$ 0.381	$ 0.229	$ 0.152	$ 0.025	10	0.869152	0
ComME13	lectronic_Equipment_M	Mfg. Computers	Motors	Existing	13	Motor Management Plan	49.2%	2.9%	$ 0.134	$ 0.054	$ 0.080	$ 0.025	10	2.214559	1
ComMT15	lectronic_Equipment_M	Mfg. Computers	Motors	Turnover	15	Motors: Rewind 101-200 HP	25.4%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	1.8127173	1
ComMT16	lectronic_Equipment_M	Mfg. Computers	Motors	Turnover	16	Motors: Rewind 201-500 HP	35.6%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	1.8127173	1
ComMT17	lectronic_Equipment_M	Mfg. Computers	Motors	Turnover	17	Motors: Rewind 20-50 HP	4.7%	0.9%	$ 0.431	$ 0.356	$ 0.075	$ 0.025	15	1.3294065	1
ComMT18	lectronic_Equipment_M	Mfg. Computers	Motors	Turnover	18	Motors: Rewind 500+ HP	55.2%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	1.8127173	1
ComMT19	lectronic_Equipment_M	Mfg. Computers	Motors	Turnover	19	Motors: Rewind 51-100 HP	15.2%	0.6%	$ 0.388	$ 0.321	$ 0.067	$ 0.025	15	1.4678581	1
ComMT2		Mfg. Computers	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	66.3%	0.4%	$ 0.799	$ 0.799	$ -	$ 0.025	15	0.7359718	0

Measure Lookup	Industry	New Segment	New End-Use	Vintage	easure Numb	Measure	Applicability	Savings	Total Cost ($/kW Saved)	Equipment Cost	Labor Cost	Admin Costs ($/kWh Saved)	Life	TRC Test	Economic Flag
ComMT20	lectronic_Equipment_M	Mfg. Computers	Motors	Turnover	20	Properly Sized Fans	14.8%	10.4%	$ 0.202	$ 0.122	$ 0.080	$ 0.025	10	1.5542463	1
ComME21	lectronic_Equipment_M	Mfg. Computers	Motors	Existing	21	Air Compressor Optimization	35.0%	30.1%	$ 0.151	$ 0.058	$ 0.093	$ 0.025	10	2.0004569	1
ComME22	lectronic_Equipment_M	Mfg. Computers	Motors	Existing	22	Pump Energy Management	30.1%	7.5%	$ 0.134	$ 0.054	$ 0.080	$ 0.025	10	2.214559	1
ComMT23	lectronic_Equipment_M	Mfg. Computers	Motors	Turnover	23	Pump Equipment Upgrade	32.6%	20.0%	$ 0.156	$ 0.129	$ 0.027	$ 0.025	10	1.9449466	1
ComME24	lectronic_Equipment_M	Mfg. Computers	Motors	Existing	24	Pump System Optimization	15.0%	12.1%	$ 0.391	$ 0.196	$ 0.195	$ 0.025	12	1.1122362	1
ComMT25	lectronic_Equipment_M	Mfg. Computers	Motors	Turnover	25	Switch from Belt drive to Direct Drive	10.5%	7.5%	$ 0.268	$ 0.221	$ 0.046	$ 0.025	12	1.5823435	1
ComMT26	lectronic_Equipment_M	Mfg. Computers	Motors	Turnover	26	Synchronous Belts	20.8%	1.1%	$ 0.268	$ 0.221	$ 0.046	$ 0.025	10	1.2054867	1
ComMT27	lectronic_Equipment_M	Mfg. Computers	Motors	Turnover	27	Efficient Centrifugal Fan	10.3%	20.0%	$ 0.228	$ 0.188	$ 0.040	$ 0.025	10	1.3973192	1
ComMT28		Mfg. Computers	Motors	Turnover	28	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	74.4%	0.91%	$ 2.085	$ 2.085	$ -	$ 0.025	15	0.2873799	0
ComMT29		Mfg. Computers	Motors	Turnover	29	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	55.8%	0.39%	$ 0.436	$ 0.436	$ -	$ 0.025	15	1.3152868	1
ComME3	lectronic_Equipment_M	Mfg. Computers	Motors	Existing	3	Fan System Optimization	29.1%	7.7%	$ 0.311	$ 0.156	$ 0.155	$ 0.025	10	1.0505007	1
ComMT30		Mfg. Computers	Motors	Turnover	30	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	74.4%	0.7%	$ 1.249	$ 1.249	$ -	$ 0.025	15	0.4758305	0
ComMT4	lectronic_Equipment_M	Mfg. Computers	Motors	Turnover	4	High efficiency Compressor motors	73.8%	1.1%	$ 0.430	$ 0.355	$ 0.075	$ 0.025	15	1.3331511	1
ComMT5	lectronic_Equipment_M	Mfg. Computers	Motors	Turnover	5	High Efficiency Motors	73.8%	1.5%	$ 0.545	$ 0.450	$ 0.095	$ 0.025	15	1.064045	1
ComOT1	lectronic_Equipment_M	Mfg. Computers	Other	Turnover	1	Bldg Improvements	35.0%	20.4%	$ 0.248	$ 0.162	$ 0.087	$ 0.025	15	2.1868274	1
ComOT2	lectronic_Equipment_M	Mfg. Computers	Other	Turnover	2	Elec Chip Fab: Eliminate Exhaust	80.1%	5.0%	$ 0.233	$ 0.206	$ 0.026	$ 0.025	10	1.3409662	1
ComOT3	lectronic_Equipment_M	Mfg. Computers	Other	Turnover	3	Elec Chip Fab: Exhaust Injector	35.0%	100.0%	$ 0.561	$ 0.498	$ 0.064	$ 0.025	10	0.589453	0
ComCooT11	lectronic_Equipment_M	Mfg. Computers	Process Cooling	Turnover	11	Elec Chip Fab: Reduce Gas Pressure	5.0%	10.0%	$ 0.063	$ -	$ 0.063	$ 0.025	10	3.959402	1
ComOE5	lectronic_Equipment_M	Mfg. Computers	Other	Existing	5	Energy Project Management	27.0%	29.0%	$ 0.163	$ 0.134	$ 0.029	$ 0.025	11	2.1355652	1
ComOE6	lectronic_Equipment_M	Mfg. Computers	Other	Existing	6	Integrated Plant Energy Management	22.0%	50.0%	$ 0.261	$ 0.215	$ 0.047	$ 0.025	11	1.4034422	1
ComOE7	lectronic_Equipment_M	Mfg. Computers	Other	Existing	7	Plant Energy Management	27.0%	12.0%	$ 0.139	$ 0.114	$ 0.025	$ 0.025	10	2.1101009	1
ComOT8	lectronic_Equipment_M	Mfg. Computers	Other	Turnover	8	Transformers	20.0%	1.6%	$ 0.415	$ 0.399	$ 0.016	$ 0.025	15	1.3570186	1
FooCooT1	Food_Mfg	Mfg. Food	Process Cooling	Turnover	1	Equipment: Chillers	8.3%	17.9%	$ 0.330	$ 0.249	$ 0.081	$ 0.025	15	1.6871241	1
FooCooE2	Food_Mfg	Mfg. Food	Process Cooling	Existing	2	Improved Controls	35.2%	6.0%	$ 1.118	$ 0.673	$ 0.445	$ 0.025	15	0.5242095	0
FooCooT3	Food_Mfg	Mfg. Food	Process Cooling	Turnover	3	Adjustable speed drive on compressors	34.0%	11.7%	$ 0.201	$ 0.121	$ 0.080	$ 0.025	10	1.5311461	1
FooCooT4	Food_Mfg	Mfg. Food	Process Cooling	Turnover	4	Food: Cooling and Storage	15.0%	15.4%	$ 0.258	$ 0.162	$ 0.096	$ 0.025	10	1.2245103	1
FooCooT5	Food_Mfg	Mfg. Food	Process Cooling	Turnover	5	Food: Refrig Storage Tuneup	7.5%	14.4%	$ 0.056	$ 0.023	$ 0.033	$ 0.025	3	1.2587217	1
FooCooT6	Food_Mfg	Mfg. Food	Process Cooling	Turnover	6	Fruit Storage Refer Retrofit	60.7%	38.2%	$ 0.214	$ 0.135	$ 0.079	$ 0.025	10	1.4475715	1
FooCooT7	Food_Mfg	Mfg. Food	Process Cooling	Turnover	7	Fruit Storage Tuneup	10.0%	15.6%	$ 0.056	$ 0.023	$ 0.033	$ 0.025	3	1.2587217	1
FooCooE8	Food_Mfg	Mfg. Food	Process Cooling	Existing	8	Optimization of operating parameters	35.0%	13.1%	$ 0.101	$ 0.039	$ 0.063	$ 0.025	3	0.8070835	0
FooHeaE1	Food_Mfg	Mfg. Food	Process Heating	Existing	1	Improved Controls	38.8%	30.4%	$ 0.245	$ 0.147	$ 0.098	$ 0.025	10	1.2843727	1
FooHeaE2	Food_Mfg	Mfg. Food	Process Heating	Existing	2	Process Heat O&M	65.0%	28.6%	$ 0.257	$ 0.225	$ 0.032	$ 0.025	2	0.2324913	0
FooHT1	Food_Mfg	Mfg. Food	HVAC	Turnover	1	Equipment Upgrades	62.9%	16.4%	$ 0.296	$ 0.252	$ 0.044	$ 0.025	15	1.8861037	1
FooHE2	Food_Mfg	Mfg. Food	HVAC	Existing	2	Improved Controls	32.7%	20.9%	$ 0.102	$ 0.077	$ 0.025	$ 0.025	10	2.7610834	1
FooHE3	Food_Mfg	Mfg. Food	HVAC	Existing	3	Recommissioning	72.6%	16.0%	$ 0.271	$ -	$ 0.271	$ 0.025	7	0.8341842	0
FooLT1	Food_Mfg	Mfg. Food	Lighting	Turnover	1	Efficient Lighting Equipment	30.4%	19.9%	$ 0.150	$ 0.103	$ 0.047	$ 0.025	10	1.9987264	1
FooLT2	Food_Mfg	Mfg. Food	Lighting	Turnover	2	HighBay Lighting Equipment	55.1%	34.1%	$ 0.376	$ 0.295	$ 0.081	$ 0.025	10	0.8735989	0
FooLE3	Food_Mfg	Mfg. Food	Lighting	Existing	3	Lighting Controls	42.3%	30.0%	$ 0.212	$ 0.157	$ 0.055	$ 0.025	10	1.4773086	1
FooME1	Food_Mfg	Mfg. Food	Motors	Existing	1	Fan System Optimization	29.6%	7.7%	$ 0.311	$ 0.156	$ 0.155	$ 0.025	10	1.0505007	1
FooME4	Food_Mfg	Mfg. Food	Motors	Existing	4	Material Handling VFD	51.6%	18.7%	$ 0.381	$ 0.229	$ 0.152	$ 0.025	10	0.869152	0
FooME11	Food_Mfg	Mfg. Food	Motors	Existing	11	Motor Management Plan	48.9%	2.9%	$ 0.134	$ 0.054	$ 0.080	$ 0.025	10	2.214559	1
FooMT13	Food_Mfg	Mfg. Food	Motors	Turnover	13	Motors: Rewind 101-200 HP	25.4%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	1.8127173	1
FooMT14	Food_Mfg	Mfg. Food	Motors	Turnover	14	Motors: Rewind 201-500 HP	35.6%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	1.8127173	1
FooMT15	Food_Mfg	Mfg. Food	Motors	Turnover	15	Motors: Rewind 20-50 HP	4.6%	0.9%	$ 0.431	$ 0.356	$ 0.075	$ 0.025	15	1.3294065	1
FooMT16	Food_Mfg	Mfg. Food	Motors	Turnover	16	Motors: Rewind 500+ HP	55.2%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	1.8127173	1
FooMT17	Food_Mfg	Mfg. Food	Motors	Turnover	17	Motors: Rewind 51-100 HP	15.2%	0.6%	$ 0.388	$ 0.321	$ 0.067	$ 0.025	15	1.4678581	1
FooME18	Food_Mfg	Mfg. Food	Motors	Existing	18	Air Compressor Optimization	35.0%	30.1%	$ 0.151	$ 0.058	$ 0.093	$ 0.025	10	2.0004569	1
FooMT19	Food_Mfg	Mfg. Food	Motors	Turnover	19	Properly Sized Fans	15.0%	10.4%	$ 0.202	$ 0.122	$ 0.080	$ 0.025	10	1.5542463	1
FooMT2	Food_Mfg	Mfg. Food	Motors	Turnover	2	High efficiency Compressor motors	73.8%	1.1%	$ 0.430	$ 0.355	$ 0.075	$ 0.025	15	1.3331511	1
FooME20	Food_Mfg	Mfg. Food	Motors	Existing	20	Pump Energy Management	30.5%	7.5%	$ 0.134	$ 0.054	$ 0.080	$ 0.025	10	2.214559	1
FooMT21	Food_Mfg	Mfg. Food	Motors	Turnover	21	Pump Equipment Upgrade	33.0%	20.0%	$ 0.156	$ 0.129	$ 0.027	$ 0.025	10	1.9449466	1
FooME22	Food_Mfg	Mfg. Food	Motors	Existing	22	Pump System Optimization	15.2%	12.1%	$ 0.391	$ 0.196	$ 0.195	$ 0.025	12	1.1122362	1
FooMT23	Food_Mfg	Mfg. Food	Motors	Turnover	23	Switch from Belt drive to Direct Drive	10.2%	7.5%	$ 0.268	$ 0.221	$ 0.046	$ 0.025	12	1.5823435	1
FooMT24	Food_Mfg	Mfg. Food	Motors	Turnover	24	Synchronous Belts	20.8%	1.1%	$ 0.268	$ 0.221	$ 0.046	$ 0.025	10	1.2054867	1
FooMT25	Food_Mfg	Mfg. Food	Motors	Turnover	25	Efficient Centrifugal Fan	10.5%	20.0%	$ 0.228	$ 0.188	$ 0.040	$ 0.025	10	1.3973192	1
FooMT26		Mfg. Food	Motors	Turnover	26	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	74.4%	0.91%	$ 2.085	$ 2.085	$ -	$ 0.025	15	0.2873799	0
FooMT27		Mfg. Food	Motors	Turnover	27	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	55.8%	0.39%	$ 0.436	$ 0.436	$ -	$ 0.025	15	1.3152868	1
FooMT28		Mfg. Food	Motors	Turnover	28	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	74.4%	0.7%	$ 1.249	$ 1.249	$ -	$ 0.025	15	0.4758305	0
FooMT29		Mfg. Food	Motors	Turnover	29	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	42.8%	0.9%	$ 0.372	$ 0.372	$ -	$ 0.025	15	1.5269248	1
FooMT3	Food_Mfg	Mfg. Food	Motors	Turnover	3	High Efficiency Motors	74.0%	1.5%	$ 0.545	$ 0.450	$ 0.095	$ 0.025	15	1.064045	1
FooMT30		Mfg. Food	Motors	Turnover	30	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	66.3%	0.4%	$ 0.799	$ 0.799	$ -	$ 0.025	15	0.7359718	0
FooMT7	Food_Mfg	Mfg. Food	Motors	Turnover	7	Air Compressor Demand Reduction	25.5%	15.9%	$ 0.107	$ 0.081	$ 0.026	$ 0.025	10	2.6817522	1
FooMT9	Food_Mfg	Mfg. Food	Motors	Turnover	9	Material Handling	51.6%	5.0%	$ 0.585	$ 0.483	$ 0.102	$ 0.025	10	0.5786809	0
FooOT1	Food_Mfg	Mfg. Food	Other	Turnover	1	Bldg Improvements	35.0%	20.4%	$ 0.248	$ 0.162	$ 0.087	$ 0.025	15	2.1868274	1
FooOE2	Food_Mfg	Mfg. Food	Other	Existing	2	Energy Project Management	27.0%	29.0%	$ 0.163	$ 0.134	$ 0.029	$ 0.025	11	2.1355652	1
FooOE3	Food_Mfg	Mfg. Food	Other	Existing	3	Integrated Plant Energy Management	22.0%	50.0%	$ 0.261	$ 0.215	$ 0.047	$ 0.025	11	1.4034422	1
FooOE4	Food_Mfg	Mfg. Food	Other	Existing	4	Plant Energy Management	27.0%	12.0%	$ 0.139	$ 0.114	$ 0.025	$ 0.025	10	2.1101009	1
FooOT5	Food_Mfg	Mfg. Food	Other	Turnover	5	Transformers	20.0%	1.6%	$ 0.415	$ 0.399	$ 0.016	$ 0.025	15	1.3570186	1
MetCooT1	Primary_Metal_Mfg	Mfg. Metals	Process Cooling	Turnover	1	Equipment: Chillers	8.0%	17.9%	$ 0.330	$ 0.249	$ 0.081	$ 0.025	15	1.6871241	1
MetCooe2	Primary_Metal_Mfg	Mfg. Metals	Process Cooling	existing	2	Improved Controls	33.8%	6.0%	$ 1.118	$ 0.673	$ 0.445	$ 0.025	15	0.5242095	0
MetCooE3	Primary_Metal_Mfg	Mfg. Metals	Process Cooling	Existing	3	Optimization of operating parameters	35.0%	13.1%	$ 0.101	$ 0.039	$ 0.063	$ 0.025	3	0.8070835	0
MetHeaE1	Primary_Metal_Mfg	Mfg. Metals	Process Heating	Existing	1	Improved Controls	40.1%	30.4%	$ 0.245	$ 0.147	$ 0.098	$ 0.025	10	1.2843727	1
MetHeaT2	Primary_Metal_Mfg	Mfg. Metals	Process Heating	Turnover	2	Metal: New Arc Furnace	10.3%	45.0%	$ 0.115	$ 0.102	$ 0.013	$ 0.025	10	2.4737579	1
MetHeaE3	Primary_Metal_Mfg	Mfg. Metals	Process Heating	Existing	3	Process Heat O&M	67.2%	28.6%	$ 0.257	$ 0.225	$ 0.032	$ 0.025	2	0.2324913	0
MetHT1	Primary_Metal_Mfg	Mfg. Metals	HVAC	Turnover	1	Equipment Upgrades	64.7%	16.4%	$ 0.296	$ 0.252	$ 0.044	$ 0.025	15	1.8861037	1
MetHE2	Primary_Metal_Mfg	Mfg. Metals	HVAC	Existing	2	Improved Controls	33.6%	20.9%	$ 0.102	$ 0.077	$ 0.025	$ 0.025	10	2.7610834	1

Measure Lookup	Industry	New Segment	New End-Use	Vintage	easure Numb	Measure	Applicability	Savings	Total Cost ($/kW Saved)	Equipment Cost	Labor Cost	Admin Costs ($/kWh Saved)	Life	TRC Test	Economic Flag
MetHE3	Primary_Metal_Mfg	Mfg. Metals	HVAC	Existing	3	Recommissioning	74.7%	16.0%	$ 0.271	$ -	$ 0.271	$ 0.025	7	0.8341842	0
MetLT1	Primary_Metal_Mfg	Mfg. Metals	Lighting	Turnover	1	Efficient Lighting Equipment	30.4%	19.9%	$ 0.150	$ 0.103	$ 0.047	$ 0.025	10	1.9987264	1
MetLT2	Primary_Metal_Mfg	Mfg. Metals	Lighting	Turnover	2	HighBay Lighting Equipment	55.1%	34.1%	$ 0.376	$ 0.295	$ 0.081	$ 0.025	10	0.8735989	0
MetLE3	Primary_Metal_Mfg	Mfg. Metals	Lighting	Existing	3	Lighting Controls	42.3%	30.0%	$ 0.212	$ 0.157	$ 0.055	$ 0.025	10	1.4773086	1
MetMT1	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	1	Air Compressor Demand Reduction	25.3%	15.9%	$ 0.107	$ 0.081	$ 0.026	$ 0.025	10	2.6817522	1
MetME10	Primary_Metal_Mfg	Mfg. Metals	Motors	Existing	10	Motor Management Plan	49.1%	2.9%	$ 0.134	$ 0.054	$ 0.080	$ 0.025	10	2.214559	1
MetME12	Primary_Metal_Mfg	Mfg. Metals	Motors	Existing	12	Air Compressor Optimization	34.7%	30.1%	$ 0.151	$ 0.058	$ 0.093	$ 0.025	10	2.0004569	1
MetMT13	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	13	Motors: Rewind 101-200 HP	25.4%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	1.8127173	1
MetMT14	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	14	Motors: Rewind 201-500 HP	35.6%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	1.8127173	1
MetMT15	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	15	Motors: Rewind 20-50 HP	4.6%	0.9%	$ 0.431	$ 0.356	$ 0.075	$ 0.025	15	1.3294065	1
MetMT16	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	16	Motors: Rewind 500+ HP	55.2%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	1.8127173	1
MetMT17	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	17	Motors: Rewind 51-100 HP	15.2%	0.6%	$ 0.388	$ 0.321	$ 0.067	$ 0.025	15	1.4678581	1
MetMT18	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	18	Properly Sized Fans	14.7%	10.4%	$ 0.202	$ 0.122	$ 0.080	$ 0.025	10	1.5542463	1
MetME19	Primary_Metal_Mfg	Mfg. Metals	Motors	Existing	19	Pump Energy Management	29.8%	7.5%	$ 0.134	$ 0.054	$ 0.080	$ 0.025	10	2.214559	1
MetMT2	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	2	High efficiency Compressor motors	73.1%	1.1%	$ 0.430	$ 0.355	$ 0.075	$ 0.025	15	1.3331511	1
MetMT20	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	20	Pump Equipment Upgrade	32.3%	20.0%	$ 0.156	$ 0.129	$ 0.027	$ 0.025	10	1.9449466	1
MetME21	Primary_Metal_Mfg	Mfg. Metals	Motors	Existing	21	Pump System Optimization	14.9%	12.1%	$ 0.391	$ 0.196	$ 0.195	$ 0.025	12	1.1122362	1
MetMT22	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	22	Efficient Centrifugal Fan	10.3%	20.0%	$ 0.228	$ 0.188	$ 0.040	$ 0.025	10	1.3973192	1
MetMT23	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	23	Switch from Belt drive to Direct Drive	10.4%	7.5%	$ 0.268	$ 0.221	$ 0.046	$ 0.025	12	1.5823435	1
MetMT24	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	24	Synchronous Belts	20.6%	1.1%	$ 0.268	$ 0.221	$ 0.046	$ 0.025	10	1.2054867	1
MetMT25		Mfg. Metals	Motors	Turnover	25	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	74.4%	0.91%	$ 2.085	$ 2.085	$ -	$ 0.025	15	0.2873799	0
MetMT26		Mfg. Metals	Motors	Turnover	26	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	55.8%	0.39%	$ 0.436	$ 0.436	$ -	$ 0.025	15	1.3152868	1
MetMT27		Mfg. Metals	Motors	Turnover	27	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	74.4%	0.7%	$ 1.249	$ 1.249	$ -	$ 0.025	15	0.4758305	0
MetMT28		Mfg. Metals	Motors	Turnover	28	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	42.8%	0.9%	$ 0.372	$ 0.372	$ -	$ 0.025	15	1.5269248	1
MetMT29		Mfg. Metals	Motors	Turnover	29	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	66.3%	0.4%	$ 0.799	$ 0.799	$ -	$ 0.025	15	0.7359718	0
MetMT3	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	3	High Efficiency Motors	73.3%	1.5%	$ 0.545	$ 0.450	$ 0.095	$ 0.025	15	1.064045	1
MetME30	Primary_Metal_Mfg	Mfg. Metals	Motors	Existing	30	Fan System Optimization	29.0%	7.7%	$ 0.311	$ 0.156	$ 0.155	$ 0.025	10	1.0505007	1
MetMT8	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	8	Material Handling	52.4%	5.0%	$ 0.585	$ 0.483	$ 0.102	$ 0.025	10	0.5786809	0
MetME4	Primary_Metal_Mfg	Mfg. Metals	Motors	Existing	4	Material Handling VFD	52.4%	18.7%	$ 0.381	$ 0.229	$ 0.152	$ 0.025	10	0.869152	0
MetOT1	Primary_Metal_Mfg	Mfg. Metals	Other	Turnover	1	Bldg Improvements	35.0%	20.4%	$ 0.248	$ 0.162	$ 0.087	$ 0.025	15	2.1868274	1
MetOE2	Primary_Metal_Mfg	Mfg. Metals	Other	Existing	2	Energy Project Management	27.0%	29.0%	$ 0.163	$ 0.134	$ 0.029	$ 0.025	11	2.1355652	1
MetOE3	Primary_Metal_Mfg	Mfg. Metals	Other	Existing	3	Integrated Plant Energy Management	22.0%	50.0%	$ 0.261	$ 0.215	$ 0.047	$ 0.025	11	1.4034422	1
MetOE4	Primary_Metal_Mfg	Mfg. Metals	Other	Existing	4	Plant Energy Management	27.0%	12.0%	$ 0.139	$ 0.114	$ 0.025	$ 0.025	10	2.1101009	1
MetOT5	Primary_Metal_Mfg	Mfg. Metals	Other	Turnover	5	Transformers	20.0%	1.6%	$ 0.415	$ 0.399	$ 0.016	$ 0.025	15	1.3570186	1
OthCooT1	Miscellaneous_Mfg	Mfg. Other	Process Cooling	Turnover	1	Equipment: Chillers	8.0%	17.9%	$ 0.330	$ 0.249	$ 0.081	$ 0.025	15	1.6871241	1
OthCooE2	Miscellaneous_Mfg	Mfg. Other	Process Cooling	Existing	2	Improved Controls	33.8%	6.0%	$ 1.118	$ 0.673	$ 0.445	$ 0.025	15	0.5242095	0
OthCooT3	one_Clay_Glass_Produc	Mfg. Other	Process Cooling	Turnover	3	Adjustable speed drive on compressors	34.0%	11.7%	$ 0.201	$ 0.121	$ 0.080	$ 0.025	10	1.5311461	1
OthCooE4	Miscellaneous_Mfg	Mfg. Other	Process Cooling	Existing	4	Optimization of operating parameters	35.0%	13.1%	$ 0.101	$ 0.039	$ 0.063	$ 0.025	3	0.8070835	0
OthCooT5	Miscellaneous_Mfg	Mfg. Other	Process Cooling	Turnover	5	Cold Storage Retrofit	25.6%	20.7%	$ 0.250	$ 0.157	$ 0.093	$ 0.025	10	1.2595366	1
OthCooE6	Miscellaneous_Mfg	Mfg. Other	Process Cooling	Existing	6	Cold Storage Tuneup	10.0%	15.6%	$ 0.112	$ 0.047	$ 0.065	$ 0.025	3	0.7444628	0
OthHeae1	Miscellaneous_Mfg	Mfg. Other	Process Heating	existing	1	Improved Controls	41.7%	30.4%	$ 0.245	$ 0.147	$ 0.098	$ 0.025	10	1.2843727	1
OthHeae2	Miscellaneous_Mfg	Mfg. Other	Process Heating	existing	2	Process Heat O&M	69.8%	28.6%	$ 0.257	$ 0.225	$ 0.032	$ 0.025	2	0.2324913	0
OthHT1	Miscellaneous_Mfg	Mfg. Other	HVAC	Turnover	1	Equipment Upgrades	64.4%	16.4%	$ 0.296	$ 0.252	$ 0.044	$ 0.025	15	1.8861037	1
OthHE2	Miscellaneous_Mfg	Mfg. Other	HVAC	Existing	2	Improved Controls	33.4%	20.9%	$ 0.102	$ 0.077	$ 0.025	$ 0.025	10	2.7610834	1
OthHE3	Miscellaneous_Mfg	Mfg. Other	HVAC	Existing	3	Recommissioning	74.3%	16.0%	$ 0.271	$ -	$ 0.271	$ 0.025	7	0.8341842	0
OthLT1	Miscellaneous_Mfg	Mfg. Other	Lighting	Turnover	1	Efficient Lighting Equipment	30.4%	19.9%	$ 0.150	$ 0.103	$ 0.047	$ 0.025	10	1.9987264	1
OthLT2	Miscellaneous_Mfg	Mfg. Other	Lighting	Turnover	2	HighBay Lighting Equipment	55.1%	34.1%	$ 0.376	$ 0.295	$ 0.081	$ 0.025	10	0.8735989	0
OthLE3	Miscellaneous_Mfg	Mfg. Other	Lighting	Existing	3	Lighting Controls	42.3%	30.0%	$ 0.212	$ 0.157	$ 0.055	$ 0.025	10	1.4773086	1
OthMT1		Mfg. Other	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	74.4%	0.7%	$ 1.249	$ 1.249	$ -	$ 0.025	15	0.4758305	0
OthMT11	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	11	Air Compressor Demand Reduction	26.0%	15.9%	$ 0.107	$ 0.081	$ 0.026	$ 0.025	10	2.6817522	1
OthMT12	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	12	Material Handling	52.9%	5.0%	$ 0.585	$ 0.483	$ 0.102	$ 0.025	10	0.5786809	0
OthME13	Miscellaneous_Mfg	Mfg. Other	Motors	Existing	13	Material Handling VFD	52.9%	18.7%	$ 0.381	$ 0.229	$ 0.152	$ 0.025	10	0.869152	0
OthME14	Miscellaneous_Mfg	Mfg. Other	Motors	Existing	14	Motor Management Plan	50.0%	2.9%	$ 0.134	$ 0.054	$ 0.080	$ 0.025	10	2.214559	1
OthMT16	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	16	Motors: Rewind 101-200 HP	25.4%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	1.8127173	1
OthMT17	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	17	Motors: Rewind 201-500 HP	35.6%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	1.8127173	1
OthMT18	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	18	Motors: Rewind 20-50 HP	4.7%	0.9%	$ 0.431	$ 0.356	$ 0.075	$ 0.025	15	1.3294065	1
OthMT19	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	19	Motors: Rewind 500+ HP	55.2%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	1.8127173	1
OthMT2		Mfg. Other	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	42.8%	0.9%	$ 0.372	$ 0.372	$ -	$ 0.025	15	1.5269248	1
OthMT20	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	20	Motors: Rewind 51-100 HP	15.2%	0.6%	$ 0.388	$ 0.321	$ 0.067	$ 0.025	15	1.4678581	1
OthMT21	one_Clay_Glass_Produc	Mfg. Other	Motors	Turnover	21	Air Compressor Equipment	17.0%	8.8%	$ 0.157	$ 0.130	$ 0.027	$ 0.025	10	1.9366539	1
OthMT22	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	22	Properly Sized Fans	15.3%	10.4%	$ 0.202	$ 0.122	$ 0.080	$ 0.025	10	1.5542463	1
OthME23	Miscellaneous_Mfg	Mfg. Other	Motors	Existing	23	Pump Energy Management	31.2%	7.5%	$ 0.134	$ 0.054	$ 0.080	$ 0.025	10	2.214559	1
OthMT24	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	24	Pump Equipment Upgrade	33.8%	20.0%	$ 0.156	$ 0.129	$ 0.027	$ 0.025	10	1.9449466	1
OthME25	Miscellaneous_Mfg	Mfg. Other	Motors	Existing	25	Pump System Optimization	15.5%	12.1%	$ 0.391	$ 0.196	$ 0.195	$ 0.025	12	1.1122362	1
OthMT26	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	26	Switch from Belt drive to Direct Drive	10.5%	7.5%	$ 0.268	$ 0.221	$ 0.046	$ 0.025	12	1.5823435	1
OthMT27	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	27	Synchronous Belts	21.4%	1.1%	$ 0.268	$ 0.221	$ 0.046	$ 0.025	10	1.2054867	1
OthME28	Miscellaneous_Mfg	Mfg. Other	Motors	Existing	28	Air Compressor Optimization	35.6%	30.1%	$ 0.151	$ 0.058	$ 0.093	$ 0.025	10	2.0004569	1
OthMT29	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	29	Efficient Centrifugal Fan	10.7%	20.0%	$ 0.228	$ 0.188	$ 0.040	$ 0.025	10	1.3973192	1
OthMT3		Mfg. Other	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	66.3%	0.4%	$ 0.799	$ 0.799	$ -	$ 0.025	15	0.7359718	0
OthMT30		Mfg. Other	Motors	Turnover	30	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	74.4%	0.91%	$ 2.085	$ 2.085	$ -	$ 0.025	15	0.2873799	0
OthMT31		Mfg. Other	Motors	Turnover	31	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	55.8%	0.39%	$ 0.436	$ 0.436	$ -	$ 0.025	15	1.3152868	1
OthME4	Miscellaneous_Mfg	Mfg. Other	Motors	Existing	4	Fan System Optimization	30.1%	7.7%	$ 0.311	$ 0.156	$ 0.155	$ 0.025	10	1.0505007	1
OthMT5	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	5	High efficiency Compressor motors	75.1%	1.1%	$ 0.430	$ 0.355	$ 0.075	$ 0.025	15	1.3331511	1
OthMT6	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	6	High Efficiency Motors	75.6%	1.5%	$ 0.545	$ 0.450	$ 0.095	$ 0.025	15	1.064045	1
OthOT1	Miscellaneous_Mfg	Mfg. Other	Other	Turnover	1	Bldg Improvements	35.0%	20.4%	$ 0.248	$ 0.162	$ 0.087	$ 0.025	15	2.1868274	1
OthOE2	Miscellaneous_Mfg	Mfg. Other	Other	Existing	2	Energy Project Management	27.0%	29.0%	$ 0.163	$ 0.134	$ 0.029	$ 0.025	11	2.1355652	1

Measure Lookup	Industry	New Segment	New End-Use	Vintage	easure Numb	Measure	Applicability	Savings	Total Cost ($/kW Saved)	Equipment Cost	Labor Cost	Admin Costs ($/kWh Saved)	Life	TRC Test	Economic Flag
OthOE3	Miscellaneous_Mfg	Mfg. Other	Other	Existing	3	Integrated Plant Energy Management	22.0%	50.0%	$ 0.261	$ 0.215	$ 0.047	$ 0.025	11	1.4034422	1
OthOE4	Miscellaneous_Mfg	Mfg. Other	Other	Existing	4	Plant Energy Management	27.0%	12.0%	$ 0.139	$ 0.114	$ 0.025	$ 0.025	10	2.1101009	1
OthOT5	Miscellaneous_Mfg	Mfg. Other	Other	Turnover	5	Transformers	20.0%	1.6%	$ 0.415	$ 0.399	$ 0.016	$ 0.025	15	1.3570186	1
PapCooT1	Paper_Mfg	Mfg. Paper	Process Cooling	Turnover	1	Equipment: Chillers	8.0%	17.9%	$ 0.330	$ 0.249	$ 0.081	$ 0.025	15	1.6871241	1
PapCooE2	Paper_Mfg	Mfg. Paper	Process Cooling	Existing	2	Improved Controls	33.8%	6.0%	$ 1.118	$ 0.673	$ 0.445	$ 0.025	15	0.5242095	0
PapCooT3	Paper_Mfg	Mfg. Paper	Process Cooling	Turnover	3	Adjustable speed drive on compressors	34.0%	11.7%	$ 0.201	$ 0.121	$ 0.080	$ 0.025	10	1.5311461	1
PapCooE4	Paper_Mfg	Mfg. Paper	Process Cooling	Existing	4	Optimization of operating parameters	35.0%	13.1%	$ 0.101	$ 0.039	$ 0.063	$ 0.025	3	0.8070835	0
PapHeaE1	Paper_Mfg	Mfg. Paper	Process Heating	Existing	1	Improved Controls	38.1%	30.4%	$ 0.245	$ 0.147	$ 0.098	$ 0.025	10	1.2843727	1
PapHeaE2	Paper_Mfg	Mfg. Paper	Process Heating	Existing	2	Process Heat O&M	63.9%	28.6%	$ 0.257	$ 0.225	$ 0.032	$ 0.025	2	0.2324913	0
PapHT1	Paper_Mfg	Mfg. Paper	HVAC	Turnover	1	Equipment Upgrades	62.4%	16.4%	$ 0.296	$ 0.252	$ 0.044	$ 0.025	15	1.8861037	1
PapHE2	Paper_Mfg	Mfg. Paper	HVAC	Existing	2	Improved Controls	32.4%	20.9%	$ 0.102	$ 0.077	$ 0.025	$ 0.025	10	2.7610834	1
PapHE3	Paper_Mfg	Mfg. Paper	HVAC	Existing	3	Recommissioning	72.0%	16.0%	$ 0.271	$ -	$ 0.271	$ 0.025	7	0.8341842	0
PapLT1	Paper_Mfg	Mfg. Paper	Lighting	Turnover	1	Efficient Lighting Equipment	30.4%	19.9%	$ 0.150	$ 0.103	$ 0.047	$ 0.025	10	1.9987264	1
PapLT2	Paper_Mfg	Mfg. Paper	Lighting	Turnover	2	HighBay Lighting Equipment	55.1%	34.1%	$ 0.376	$ 0.295	$ 0.081	$ 0.025	10	0.8735989	0
PapLE3	Paper_Mfg	Mfg. Paper	Lighting	Existing	3	Lighting Controls	42.3%	30.0%	$ 0.212	$ 0.157	$ 0.055	$ 0.025	10	1.4773086	1
PapME1	Paper_Mfg	Mfg. Paper	Motors	Existing	1	Fan System Optimization	30.2%	7.7%	$ 0.311	$ 0.156	$ 0.155	$ 0.025	10	1.0505007	1
PapME10	Paper_Mfg	Mfg. Paper	Motors	Existing	10	Motor Management Plan	50.1%	2.9%	$ 0.134	$ 0.054	$ 0.080	$ 0.025	10	2.214559	1
PapMT11	Paper_Mfg	Mfg. Paper	Motors	Turnover	11	Air Compressor Demand Reduction	25.8%	15.9%	$ 0.107	$ 0.081	$ 0.026	$ 0.025	10	2.6817522	1
PapMT13	Paper_Mfg	Mfg. Paper	Motors	Turnover	13	Motors: Rewind 101-200 HP	25.4%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	1.8127173	1
PapMT14	Paper_Mfg	Mfg. Paper	Motors	Turnover	14	Motors: Rewind 201-500 HP	35.6%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	1.8127173	1
PapMT15	Paper_Mfg	Mfg. Paper	Motors	Turnover	15	Motors: Rewind 20-50 HP	4.7%	0.9%	$ 0.431	$ 0.356	$ 0.075	$ 0.025	15	1.3294065	1
PapMT16	Paper_Mfg	Mfg. Paper	Motors	Turnover	16	Motors: Rewind 500+ HP	55.2%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	1.8127173	1
PapMT17	Paper_Mfg	Mfg. Paper	Motors	Turnover	17	Motors: Rewind 51-100 HP	15.2%	0.6%	$ 0.388	$ 0.321	$ 0.067	$ 0.025	15	1.4678581	1
PapMT18	Paper_Mfg	Mfg. Paper	Motors	Turnover	18	Paper: Large Material Handling	25.2%	9.7%	$ 0.959	$ 0.850	$ 0.109	$ 0.025	10	0.358642	0
PapMT19	Paper_Mfg	Mfg. Paper	Motors	Turnover	19	Paper: Material Handling	25.2%	13.1%	$ 0.801	$ 0.710	$ 0.091	$ 0.025	10	0.4270114	0
PapMT2	Paper_Mfg	Mfg. Paper	Motors	Turnover	2	High efficiency Compressor motors	74.7%	1.1%	$ 0.430	$ 0.355	$ 0.075	$ 0.025	15	1.3331511	1
PapMT20	Paper_Mfg	Mfg. Paper	Motors	Turnover	20	Paper: Premium Control Large Material	25.2%	18.7%	$ 0.549	$ 0.486	$ 0.062	$ 0.025	10	0.6152985	0
PapME21	Paper_Mfg	Mfg. Paper	Motors	Existing	21	Air Compressor Optimization	35.4%	30.1%	$ 0.151	$ 0.058	$ 0.093	$ 0.025	10	2.0004569	1
PapMT22	Paper_Mfg	Mfg. Paper	Motors	Turnover	22	Paper: Premium Fan	25.5%	20.0%	$ 0.227	$ 0.201	$ 0.026	$ 0.025	10	1.4022249	1
PapMT23	Paper_Mfg	Mfg. Paper	Motors	Turnover	23	Properly Sized Fans	15.3%	10.4%	$ 0.202	$ 0.122	$ 0.080	$ 0.025	10	1.5542463	1
PapME24	Paper_Mfg	Mfg. Paper	Motors	Existing	24	Pump Energy Management	32.3%	7.5%	$ 0.134	$ 0.054	$ 0.080	$ 0.025	10	2.214559	1
PapMT25	Paper_Mfg	Mfg. Paper	Motors	Turnover	25	Pump Equipment Upgrade	34.9%	20.0%	$ 0.156	$ 0.129	$ 0.027	$ 0.025	10	1.9449466	1
PapME26	Paper_Mfg	Mfg. Paper	Motors	Existing	26	Pump System Optimization	16.1%	12.1%	$ 0.391	$ 0.196	$ 0.195	$ 0.025	12	1.1122362	1
PapMT27	Paper_Mfg	Mfg. Paper	Motors	Turnover	27	Switch from Belt drive to Direct Drive	10.6%	7.5%	$ 0.268	$ 0.221	$ 0.046	$ 0.025	12	1.5823435	1
PapMT28	Paper_Mfg	Mfg. Paper	Motors	Turnover	28	Synchronous Belts	21.4%	1.1%	$ 0.268	$ 0.221	$ 0.046	$ 0.025	10	1.2054867	1
PapMT29	Paper_Mfg	Mfg. Paper	Motors	Turnover	29	Efficient Centrifugal Fan	10.7%	20.0%	$ 0.228	$ 0.188	$ 0.040	$ 0.025	10	1.3973192	1
PapMT3	Paper_Mfg	Mfg. Paper	Motors	Turnover	3	High Efficiency Motors	76.7%	1.5%	$ 0.545	$ 0.450	$ 0.095	$ 0.025	15	1.064045	1
PapMT30		Mfg. Paper	Motors	Turnover	30	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	74.4%	0.91%	$ 2.085	$ 2.085	$ -	$ 0.025	15	0.2873799	0
PapMT31		Mfg. Paper	Motors	Turnover	31	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	55.8%	0.39%	$ 0.436	$ 0.436	$ -	$ 0.025	15	1.3152868	1
PapMT32		Mfg. Paper	Motors	Turnover	32	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	74.4%	0.7%	$ 1.249	$ 1.249	$ -	$ 0.025	15	0.4758305	0
PapMT33		Mfg. Paper	Motors	Turnover	33	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	42.8%	0.9%	$ 0.372	$ 0.372	$ -	$ 0.025	15	1.5269248	1
PapMT34		Mfg. Paper	Motors	Turnover	34	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	66.3%	0.4%	$ 0.799	$ 0.799	$ -	$ 0.025	15	0.7359718	0
PapMT8	Paper_Mfg	Mfg. Paper	Motors	Turnover	8	Material Handling	53.4%	5.0%	$ 0.585	$ 0.483	$ 0.102	$ 0.025	10	0.5786809	0
PapME9	Paper_Mfg	Mfg. Paper	Motors	Existing	9	Material Handling VFD	53.4%	18.7%	$ 0.381	$ 0.229	$ 0.152	$ 0.025	10	0.869152	0
PapOT1	Paper_Mfg	Mfg. Paper	Other	Turnover	1	Bldg Improvements	35.0%	20.4%	$ 0.248	$ 0.162	$ 0.087	$ 0.025	15	2.1868274	1
PapOE10	Paper_Mfg	Mfg. Paper	Other	Existing	10	Plant Energy Management	27.0%	12.0%	$ 0.139	$ 0.114	$ 0.025	$ 0.025	10	2.1101009	1
PapOT11	Paper_Mfg	Mfg. Paper	Other	Turnover	11	Transformers	20.0%	1.6%	$ 0.415	$ 0.399	$ 0.016	$ 0.025	15	1.3570186	1
PapOE2	Paper_Mfg	Mfg. Paper	Other	Existing	2	Energy Project Management	27.0%	29.0%	$ 0.163	$ 0.134	$ 0.029	$ 0.025	11	2.1355652	1
PapOE3	Paper_Mfg	Mfg. Paper	Other	Existing	3	Integrated Plant Energy Management	22.0%	50.0%	$ 0.261	$ 0.215	$ 0.047	$ 0.025	11	1.4034422	1
PapOT4	Paper_Mfg	Mfg. Paper	Other	Turnover	4	Kraft: Efficient Agitator	13.8%	50.0%	$ 0.104	$ 0.093	$ 0.012	$ 0.025	10	2.6697517	1
PapOT5	Paper_Mfg	Mfg. Paper	Other	Turnover	5	Kraft: Effluent Treatment System	9.2%	15.0%	$ 0.092	$ 0.082	$ 0.011	$ 0.025	10	2.9420775	1
PapOT6	Paper_Mfg	Mfg. Paper	Other	Turnover	6	Mech Pulp: Premium Process	22.5%	0.2%	$ 0.141	$ 0.125	$ 0.016	$ 0.025	5	1.0001376	1
PapOT7	Paper_Mfg	Mfg. Paper	Other	Turnover	7	Mech Pulp: Refiner Plate Improvement	35.5%	0.4%	$ 0.045	$ 0.040	$ 0.005	$ 0.025	1	0.4621846	0
PapOT8	Paper_Mfg	Mfg. Paper	Other	Turnover	8	Mech Pulp: Refiner Replacement	23.7%	10.0%	$ 0.735	$ 0.652	$ 0.084	$ 0.025	12	0.5985793	0
PapOT9	Paper_Mfg	Mfg. Paper	Other	Turnover	9	Paper: Efficient Pulp Screen	13.8%	15.0%	$ 0.226	$ 0.200	$ 0.026	$ 0.025	10	1.379369	1
PlaCooE1	Chemical_Mfg	Mfg. Plastics	Process Cooling	Existing	1	Clean Room: Change Filter Strategy	10.0%	40.0%	$ 0.016	$ 0.012	$ 0.005	$ 0.025	1	0.7730571	0
PlaCooE2	Chemical_Mfg	Mfg. Plastics	Process Cooling	Existing	2	Clean Room: Chiller Optimize	28.3%	14.8%	$ 0.248	$ 0.124	$ 0.124	$ 0.025	10	1.2693096	1
PlaCooT3	Chemical_Mfg	Mfg. Plastics	Process Cooling	Turnover	3	Clean Room: Clean Room HVAC	30.0%	9.0%	$ 0.204	$ 0.144	$ 0.061	$ 0.025	15	2.612798	1
PlaCooT4	Chemical_Mfg	Mfg. Plastics	Process Cooling	Turnover	4	Equipment: Chillers	8.0%	17.9%	$ 0.330	$ 0.249	$ 0.081	$ 0.025	15	1.6871241	1
PlaCooE5	Chemical_Mfg	Mfg. Plastics	Process Cooling	Existing	5	Improved Controls	33.8%	6.0%	$ 1.118	$ 0.673	$ 0.445	$ 0.025	15	0.5242095	0
PlaCooT6	Chemical_Mfg	Mfg. Plastics	Process Cooling	Turnover	6	Adjustable speed drive on compressors	34.0%	11.7%	$ 0.201	$ 0.121	$ 0.080	$ 0.025	10	1.5311461	1
PlaCooE7	Chemical_Mfg	Mfg. Plastics	Process Cooling	Existing	7	Optimization of operating parameters	35.0%	13.1%	$ 0.101	$ 0.039	$ 0.063	$ 0.025	3	0.8070835	0
PlaCooT8	Chemical_Mfg	Mfg. Plastics	Process Cooling	Turnover	8	Cold Storage Retrofit	25.6%	20.7%	$ 0.250	$ 0.157	$ 0.093	$ 0.025	10	1.2595366	1
PlaCooE9	Chemical_Mfg	Mfg. Plastics	Process Cooling	Existing	9	Cold Storage Tuneup	10.0%	15.6%	$ 0.112	$ 0.047	$ 0.065	$ 0.025	3	0.7444628	0
PlaHeaE1	Chemical_Mfg	Mfg. Plastics	Process Heating	Existing	1	Improved Controls	37.9%	30.4%	$ 0.245	$ 0.147	$ 0.098	$ 0.025	10	1.2843727	1
PlaHeaE2	Chemical_Mfg	Mfg. Plastics	Process Heating	Existing	2	Process Heat O&M	63.4%	28.6%	$ 0.257	$ 0.225	$ 0.032	$ 0.025	2	0.2324913	0
PlaHT1	Chemical_Mfg	Mfg. Plastics	HVAC	Turnover	1	Equipment Upgrades	62.9%	16.4%	$ 0.296	$ 0.252	$ 0.044	$ 0.025	15	1.8861037	1
PlaHE2	Chemical_Mfg	Mfg. Plastics	HVAC	Existing	2	Improved Controls	32.7%	20.9%	$ 0.102	$ 0.077	$ 0.025	$ 0.025	10	2.7610834	1
PlaHE3	Chemical_Mfg	Mfg. Plastics	HVAC	Existing	3	Recommissioning	72.6%	16.0%	$ 0.271	$ -	$ 0.271	$ 0.025	7	0.8341842	0
PlaLT1	Chemical_Mfg	Mfg. Plastics	Lighting	Turnover	1	Efficient Lighting Equipment	30.4%	19.9%	$ 0.150	$ 0.103	$ 0.047	$ 0.025	10	1.9987264	1
PlaLT2	Chemical_Mfg	Mfg. Plastics	Lighting	Turnover	2	HighBay Lighting Equipment	55.1%	34.1%	$ 0.376	$ 0.295	$ 0.081	$ 0.025	10	0.8735989	0
PlaLE3	Chemical_Mfg	Mfg. Plastics	Lighting	Existing	3	Lighting Controls	42.3%	30.0%	$ 0.212	$ 0.157	$ 0.055	$ 0.025	10	1.4773086	1
PlaMT1		Mfg. Plastics	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	42.8%	0.9%	$ 0.372	$ 0.372	$ -	$ 0.025	15	1.5269248	1
PlaMT10	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	10	Material Handling	52.3%	5.0%	$ 0.585	$ 0.483	$ 0.102	$ 0.025	10	0.5786809	0
PlaMT11	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	11	Air Compressor Demand Reduction	28.0%	15.9%	$ 0.107	$ 0.081	$ 0.026	$ 0.025	10	2.6817522	1
PlaME12	Chemical_Mfg	Mfg. Plastics	Motors	Existing	12	Material Handling VFD	52.3%	18.7%	$ 0.381	$ 0.229	$ 0.152	$ 0.025	10	0.869152	0

Measure Lookup	Industry	New Segment	New End-Use	Vintage	easure Numb	Measure	Applicability	Savings	Total Cost ($/kW Saved)	Equipment Cost	Labor Cost	Admin Costs ($/kWh Saved)	Life	TRC Test	Economic Flag
PlaME13	Chemical_Mfg	Mfg. Plastics	Motors	Existing	13	Motor Management Plan	51.6%	2.9%	$ 0.134	$ 0.054	$ 0.080	$ 0.025	10	2.214559	1
PlaMT15	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	15	Motors: Rewind 101-200 HP	25.4%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	1.8127173	1
PlaMT16	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	16	Motors: Rewind 201-500 HP	35.6%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	1.8127173	1
PlaMT17	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	17	Motors: Rewind 20-50 HP	4.6%	0.9%	$ 0.431	$ 0.356	$ 0.075	$ 0.025	15	1.3294065	1
PlaMT18	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	18	Motors: Rewind 500+ HP	55.2%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	1.8127173	1
PlaMT19	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	19	Motors: Rewind 51-100 HP	15.2%	0.6%	$ 0.388	$ 0.321	$ 0.067	$ 0.025	15	1.4678581	1
PlaMT2		Mfg. Plastics	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	66.3%	0.4%	$ 0.799	$ 0.799	$ -	$ 0.025	15	0.7359718	0
PlaMT20	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	20	Properly Sized Fans	14.7%	10.4%	$ 0.202	$ 0.122	$ 0.080	$ 0.025	10	1.5542463	1
PlaME21	Chemical_Mfg	Mfg. Plastics	Motors	Existing	21	Air Compressor Optimization	38.3%	30.1%	$ 0.151	$ 0.058	$ 0.093	$ 0.025	10	2.0004569	1
PlaME22	Chemical_Mfg	Mfg. Plastics	Motors	Existing	22	Pump Energy Management	31.4%	7.5%	$ 0.134	$ 0.054	$ 0.080	$ 0.025	10	2.214559	1
PlaMT23	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	23	Pump Equipment Upgrade	34.0%	20.0%	$ 0.156	$ 0.129	$ 0.027	$ 0.025	10	1.9449466	1
PlaME24	Chemical_Mfg	Mfg. Plastics	Motors	Existing	24	Pump System Optimization	15.6%	12.1%	$ 0.391	$ 0.196	$ 0.195	$ 0.025	12	1.1122362	1
PlaMT25	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	25	Switch from Belt drive to Direct Drive	10.4%	7.5%	$ 0.268	$ 0.221	$ 0.046	$ 0.025	12	1.5823435	1
PlaMT26	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	26	Synchronous Belts	20.9%	1.1%	$ 0.268	$ 0.221	$ 0.046	$ 0.025	10	1.2054867	1
PlaMT27	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	27	Efficient Centrifugal Fan	10.3%	20.0%	$ 0.228	$ 0.188	$ 0.040	$ 0.025	10	1.3973192	1
PlaMT28		Mfg. Plastics	Motors	Turnover	28	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	74.4%	0.91%	$ 2.085	$ 2.085	$ -	$ 0.025	15	0.2873799	0
PlaMT29		Mfg. Plastics	Motors	Turnover	29	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	55.8%	0.39%	$ 0.436	$ 0.436	$ -	$ 0.025	15	1.3152868	1
PlaME3	Chemical_Mfg	Mfg. Plastics	Motors	Existing	3	Fan System Optimization	28.9%	7.7%	$ 0.311	$ 0.156	$ 0.155	$ 0.025	10	1.0505007	1
PlaMT30		Mfg. Plastics	Motors	Turnover	30	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	74.4%	0.7%	$ 1.249	$ 1.249	$ -	$ 0.025	15	0.4758305	0
PlaMT4	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	4	High efficiency Compressor motors	80.8%	1.1%	$ 0.430	$ 0.355	$ 0.075	$ 0.025	15	1.3331511	1
PlaMT5	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	5	High Efficiency Motors	74.4%	1.5%	$ 0.545	$ 0.450	$ 0.095	$ 0.025	15	1.064045	1
PlaOT1	Chemical_Mfg	Mfg. Plastics	Other	Turnover	1	Bldg Improvements	35.0%	20.4%	$ 0.248	$ 0.162	$ 0.087	$ 0.025	15	2.1868274	1
PlaOE2	Chemical_Mfg	Mfg. Plastics	Other	Existing	2	Energy Project Management	27.0%	29.0%	$ 0.163	$ 0.134	$ 0.029	$ 0.025	11	2.1355652	1
PlaOE3	Chemical_Mfg	Mfg. Plastics	Other	Existing	3	Integrated Plant Energy Management	22.0%	50.0%	$ 0.261	$ 0.215	$ 0.047	$ 0.025	11	1.4034422	1
PlaOE4	Chemical_Mfg	Mfg. Plastics	Other	Existing	4	Plant Energy Management	27.0%	12.0%	$ 0.139	$ 0.114	$ 0.025	$ 0.025	10	2.1101009	1
PlaOT5	Chemical_Mfg	Mfg. Plastics	Other	Turnover	5	Transformers	20.0%	1.6%	$ 0.415	$ 0.399	$ 0.016	$ 0.025	15	1.3570186	1
MinMT1		Mining	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	74.4%	0.91%	$ 2.085	$ 2.085	$ -	$ 0.025	15	0.2873799	0
MinME10	Mining	Mining	Motors	Existing	10	Motor Management Plan	50.0%	2.9%	$ 0.134	$ 0.054	$ 0.080	$ 0.025	10	2.214559	1
MinMT12	Mining	Mining	Motors	Turnover	12	Motors: Rewind 101-200 HP	25.4%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	1.8127173	1
MinMT13	Mining	Mining	Motors	Turnover	13	Motors: Rewind 201-500 HP	35.6%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	1.8127173	1
MinMT14	Mining	Mining	Motors	Turnover	14	Motors: Rewind 20-50 HP	4.7%	0.9%	$ 0.431	$ 0.356	$ 0.075	$ 0.025	15	1.3294065	1
MinMT15	Mining	Mining	Motors	Turnover	15	Motors: Rewind 500+ HP	55.2%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	1.8127173	1
MinMT16	Mining	Mining	Motors	Turnover	16	Motors: Rewind 51-100 HP	15.2%	0.6%	$ 0.388	$ 0.321	$ 0.067	$ 0.025	15	1.4678581	1
MinMT17	Mining	Mining	Motors	Turnover	17	Switch from Belt drive to Direct Drive	10.5%	7.5%	$ 0.268	$ 0.221	$ 0.046	$ 0.025	12	1.5823435	1
MinMT18	Mining	Mining	Motors	Turnover	18	Synchronous Belts	21.0%	1.1%	$ 0.268	$ 0.221	$ 0.046	$ 0.025	10	1.2054867	1
MinMT2		Mining	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	55.8%	0.39%	$ 0.436	$ 0.436	$ -	$ 0.025	15	1.3152868	1
MinMT3		Mining	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	74.4%	0.7%	$ 1.249	$ 1.249	$ -	$ 0.025	15	0.4758305	0
MinMT4		Mining	Motors	Turnover	4	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	42.8%	0.9%	$ 0.372	$ 0.372	$ -	$ 0.025	15	1.5269248	1
MinMT5		Mining	Motors	Turnover	5	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	66.3%	0.4%	$ 0.799	$ 0.799	$ -	$ 0.025	15	0.7359718	0
MinMT6	Mining	Mining	Motors	Turnover	6	High Efficiency Motors	75.0%	1.5%	$ 0.545	$ 0.450	$ 0.095	$ 0.025	15	1.064045	1
MinMT8	Mining	Mining	Motors	Turnover	8	Material Handling	53.0%	5.0%	$ 0.585	$ 0.483	$ 0.102	$ 0.025	10	0.5786809	0
MinME9	Mining	Mining	Motors	Existing	9	Material Handling VFD	53.0%	18.7%	$ 0.381	$ 0.229	$ 0.152	$ 0.025	10	0.869152	0
NonCooT1	.umber_Wood_Product	Other Non Mfg.	Process Cooling	Turnover	1	Equipment: Chillers	7.7%	17.9%	$ 0.330	$ 0.249	$ 0.081	$ 0.025	15	1.6871241	1
NonCooE2	.umber_Wood_Product	Other Non Mfg.	Process Cooling	Existing	2	Improved Controls	32.3%	6.0%	$ 1.118	$ 0.673	$ 0.445	$ 0.025	15	0.5242095	0
NonCooT3	Agriculture	Other Non Mfg.	Process Cooling	Turnover	3	Milk Precooler - Dairy Plate Cooler	1.7%	3.24%	$ 0.660	$ 0.487	$ 0.173	$ 0.025	15	0.8742528	0
NonCooT4	.umber_Wood_Product	Other Non Mfg.	Process Cooling	Turnover	4	Adjustable speed drive on compressors	34.0%	11.7%	$ 0.201	$ 0.121	$ 0.080	$ 0.025	10	1.5311461	1
NonCooE5	.umber_Wood_Product	Other Non Mfg.	Process Cooling	Existing	5	Optimization of operating parameters	35.0%	13.1%	$ 0.101	$ 0.039	$ 0.063	$ 0.025	3	0.8070835	0
NonHeaT1	Agriculture	Other Non Mfg.	Process Heating	Turnover	1	Crate Heating Pads	22.9%	17.51%	$ 0.181	$ 0.162	$ 0.019	$ 0.025	15	2.910694	1
NonHeaT2	Agriculture	Other Non Mfg.	Process Heating	Turnover	2	Grain dryers	24.8%	23.52%	$ 8.260	$ 6.090	$ 2.169	$ 0.025	15	0.0722995	0
NonHeaE3	Agriculture	Other Non Mfg.	Process Heating	Existing	3	Heat Lamp Setback (Microzone)	22.9%	0.45%	$ 0.210	$ 0.210	$ -	$ 0.025	15	2.5447305	1
NonHeaE4	Agriculture	Other Non Mfg.	Process Heating	Existing	4	Heat Lamp/Heating Pad Controller	22.9%	1.75%	$ 0.129	$ 0.129	$ -	$ 0.025	15	3.8799431	1
NonHeaT5	Agriculture	Other Non Mfg.	Process Heating	Turnover	5	Heat Lamps	22.9%	3.38%	$ 0.023	$ 0.023	$ -	$ 0.025	10	7.1641152	1
NonHeaE6	.umber_Wood_Product	Other Non Mfg.	Process Heating	Existing	6	Improved Controls	37.9%	30.4%	$ 0.245	$ 0.147	$ 0.098	$ 0.025	10	1.2843727	1
NonHeaE7	.umber_Wood_Product	Other Non Mfg.	Process Heating	Existing	7	Process Heat O&M	63.4%	28.6%	$ 0.257	$ 0.225	$ 0.032	$ 0.025	2	0.2324913	0
NonHT1	Agriculture	Other Non Mfg.	HVAC	Turnover	1	Energy-Efficient Dehumidifier	49.7%	2.00%	$ 1.072	$ 0.791	$ 0.282	$ 0.025	15	0.5510978	0
NonHT2	.umber_Wood_Product	Other Non Mfg.	HVAC	Turnover	2	Equipment Upgrades	63.2%	16.4%	$ 0.296	$ 0.252	$ 0.044	$ 0.025	15	1.8861037	1
NonHT3	Agriculture	Other Non Mfg.	HVAC	Turnover	3	Heat Reclaimer	1.7%	42.00%	$ 0.171	$ 0.126	$ 0.045	$ 0.025	15	3.0788958	1
NonHT4	Agriculture	Other Non Mfg.	HVAC	Turnover	4	Heat Recovery Ventilators	49.7%	4.13%	$ 0.448	$ 0.330	$ 0.118	$ 0.025	10	0.7443308	0
NonHE5	.umber_Wood_Product	Other Non Mfg.	HVAC	Existing	5	Improved Controls	32.8%	20.9%	$ 0.102	$ 0.077	$ 0.025	$ 0.025	10	2.7610834	1
NonHT6	Agriculture	Other Non Mfg.	HVAC	Turnover	6	Infrared Film for Greenhouses	0.3%	11.06%	$ 0.261	$ 0.234	$ 0.028	$ 0.025	4	0.4890122	0
NonHT7	Agriculture	Other Non Mfg.	HVAC	Turnover	7	Programmable Ventilation Controller	49.7%	0.10%	$ 0.140	$ 0.140	$ -	$ 0.025	10	2.1379373	1
NonHE8	.umber_Wood_Product	Other Non Mfg.	HVAC	Existing	8	Recommissioning	72.9%	16.0%	$ 0.271	$ -	$ 0.271	$ 0.025	7	0.8341842	0
NonHT9	Agriculture	Other Non Mfg.	HVAC	Turnover	9	Scroll Compressor	1.7%	7.50%	$ 1.006	$ 0.899	$ 0.107	$ 0.025	15	0.5867377	0
NonLT1	.umber_Wood_Product	Other Non Mfg.	Lighting	Turnover	1	Efficient Lighting Equipment	30.4%	19.9%	$ 0.150	$ 0.103	$ 0.047	$ 0.025	10	1.9987264	1
NonLT2	.umber_Wood_Product	Other Non Mfg.	Lighting	Turnover	2	HighBay Lighting Equipment	55.1%	34.1%	$ 0.376	$ 0.295	$ 0.081	$ 0.025	10	0.8735989	0
NonLE3	.umber_Wood_Product	Other Non Mfg.	Lighting	Existing	3	Lighting Controls	42.3%	30.0%	$ 0.212	$ 0.157	$ 0.055	$ 0.025	10	1.4773086	1
NonMT1		Other Non Mfg.	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	55.8%	0.39%	$ 0.436	$ 0.436	$ -	$ 0.025	15	1.3152868	1
NonMT11	Agriculture	Other Non Mfg.	Motors	Turnover	11	Agricultural Exhaust Fans (Rate 21 CFM/Watt+)	49.7%	5.00%	$ 0.316	$ 0.283	$ 0.034	$ 0.025	15	1.7768395	1
NonMT15	Agriculture	Other Non Mfg.	Motors	Turnover	15	Low Pressure Irrigation	0.4%	50.00%	$ 0.993	$ 0.732	$ 0.261	$ 0.025	10	0.34677	0
NonMT16	.umber_Wood_Product	Other Non Mfg.	Motors	Turnover	16	Material Handling	53.2%	5.0%	$ 0.585	$ 0.483	$ 0.102	$ 0.025	10	0.5786809	0
NonME17	.umber_Wood_Product	Other Non Mfg.	Motors	Existing	17	Material Handling VFD	53.2%	18.7%	$ 0.381	$ 0.229	$ 0.152	$ 0.025	10	0.869152	0
NonME18	.umber_Wood_Product	Other Non Mfg.	Motors	Existing	18	Motor Management Plan	50.9%	2.9%	$ 0.134	$ 0.054	$ 0.080	$ 0.025	10	2.214559	1
NonMT2		Other Non Mfg.	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	74.4%	0.7%	$ 1.249	$ 1.249	$ -	$ 0.025	15	0.4758305	0
NonMT21	.umber_Wood_Product	Other Non Mfg.	Motors	Turnover	21	Motors: Rewind 101-200 HP	25.4%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	1.8127173	1
NonMT22	.umber_Wood_Product	Other Non Mfg.	Motors	Turnover	22	Air Compressor Demand Reduction	26.8%	15.9%	$ 0.107	$ 0.081	$ 0.026	$ 0.025	10	2.6817522	1
NonMT23	.umber_Wood_Product	Other Non Mfg.	Motors	Turnover	23	Motors: Rewind 201-500 HP	35.6%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	1.8127173	1

Measure Lookup	Industry	New Segment	New End-Use	Vintage	easure Numb	Measure	Applicability	Savings	Total Cost ($/kW Saved)	Equipment Cost	Labor Cost	Admin Costs ($/kWh Saved)	Life	TRC Test	Economic Flag
NonMT24	.umber_Wood_Product	Other Non Mfg.	Motors	Turnover	24	Motors: Rewind 20-50 HP	4.7%	0.9%	$ 0.431	$ 0.356	$ 0.075	$ 0.025	15	1.3294065	1
NonMT25	.umber_Wood_Product	Other Non Mfg.	Motors	Turnover	25	Motors: Rewind 500+ HP	55.2%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	1.8127173	1
NonMT26	.umber_Wood_Product	Other Non Mfg.	Motors	Turnover	26	Motors: Rewind 51-100 HP	15.2%	0.6%	$ 0.388	$ 0.321	$ 0.067	$ 0.025	15	1.4678581	1
NonMT27	.umber_Wood_Product	Other Non Mfg.	Motors	Turnover	27	Properly Sized Fans	15.3%	10.4%	$ 0.202	$ 0.122	$ 0.080	$ 0.025	10	1.5542463	1
NonME28	.umber_Wood_Product	Other Non Mfg.	Motors	Existing	28	Pump Energy Management	29.8%	7.5%	$ 0.134	$ 0.054	$ 0.080	$ 0.025	10	2.214559	1
NonMT29	.umber_Wood_Product	Other Non Mfg.	Motors	Turnover	29	Pump Equipment Upgrade	32.3%	20.0%	$ 0.156	$ 0.129	$ 0.027	$ 0.025	10	1.9449466	1
NonMT3		Other Non Mfg.	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	42.8%	0.9%	$ 0.372	$ 0.372	$ -	$ 0.025	15	1.5269248	1
NonME30	.umber_Wood_Product	Other Non Mfg.	Motors	Existing	30	Pump System Optimization	14.9%	12.1%	$ 0.391	$ 0.196	$ 0.195	$ 0.025	12	1.1122362	1
NonMT31	Irrigation	Other Non Mfg.	Motors	Turnover	31	SIS	76.5%	7.5%	$ 1.051	$ 0.869	$ 0.183	$ 0.025	7	0.2295627	0
NonMT32	.umber_Wood_Product	Other Non Mfg.	Motors	Turnover	32	Air Compressor Equipment	17.6%	8.8%	$ 0.157	$ 0.130	$ 0.027	$ 0.025	10	1.9366539	1
NonMT33	.umber_Wood_Product	Other Non Mfg.	Motors	Turnover	33	Switch from Belt drive to Direct Drive	10.5%	7.5%	$ 0.268	$ 0.221	$ 0.046	$ 0.025	12	1.5823435	1
NonMT34	.umber_Wood_Product	Other Non Mfg.	Motors	Turnover	34	Synchronous Belts	20.9%	1.1%	$ 0.268	$ 0.221	$ 0.046	$ 0.025	10	1.2054867	1
NonMT35	Irrigation	Other Non Mfg.	Motors	Turnover	35	System Improvements	85.0%	8.0%	$ 0.416	$ 0.344	$ 0.072	$ 0.025	5	0.3880369	0
NonMT36	Agriculture	Other Non Mfg.	Motors	Turnover	36	Variable Speed Drives for Dairy Vacuum Pumps	1.7%	36.89%	$ 0.169	$ 0.151	$ 0.018	$ 0.025	15	3.1235438	1
NonMT37	Agriculture	Other Non Mfg.	Motors	Turnover	37	VFDs on Small Milking Machines	1.7%	3.22%	$ 0.832	$ 0.614	$ 0.219	$ 0.025	15	0.7073638	0
NonMT38	.umber_Wood_Product	Other Non Mfg.	Motors	Turnover	38	Wood: Replace Pneumatic Conveyor	50.2%	29.0%	$ 0.018	$ 0.016	$ 0.002	$ 0.025	10	8.1920258	1
NonME39	.umber_Wood_Product	Other Non Mfg.	Motors	Existing	39	Air Compressor Optimization	36.8%	30.1%	$ 0.151	$ 0.058	$ 0.093	$ 0.025	10	2.0004569	1
NonMT4		Other Non Mfg.	Motors	Turnover	4	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	66.3%	0.4%	$ 0.799	$ 0.799	$ -	$ 0.025	15	0.7359718	0
NonMT40	Agriculture	Other Non Mfg.	Motors	Turnover	40	Automatic Milker Takeoff	1.7%	3.00%	$ 0.763	$ 0.563	$ 0.200	$ 0.025	15	0.7693927	0
NonMT41	Agriculture	Other Non Mfg.	Motors	Turnover	41	Circulating Fans	49.7%	5.00%	$ 0.152	$ 0.136	$ 0.016	$ 0.025	10	1.9970266	1
NonMT42	.umber_Wood_Product	Other Non Mfg.	Motors	Turnover	42	Efficient Centrifugal Fan	10.7%	20.0%	$ 0.228	$ 0.188	$ 0.040	$ 0.025	10	1.3973192	1
NonMT43		Other Non Mfg.	Motors	Turnover	43	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	74.4%	0.91%	$ 2.085	$ 2.085	$ -	$ 0.025	15	0.2873799	0
NonME5	.umber_Wood_Product	Other Non Mfg.	Motors	Existing	5	Fan System Optimization	30.2%	7.7%	$ 0.311	$ 0.156	$ 0.155	$ 0.025	10	1.0505007	1
NonMT6	.umber_Wood_Product	Other Non Mfg.	Motors	Turnover	6	High efficiency Compressor motors	77.5%	1.1%	$ 0.430	$ 0.355	$ 0.075	$ 0.025	15	1.3331511	1
NonMT7	Irrigation	Other Non Mfg.	Motors	Turnover	7	High Efficiency Motors	74.7%	1.5%	$ 0.545	$ 0.450	$ 0.095	$ 0.025	15	1.064045	1
NonMT8	Agriculture	Other Non Mfg.	Motors	Turnover	8	High Volume Low Speed Fans	49.7%	46.61%	$ 2.004	$ 1.883	$ 0.120	$ 0.025	15	0.2988993	0
NonMT9	Agriculture	Other Non Mfg.	Motors	Turnover	9	High-Efficiency Ventilation System	49.7%	5.66%	$ 1.366	$ 1.366	$ -	$ 0.025	10	0.2536952	0
NonOT1	.umber_Wood_Product	Other Non Mfg.	Other	Turnover	1	Bldg Improvements	35.0%	20.4%	$ 0.248	$ 0.162	$ 0.087	$ 0.025	15	2.1868274	1
NonOT10	.umber_Wood_Product	Other Non Mfg.	Other	Turnover	10	Transformers	20.0%	1.6%	$ 0.415	$ 0.399	$ 0.016	$ 0.025	15	1.3570186	1
NonOT2	Agriculture	Other Non Mfg.	Other	Turnover	2	Block Heater Timer	25.0%	2.50%	$ 0.048	$ 0.048	$ -	$ 0.025	10	4.7128202	1
NonOE3	.umber_Wood_Product	Other Non Mfg.	Other	Existing	3	Energy Project Management	27.0%	29.0%	$ 0.163	$ 0.134	$ 0.029	$ 0.025	11	2.1355652	1
NonOT4	Agriculture	Other Non Mfg.	Other	Turnover	4	Grain bin aeration control systems	24.8%	2.25%	$ 0.168	$ 0.124	$ 0.044	$ 0.025	15	3.1015891	1
NonOT5	Agriculture	Other Non Mfg.	Other	Turnover	5	Greenhouse Heat Curtain	0.3%	16.76%	$ 0.056	$ 0.056	$ -	$ 0.025	5	2.0441316	1
NonOT6	Agriculture	Other Non Mfg.	Other	Turnover	6	High Efficiency Stock tank	22.9%	3.75%	$ 0.412	$ 0.368	$ 0.044	$ 0.025	10	0.7904957	0
NonOE7	.umber_Wood_Product	Other Non Mfg.	Other	Existing	7	Integrated Plant Energy Management	22.0%	50.0%	$ 0.261	$ 0.215	$ 0.047	$ 0.025	11	1.4034422	1
NonOT8	Agriculture	Other Non Mfg.	Other	Turnover	8	Livestock Waterers	22.9%	11.25%	$ 0.327	$ 0.292	$ 0.035	$ 0.025	10	0.9822523	0
NonOE9	.umber_Wood_Product	Other Non Mfg.	Other	Existing	9	Plant Energy Management	27.0%	12.0%	$ 0.139	$ 0.114	$ 0.025	$ 0.025	10	2.1101009	1
MetPT1		Mfg. Metals	Process EC	Turnover	1	Electrical-Chemical Plating Bundle, Tank and Rectifier	65.0%	18.5%	$ 0.550	$ 0.450	$ 0.100	$ 0.025	15	1.0416799	1
MinHT1	Mining	Mining	HVAC	Turnover	1	Equipment Upgrades	62.9%	16.4%	$ 0.296	$ 0.252	$ 0.044	$ 0.025	15	1.8861037	1
MinHE2	Mining	Mining	HVAC	Existing	2	Improved Controls	32.7%	20.9%	$ 0.102	$ 0.077	$ 0.025	$ 0.025	10	2.7610834	1
MinHE3	Mining	Mining	HVAC	Existing	3	Recommissioning	72.6%	16.0%	$ 0.271	$ -	$ 0.271	$ 0.025	7	0.8341842	0
MinLT1	Mining	Mining	Lighting	Turnover	1	Efficient Lighting Equipment	30.4%	19.9%	$ 0.150	$ 0.103	$ 0.047	$ 0.025	10	1.9987264	1
MinLT2	Mining	Mining	Lighting	Turnover	2	HighBay Lighting Equipment	55.1%	34.1%	$ 0.376	$ 0.295	$ 0.081	$ 0.025	10	0.8735989	0
MinLE3	Mining	Mining	Lighting	Existing	3	Lighting Controls	42.3%	30.0%	$ 0.212	$ 0.157	$ 0.055	$ 0.025	10	1.4773086	1

Measure Lookup	Industry	New Segment	New End-Use	Vintage	easure Numb	Measure	Applicability	Savings	Total Cost ($/kW Saved)	Equipment Cost	Labor Cost	Admin Costs ($/kWh Saved)	Life	TRC Test	Economic Flag
CheCooE1	Chemical_Mfg	Mfg. Chemicals	Process Cooling	Existing	1	Clean Room: Change Filter Strategy	10.0%	40.0%	$ 0.016	$ 0.012	$ 0.005	$ 0.025	1	1.5135301	1
CheCooE2	Chemical_Mfg	Mfg. Chemicals	Process Cooling	Existing	2	Clean Room: Chiller Optimize	28.3%	14.8%	$ 0.248	$ 0.124	$ 0.124	$ 0.025	10	2.096118	1
CheCooT3	Chemical_Mfg	Mfg. Chemicals	Process Cooling	Turnover	3	Clean Room: Clean Room HVAC	30.0%	9.0%	$ 0.204	$ 0.144	$ 0.061	$ 0.025	15	3.5705864	1
CheCooT4	Chemical_Mfg	Mfg. Chemicals	Process Cooling	Turnover	4	Equipment: Chillers	8.0%	17.9%	$ 0.330	$ 0.249	$ 0.081	$ 0.025	15	2.3055829	1
CheCooE5	Chemical_Mfg	Mfg. Chemicals	Process Cooling	Existing	5	Improved Controls	33.8%	6.0%	$ 1.118	$ 0.673	$ 0.445	$ 0.025	15	0.716372	0
CheCooT6	Chemical_Mfg	Mfg. Chemicals	Process Cooling	Turnover	6	Adjustable speed drive on compressors	34.0%	11.7%	$ 0.201	$ 0.121	$ 0.080	$ 0.025	10	2.5285107	1
CheCooE7	Chemical_Mfg	Mfg. Chemicals	Process Cooling	Existing	7	Optimization of operating parameters	35.0%	13.1%	$ 0.101	$ 0.039	$ 0.063	$ 0.025	3	1.3718163	1
CheCooT8	Chemical_Mfg	Mfg. Chemicals	Process Cooling	Turnover	8	Cold Storage Retrofit	25.6%	20.7%	$ 0.250	$ 0.157	$ 0.093	$ 0.025	10	2.0799789	1
CheCooE9	Chemical_Mfg	Mfg. Chemicals	Process Cooling	Existing	9	Cold Storage Tuneup	10.0%	15.6%	$ 0.112	$ 0.047	$ 0.065	$ 0.025	3	1.2653787	1
CheHeaE1	Chemical_Mfg	Mfg. Chemicals	Process Heating	Existing	1	Improved Controls	37.9%	30.4%	$ 0.245	$ 0.147	$ 0.098	$ 0.025	10	2.1209929	1
CheHeaE2	Chemical_Mfg	Mfg. Chemicals	Process Heating	Existing	2	Process Heat O&M	63.4%	28.6%	$ 0.257	$ 0.225	$ 0.032	$ 0.025	2	0.4185549	0
CheHT1	Chemical_Mfg	Mfg. Chemicals	HVAC	Turnover	1	Equipment Upgrades	62.9%	16.4%	$ 0.296	$ 0.252	$ 0.044	$ 0.025	15	2.6456759	1
CheHE2	Chemical_Mfg	Mfg. Chemicals	HVAC	Existing	2	Improved Controls	32.7%	20.9%	$ 0.102	$ 0.077	$ 0.025	$ 0.025	10	4.6569446	1
CheHE3	Chemical_Mfg	Mfg. Chemicals	HVAC	Existing	3	Recommissioning	72.6%	16.0%	$ 0.271	$ -	$ 0.271	$ 0.025	7	1.4040325	1
CheLT1	Chemical_Mfg	Mfg. Chemicals	Lighting	Turnover	1	Efficient Lighting Equipment	30.4%	19.9%	$ 0.150	$ 0.103	$ 0.047	$ 0.025	10	3.3767624	1
CheLT2	Chemical_Mfg	Mfg. Chemicals	Lighting	Turnover	2	HighBay Lighting Equipment	55.1%	34.1%	$ 0.376	$ 0.295	$ 0.081	$ 0.025	10	1.4759078	1
CheLE3	Chemical_Mfg	Mfg. Chemicals	Lighting	Existing	3	Lighting Controls	42.3%	30.0%	$ 0.212	$ 0.157	$ 0.055	$ 0.025	10	2.4958494	1
CheMT1		Mfg. Chemicals	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	42.8%	0.9%	$ 0.372	$ 0.372	$ -	$ 0.025	15	2.0909404	1
CheMT10	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	10	Material Handling	52.3%	5.0%	$ 0.585	$ 0.483	$ 0.102	$ 0.025	10	0.9520733	0
CheMT11	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	11	Air Compressor Demand Reduction	28.0%	15.9%	$ 0.107	$ 0.081	$ 0.026	$ 0.025	10	4.4121465	1
CheME6	Chemical_Mfg	Mfg. Chemicals	Motors	Existing	6	Material Handling VFD	52.3%	18.7%	$ 0.381	$ 0.229	$ 0.152	$ 0.025	10	1.4299704	1
CheME13	Chemical_Mfg	Mfg. Chemicals	Motors	Existing	13	Motor Management Plan	51.6%	2.9%	$ 0.134	$ 0.054	$ 0.080	$ 0.025	10	3.6434981	1
CheMT15	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	15	Motors: Rewind 101-200 HP	25.4%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	2.482299	1
CheMT16	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	16	Motors: Rewind 201-500 HP	35.6%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	2.482299	1
CheMT17	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	17	Motors: Rewind 20-50 HP	4.6%	0.9%	$ 0.431	$ 0.356	$ 0.075	$ 0.025	15	1.8204628	1
CheMT18	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	18	Motors: Rewind 500+ HP	55.2%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	2.482299	1
CheMT19	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	19	Motors: Rewind 51-100 HP	15.2%	0.6%	$ 0.388	$ 0.321	$ 0.067	$ 0.025	15	2.0100557	1
CheMT2		Mfg. Chemicals	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	66.3%	0.4%	$ 0.799	$ 0.799	$ -	$ 0.025	15	1.0078251	1
CheMT20	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	20	Properly Sized Fans	14.7%	10.4%	$ 0.202	$ 0.122	$ 0.080	$ 0.025	10	2.55712	1
CheME21	Chemical_Mfg	Mfg. Chemicals	Motors	Existing	21	Air Compressor Optimization	38.3%	30.1%	$ 0.151	$ 0.058	$ 0.093	$ 0.025	10	3.291247	1
CheME22	Chemical_Mfg	Mfg. Chemicals	Motors	Existing	22	Pump Energy Management	31.4%	7.5%	$ 0.134	$ 0.054	$ 0.080	$ 0.025	10	3.6434981	1
CheMT23	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	23	Pump Equipment Upgrade	34.0%	20.0%	$ 0.156	$ 0.129	$ 0.027	$ 0.025	10	3.1999188	1
CheME24	Chemical_Mfg	Mfg. Chemicals	Motors	Existing	24	Pump System Optimization	15.6%	12.1%	$ 0.391	$ 0.196	$ 0.195	$ 0.025	12	1.6441851	1
CheMT25	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	25	Switch from Belt drive to Direct Drive	10.4%	7.5%	$ 0.268	$ 0.221	$ 0.046	$ 0.025	12	2.3391305	1
CheMT26	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	26	Synchronous Belts	20.9%	1.1%	$ 0.268	$ 0.221	$ 0.046	$ 0.025	10	1.9833242	1
CheMT27	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	27	Efficient Centrifugal Fan	10.3%	20.0%	$ 0.228	$ 0.188	$ 0.040	$ 0.025	10	2.2989361	1
CheMT28		Mfg. Chemicals	Motors	Turnover	28	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	74.4%	0.91%	$ 2.085	$ 2.085	$ -	$ 0.025	15	0.3935323	0
CheMT29		Mfg. Chemicals	Motors	Turnover	29	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	55.8%	0.39%	$ 0.436	$ 0.436	$ -	$ 0.025	15	1.8011275	1
CheME3	Chemical_Mfg	Mfg. Chemicals	Motors	Existing	3	Fan System Optimization	28.9%	7.7%	$ 0.311	$ 0.156	$ 0.155	$ 0.025	10	1.7283338	1
CheMT30		Mfg. Chemicals	Motors	Turnover	30	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	74.4%	0.7%	$ 1.249	$ 1.249	$ -	$ 0.025	15	0.6515928	0
CheMT4	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	4	High efficiency Compressor motors	80.8%	1.1%	$ 0.430	$ 0.355	$ 0.075	$ 0.025	15	1.8255905	1
CheMT5	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	5	High Efficiency Motors	74.4%	1.5%	$ 0.545	$ 0.450	$ 0.095	$ 0.025	15	1.4570821	1
CheOT1	Chemical_Mfg	Mfg. Chemicals	Other	Turnover	1	Bldg Improvements	35.0%	20.4%	$ 0.248	$ 0.162	$ 0.087	$ 0.025	15	3.0185774	1
CheOE2	Chemical_Mfg	Mfg. Chemicals	Other	Existing	2	Energy Project Management	27.0%	29.0%	$ 0.163	$ 0.134	$ 0.029	$ 0.025	11	3.3412297	1
CheOE3	Chemical_Mfg	Mfg. Chemicals	Other	Existing	3	Integrated Plant Energy Management	22.0%	50.0%	$ 0.261	$ 0.215	$ 0.047	$ 0.025	11	2.195776	1
CheOE4	Chemical_Mfg	Mfg. Chemicals	Other	Existing	4	Plant Energy Management	27.0%	12.0%	$ 0.139	$ 0.114	$ 0.025	$ 0.025	10	3.5198522	1
CheOT5	Chemical_Mfg	Mfg. Chemicals	Other	Turnover	5	Transformers	20.0%	1.6%	$ 0.415	$ 0.399	$ 0.016	$ 0.025	15	1.8731544	1
ComCooE1	ectronic_Equipment_M	Mfg. Computers	Process Cooling	Existing	1	Clean Room: Change Filter Strategy	10.0%	40.0%	$ 0.016	$ 0.012	$ 0.005	$ 0.025	1	1.5135301	1
ComCooE10	ectronic_Equipment_M	Mfg. Computers	Process Cooling	Existing	10	Cold Storage Tuneup	10.0%	15.6%	$ 0.112	$ 0.047	$ 0.065	$ 0.025	3	1.2653787	1
ComCooE2	ectronic_Equipment_M	Mfg. Computers	Process Cooling	Existing	2	Clean Room: Chiller Optimize	28.3%	14.8%	$ 0.248	$ 0.124	$ 0.124	$ 0.025	10	2.096118	1
ComCooT3	ectronic_Equipment_M	Mfg. Computers	Process Cooling	Turnover	3	Clean Room: Clean Room HVAC	30.0%	9.0%	$ 0.204	$ 0.144	$ 0.061	$ 0.025	15	3.5705864	1
ComCooT4	ectronic_Equipment_M	Mfg. Computers	Process Cooling	Turnover	4	Elec Chip Fab: Solidstate Chiller	20.0%	90.0%	$ 0.634	$ 0.562	$ 0.072	$ 0.025	10	0.8685456	0
ComCooT5	ectronic_Equipment_M	Mfg. Computers	Process Cooling	Turnover	5	Equipment: Chillers	8.0%	17.9%	$ 0.330	$ 0.249	$ 0.081	$ 0.025	15	2.3055829	1
ComCooE6	ectronic_Equipment_M	Mfg. Computers	Process Cooling	Existing	6	Improved Controls	33.8%	6.0%	$ 1.118	$ 0.673	$ 0.445	$ 0.025	15	0.716372	0
ComCooT7	ectronic_Equipment_M	Mfg. Computers	Process Cooling	Turnover	7	Adjustable speed drive on compressors	34.0%	11.7%	$ 0.201	$ 0.121	$ 0.080	$ 0.025	10	2.5285107	1
ComCooE8	ectronic_Equipment_M	Mfg. Computers	Process Cooling	Existing	8	Optimization of operating parameters	35.0%	13.1%	$ 0.101	$ 0.039	$ 0.063	$ 0.025	3	1.3718163	1
ComCooT9	ectronic_Equipment_M	Mfg. Computers	Process Cooling	Turnover	9	Cold Storage Retrofit	25.6%	20.7%	$ 0.250	$ 0.157	$ 0.093	$ 0.025	10	2.0799789	1
ComHeaE1	ectronic_Equipment_M	Mfg. Computers	Process Heating	Existing	1	Improved Controls	41.5%	30.4%	$ 0.245	$ 0.147	$ 0.098	$ 0.025	10	2.1209929	1
ComHeaE2	ectronic_Equipment_M	Mfg. Computers	Process Heating	Existing	2	Process Heat O&M	69.5%	28.6%	$ 0.257	$ 0.225	$ 0.032	$ 0.025	2	0.4185549	0
ComHT1	ectronic_Equipment_M	Mfg. Computers	HVAC	Turnover	1	Equipment Upgrades	74.9%	16.4%	$ 0.296	$ 0.252	$ 0.044	$ 0.025	15	2.6456759	1
ComHE2	ectronic_Equipment_M	Mfg. Computers	HVAC	Existing	2	Improved Controls	38.9%	20.9%	$ 0.102	$ 0.077	$ 0.025	$ 0.025	10	4.6569446	1
ComHE3	ectronic_Equipment_M	Mfg. Computers	HVAC	Existing	3	Recommissioning	86.4%	16.0%	$ 0.271	$ -	$ 0.271	$ 0.025	7	1.4040325	1
ComLT1	ectronic_Equipment_M	Mfg. Computers	Lighting	Turnover	1	Efficient Lighting Equipment	30.4%	19.9%	$ 0.150	$ 0.103	$ 0.047	$ 0.025	10	3.3767624	1
ComLT2	ectronic_Equipment_M	Mfg. Computers	Lighting	Turnover	2	HighBay Lighting Equipment	55.1%	34.1%	$ 0.376	$ 0.295	$ 0.081	$ 0.025	10	1.4759078	1
ComLE3	ectronic_Equipment_M	Mfg. Computers	Lighting	Existing	3	Lighting Controls	42.3%	30.0%	$ 0.212	$ 0.157	$ 0.055	$ 0.025	10	2.4958494	1
ComMT1		Mfg. Computers	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	42.8%	0.9%	$ 0.372	$ 0.372	$ -	$ 0.025	15	2.0909404	1
ComMT10	ectronic_Equipment_M	Mfg. Computers	Motors	Turnover	10	Material Handling	52.9%	5.0%	$ 0.585	$ 0.483	$ 0.102	$ 0.025	10	0.9520733	0
ComMT11	ectronic_Equipment_M	Mfg. Computers	Motors	Turnover	11	Air Compressor Demand Reduction	25.5%	15.9%	$ 0.107	$ 0.081	$ 0.026	$ 0.025	10	4.4121465	1
ComME6	ectronic_Equipment_M	Mfg. Computers	Motors	Existing	6	Material Handling VFD	52.9%	18.7%	$ 0.381	$ 0.229	$ 0.152	$ 0.025	10	1.4299704	1
ComME13	ectronic_Equipment_M	Mfg. Computers	Motors	Existing	13	Motor Management Plan	49.2%	2.9%	$ 0.134	$ 0.054	$ 0.080	$ 0.025	10	3.6434981	1
ComMT15	ectronic_Equipment_M	Mfg. Computers	Motors	Turnover	15	Motors: Rewind 101-200 HP	25.4%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	2.482299	1
ComMT16	ectronic_Equipment_M	Mfg. Computers	Motors	Turnover	16	Motors: Rewind 201-500 HP	35.6%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	2.482299	1
ComMT17	ectronic_Equipment_M	Mfg. Computers	Motors	Turnover	17	Motors: Rewind 20-50 HP	4.7%	0.9%	$ 0.431	$ 0.356	$ 0.075	$ 0.025	15	1.8204628	1
ComMT18	ectronic_Equipment_M	Mfg. Computers	Motors	Turnover	18	Motors: Rewind 500+ HP	55.2%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	2.482299	1
ComMT19	ectronic_Equipment_M	Mfg. Computers	Motors	Turnover	19	Motors: Rewind 51-100 HP	15.2%	0.6%	$ 0.388	$ 0.321	$ 0.067	$ 0.025	15	2.0100557	1
ComMT2		Mfg. Computers	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	66.3%	0.4%	$ 0.799	$ 0.799	$ -	$ 0.025	15	1.0078251	1

Measure Lookup	Industry	New Segment	New End-Use	Vintage	easure Numb	Measure	Applicability	Savings	Total Cost ($/kW Saved)	Equipment Cost	Labor Cost	Admin Costs ($/kWh Saved)	Life	TRC Test	Economic Flag
ComMT20	ectronic_Equipment_M	Mfg. Computers	Motors	Turnover	20	Properly Sized Fans	14.8%	10.4%	$ 0.202	$ 0.122	$ 0.080	$ 0.025	10	2.55712	1
ComME21	ectronic_Equipment_M	Mfg. Computers	Motors	Existing	21	Air Compressor Optimization	35.0%	30.1%	$ 0.151	$ 0.058	$ 0.093	$ 0.025	10	3.291247	1
ComME22	ectronic_Equipment_M	Mfg. Computers	Motors	Existing	22	Pump Energy Management	30.1%	7.5%	$ 0.134	$ 0.054	$ 0.080	$ 0.025	10	3.6434981	1
ComMT23	ectronic_Equipment_M	Mfg. Computers	Motors	Turnover	23	Pump Equipment Upgrade	32.6%	20.0%	$ 0.156	$ 0.129	$ 0.027	$ 0.025	10	3.1999188	1
ComME24	ectronic_Equipment_M	Mfg. Computers	Motors	Existing	24	Pump System Optimization	15.0%	12.1%	$ 0.391	$ 0.196	$ 0.195	$ 0.025	12	1.6441851	1
ComMT25	ectronic_Equipment_M	Mfg. Computers	Motors	Turnover	25	Switch from Belt drive to Direct Drive	10.5%	7.5%	$ 0.268	$ 0.221	$ 0.046	$ 0.025	12	2.3391305	1
ComMT26	ectronic_Equipment_M	Mfg. Computers	Motors	Turnover	26	Synchronous Belts	20.8%	1.1%	$ 0.268	$ 0.221	$ 0.046	$ 0.025	10	1.9833242	1
ComMT27	ectronic_Equipment_M	Mfg. Computers	Motors	Turnover	27	Efficient Centrifugal Fan	10.3%	20.0%	$ 0.228	$ 0.188	$ 0.040	$ 0.025	10	2.2989361	1
ComMT28		Mfg. Computers	Motors	Turnover	28	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	74.4%	0.91%	$ 2.085	$ 2.085	$ -	$ 0.025	15	0.3935323	0
ComMT29		Mfg. Computers	Motors	Turnover	29	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	55.8%	0.39%	$ 0.436	$ 0.436	$ -	$ 0.025	15	1.8011275	1
ComME3	ectronic_Equipment_M	Mfg. Computers	Motors	Existing	3	Fan System Optimization	29.1%	7.7%	$ 0.311	$ 0.156	$ 0.155	$ 0.025	10	1.7283338	1
ComMT30		Mfg. Computers	Motors	Turnover	30	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	74.4%	0.7%	$ 1.249	$ 1.249	$ -	$ 0.025	15	0.6515928	0
ComMT4	ectronic_Equipment_M	Mfg. Computers	Motors	Turnover	4	High efficiency Compressor motors	73.8%	1.1%	$ 0.430	$ 0.355	$ 0.075	$ 0.025	15	1.8255905	1
ComMT5	ectronic_Equipment_M	Mfg. Computers	Motors	Turnover	5	High Efficiency Motors	73.8%	1.5%	$ 0.545	$ 0.450	$ 0.095	$ 0.025	15	1.4570821	1
ComOT1	ectronic_Equipment_M	Mfg. Computers	Other	Turnover	1	Bldg Improvements	35.0%	20.4%	$ 0.248	$ 0.162	$ 0.087	$ 0.025	15	3.0185774	1
ComOT2	ectronic_Equipment_M	Mfg. Computers	Other	Turnover	2	Elec Chip Fab: Eliminate Exhaust	80.1%	5.0%	$ 0.233	$ 0.206	$ 0.026	$ 0.025	10	2.2368611	1
ComOT3	ectronic_Equipment_M	Mfg. Computers	Other	Turnover	3	Elec Chip Fab: Exhaust Injector	35.0%	100.0%	$ 0.561	$ 0.498	$ 0.064	$ 0.025	10	0.9832646	0
ComCooT11	ectronic_Equipment_M	Mfg. Computers	Process Cooling	Turnover	11	Elec Chip Fab: Reduce Gas Pressure	5.0%	10.0%	$ 0.063	$ -	$ 0.063	$ 0.025	10	6.5384944	1
ComOE5	ectronic_Equipment_M	Mfg. Computers	Other	Existing	5	Energy Project Management	27.0%	29.0%	$ 0.163	$ 0.134	$ 0.029	$ 0.025	11	3.3412297	1
ComOE6	ectronic_Equipment_M	Mfg. Computers	Other	Existing	6	Integrated Plant Energy Management	22.0%	50.0%	$ 0.261	$ 0.215	$ 0.047	$ 0.025	11	2.195776	1
ComOE7	ectronic_Equipment_M	Mfg. Computers	Other	Existing	7	Plant Energy Management	27.0%	12.0%	$ 0.139	$ 0.114	$ 0.025	$ 0.025	10	3.5198522	1
ComOT8	ectronic_Equipment_M	Mfg. Computers	Other	Turnover	8	Transformers	20.0%	1.6%	$ 0.415	$ 0.399	$ 0.016	$ 0.025	15	1.8731544	1
FooCooT1	Food_Mfg	Mfg. Food	Process Cooling	Turnover	1	Equipment: Chillers	8.3%	17.9%	$ 0.330	$ 0.249	$ 0.081	$ 0.025	15	2.3055829	1
FooCooE2	Food_Mfg	Mfg. Food	Process Cooling	Existing	2	Improved Controls	35.2%	6.0%	$ 1.118	$ 0.673	$ 0.445	$ 0.025	15	0.716372	0
FooCooT3	Food_Mfg	Mfg. Food	Process Cooling	Turnover	3	Adjustable speed drive on compressors	34.0%	11.7%	$ 0.201	$ 0.121	$ 0.080	$ 0.025	10	2.5285107	1
FooCooT4	Food_Mfg	Mfg. Food	Process Cooling	Turnover	4	Food: Cooling and Storage	15.0%	15.4%	$ 0.258	$ 0.162	$ 0.096	$ 0.025	10	2.0221371	1
FooCooT5	Food_Mfg	Mfg. Food	Process Cooling	Turnover	5	Food: Refrig Storage Tuneup	7.5%	14.4%	$ 0.056	$ 0.023	$ 0.033	$ 0.025	3	2.1394751	1
FooCooT6	Food_Mfg	Mfg. Food	Process Cooling	Turnover	6	Fruit Storage Refer Retrofit	60.7%	38.2%	$ 0.214	$ 0.135	$ 0.079	$ 0.025	10	2.3904968	1
FooCooT7	Food_Mfg	Mfg. Food	Process Cooling	Turnover	7	Fruit Storage Tuneup	10.0%	15.6%	$ 0.056	$ 0.023	$ 0.033	$ 0.025	3	2.1394751	1
FooCooE8	Food_Mfg	Mfg. Food	Process Cooling	Existing	8	Optimization of operating parameters	35.0%	13.1%	$ 0.101	$ 0.039	$ 0.063	$ 0.025	3	1.3718163	1
FooHeaE1	Food_Mfg	Mfg. Food	Process Heating	Existing	1	Improved Controls	38.8%	30.4%	$ 0.245	$ 0.147	$ 0.098	$ 0.025	10	2.1209929	1
FooHeaE2	Food_Mfg	Mfg. Food	Process Heating	Existing	2	Process Heat O&M	65.0%	28.6%	$ 0.257	$ 0.225	$ 0.032	$ 0.025	2	0.4185549	0
FooHT1	Food_Mfg	Mfg. Food	HVAC	Turnover	1	Equipment Upgrades	62.9%	16.4%	$ 0.296	$ 0.252	$ 0.044	$ 0.025	15	2.6456759	1
FooHE2	Food_Mfg	Mfg. Food	HVAC	Existing	2	Improved Controls	32.7%	20.9%	$ 0.102	$ 0.077	$ 0.025	$ 0.025	10	4.6569446	1
FooHE3	Food_Mfg	Mfg. Food	HVAC	Existing	3	Recommissioning	72.6%	16.0%	$ 0.271	$ -	$ 0.271	$ 0.025	7	1.4040325	1
FooLT1	Food_Mfg	Mfg. Food	Lighting	Turnover	1	Efficient Lighting Equipment	30.4%	19.9%	$ 0.150	$ 0.103	$ 0.047	$ 0.025	10	3.3767624	1
FooLT2	Food_Mfg	Mfg. Food	Lighting	Turnover	2	HighBay Lighting Equipment	55.1%	34.1%	$ 0.376	$ 0.295	$ 0.081	$ 0.025	10	1.4759078	1
FooLE3	Food_Mfg	Mfg. Food	Lighting	Existing	3	Lighting Controls	42.3%	30.0%	$ 0.212	$ 0.157	$ 0.055	$ 0.025	10	2.4958494	1
FooME1	Food_Mfg	Mfg. Food	Motors	Existing	1	Fan System Optimization	29.6%	7.7%	$ 0.311	$ 0.156	$ 0.155	$ 0.025	10	1.7283338	1
FooME4	Food_Mfg	Mfg. Food	Motors	Existing	4	Material Handling VFD	51.6%	18.7%	$ 0.381	$ 0.229	$ 0.152	$ 0.025	10	1.4299704	1
FooME11	Food_Mfg	Mfg. Food	Motors	Existing	11	Motor Management Plan	48.9%	2.9%	$ 0.134	$ 0.054	$ 0.080	$ 0.025	10	3.6434981	1
FooMT13	Food_Mfg	Mfg. Food	Motors	Turnover	13	Motors: Rewind 101-200 HP	25.4%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	2.482299	1
FooMT14	Food_Mfg	Mfg. Food	Motors	Turnover	14	Motors: Rewind 201-500 HP	35.6%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	2.482299	1
FooMT15	Food_Mfg	Mfg. Food	Motors	Turnover	15	Motors: Rewind 20-50 HP	4.6%	0.9%	$ 0.431	$ 0.356	$ 0.075	$ 0.025	15	1.8204628	1
FooMT16	Food_Mfg	Mfg. Food	Motors	Turnover	16	Motors: Rewind 500+ HP	55.2%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	2.482299	1
FooMT17	Food_Mfg	Mfg. Food	Motors	Turnover	17	Motors: Rewind 51-100 HP	15.2%	0.6%	$ 0.388	$ 0.321	$ 0.067	$ 0.025	15	2.0100557	1
FooME18	Food_Mfg	Mfg. Food	Motors	Existing	18	Air Compressor Optimization	35.0%	30.1%	$ 0.151	$ 0.058	$ 0.093	$ 0.025	10	3.291247	1
FooMT19	Food_Mfg	Mfg. Food	Motors	Turnover	19	Properly Sized Fans	15.0%	10.4%	$ 0.202	$ 0.122	$ 0.080	$ 0.025	10	2.55712	1
FooMT2	Food_Mfg	Mfg. Food	Motors	Turnover	2	High efficiency Compressor motors	73.8%	1.1%	$ 0.430	$ 0.355	$ 0.075	$ 0.025	15	1.8255905	1
FooME20	Food_Mfg	Mfg. Food	Motors	Existing	20	Pump Energy Management	30.5%	7.5%	$ 0.134	$ 0.054	$ 0.080	$ 0.025	10	3.6434981	1
FooMT21	Food_Mfg	Mfg. Food	Motors	Turnover	21	Pump Equipment Upgrade	33.0%	20.0%	$ 0.156	$ 0.129	$ 0.027	$ 0.025	10	3.1999188	1
FooME22	Food_Mfg	Mfg. Food	Motors	Existing	22	Pump System Optimization	15.2%	12.1%	$ 0.391	$ 0.196	$ 0.195	$ 0.025	12	1.6441851	1
FooMT23	Food_Mfg	Mfg. Food	Motors	Turnover	23	Switch from Belt drive to Direct Drive	10.2%	7.5%	$ 0.268	$ 0.221	$ 0.046	$ 0.025	12	2.3391305	1
FooMT24	Food_Mfg	Mfg. Food	Motors	Turnover	24	Synchronous Belts	20.8%	1.1%	$ 0.268	$ 0.221	$ 0.046	$ 0.025	10	1.9833242	1
FooMT25	Food_Mfg	Mfg. Food	Motors	Turnover	25	Efficient Centrifugal Fan	10.5%	20.0%	$ 0.228	$ 0.188	$ 0.040	$ 0.025	10	2.2989361	1
FooMT26		Mfg. Food	Motors	Turnover	26	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	74.4%	0.91%	$ 2.085	$ 2.085	$ -	$ 0.025	15	0.3935323	0
FooMT27		Mfg. Food	Motors	Turnover	27	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	55.8%	0.39%	$ 0.436	$ 0.436	$ -	$ 0.025	15	1.8011275	1
FooMT28		Mfg. Food	Motors	Turnover	28	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	74.4%	0.7%	$ 1.249	$ 1.249	$ -	$ 0.025	15	0.6515928	0
FooMT29		Mfg. Food	Motors	Turnover	29	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	42.8%	0.9%	$ 0.372	$ 0.372	$ -	$ 0.025	15	2.0909404	1
FooMT3	Food_Mfg	Mfg. Food	Motors	Turnover	3	High Efficiency Motors	74.0%	1.5%	$ 0.545	$ 0.450	$ 0.095	$ 0.025	15	1.4570821	1
FooMT30		Mfg. Food	Motors	Turnover	30	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	66.3%	0.4%	$ 0.799	$ 0.799	$ -	$ 0.025	15	1.0078251	1
FooMT7	Food_Mfg	Mfg. Food	Motors	Turnover	7	Air Compressor Demand Reduction	25.5%	15.9%	$ 0.107	$ 0.081	$ 0.026	$ 0.025	10	4.4121465	1
FooMT9	Food_Mfg	Mfg. Food	Motors	Turnover	9	Material Handling	51.6%	5.0%	$ 0.585	$ 0.483	$ 0.102	$ 0.025	10	0.9520733	0
FooOT1	Food_Mfg	Mfg. Food	Other	Turnover	1	Bldg Improvements	35.0%	20.4%	$ 0.248	$ 0.162	$ 0.087	$ 0.025	15	3.0185774	1
FooOE2	Food_Mfg	Mfg. Food	Other	Existing	2	Energy Project Management	27.0%	29.0%	$ 0.163	$ 0.134	$ 0.029	$ 0.025	11	3.3412297	1
FooOE3	Food_Mfg	Mfg. Food	Other	Existing	3	Integrated Plant Energy Management	22.0%	50.0%	$ 0.261	$ 0.215	$ 0.047	$ 0.025	11	2.195776	1
FooOE4	Food_Mfg	Mfg. Food	Other	Existing	4	Plant Energy Management	27.0%	12.0%	$ 0.139	$ 0.114	$ 0.025	$ 0.025	10	3.5198522	1
FooOT5	Food_Mfg	Mfg. Food	Other	Turnover	5	Transformers	20.0%	1.6%	$ 0.415	$ 0.399	$ 0.016	$ 0.025	15	1.8731544	1
MetCooT1	Primary_Metal_Mfg	Mfg. Metals	Process Cooling	Turnover	1	Equipment: Chillers	8.0%	17.9%	$ 0.330	$ 0.249	$ 0.081	$ 0.025	15	2.3055829	1
MetCooe2	Primary_Metal_Mfg	Mfg. Metals	Process Cooling	existing	2	Improved Controls	33.8%	6.0%	$ 1.118	$ 0.673	$ 0.445	$ 0.025	15	0.716372	0
MetCooE3	Primary_Metal_Mfg	Mfg. Metals	Process Cooling	Existing	3	Optimization of operating parameters	35.0%	13.1%	$ 0.101	$ 0.039	$ 0.063	$ 0.025	3	1.3718163	1
MetHeaE1	Primary_Metal_Mfg	Mfg. Metals	Process Heating	Existing	1	Improved Controls	40.1%	30.4%	$ 0.245	$ 0.147	$ 0.098	$ 0.025	10	2.1209929	1
MetHeaT2	Primary_Metal_Mfg	Mfg. Metals	Process Heating	Turnover	2	Metal: New Arc Furnace	10.3%	45.0%	$ 0.115	$ 0.102	$ 0.013	$ 0.025	10	4.0851251	1
MetHeaE3	Primary_Metal_Mfg	Mfg. Metals	Process Heating	Existing	3	Process Heat O&M	67.2%	28.6%	$ 0.257	$ 0.225	$ 0.032	$ 0.025	2	0.4185549	0
MetHT1	Primary_Metal_Mfg	Mfg. Metals	HVAC	Turnover	1	Equipment Upgrades	64.7%	16.4%	$ 0.296	$ 0.252	$ 0.044	$ 0.025	15	2.6456759	1
MetHE2	Primary_Metal_Mfg	Mfg. Metals	HVAC	Existing	2	Improved Controls	33.6%	20.9%	$ 0.102	$ 0.077	$ 0.025	$ 0.025	10	4.6569446	1

Measure Lookup	Industry	New Segment	New End-Use	Vintage	easure Numb	Measure	Applicability	Savings	Total Cost ($/kW Saved)	Equipment Cost	Labor Cost	Admin Costs ($/kWh Saved)	Life	TRC Test	Economic Flag
MetHE3	Primary_Metal_Mfg	Mfg. Metals	HVAC	Existing	3	Recommissioning	74.7%	16.0%	$ 0.271	$ -	$ 0.271	$ 0.025	7	1.4040325	1
MetLT1	Primary_Metal_Mfg	Mfg. Metals	Lighting	Turnover	1	Efficient Lighting Equipment	30.4%	19.9%	$ 0.150	$ 0.103	$ 0.047	$ 0.025	10	3.3767624	1
MetLT2	Primary_Metal_Mfg	Mfg. Metals	Lighting	Turnover	2	HighBay Lighting Equipment	55.1%	34.1%	$ 0.376	$ 0.295	$ 0.081	$ 0.025	10	1.4759078	1
MetLE3	Primary_Metal_Mfg	Mfg. Metals	Lighting	Existing	3	Lighting Controls	42.3%	30.0%	$ 0.212	$ 0.157	$ 0.055	$ 0.025	10	2.4958494	1
MetMT1	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	1	Air Compressor Demand Reduction	25.3%	15.9%	$ 0.107	$ 0.081	$ 0.026	$ 0.025	10	4.4121465	1
MetME10	Primary_Metal_Mfg	Mfg. Metals	Motors	Existing	10	Motor Management Plan	49.1%	2.9%	$ 0.134	$ 0.054	$ 0.080	$ 0.025	10	3.6434981	1
MetME12	Primary_Metal_Mfg	Mfg. Metals	Motors	Existing	12	Air Compressor Optimization	34.7%	30.1%	$ 0.151	$ 0.058	$ 0.093	$ 0.025	10	3.291247	1
MetMT13	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	13	Motors: Rewind 101-200 HP	25.4%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	2.482299	1
MetMT14	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	14	Motors: Rewind 201-500 HP	35.6%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	2.482299	1
MetMT15	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	15	Motors: Rewind 20-50 HP	4.6%	0.9%	$ 0.431	$ 0.356	$ 0.075	$ 0.025	15	1.8204628	1
MetMT16	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	16	Motors: Rewind 500+ HP	55.2%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	2.482299	1
MetMT17	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	17	Motors: Rewind 51-100 HP	15.2%	0.6%	$ 0.388	$ 0.321	$ 0.067	$ 0.025	15	2.0100557	1
MetMT18	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	18	Properly Sized Fans	14.7%	10.4%	$ 0.202	$ 0.122	$ 0.080	$ 0.025	10	2.55712	1
MetME19	Primary_Metal_Mfg	Mfg. Metals	Motors	Existing	19	Pump Energy Management	29.8%	7.5%	$ 0.134	$ 0.054	$ 0.080	$ 0.025	10	3.6434981	1
MetMT2	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	2	High efficiency Compressor motors	73.1%	1.1%	$ 0.430	$ 0.355	$ 0.075	$ 0.025	15	1.8255905	1
MetMT20	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	20	Pump Equipment Upgrade	32.3%	20.0%	$ 0.156	$ 0.129	$ 0.027	$ 0.025	10	3.1999188	1
MetME21	Primary_Metal_Mfg	Mfg. Metals	Motors	Existing	21	Pump System Optimization	14.9%	12.1%	$ 0.391	$ 0.196	$ 0.195	$ 0.025	12	1.6441851	1
MetMT22	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	22	Efficient Centrifugal Fan	10.3%	20.0%	$ 0.228	$ 0.188	$ 0.040	$ 0.025	10	2.2989361	1
MetMT23	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	23	Switch from Belt drive to Direct Drive	10.4%	7.5%	$ 0.268	$ 0.221	$ 0.046	$ 0.025	12	2.3391305	1
MetMT24	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	24	Synchronous Belts	20.6%	1.1%	$ 0.268	$ 0.221	$ 0.046	$ 0.025	10	1.9833242	1
MetMT25		Mfg. Metals	Motors	Turnover	25	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	74.4%	0.91%	$ 2.085	$ 2.085	$ -	$ 0.025	15	0.3935323	0
MetMT26		Mfg. Metals	Motors	Turnover	26	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	55.8%	0.39%	$ 0.436	$ 0.436	$ -	$ 0.025	15	1.8011275	1
MetMT27		Mfg. Metals	Motors	Turnover	27	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	74.4%	0.7%	$ 1.249	$ 1.249	$ -	$ 0.025	15	0.6515928	0
MetMT28		Mfg. Metals	Motors	Turnover	28	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	42.8%	0.9%	$ 0.372	$ 0.372	$ -	$ 0.025	15	2.0909404	1
MetMT29		Mfg. Metals	Motors	Turnover	29	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	66.3%	0.4%	$ 0.799	$ 0.799	$ -	$ 0.025	15	1.0078251	1
MetMT3	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	3	High Efficiency Motors	73.3%	1.5%	$ 0.545	$ 0.450	$ 0.095	$ 0.025	15	1.4570821	1
MetME30	Primary_Metal_Mfg	Mfg. Metals	Motors	Existing	30	Fan System Optimization	29.0%	7.7%	$ 0.311	$ 0.156	$ 0.155	$ 0.025	10	1.7283338	1
MetMT8	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	8	Material Handling	52.4%	5.0%	$ 0.585	$ 0.483	$ 0.102	$ 0.025	10	0.9520733	0
MetME4	Primary_Metal_Mfg	Mfg. Metals	Motors	Existing	4	Material Handling VFD	52.4%	18.7%	$ 0.381	$ 0.229	$ 0.152	$ 0.025	10	1.4299704	1
MetOT1	Primary_Metal_Mfg	Mfg. Metals	Other	Turnover	1	Bldg Improvements	35.0%	20.4%	$ 0.248	$ 0.162	$ 0.087	$ 0.025	15	3.0185774	1
MetOE2	Primary_Metal_Mfg	Mfg. Metals	Other	Existing	2	Energy Project Management	27.0%	29.0%	$ 0.163	$ 0.134	$ 0.029	$ 0.025	11	3.3412297	1
MetOE3	Primary_Metal_Mfg	Mfg. Metals	Other	Existing	3	Integrated Plant Energy Management	22.0%	50.0%	$ 0.261	$ 0.215	$ 0.047	$ 0.025	11	2.195776	1
MetOE4	Primary_Metal_Mfg	Mfg. Metals	Other	Existing	4	Plant Energy Management	27.0%	12.0%	$ 0.139	$ 0.114	$ 0.025	$ 0.025	10	3.5198522	1
MetOT5	Primary_Metal_Mfg	Mfg. Metals	Other	Turnover	5	Transformers	20.0%	1.6%	$ 0.415	$ 0.399	$ 0.016	$ 0.025	15	1.8731544	1
OthCooT1	Miscellaneous_Mfg	Mfg. Other	Process Cooling	Turnover	1	Equipment: Chillers	8.0%	17.9%	$ 0.330	$ 0.249	$ 0.081	$ 0.025	15	2.3055829	1
OthCooE2	Miscellaneous_Mfg	Mfg. Other	Process Cooling	Existing	2	Improved Controls	33.8%	6.0%	$ 1.118	$ 0.673	$ 0.445	$ 0.025	15	0.716372	0
OthCooT3	one_Clay_Glass_Produc	Mfg. Other	Process Cooling	Turnover	3	Adjustable speed drive on compressors	34.0%	11.7%	$ 0.201	$ 0.121	$ 0.080	$ 0.025	10	2.5285107	1
OthCooE4	Miscellaneous_Mfg	Mfg. Other	Process Cooling	Existing	4	Optimization of operating parameters	35.0%	13.1%	$ 0.101	$ 0.039	$ 0.063	$ 0.025	3	1.3718163	1
OthCooT5	Miscellaneous_Mfg	Mfg. Other	Process Cooling	Turnover	5	Cold Storage Retrofit	25.6%	20.7%	$ 0.250	$ 0.157	$ 0.093	$ 0.025	10	2.0799789	1
OthCooE6	Miscellaneous_Mfg	Mfg. Other	Process Cooling	Existing	6	Cold Storage Tuneup	10.0%	15.6%	$ 0.112	$ 0.047	$ 0.065	$ 0.025	3	1.2653787	1
OthHeae1	Miscellaneous_Mfg	Mfg. Other	Process Heating	existing	1	Improved Controls	41.7%	30.4%	$ 0.245	$ 0.147	$ 0.098	$ 0.025	10	2.1209929	1
OthHeae2	Miscellaneous_Mfg	Mfg. Other	Process Heating	existing	2	Process Heat O&M	69.8%	28.6%	$ 0.257	$ 0.225	$ 0.032	$ 0.025	2	0.4185549	0
OthHT1	Miscellaneous_Mfg	Mfg. Other	HVAC	Turnover	1	Equipment Upgrades	64.4%	16.4%	$ 0.296	$ 0.252	$ 0.044	$ 0.025	15	2.6456759	1
OthHE2	Miscellaneous_Mfg	Mfg. Other	HVAC	Existing	2	Improved Controls	33.4%	20.9%	$ 0.102	$ 0.077	$ 0.025	$ 0.025	10	4.6569446	1
OthHE3	Miscellaneous_Mfg	Mfg. Other	HVAC	Existing	3	Recommissioning	74.3%	16.0%	$ 0.271	$ -	$ 0.271	$ 0.025	7	1.4040325	1
OthLT1	Miscellaneous_Mfg	Mfg. Other	Lighting	Turnover	1	Efficient Lighting Equipment	30.4%	19.9%	$ 0.150	$ 0.103	$ 0.047	$ 0.025	10	3.3767624	1
OthLT2	Miscellaneous_Mfg	Mfg. Other	Lighting	Turnover	2	HighBay Lighting Equipment	55.1%	34.1%	$ 0.376	$ 0.295	$ 0.081	$ 0.025	10	1.4759078	1
OthLE3	Miscellaneous_Mfg	Mfg. Other	Lighting	Existing	3	Lighting Controls	42.3%	30.0%	$ 0.212	$ 0.157	$ 0.055	$ 0.025	10	2.4958494	1
OthMT1		Mfg. Other	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	74.4%	0.7%	$ 1.249	$ 1.249	$ -	$ 0.025	15	0.6515928	0
OthMT11	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	11	Air Compressor Demand Reduction	26.0%	15.9%	$ 0.107	$ 0.081	$ 0.026	$ 0.025	10	4.4121465	1
OthMT12	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	12	Material Handling	52.9%	5.0%	$ 0.585	$ 0.483	$ 0.102	$ 0.025	10	0.9520733	0
OthME13	Miscellaneous_Mfg	Mfg. Other	Motors	Existing	13	Material Handling VFD	52.9%	18.7%	$ 0.381	$ 0.229	$ 0.152	$ 0.025	10	1.4299704	1
OthME14	Miscellaneous_Mfg	Mfg. Other	Motors	Existing	14	Motor Management Plan	50.0%	2.9%	$ 0.134	$ 0.054	$ 0.080	$ 0.025	10	3.6434981	1
OthMT16	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	16	Motors: Rewind 101-200 HP	25.4%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	2.482299	1
OthMT17	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	17	Motors: Rewind 201-500 HP	35.6%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	2.482299	1
OthMT18	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	18	Motors: Rewind 20-50 HP	4.7%	0.9%	$ 0.431	$ 0.356	$ 0.075	$ 0.025	15	1.8204628	1
OthMT19	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	19	Motors: Rewind 500+ HP	55.2%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	2.482299	1
OthMT2		Mfg. Other	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	42.8%	0.9%	$ 0.372	$ 0.372	$ -	$ 0.025	15	2.0909404	1
OthMT20	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	20	Motors: Rewind 51-100 HP	15.2%	0.6%	$ 0.388	$ 0.321	$ 0.067	$ 0.025	15	2.0100557	1
OthMT21	one_Clay_Glass_Produc	Mfg. Other	Motors	Turnover	21	Air Compressor Equipment	17.0%	8.8%	$ 0.157	$ 0.130	$ 0.027	$ 0.025	10	3.1862753	1
OthMT22	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	22	Properly Sized Fans	15.3%	10.4%	$ 0.202	$ 0.122	$ 0.080	$ 0.025	10	2.55712	1
OthME23	Miscellaneous_Mfg	Mfg. Other	Motors	Existing	23	Pump Energy Management	31.2%	7.5%	$ 0.134	$ 0.054	$ 0.080	$ 0.025	10	3.6434981	1
OthMT24	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	24	Pump Equipment Upgrade	33.8%	20.0%	$ 0.156	$ 0.129	$ 0.027	$ 0.025	10	3.1999188	1
OthME25	Miscellaneous_Mfg	Mfg. Other	Motors	Existing	25	Pump System Optimization	15.5%	12.1%	$ 0.391	$ 0.196	$ 0.195	$ 0.025	12	1.6441851	1
OthMT26	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	26	Switch from Belt drive to Direct Drive	10.5%	7.5%	$ 0.268	$ 0.221	$ 0.046	$ 0.025	12	2.3391305	1
OthMT27	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	27	Synchronous Belts	21.4%	1.1%	$ 0.268	$ 0.221	$ 0.046	$ 0.025	10	1.9833242	1
OthME28	Miscellaneous_Mfg	Mfg. Other	Motors	Existing	28	Air Compressor Optimization	35.6%	30.1%	$ 0.151	$ 0.058	$ 0.093	$ 0.025	10	3.291247	1
OthMT29	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	29	Efficient Centrifugal Fan	10.7%	20.0%	$ 0.228	$ 0.188	$ 0.040	$ 0.025	10	2.2989361	1
OthMT3		Mfg. Other	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	66.3%	0.4%	$ 0.799	$ 0.799	$ -	$ 0.025	15	1.0078251	1
OthMT30		Mfg. Other	Motors	Turnover	30	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	74.4%	0.91%	$ 2.085	$ 2.085	$ -	$ 0.025	15	0.3935323	0
OthMT31		Mfg. Other	Motors	Turnover	31	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	55.8%	0.39%	$ 0.436	$ 0.436	$ -	$ 0.025	15	1.8011275	1
OthME4	Miscellaneous_Mfg	Mfg. Other	Motors	Existing	4	Fan System Optimization	30.1%	7.7%	$ 0.311	$ 0.156	$ 0.155	$ 0.025	10	1.7283338	1
OthMT5	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	5	High efficiency Compressor motors	75.1%	1.1%	$ 0.430	$ 0.355	$ 0.075	$ 0.025	15	1.8255905	1
OthMT6	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	6	High Efficiency Motors	75.6%	1.5%	$ 0.545	$ 0.450	$ 0.095	$ 0.025	15	1.4570821	1
OthOT1	Miscellaneous_Mfg	Mfg. Other	Other	Turnover	1	Bldg Improvements	35.0%	20.4%	$ 0.248	$ 0.162	$ 0.087	$ 0.025	15	3.0185774	1
OthOE2	Miscellaneous_Mfg	Mfg. Other	Other	Existing	2	Energy Project Management	27.0%	29.0%	$ 0.163	$ 0.134	$ 0.029	$ 0.025	11	3.3412297	1

Measure Lookup	Industry	New Segment	New End-Use	Vintage	easure Numb	Measure	Applicability	Savings	Total Cost ($/kW Saved)	Equipment Cost	Labor Cost	Admin Costs ($/kWh Saved)	Life	TRC Test	Economic Flag
OthOE3	Miscellaneous_Mfg	Mfg. Other	Other	Existing	3	Integrated Plant Energy Management	22.0%	50.0%	$ 0.261	$ 0.215	$ 0.047	$ 0.025	11	2.195776	1
OthOE4	Miscellaneous_Mfg	Mfg. Other	Other	Existing	4	Plant Energy Management	27.0%	12.0%	$ 0.139	$ 0.114	$ 0.025	$ 0.025	10	3.5198522	1
OthOT5	Miscellaneous_Mfg	Mfg. Other	Other	Turnover	5	Transformers	20.0%	1.6%	$ 0.415	$ 0.399	$ 0.016	$ 0.025	15	1.8731544	1
PapCooT1	Paper_Mfg	Mfg. Paper	Process Cooling	Turnover	1	Equipment: Chillers	8.0%	17.9%	$ 0.330	$ 0.249	$ 0.081	$ 0.025	15	2.3055829	1
PapCooE2	Paper_Mfg	Mfg. Paper	Process Cooling	Existing	2	Improved Controls	33.8%	6.0%	$ 1.118	$ 0.673	$ 0.445	$ 0.025	15	0.716372	0
PapCooT3	Paper_Mfg	Mfg. Paper	Process Cooling	Turnover	3	Adjustable speed drive on compressors	34.0%	11.7%	$ 0.201	$ 0.121	$ 0.080	$ 0.025	10	2.5285107	1
PapCooE4	Paper_Mfg	Mfg. Paper	Process Cooling	Existing	4	Optimization of operating parameters	35.0%	13.1%	$ 0.101	$ 0.039	$ 0.063	$ 0.025	3	1.3718163	1
PapHeaE1	Paper_Mfg	Mfg. Paper	Process Heating	Existing	1	Improved Controls	38.1%	30.4%	$ 0.245	$ 0.147	$ 0.098	$ 0.025	10	2.1209929	1
PapHeaE2	Paper_Mfg	Mfg. Paper	Process Heating	Existing	2	Process Heat O&M	63.9%	28.6%	$ 0.257	$ 0.225	$ 0.032	$ 0.025	2	0.4185549	0
PapHT1	Paper_Mfg	Mfg. Paper	HVAC	Turnover	1	Equipment Upgrades	62.4%	16.4%	$ 0.296	$ 0.252	$ 0.044	$ 0.025	15	2.6456759	1
PapHE2	Paper_Mfg	Mfg. Paper	HVAC	Existing	2	Improved Controls	32.4%	20.9%	$ 0.102	$ 0.077	$ 0.025	$ 0.025	10	4.6569446	1
PapHE3	Paper_Mfg	Mfg. Paper	HVAC	Existing	3	Recommissioning	72.0%	16.0%	$ 0.271	$ -	$ 0.271	$ 0.025	7	1.4040325	1
PapLT1	Paper_Mfg	Mfg. Paper	Lighting	Turnover	1	Efficient Lighting Equipment	30.4%	19.9%	$ 0.150	$ 0.103	$ 0.047	$ 0.025	10	3.3767624	1
PapLT2	Paper_Mfg	Mfg. Paper	Lighting	Turnover	2	HighBay Lighting Equipment	55.1%	34.1%	$ 0.376	$ 0.295	$ 0.081	$ 0.025	10	1.4759078	1
PapLE3	Paper_Mfg	Mfg. Paper	Lighting	Existing	3	Lighting Controls	42.3%	30.0%	$ 0.212	$ 0.157	$ 0.055	$ 0.025	10	2.4958494	1
PapME1	Paper_Mfg	Mfg. Paper	Motors	Existing	1	Fan System Optimization	30.2%	7.7%	$ 0.311	$ 0.156	$ 0.155	$ 0.025	10	1.7283338	1
PapME10	Paper_Mfg	Mfg. Paper	Motors	Existing	10	Motor Management Plan	50.1%	2.9%	$ 0.134	$ 0.054	$ 0.080	$ 0.025	10	3.6434981	1
PapMT11	Paper_Mfg	Mfg. Paper	Motors	Turnover	11	Air Compressor Demand Reduction	25.8%	15.9%	$ 0.107	$ 0.081	$ 0.026	$ 0.025	10	4.4121465	1
PapMT13	Paper_Mfg	Mfg. Paper	Motors	Turnover	13	Motors: Rewind 101-200 HP	25.4%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	2.482299	1
PapMT14	Paper_Mfg	Mfg. Paper	Motors	Turnover	14	Motors: Rewind 201-500 HP	35.6%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	2.482299	1
PapMT15	Paper_Mfg	Mfg. Paper	Motors	Turnover	15	Motors: Rewind 20-50 HP	4.7%	0.9%	$ 0.431	$ 0.356	$ 0.075	$ 0.025	15	1.8204628	1
PapMT16	Paper_Mfg	Mfg. Paper	Motors	Turnover	16	Motors: Rewind 500+ HP	55.2%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	2.482299	1
PapMT17	Paper_Mfg	Mfg. Paper	Motors	Turnover	17	Motors: Rewind 51-100 HP	15.2%	0.6%	$ 0.388	$ 0.321	$ 0.067	$ 0.025	15	2.0100557	1
PapMT18	Paper_Mfg	Mfg. Paper	Motors	Turnover	18	Paper: Large Material Handling	25.2%	9.7%	$ 0.959	$ 0.850	$ 0.109	$ 0.025	10	0.5900549	0
PapMT19	Paper_Mfg	Mfg. Paper	Motors	Turnover	19	Paper: Material Handling	25.2%	13.1%	$ 0.801	$ 0.710	$ 0.091	$ 0.025	10	0.7025395	0
PapMT2	Paper_Mfg	Mfg. Paper	Motors	Turnover	2	High efficiency Compressor motors	74.7%	1.1%	$ 0.430	$ 0.355	$ 0.075	$ 0.025	15	1.8255905	1
PapMT20	Paper_Mfg	Mfg. Paper	Motors	Turnover	20	Paper: Premium Control Large Material	25.2%	18.7%	$ 0.549	$ 0.486	$ 0.062	$ 0.025	10	1.0123185	1
PapME21	Paper_Mfg	Mfg. Paper	Motors	Existing	21	Air Compressor Optimization	35.4%	30.1%	$ 0.151	$ 0.058	$ 0.093	$ 0.025	10	3.291247	1
PapMT22	Paper_Mfg	Mfg. Paper	Motors	Turnover	22	Paper: Premium Fan	25.5%	20.0%	$ 0.227	$ 0.201	$ 0.026	$ 0.025	10	2.3070073	1
PapMT23	Paper_Mfg	Mfg. Paper	Motors	Turnover	23	Properly Sized Fans	15.3%	10.4%	$ 0.202	$ 0.122	$ 0.080	$ 0.025	10	2.55712	1
PapME24	Paper_Mfg	Mfg. Paper	Motors	Existing	24	Pump Energy Management	32.3%	7.5%	$ 0.134	$ 0.054	$ 0.080	$ 0.025	10	3.6434981	1
PapMT25	Paper_Mfg	Mfg. Paper	Motors	Turnover	25	Pump Equipment Upgrade	34.9%	20.0%	$ 0.156	$ 0.129	$ 0.027	$ 0.025	10	3.1999188	1
PapME26	Paper_Mfg	Mfg. Paper	Motors	Existing	26	Pump System Optimization	16.1%	12.1%	$ 0.391	$ 0.196	$ 0.195	$ 0.025	12	1.6441851	1
PapMT27	Paper_Mfg	Mfg. Paper	Motors	Turnover	27	Switch from Belt drive to Direct Drive	10.6%	7.5%	$ 0.268	$ 0.221	$ 0.046	$ 0.025	12	2.3391305	1
PapMT28	Paper_Mfg	Mfg. Paper	Motors	Turnover	28	Synchronous Belts	21.4%	1.1%	$ 0.268	$ 0.221	$ 0.046	$ 0.025	10	1.9833242	1
PapMT29	Paper_Mfg	Mfg. Paper	Motors	Turnover	29	Efficient Centrifugal Fan	10.7%	20.0%	$ 0.228	$ 0.188	$ 0.040	$ 0.025	10	2.2989361	1
PapMT3	Paper_Mfg	Mfg. Paper	Motors	Turnover	3	High Efficiency Motors	76.7%	1.5%	$ 0.545	$ 0.450	$ 0.095	$ 0.025	15	1.4570821	1
PapMT30		Mfg. Paper	Motors	Turnover	30	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	74.4%	0.91%	$ 2.085	$ 2.085	$ -	$ 0.025	15	0.3935323	0
PapMT31		Mfg. Paper	Motors	Turnover	31	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	55.8%	0.39%	$ 0.436	$ 0.436	$ -	$ 0.025	15	1.8011275	1
PapMT32		Mfg. Paper	Motors	Turnover	32	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	74.4%	0.7%	$ 1.249	$ 1.249	$ -	$ 0.025	15	0.6515928	0
PapMT33		Mfg. Paper	Motors	Turnover	33	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	42.8%	0.9%	$ 0.372	$ 0.372	$ -	$ 0.025	15	2.0909404	1
PapMT34		Mfg. Paper	Motors	Turnover	34	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	66.3%	0.4%	$ 0.799	$ 0.799	$ -	$ 0.025	15	1.0078251	1
PapMT8	Paper_Mfg	Mfg. Paper	Motors	Turnover	8	Material Handling	53.4%	5.0%	$ 0.585	$ 0.483	$ 0.102	$ 0.025	10	0.9520733	0
PapME9	Paper_Mfg	Mfg. Paper	Motors	Existing	9	Material Handling VFD	53.4%	18.7%	$ 0.381	$ 0.229	$ 0.152	$ 0.025	10	1.4299704	1
PapOT1	Paper_Mfg	Mfg. Paper	Other	Turnover	1	Bldg Improvements	35.0%	20.4%	$ 0.248	$ 0.162	$ 0.087	$ 0.025	15	3.0185774	1
PapOE10	Paper_Mfg	Mfg. Paper	Other	Existing	10	Plant Energy Management	27.0%	12.0%	$ 0.139	$ 0.114	$ 0.025	$ 0.025	10	3.5198522	1
PapOT11	Paper_Mfg	Mfg. Paper	Other	Turnover	11	Transformers	20.0%	1.6%	$ 0.415	$ 0.399	$ 0.016	$ 0.025	15	1.8731544	1
PapOE2	Paper_Mfg	Mfg. Paper	Other	Existing	2	Energy Project Management	27.0%	29.0%	$ 0.163	$ 0.134	$ 0.029	$ 0.025	11	3.3412297	1
PapOE3	Paper_Mfg	Mfg. Paper	Other	Existing	3	Integrated Plant Energy Management	22.0%	50.0%	$ 0.261	$ 0.215	$ 0.047	$ 0.025	11	2.195776	1
PapOT4	Paper_Mfg	Mfg. Paper	Other	Turnover	4	Kraft: Efficient Agitator	13.8%	50.0%	$ 0.104	$ 0.093	$ 0.012	$ 0.025	10	4.4534037	1
PapOT5	Paper_Mfg	Mfg. Paper	Other	Turnover	5	Kraft: Effluent Treatment System	9.2%	15.0%	$ 0.092	$ 0.082	$ 0.011	$ 0.025	10	4.9076695	1
PapOT6	Paper_Mfg	Mfg. Paper	Other	Turnover	6	Mech Pulp: Premium Process	22.5%	0.2%	$ 0.141	$ 0.125	$ 0.016	$ 0.025	5	1.6991766	1
PapOT7	Paper_Mfg	Mfg. Paper	Other	Turnover	7	Mech Pulp: Refiner Plate Improvement	35.5%	0.4%	$ 0.045	$ 0.040	$ 0.005	$ 0.025	1	0.9055733	0
PapOT8	Paper_Mfg	Mfg. Paper	Other	Turnover	8	Mech Pulp: Refiner Replacement	23.7%	10.0%	$ 0.735	$ 0.652	$ 0.084	$ 0.025	12	0.8941989	0
PapOT9	Paper_Mfg	Mfg. Paper	Other	Turnover	9	Paper: Efficient Pulp Screen	13.8%	15.0%	$ 0.226	$ 0.200	$ 0.026	$ 0.025	10	2.3009207	1
PlaCooE1	Chemical_Mfg	Mfg. Plastics	Process Cooling	Existing	1	Clean Room: Change Filter Strategy	10.0%	40.0%	$ 0.016	$ 0.012	$ 0.005	$ 0.025	1	1.5135301	1
PlaCooE2	Chemical_Mfg	Mfg. Plastics	Process Cooling	Existing	2	Clean Room: Chiller Optimize	28.3%	14.8%	$ 0.248	$ 0.124	$ 0.124	$ 0.025	10	2.096118	1
PlaCooT3	Chemical_Mfg	Mfg. Plastics	Process Cooling	Turnover	3	Clean Room: Clean Room HVAC	30.0%	9.0%	$ 0.204	$ 0.144	$ 0.061	$ 0.025	15	3.5705864	1
PlaCooT4	Chemical_Mfg	Mfg. Plastics	Process Cooling	Turnover	4	Equipment: Chillers	8.0%	17.9%	$ 0.330	$ 0.249	$ 0.081	$ 0.025	15	2.3055829	1
PlaCooE5	Chemical_Mfg	Mfg. Plastics	Process Cooling	Existing	5	Improved Controls	33.8%	6.0%	$ 1.118	$ 0.673	$ 0.445	$ 0.025	15	0.716372	0
PlaCooT6	Chemical_Mfg	Mfg. Plastics	Process Cooling	Turnover	6	Adjustable speed drive on compressors	34.0%	11.7%	$ 0.201	$ 0.121	$ 0.080	$ 0.025	10	2.5285107	1
PlaCooE7	Chemical_Mfg	Mfg. Plastics	Process Cooling	Existing	7	Optimization of operating parameters	35.0%	13.1%	$ 0.101	$ 0.039	$ 0.063	$ 0.025	3	1.3718163	1
PlaCooT8	Chemical_Mfg	Mfg. Plastics	Process Cooling	Turnover	8	Cold Storage Retrofit	25.6%	20.7%	$ 0.250	$ 0.157	$ 0.093	$ 0.025	10	2.0799789	1
PlaCooE9	Chemical_Mfg	Mfg. Plastics	Process Cooling	Existing	9	Cold Storage Tuneup	10.0%	15.6%	$ 0.112	$ 0.047	$ 0.065	$ 0.025	3	1.2653787	1
PlaHeaE1	Chemical_Mfg	Mfg. Plastics	Process Heating	Existing	1	Improved Controls	37.9%	30.4%	$ 0.245	$ 0.147	$ 0.098	$ 0.025	10	2.1209929	1
PlaHeaE2	Chemical_Mfg	Mfg. Plastics	Process Heating	Existing	2	Process Heat O&M	63.4%	28.6%	$ 0.257	$ 0.225	$ 0.032	$ 0.025	2	0.4185549	0
PlaHT1	Chemical_Mfg	Mfg. Plastics	HVAC	Turnover	1	Equipment Upgrades	62.9%	16.4%	$ 0.296	$ 0.252	$ 0.044	$ 0.025	15	2.6456759	1
PlaHE2	Chemical_Mfg	Mfg. Plastics	HVAC	Existing	2	Improved Controls	32.7%	20.9%	$ 0.102	$ 0.077	$ 0.025	$ 0.025	10	4.6569446	1
PlaHE3	Chemical_Mfg	Mfg. Plastics	HVAC	Existing	3	Recommissioning	72.6%	16.0%	$ 0.271	$ -	$ 0.271	$ 0.025	7	1.4040325	1
PlaLT1	Chemical_Mfg	Mfg. Plastics	Lighting	Turnover	1	Efficient Lighting Equipment	30.4%	19.9%	$ 0.150	$ 0.103	$ 0.047	$ 0.025	10	3.3767624	1
PlaLT2	Chemical_Mfg	Mfg. Plastics	Lighting	Turnover	2	HighBay Lighting Equipment	55.1%	34.1%	$ 0.376	$ 0.295	$ 0.081	$ 0.025	10	1.4759078	1
PlaLE3	Chemical_Mfg	Mfg. Plastics	Lighting	Existing	3	Lighting Controls	42.3%	30.0%	$ 0.212	$ 0.157	$ 0.055	$ 0.025	10	2.4958494	1
PlaMT1		Mfg. Plastics	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	42.8%	0.9%	$ 0.372	$ 0.372	$ -	$ 0.025	15	2.0909404	1
PlaMT10	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	10	Material Handling	52.3%	5.0%	$ 0.585	$ 0.483	$ 0.102	$ 0.025	10	0.9520733	0
PlaMT11	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	11	Air Compressor Demand Reduction	28.0%	15.9%	$ 0.107	$ 0.081	$ 0.026	$ 0.025	10	4.4121465	1
PlaME12	Chemical_Mfg	Mfg. Plastics	Motors	Existing	12	Material Handling VFD	52.3%	18.7%	$ 0.381	$ 0.229	$ 0.152	$ 0.025	10	1.4299704	1

Measure Lookup	Industry	New Segment	New End-Use	Vintage	easure Numb	Measure	Applicability	Savings	Total Cost ($/kW Saved)	Equipment Cost	Labor Cost	Admin Costs ($/kWh Saved)	Life	TRC Test	Economic Flag
PlaME13	Chemical_Mfg	Mfg. Plastics	Motors	Existing	13	Motor Management Plan	51.6%	2.9%	$ 0.134	$ 0.054	$ 0.080	$ 0.025	10	3.6434981	1
PlaMT15	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	15	Motors: Rewind 101-200 HP	25.4%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	2.482299	1
PlaMT16	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	16	Motors: Rewind 201-500 HP	35.6%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	2.482299	1
PlaMT17	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	17	Motors: Rewind 20-50 HP	4.6%	0.9%	$ 0.431	$ 0.356	$ 0.075	$ 0.025	15	1.8204628	1
PlaMT18	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	18	Motors: Rewind 500+ HP	55.2%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	2.482299	1
PlaMT19	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	19	Motors: Rewind 51-100 HP	15.2%	0.6%	$ 0.388	$ 0.321	$ 0.067	$ 0.025	15	2.0100557	1
PlaMT2		Mfg. Plastics	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	66.3%	0.4%	$ 0.799	$ 0.799	$ -	$ 0.025	15	1.0078251	1
PlaMT20	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	20	Properly Sized Fans	14.7%	10.4%	$ 0.202	$ 0.122	$ 0.080	$ 0.025	10	2.55712	1
PlaME21	Chemical_Mfg	Mfg. Plastics	Motors	Existing	21	Air Compressor Optimization	38.3%	30.1%	$ 0.151	$ 0.058	$ 0.093	$ 0.025	10	3.291247	1
PlaME22	Chemical_Mfg	Mfg. Plastics	Motors	Existing	22	Pump Energy Management	31.4%	7.5%	$ 0.134	$ 0.054	$ 0.080	$ 0.025	10	3.6434981	1
PlaMT23	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	23	Pump Equipment Upgrade	34.0%	20.0%	$ 0.156	$ 0.129	$ 0.027	$ 0.025	10	3.1999188	1
PlaME24	Chemical_Mfg	Mfg. Plastics	Motors	Existing	24	Pump System Optimization	15.6%	12.1%	$ 0.391	$ 0.196	$ 0.195	$ 0.025	12	1.6441851	1
PlaMT25	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	25	Switch from Belt drive to Direct Drive	10.4%	7.5%	$ 0.268	$ 0.221	$ 0.046	$ 0.025	12	2.3391305	1
PlaMT26	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	26	Synchronous Belts	20.9%	1.1%	$ 0.268	$ 0.221	$ 0.046	$ 0.025	10	1.9833242	1
PlaMT27	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	27	Efficient Centrifugal Fan	10.3%	20.0%	$ 0.228	$ 0.188	$ 0.040	$ 0.025	10	2.2989361	1
PlaMT28		Mfg. Plastics	Motors	Turnover	28	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	74.4%	0.91%	$ 2.085	$ 2.085	$ -	$ 0.025	15	0.3935323	0
PlaMT29		Mfg. Plastics	Motors	Turnover	29	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	55.8%	0.39%	$ 0.436	$ 0.436	$ -	$ 0.025	15	1.8011275	1
PlaME3	Chemical_Mfg	Mfg. Plastics	Motors	Existing	3	Fan System Optimization	28.9%	7.7%	$ 0.311	$ 0.156	$ 0.155	$ 0.025	10	1.7283338	1
PlaMT30		Mfg. Plastics	Motors	Turnover	30	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	74.4%	0.7%	$ 1.249	$ 1.249	$ -	$ 0.025	15	0.6515928	0
PlaMT4	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	4	High efficiency Compressor motors	80.8%	1.1%	$ 0.430	$ 0.355	$ 0.075	$ 0.025	15	1.8255905	1
PlaMT5	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	5	High Efficiency Motors	74.4%	1.5%	$ 0.545	$ 0.450	$ 0.095	$ 0.025	15	1.4570821	1
PlaOT1	Chemical_Mfg	Mfg. Plastics	Other	Turnover	1	Bldg Improvements	35.0%	20.4%	$ 0.248	$ 0.162	$ 0.087	$ 0.025	15	3.0185774	1
PlaOE2	Chemical_Mfg	Mfg. Plastics	Other	Existing	2	Energy Project Management	27.0%	29.0%	$ 0.163	$ 0.134	$ 0.029	$ 0.025	11	3.3412297	1
PlaOE3	Chemical_Mfg	Mfg. Plastics	Other	Existing	3	Integrated Plant Energy Management	22.0%	50.0%	$ 0.261	$ 0.215	$ 0.047	$ 0.025	11	2.195776	1
PlaOE4	Chemical_Mfg	Mfg. Plastics	Other	Existing	4	Plant Energy Management	27.0%	12.0%	$ 0.139	$ 0.114	$ 0.025	$ 0.025	10	3.5198522	1
PlaOT5	Chemical_Mfg	Mfg. Plastics	Other	Turnover	5	Transformers	20.0%	1.6%	$ 0.415	$ 0.399	$ 0.016	$ 0.025	15	1.8731544	1
MinMT1		Mining	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	74.4%	0.91%	$ 2.085	$ 2.085	$ -	$ 0.025	15	0.3935323	0
MinME10	Mining	Mining	Motors	Existing	10	Motor Management Plan	50.0%	2.9%	$ 0.134	$ 0.054	$ 0.080	$ 0.025	10	3.6434981	1
MinMT12	Mining	Mining	Motors	Turnover	12	Motors: Rewind 101-200 HP	25.4%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	2.482299	1
MinMT13	Mining	Mining	Motors	Turnover	13	Motors: Rewind 201-500 HP	35.6%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	2.482299	1
MinMT14	Mining	Mining	Motors	Turnover	14	Motors: Rewind 20-50 HP	4.7%	0.9%	$ 0.431	$ 0.356	$ 0.075	$ 0.025	15	1.8204628	1
MinMT15	Mining	Mining	Motors	Turnover	15	Motors: Rewind 500+ HP	55.2%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	2.482299	1
MinMT16	Mining	Mining	Motors	Turnover	16	Motors: Rewind 51-100 HP	15.2%	0.6%	$ 0.388	$ 0.321	$ 0.067	$ 0.025	15	2.0100557	1
MinMT17	Mining	Mining	Motors	Turnover	17	Switch from Belt drive to Direct Drive	10.5%	7.5%	$ 0.268	$ 0.221	$ 0.046	$ 0.025	12	2.3391305	1
MinMT18	Mining	Mining	Motors	Turnover	18	Synchronous Belts	21.0%	1.1%	$ 0.268	$ 0.221	$ 0.046	$ 0.025	10	1.9833242	1
MinMT2		Mining	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	55.8%	0.39%	$ 0.436	$ 0.436	$ -	$ 0.025	15	1.8011275	1
MinMT3		Mining	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	74.4%	0.7%	$ 1.249	$ 1.249	$ -	$ 0.025	15	0.6515928	0
MinMT4		Mining	Motors	Turnover	4	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	42.8%	0.9%	$ 0.372	$ 0.372	$ -	$ 0.025	15	2.0909404	1
MinMT5		Mining	Motors	Turnover	5	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	66.3%	0.4%	$ 0.799	$ 0.799	$ -	$ 0.025	15	1.0078251	1
MinMT6	Mining	Mining	Motors	Turnover	6	High Efficiency Motors	75.0%	1.5%	$ 0.545	$ 0.450	$ 0.095	$ 0.025	15	1.4570821	1
MinMT8	Mining	Mining	Motors	Turnover	8	Material Handling	53.0%	5.0%	$ 0.585	$ 0.483	$ 0.102	$ 0.025	10	0.9520733	0
MinME9	Mining	Mining	Motors	Existing	9	Material Handling VFD	53.0%	18.7%	$ 0.381	$ 0.229	$ 0.152	$ 0.025	10	1.4299704	1
NonCooT1	umber_Wood_Product	Other Non Mfg.	Process Cooling	Turnover	1	Equipment: Chillers	7.7%	17.9%	$ 0.330	$ 0.249	$ 0.081	$ 0.025	15	2.3055829	1
NonCooE2	umber_Wood_Product	Other Non Mfg.	Process Cooling	Existing	2	Improved Controls	32.3%	6.0%	$ 1.118	$ 0.673	$ 0.445	$ 0.025	15	0.716372	0
NonCooT3	Agriculture	Other Non Mfg.	Process Cooling	Turnover	3	Milk Precooler - Dairy Plate Cooler	1.7%	3.24%	$ 0.660	$ 0.487	$ 0.173	$ 0.025	15	1.1947326	1
NonCooT4	umber_Wood_Product	Other Non Mfg.	Process Cooling	Turnover	4	Adjustable speed drive on compressors	34.0%	11.7%	$ 0.201	$ 0.121	$ 0.080	$ 0.025	10	2.5285107	1
NonCooE5	umber_Wood_Product	Other Non Mfg.	Process Cooling	Existing	5	Optimization of operating parameters	35.0%	13.1%	$ 0.101	$ 0.039	$ 0.063	$ 0.025	3	1.3718163	1
NonHeaT1	Agriculture	Other Non Mfg.	Process Heating	Turnover	1	Crate Heating Pads	22.9%	17.51%	$ 0.181	$ 0.162	$ 0.019	$ 0.025	15	3.9776839	1
NonHeaT2	Agriculture	Other Non Mfg.	Process Heating	Turnover	2	Grain dryers	24.8%	23.52%	$ 8.260	$ 6.090	$ 2.169	$ 0.025	15	0.0988027	0
NonHeaE3	Agriculture	Other Non Mfg.	Process Heating	Existing	3	Heat Lamp Setback (Microzone)	22.9%	0.45%	$ 0.210	$ 0.210	$ -	$ 0.025	15	3.477567	1
NonHeaE4	Agriculture	Other Non Mfg.	Process Heating	Existing	4	Heat Lamp/Heating Pad Controller	22.9%	1.75%	$ 0.129	$ 0.129	$ -	$ 0.025	15	5.3022361	1
NonHeaT5	Agriculture	Other Non Mfg.	Process Heating	Turnover	5	Heat Lamps	22.9%	3.38%	$ 0.023	$ 0.023	$ -	$ 0.025	10	11.830707	1
NonHeaE6	umber_Wood_Product	Other Non Mfg.	Process Heating	Existing	6	Improved Controls	37.9%	30.4%	$ 0.245	$ 0.147	$ 0.098	$ 0.025	10	2.1209929	1
NonHeaE7	umber_Wood_Product	Other Non Mfg.	Process Heating	Existing	7	Process Heat O&M	63.4%	28.6%	$ 0.257	$ 0.225	$ 0.032	$ 0.025	2	0.4185549	0
NonHT1	Agriculture	Other Non Mfg.	HVAC	Turnover	1	Energy-Efficient Dehumidifier	49.7%	2.00%	$ 1.072	$ 0.791	$ 0.282	$ 0.025	15	0.7730361	0
NonHT2	umber_Wood_Product	Other Non Mfg.	HVAC	Turnover	2	Equipment Upgrades	63.2%	16.4%	$ 0.296	$ 0.252	$ 0.044	$ 0.025	15	2.6456759	1
NonHT3	Agriculture	Other Non Mfg.	HVAC	Turnover	3	Heat Reclaimer	1.7%	42.00%	$ 0.171	$ 0.126	$ 0.045	$ 0.025	15	4.3188297	1
NonHT4	Agriculture	Other Non Mfg.	HVAC	Turnover	4	Heat Recovery Ventilators	49.7%	4.13%	$ 0.448	$ 0.330	$ 0.118	$ 0.025	10	1.2554155	1
NonHE5	umber_Wood_Product	Other Non Mfg.	HVAC	Existing	5	Improved Controls	32.8%	20.9%	$ 0.102	$ 0.077	$ 0.025	$ 0.025	10	4.6569446	1
NonHT6	Agriculture	Other Non Mfg.	HVAC	Turnover	6	Infrared Film for Greenhouses	0.3%	11.06%	$ 0.261	$ 0.234	$ 0.028	$ 0.025	4	0.8232033	0
NonHT7	Agriculture	Other Non Mfg.	HVAC	Turnover	7	Programmable Ventilation Controller	49.7%	0.10%	$ 0.140	$ 0.140	$ -	$ 0.025	10	3.6059234	1
NonHE8	umber_Wood_Product	Other Non Mfg.	HVAC	Existing	8	Recommissioning	72.9%	16.0%	$ 0.271	$ -	$ 0.271	$ 0.025	7	1.4040325	1
NonHT9	Agriculture	Other Non Mfg.	HVAC	Turnover	9	Scroll Compressor	1.7%	7.50%	$ 1.006	$ 0.899	$ 0.107	$ 0.025	15	0.8230289	0
NonLT1	umber_Wood_Product	Other Non Mfg.	Lighting	Turnover	1	Efficient Lighting Equipment	30.4%	19.9%	$ 0.150	$ 0.103	$ 0.047	$ 0.025	10	3.3767624	1
NonLT2	umber_Wood_Product	Other Non Mfg.	Lighting	Turnover	2	HighBay Lighting Equipment	55.1%	34.1%	$ 0.376	$ 0.295	$ 0.081	$ 0.025	10	1.4759078	1
NonLE3	umber_Wood_Product	Other Non Mfg.	Lighting	Existing	3	Lighting Controls	42.3%	30.0%	$ 0.212	$ 0.157	$ 0.055	$ 0.025	10	2.4958494	1
NonMT1		Other Non Mfg.	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	55.8%	0.39%	$ 0.436	$ 0.436	$ -	$ 0.025	15	1.8011275	1
NonMT11	Agriculture	Other Non Mfg.	Motors	Turnover	11	Agricultural Exhaust Fans (Rate 21 CFM/Watt+)	49.7%	5.00%	$ 0.316	$ 0.283	$ 0.034	$ 0.025	15	2.4331686	1
NonMT15	Agriculture	Other Non Mfg.	Motors	Turnover	15	Low Pressure Irrigation	0.4%	50.00%	$ 0.993	$ 0.732	$ 0.261	$ 0.025	10	0.5705225	0
NonMT16	umber_Wood_Product	Other Non Mfg.	Motors	Turnover	16	Material Handling	53.2%	5.0%	$ 0.585	$ 0.483	$ 0.102	$ 0.025	10	0.9520733	0
NonME17	umber_Wood_Product	Other Non Mfg.	Motors	Existing	17	Material Handling VFD	53.2%	18.7%	$ 0.381	$ 0.229	$ 0.152	$ 0.025	10	1.4299704	1
NonME18	umber_Wood_Product	Other Non Mfg.	Motors	Existing	18	Motor Management Plan	50.9%	2.9%	$ 0.134	$ 0.054	$ 0.080	$ 0.025	10	3.6434981	1
NonMT2		Other Non Mfg.	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	74.4%	0.7%	$ 1.249	$ 1.249	$ -	$ 0.025	15	0.6515928	0
NonMT21	umber_Wood_Product	Other Non Mfg.	Motors	Turnover	21	Motors: Rewind 101-200 HP	25.4%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	2.482299	1
NonMT22	umber_Wood_Product	Other Non Mfg.	Motors	Turnover	22	Air Compressor Demand Reduction	26.8%	15.9%	$ 0.107	$ 0.081	$ 0.026	$ 0.025	10	4.4121465	1
NonMT23	umber_Wood_Product	Other Non Mfg.	Motors	Turnover	23	Motors: Rewind 201-500 HP	35.6%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	2.482299	1

Measure Lookup	Industry	New Segment	New End-Use	Vintage	easure Numb	Measure	Applicability	Savings	Total Cost ($/kW Saved)	Equipment Cost	Labor Cost	Admin Costs ($/kWh Saved)	Life	TRC Test	Economic Flag
NonMT24	umber_Wood_Product	Other Non Mfg.	Motors	Turnover	24	Motors: Rewind 20-50 HP	4.7%	0.9%	$ 0.431	$ 0.356	$ 0.075	$ 0.025	15	1.8204628	1
NonMT25	umber_Wood_Product	Other Non Mfg.	Motors	Turnover	25	Motors: Rewind 500+ HP	55.2%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	2.482299	1
NonMT26	umber_Wood_Product	Other Non Mfg.	Motors	Turnover	26	Motors: Rewind 51-100 HP	15.2%	0.6%	$ 0.388	$ 0.321	$ 0.067	$ 0.025	15	2.0100557	1
NonMT27	umber_Wood_Product	Other Non Mfg.	Motors	Turnover	27	Properly Sized Fans	15.3%	10.4%	$ 0.202	$ 0.122	$ 0.080	$ 0.025	10	2.55712	1
NonME28	umber_Wood_Product	Other Non Mfg.	Motors	Existing	28	Pump Energy Management	29.8%	7.5%	$ 0.134	$ 0.054	$ 0.080	$ 0.025	10	3.6434981	1
NonMT29	umber_Wood_Product	Other Non Mfg.	Motors	Turnover	29	Pump Equipment Upgrade	32.3%	20.0%	$ 0.156	$ 0.129	$ 0.027	$ 0.025	10	3.1999188	1
NonMT3		Other Non Mfg.	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	42.8%	0.9%	$ 0.372	$ 0.372	$ -	$ 0.025	15	2.0909404	1
NonME30	umber_Wood_Product	Other Non Mfg.	Motors	Existing	30	Pump System Optimization	14.9%	12.1%	$ 0.391	$ 0.196	$ 0.195	$ 0.025	12	1.6441851	1
NonMT31	Irrigation	Other Non Mfg.	Motors	Turnover	31	SIS	76.5%	7.5%	$ 1.051	$ 0.869	$ 0.183	$ 0.025	7	0.3772236	0
NonMT32	umber_Wood_Product	Other Non Mfg.	Motors	Turnover	32	Air Compressor Equipment	17.6%	8.8%	$ 0.157	$ 0.130	$ 0.027	$ 0.025	10	3.1862753	1
NonMT33	umber_Wood_Product	Other Non Mfg.	Motors	Turnover	33	Switch from Belt drive to Direct Drive	10.5%	7.5%	$ 0.268	$ 0.221	$ 0.046	$ 0.025	12	2.3391305	1
NonMT34	umber_Wood_Product	Other Non Mfg.	Motors	Turnover	34	Synchronous Belts	20.9%	1.1%	$ 0.268	$ 0.221	$ 0.046	$ 0.025	10	1.9833242	1
NonMT35	Irrigation	Other Non Mfg.	Motors	Turnover	35	System Improvements	85.0%	8.0%	$ 0.416	$ 0.344	$ 0.072	$ 0.025	5	0.6456327	0
NonMT36	Agriculture	Other Non Mfg.	Motors	Turnover	36	Variable Speed Drives for Dairy Vacuum Pumps	1.7%	36.89%	$ 0.169	$ 0.151	$ 0.018	$ 0.025	15	4.2773188	1
NonMT37	Agriculture	Other Non Mfg.	Motors	Turnover	37	VFDs on Small Milking Machines	1.7%	3.22%	$ 0.832	$ 0.614	$ 0.219	$ 0.025	15	0.96865	0
NonMT38	umber_Wood_Product	Other Non Mfg.	Motors	Turnover	38	Wood: Replace Pneumatic Conveyor	50.2%	29.0%	$ 0.018	$ 0.016	$ 0.002	$ 0.025	10	13.477911	1
NonME39	umber_Wood_Product	Other Non Mfg.	Motors	Existing	39	Air Compressor Optimization	36.8%	30.1%	$ 0.151	$ 0.058	$ 0.093	$ 0.025	10	3.291247	1
NonMT4		Other Non Mfg.	Motors	Turnover	4	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	66.3%	0.4%	$ 0.799	$ 0.799	$ -	$ 0.025	15	1.0078251	1
NonMT40	Agriculture	Other Non Mfg.	Motors	Turnover	40	Automatic Milker Takeoff	1.7%	3.00%	$ 0.763	$ 0.563	$ 0.200	$ 0.025	15	1.053591	1
NonMT41	Agriculture	Other Non Mfg.	Motors	Turnover	41	Circulating Fans	49.7%	5.00%	$ 0.152	$ 0.136	$ 0.016	$ 0.025	10	3.2856034	1
NonMT42	umber_Wood_Product	Other Non Mfg.	Motors	Turnover	42	Efficient Centrifugal Fan	10.7%	20.0%	$ 0.228	$ 0.188	$ 0.040	$ 0.025	10	2.2989361	1
NonMT43		Other Non Mfg.	Motors	Turnover	43	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	74.4%	0.91%	$ 2.085	$ 2.085	$ -	$ 0.025	15	0.3935323	0
NonME5	umber_Wood_Product	Other Non Mfg.	Motors	Existing	5	Fan System Optimization	30.2%	7.7%	$ 0.311	$ 0.156	$ 0.155	$ 0.025	10	1.7283338	1
NonMT6	umber_Wood_Product	Other Non Mfg.	Motors	Turnover	6	High efficiency Compressor motors	77.5%	1.1%	$ 0.430	$ 0.355	$ 0.075	$ 0.025	15	1.8255905	1
NonMT7	Irrigation	Other Non Mfg.	Motors	Turnover	7	High Efficiency Motors	74.7%	1.5%	$ 0.545	$ 0.450	$ 0.095	$ 0.025	15	1.4570821	1
NonMT8	Agriculture	Other Non Mfg.	Motors	Turnover	8	High Volume Low Speed Fans	49.7%	46.61%	$ 2.004	$ 1.883	$ 0.120	$ 0.025	15	0.4093068	0
NonMT9	Agriculture	Other Non Mfg.	Motors	Turnover	9	High-Efficiency Ventilation System	49.7%	5.66%	$ 1.366	$ 1.366	$ -	$ 0.025	10	0.4173914	0
NonOT1	umber_Wood_Product	Other Non Mfg.	Other	Turnover	1	Bldg Improvements	35.0%	20.4%	$ 0.248	$ 0.162	$ 0.087	$ 0.025	15	3.0185774	1
NonOT10	umber_Wood_Product	Other Non Mfg.	Other	Turnover	10	Transformers	20.0%	1.6%	$ 0.415	$ 0.399	$ 0.016	$ 0.025	15	1.8731544	1
NonOT2	Agriculture	Other Non Mfg.	Other	Turnover	2	Block Heater Timer	25.0%	2.50%	$ 0.048	$ 0.048	$ -	$ 0.025	10	7.8614393	1
NonOE3	umber_Wood_Product	Other Non Mfg.	Other	Existing	3	Energy Project Management	27.0%	29.0%	$ 0.163	$ 0.134	$ 0.029	$ 0.025	11	3.3412297	1
NonOT4	Agriculture	Other Non Mfg.	Other	Turnover	4	Grain bin aeration control systems	24.8%	2.25%	$ 0.168	$ 0.124	$ 0.044	$ 0.025	15	4.2812644	1
NonOT5	Agriculture	Other Non Mfg.	Other	Turnover	5	Greenhouse Heat Curtain	0.3%	16.76%	$ 0.056	$ 0.056	$ -	$ 0.025	5	3.4728625	1
NonOT6	Agriculture	Other Non Mfg.	Other	Turnover	6	High Efficiency Stock tank	22.9%	3.75%	$ 0.412	$ 0.368	$ 0.044	$ 0.025	10	1.3186232	1
NonOE7	umber_Wood_Product	Other Non Mfg.	Other	Existing	7	Integrated Plant Energy Management	22.0%	50.0%	$ 0.261	$ 0.215	$ 0.047	$ 0.025	11	2.195776	1
NonOT8	Agriculture	Other Non Mfg.	Other	Turnover	8	Livestock Waterers	22.9%	11.25%	$ 0.327	$ 0.292	$ 0.035	$ 0.025	10	1.6384917	1
NonOE9	umber_Wood_Product	Other Non Mfg.	Other	Existing	9	Plant Energy Management	27.0%	12.0%	$ 0.139	$ 0.114	$ 0.025	$ 0.025	10	3.5198522	1
MetPT1		Mfg. Metals	Process EC	Turnover	1	Electrical-Chemical Plating Bundle, Tank and Rectifier	65.0%	18.5%	$ 0.550	$ 0.450	$ 0.100	$ 0.025	15	1.4235345	1
MinHT1	Mining	Mining	HVAC	Turnover	1	Equipment Upgrades	62.9%	16.4%	$ 0.296	$ 0.252	$ 0.044	$ 0.025	15	2.6456759	1
MinHE2	Mining	Mining	HVAC	Existing	2	Improved Controls	32.7%	20.9%	$ 0.102	$ 0.077	$ 0.025	$ 0.025	10	4.6569446	1
MinHE3	Mining	Mining	HVAC	Existing	3	Recommissioning	72.6%	16.0%	$ 0.271	$ -	$ 0.271	$ 0.025	7	1.4040325	1
MinLT1	Mining	Mining	Lighting	Turnover	1	Efficient Lighting Equipment	30.4%	19.9%	$ 0.150	$ 0.103	$ 0.047	$ 0.025	10	3.3767624	1
MinLT2	Mining	Mining	Lighting	Turnover	2	HighBay Lighting Equipment	55.1%	34.1%	$ 0.376	$ 0.295	$ 0.081	$ 0.025	10	1.4759078	1
MinLE3	Mining	Mining	Lighting	Existing	3	Lighting Controls	42.3%	30.0%	$ 0.212	$ 0.157	$ 0.055	$ 0.025	10	2.4958494	1

Measure Lookup	Industry	New Segment	New End-Use	Vintage	easure Numb	Measure	Applicability	Savings	Total Cost ($/kW Saved)	Equipment Cost	Labor Cost	Admin Costs ($/kWh Saved)	Life	TRC Test	Economic Flag
CheCooE1	Chemical_Mfg	Mfg. Chemicals	Process Cooling	Existing	1	Clean Room: Change Filter Strategy	10.0%	40.0%	$ 0.016	$ 0.012	$ 0.005	$ 0.025	1	0.7571936	0
CheCooE2	Chemical_Mfg	Mfg. Chemicals	Process Cooling	Existing	2	Clean Room: Chiller Optimize	28.3%	14.8%	$ 0.248	$ 0.124	$ 0.124	$ 0.025	10	1.171322	1
CheCooT3	Chemical_Mfg	Mfg. Chemicals	Process Cooling	Turnover	3	Clean Room: Clean Room HVAC	30.0%	9.0%	$ 0.204	$ 0.144	$ 0.061	$ 0.025	15	2.3477936	1
CheCooT4	Chemical_Mfg	Mfg. Chemicals	Process Cooling	Turnover	4	Equipment: Chillers	8.0%	17.9%	$ 0.330	$ 0.249	$ 0.081	$ 0.025	15	1.5160067	1
CheCooE5	Chemical_Mfg	Mfg. Chemicals	Process Cooling	Existing	5	Improved Controls	33.8%	6.0%	$ 1.118	$ 0.673	$ 0.445	$ 0.025	15	0.4710413	0
CheCooT6	Chemical_Mfg	Mfg. Chemicals	Process Cooling	Turnover	6	Adjustable speed drive on compressors	34.0%	11.7%	$ 0.201	$ 0.121	$ 0.080	$ 0.025	10	1.4129454	1
CheCooE7	Chemical_Mfg	Mfg. Chemicals	Process Cooling	Existing	7	Optimization of operating parameters	35.0%	13.1%	$ 0.101	$ 0.039	$ 0.063	$ 0.025	3	0.777031	0
CheCooT8	Chemical_Mfg	Mfg. Chemicals	Process Cooling	Turnover	8	Cold Storage Retrofit	25.6%	20.7%	$ 0.250	$ 0.157	$ 0.093	$ 0.025	10	1.1623034	1
CheCooE9	Chemical_Mfg	Mfg. Chemicals	Process Cooling	Existing	9	Cold Storage Tuneup	10.0%	15.6%	$ 0.112	$ 0.047	$ 0.065	$ 0.025	3	0.7167421	0
CheHeaE1	Chemical_Mfg	Mfg. Chemicals	Process Heating	Existing	1	Improved Controls	37.9%	30.4%	$ 0.245	$ 0.147	$ 0.098	$ 0.025	10	1.1852223	1
CheHeaE2	Chemical_Mfg	Mfg. Chemicals	Process Heating	Existing	2	Process Heat O&M	63.4%	28.6%	$ 0.257	$ 0.225	$ 0.032	$ 0.025	2	0.2267898	0
CheHT1	Chemical_Mfg	Mfg. Chemicals	HVAC	Turnover	1	Equipment Upgrades	62.9%	16.4%	$ 0.296	$ 0.252	$ 0.044	$ 0.025	15	1.7276904	1
CheHE2	Chemical_Mfg	Mfg. Chemicals	HVAC	Existing	2	Improved Controls	32.7%	20.9%	$ 0.102	$ 0.077	$ 0.025	$ 0.025	10	2.6083486	1
CheHE3	Chemical_Mfg	Mfg. Chemicals	HVAC	Existing	3	Recommissioning	72.6%	16.0%	$ 0.271	$ -	$ 0.271	$ 0.025	7	0.7996836	0
CheLT1	Chemical_Mfg	Mfg. Chemicals	Lighting	Turnover	1	Efficient Lighting Equipment	30.4%	19.9%	$ 0.150	$ 0.103	$ 0.047	$ 0.025	10	1.8881036	1
CheLT2	Chemical_Mfg	Mfg. Chemicals	Lighting	Turnover	2	HighBay Lighting Equipment	55.1%	34.1%	$ 0.376	$ 0.295	$ 0.081	$ 0.025	10	0.8252481	0
CheLE3	Chemical_Mfg	Mfg. Chemicals	Lighting	Existing	3	Lighting Controls	42.3%	30.0%	$ 0.212	$ 0.157	$ 0.055	$ 0.025	10	1.3955445	1
CheMT1		Mfg. Chemicals	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	42.8%	0.9%	$ 0.372	$ 0.372	$ -	$ 0.025	15	1.3774963	1
CheMT10	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	10	Material Handling	52.3%	5.0%	$ 0.585	$ 0.483	$ 0.102	$ 0.025	10	0.5365358	0
CheMT11	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	11	Air Compressor Demand Reduction	28.0%	15.9%	$ 0.107	$ 0.081	$ 0.026	$ 0.025	10	2.4864415	1
CheME6	Chemical_Mfg	Mfg. Chemicals	Motors	Existing	6	Material Handling VFD	52.3%	18.7%	$ 0.381	$ 0.229	$ 0.152	$ 0.025	10	0.8058521	0
CheME13	Chemical_Mfg	Mfg. Chemicals	Motors	Existing	13	Motor Management Plan	51.6%	2.9%	$ 0.134	$ 0.054	$ 0.080	$ 0.025	10	2.0532738	1
CheMT15	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	15	Motors: Rewind 101-200 HP	25.4%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	1.6353204	1
CheMT16	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	16	Motors: Rewind 201-500 HP	35.6%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	1.6353204	1
CheMT17	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	17	Motors: Rewind 20-50 HP	4.6%	0.9%	$ 0.431	$ 0.356	$ 0.075	$ 0.025	15	1.1993076	1
CheMT18	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	18	Motors: Rewind 500+ HP	55.2%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	1.6353204	1
CheMT19	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	19	Motors: Rewind 51-100 HP	15.2%	0.6%	$ 0.388	$ 0.321	$ 0.067	$ 0.025	15	1.32421	1
CheMT2		Mfg. Chemicals	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	66.3%	0.4%	$ 0.799	$ 0.799	$ -	$ 0.025	15	0.6639478	0
CheMT20	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	20	Properly Sized Fans	14.7%	10.4%	$ 0.202	$ 0.122	$ 0.080	$ 0.025	10	1.4410513	1
CheME21	Chemical_Mfg	Mfg. Chemicals	Motors	Existing	21	Air Compressor Optimization	38.3%	30.1%	$ 0.151	$ 0.058	$ 0.093	$ 0.025	10	1.8547646	1
CheME22	Chemical_Mfg	Mfg. Chemicals	Motors	Existing	22	Pump Energy Management	31.4%	7.5%	$ 0.134	$ 0.054	$ 0.080	$ 0.025	10	2.0532738	1
CheMT23	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	23	Pump Equipment Upgrade	34.0%	20.0%	$ 0.156	$ 0.129	$ 0.027	$ 0.025	10	1.8032971	1
CheME24	Chemical_Mfg	Mfg. Chemicals	Motors	Existing	24	Pump System Optimization	15.6%	12.1%	$ 0.391	$ 0.196	$ 0.195	$ 0.025	12	1.0186118	1
CheMT25	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	25	Switch from Belt drive to Direct Drive	10.4%	7.5%	$ 0.268	$ 0.221	$ 0.046	$ 0.025	12	1.4491471	1
CheMT26	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	26	Synchronous Belts	20.9%	1.1%	$ 0.268	$ 0.221	$ 0.046	$ 0.025	10	1.1176917	1
CheMT27	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	27	Efficient Centrifugal Fan	10.3%	20.0%	$ 0.228	$ 0.188	$ 0.040	$ 0.025	10	1.2955531	1
CheMT28		Mfg. Chemicals	Motors	Turnover	28	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	74.4%	0.91%	$ 2.085	$ 2.085	$ -	$ 0.025	15	0.2592562	0
CheMT29		Mfg. Chemicals	Motors	Turnover	29	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	55.8%	0.39%	$ 0.436	$ 0.436	$ -	$ 0.025	15	1.1865697	1
CheME3	Chemical_Mfg	Mfg. Chemicals	Motors	Existing	3	Fan System Optimization	28.9%	7.7%	$ 0.311	$ 0.156	$ 0.155	$ 0.025	10	0.9739933	0
CheMT30		Mfg. Chemicals	Motors	Turnover	30	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	74.4%	0.7%	$ 1.249	$ 1.249	$ -	$ 0.025	15	0.4292646	0
CheMT4	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	4	High efficiency Compressor motors	80.8%	1.1%	$ 0.430	$ 0.355	$ 0.075	$ 0.025	15	1.2026857	1
CheMT5	Chemical_Mfg	Mfg. Chemicals	Motors	Turnover	5	High Efficiency Motors	74.4%	1.5%	$ 0.545	$ 0.450	$ 0.095	$ 0.025	15	0.959915	0
CheOT1	Chemical_Mfg	Mfg. Chemicals	Other	Turnover	1	Bldg Improvements	35.0%	20.4%	$ 0.248	$ 0.162	$ 0.087	$ 0.025	15	1.9820129	1
CheOE2	Chemical_Mfg	Mfg. Chemicals	Other	Existing	2	Energy Project Management	27.0%	29.0%	$ 0.163	$ 0.134	$ 0.029	$ 0.025	11	1.9780551	1
CheOE3	Chemical_Mfg	Mfg. Chemicals	Other	Existing	3	Integrated Plant Energy Management	22.0%	50.0%	$ 0.261	$ 0.215	$ 0.047	$ 0.025	11	1.2999303	1
CheOE4	Chemical_Mfg	Mfg. Chemicals	Other	Existing	4	Plant Energy Management	27.0%	12.0%	$ 0.139	$ 0.114	$ 0.025	$ 0.025	10	1.968014	1
CheOT5	Chemical_Mfg	Mfg. Chemicals	Other	Turnover	5	Transformers	20.0%	1.6%	$ 0.415	$ 0.399	$ 0.016	$ 0.025	15	1.2299225	1
ComCooE1	ectronic_Equipment_M	Mfg. Computers	Process Cooling	Existing	1	Clean Room: Change Filter Strategy	10.0%	40.0%	$ 0.016	$ 0.012	$ 0.005	$ 0.025	1	0.7571936	0
ComCooE10	ectronic_Equipment_M	Mfg. Computers	Process Cooling	Existing	10	Cold Storage Tuneup	10.0%	15.6%	$ 0.112	$ 0.047	$ 0.065	$ 0.025	3	0.7167421	0
ComCooE2	ectronic_Equipment_M	Mfg. Computers	Process Cooling	Existing	2	Clean Room: Chiller Optimize	28.3%	14.8%	$ 0.248	$ 0.124	$ 0.124	$ 0.025	10	1.171322	1
ComCooT3	ectronic_Equipment_M	Mfg. Computers	Process Cooling	Turnover	3	Clean Room: Clean Room HVAC	30.0%	9.0%	$ 0.204	$ 0.144	$ 0.061	$ 0.025	15	2.3477936	1
ComCooT4	ectronic_Equipment_M	Mfg. Computers	Process Cooling	Turnover	4	Elec Chip Fab: Solidstate Chiller	20.0%	90.0%	$ 0.634	$ 0.562	$ 0.072	$ 0.025	10	0.485348	0
ComCooT5	ectronic_Equipment_M	Mfg. Computers	Process Cooling	Turnover	5	Equipment: Chillers	8.0%	17.9%	$ 0.330	$ 0.249	$ 0.081	$ 0.025	15	1.5160067	1
ComCooE6	ectronic_Equipment_M	Mfg. Computers	Process Cooling	Existing	6	Improved Controls	33.8%	6.0%	$ 1.118	$ 0.673	$ 0.445	$ 0.025	15	0.4710413	0
ComCooT7	ectronic_Equipment_M	Mfg. Computers	Process Cooling	Turnover	7	Adjustable speed drive on compressors	34.0%	11.7%	$ 0.201	$ 0.121	$ 0.080	$ 0.025	10	1.4129454	1
ComCooE8	ectronic_Equipment_M	Mfg. Computers	Process Cooling	Existing	8	Optimization of operating parameters	35.0%	13.1%	$ 0.101	$ 0.039	$ 0.063	$ 0.025	3	0.777031	0
ComCooT9	ectronic_Equipment_M	Mfg. Computers	Process Cooling	Turnover	9	Cold Storage Retrofit	25.6%	20.7%	$ 0.250	$ 0.157	$ 0.093	$ 0.025	10	1.1623034	1
ComHeaE1	ectronic_Equipment_M	Mfg. Computers	Process Heating	Existing	1	Improved Controls	41.5%	30.4%	$ 0.245	$ 0.147	$ 0.098	$ 0.025	10	1.1852223	1
ComHeaE2	ectronic_Equipment_M	Mfg. Computers	Process Heating	Existing	2	Process Heat O&M	69.5%	28.6%	$ 0.257	$ 0.225	$ 0.032	$ 0.025	2	0.2267898	0
ComHT1	ectronic_Equipment_M	Mfg. Computers	HVAC	Turnover	1	Equipment Upgrades	74.9%	16.4%	$ 0.296	$ 0.252	$ 0.044	$ 0.025	15	1.7276904	1
ComHE2	ectronic_Equipment_M	Mfg. Computers	HVAC	Existing	2	Improved Controls	38.9%	20.9%	$ 0.102	$ 0.077	$ 0.025	$ 0.025	10	2.6083486	1
ComHE3	ectronic_Equipment_M	Mfg. Computers	HVAC	Existing	3	Recommissioning	86.4%	16.0%	$ 0.271	$ -	$ 0.271	$ 0.025	7	0.7996836	0
ComLT1	ectronic_Equipment_M	Mfg. Computers	Lighting	Turnover	1	Efficient Lighting Equipment	30.4%	19.9%	$ 0.150	$ 0.103	$ 0.047	$ 0.025	10	1.8881036	1
ComLT2	ectronic_Equipment_M	Mfg. Computers	Lighting	Turnover	2	HighBay Lighting Equipment	55.1%	34.1%	$ 0.376	$ 0.295	$ 0.081	$ 0.025	10	0.8252481	0
ComLE3	ectronic_Equipment_M	Mfg. Computers	Lighting	Existing	3	Lighting Controls	42.3%	30.0%	$ 0.212	$ 0.157	$ 0.055	$ 0.025	10	1.3955445	1
ComMT1		Mfg. Computers	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	42.8%	0.9%	$ 0.372	$ 0.372	$ -	$ 0.025	15	1.3774963	1
ComMT10	ectronic_Equipment_M	Mfg. Computers	Motors	Turnover	10	Material Handling	52.9%	5.0%	$ 0.585	$ 0.483	$ 0.102	$ 0.025	10	0.5365358	0
ComMT11	ectronic_Equipment_M	Mfg. Computers	Motors	Turnover	11	Air Compressor Demand Reduction	25.5%	15.9%	$ 0.107	$ 0.081	$ 0.026	$ 0.025	10	2.4864415	1
ComME6	ectronic_Equipment_M	Mfg. Computers	Motors	Existing	6	Material Handling VFD	52.9%	18.7%	$ 0.381	$ 0.229	$ 0.152	$ 0.025	10	0.8058521	0
ComME13	ectronic_Equipment_M	Mfg. Computers	Motors	Existing	13	Motor Management Plan	49.2%	2.9%	$ 0.134	$ 0.054	$ 0.080	$ 0.025	10	2.0532738	1
ComMT15	ectronic_Equipment_M	Mfg. Computers	Motors	Turnover	15	Motors: Rewind 101-200 HP	25.4%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	1.6353204	1
ComMT16	ectronic_Equipment_M	Mfg. Computers	Motors	Turnover	16	Motors: Rewind 201-500 HP	35.6%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	1.6353204	1
ComMT17	ectronic_Equipment_M	Mfg. Computers	Motors	Turnover	17	Motors: Rewind 20-50 HP	4.7%	0.9%	$ 0.431	$ 0.356	$ 0.075	$ 0.025	15	1.1993076	1
ComMT18	ectronic_Equipment_M	Mfg. Computers	Motors	Turnover	18	Motors: Rewind 500+ HP	55.2%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	1.6353204	1
ComMT19	ectronic_Equipment_M	Mfg. Computers	Motors	Turnover	19	Motors: Rewind 51-100 HP	15.2%	0.6%	$ 0.388	$ 0.321	$ 0.067	$ 0.025	15	1.32421	1
ComMT2		Mfg. Computers	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	66.3%	0.4%	$ 0.799	$ 0.799	$ -	$ 0.025	15	0.6639478	0

Measure Lookup	Industry	New Segment	New End-Use	Vintage	easure Numb	Measure	Applicability	Savings	Total Cost ($/kW Saved)	Equipment Cost	Labor Cost	Admin Costs ($/kWh Saved)	Life	TRC Test	Economic Flag
ComMT20	ectronic_Equipment_M	Mfg. Computers	Motors	Turnover	20	Properly Sized Fans	14.8%	10.4%	$ 0.202	$ 0.122	$ 0.080	$ 0.025	10	1.4410513	1
ComME21	ectronic_Equipment_M	Mfg. Computers	Motors	Existing	21	Air Compressor Optimization	35.0%	30.1%	$ 0.151	$ 0.058	$ 0.093	$ 0.025	10	1.8547646	1
ComME22	ectronic_Equipment_M	Mfg. Computers	Motors	Existing	22	Pump Energy Management	30.1%	7.5%	$ 0.134	$ 0.054	$ 0.080	$ 0.025	10	2.0532738	1
ComMT23	ectronic_Equipment_M	Mfg. Computers	Motors	Turnover	23	Pump Equipment Upgrade	32.6%	20.0%	$ 0.156	$ 0.129	$ 0.027	$ 0.025	10	1.8032971	1
ComME24	ectronic_Equipment_M	Mfg. Computers	Motors	Existing	24	Pump System Optimization	15.0%	12.1%	$ 0.391	$ 0.196	$ 0.195	$ 0.025	12	1.0186118	1
ComMT25	ectronic_Equipment_M	Mfg. Computers	Motors	Turnover	25	Switch from Belt drive to Direct Drive	10.5%	7.5%	$ 0.268	$ 0.221	$ 0.046	$ 0.025	12	1.4491471	1
ComMT26	ectronic_Equipment_M	Mfg. Computers	Motors	Turnover	26	Synchronous Belts	20.8%	1.1%	$ 0.268	$ 0.221	$ 0.046	$ 0.025	10	1.1176917	1
ComMT27	ectronic_Equipment_M	Mfg. Computers	Motors	Turnover	27	Efficient Centrifugal Fan	10.3%	20.0%	$ 0.228	$ 0.188	$ 0.040	$ 0.025	10	1.2955531	1
ComMT28		Mfg. Computers	Motors	Turnover	28	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	74.4%	0.91%	$ 2.085	$ 2.085	$ -	$ 0.025	15	0.2592562	0
ComMT29		Mfg. Computers	Motors	Turnover	29	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	55.8%	0.39%	$ 0.436	$ 0.436	$ -	$ 0.025	15	1.1865697	1
ComME3	ectronic_Equipment_M	Mfg. Computers	Motors	Existing	3	Fan System Optimization	29.1%	7.7%	$ 0.311	$ 0.156	$ 0.155	$ 0.025	10	0.9739933	0
ComMT30		Mfg. Computers	Motors	Turnover	30	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	74.4%	0.7%	$ 1.249	$ 1.249	$ -	$ 0.025	15	0.4292646	0
ComMT4	ectronic_Equipment_M	Mfg. Computers	Motors	Turnover	4	High efficiency Compressor motors	73.8%	1.1%	$ 0.430	$ 0.355	$ 0.075	$ 0.025	15	1.2026857	1
ComMT5	ectronic_Equipment_M	Mfg. Computers	Motors	Turnover	5	High Efficiency Motors	73.8%	1.5%	$ 0.545	$ 0.450	$ 0.095	$ 0.025	15	0.959915	0
ComOT1	ectronic_Equipment_M	Mfg. Computers	Other	Turnover	1	Bldg Improvements	35.0%	20.4%	$ 0.248	$ 0.162	$ 0.087	$ 0.025	15	1.9820129	1
ComOT2	ectronic_Equipment_M	Mfg. Computers	Other	Turnover	2	Elec Chip Fab: Eliminate Exhaust	80.1%	5.0%	$ 0.233	$ 0.206	$ 0.026	$ 0.025	10	1.2506702	1
ComOT3	ectronic_Equipment_M	Mfg. Computers	Other	Turnover	3	Elec Chip Fab: Exhaust Injector	35.0%	100.0%	$ 0.561	$ 0.498	$ 0.064	$ 0.025	10	0.5497613	0
ComCooT11	ectronic_Equipment_M	Mfg. Computers	Process Cooling	Turnover	11	Elec Chip Fab: Reduce Gas Pressure	5.0%	10.0%	$ 0.063	$ -	$ 0.063	$ 0.025	10	3.6537459	1
ComOE5	ectronic_Equipment_M	Mfg. Computers	Other	Existing	5	Energy Project Management	27.0%	29.0%	$ 0.163	$ 0.134	$ 0.029	$ 0.025	11	1.9780551	1
ComOE6	ectronic_Equipment_M	Mfg. Computers	Other	Existing	6	Integrated Plant Energy Management	22.0%	50.0%	$ 0.261	$ 0.215	$ 0.047	$ 0.025	11	1.2999303	1
ComOE7	ectronic_Equipment_M	Mfg. Computers	Other	Existing	7	Plant Energy Management	27.0%	12.0%	$ 0.139	$ 0.114	$ 0.025	$ 0.025	10	1.968014	1
ComOT8	ectronic_Equipment_M	Mfg. Computers	Other	Turnover	8	Transformers	20.0%	1.6%	$ 0.415	$ 0.399	$ 0.016	$ 0.025	15	1.2299225	1
FooCooT1	Food_Mfg	Mfg. Food	Process Cooling	Turnover	1	Equipment: Chillers	8.3%	17.9%	$ 0.330	$ 0.249	$ 0.081	$ 0.025	15	1.5160067	1
FooCooE2	Food_Mfg	Mfg. Food	Process Cooling	Existing	2	Improved Controls	35.2%	6.0%	$ 1.118	$ 0.673	$ 0.445	$ 0.025	15	0.4710413	0
FooCooT3	Food_Mfg	Mfg. Food	Process Cooling	Turnover	3	Adjustable speed drive on compressors	34.0%	11.7%	$ 0.201	$ 0.121	$ 0.080	$ 0.025	10	1.4129454	1
FooCooT4	Food_Mfg	Mfg. Food	Process Cooling	Turnover	4	Food: Cooling and Storage	15.0%	15.4%	$ 0.258	$ 0.162	$ 0.096	$ 0.025	10	1.1299811	1
FooCooT5	Food_Mfg	Mfg. Food	Process Cooling	Turnover	5	Food: Refrig Storage Tuneup	7.5%	14.4%	$ 0.056	$ 0.023	$ 0.033	$ 0.025	3	1.2118521	1
FooCooT6	Food_Mfg	Mfg. Food	Process Cooling	Turnover	6	Fruit Storage Refer Retrofit	60.7%	38.2%	$ 0.214	$ 0.135	$ 0.079	$ 0.025	10	1.3358225	1
FooCooT7	Food_Mfg	Mfg. Food	Process Cooling	Turnover	7	Fruit Storage Tuneup	10.0%	15.6%	$ 0.056	$ 0.023	$ 0.033	$ 0.025	3	1.2118521	1
FooCooE8	Food_Mfg	Mfg. Food	Process Cooling	Existing	8	Optimization of operating parameters	35.0%	13.1%	$ 0.101	$ 0.039	$ 0.063	$ 0.025	3	0.777031	0
FooHeaE1	Food_Mfg	Mfg. Food	Process Heating	Existing	1	Improved Controls	38.8%	30.4%	$ 0.245	$ 0.147	$ 0.098	$ 0.025	10	1.1852223	1
FooHeaE2	Food_Mfg	Mfg. Food	Process Heating	Existing	2	Process Heat O&M	65.0%	28.6%	$ 0.257	$ 0.225	$ 0.032	$ 0.025	2	0.2267898	0
FooHT1	Food_Mfg	Mfg. Food	HVAC	Turnover	1	Equipment Upgrades	62.9%	16.4%	$ 0.296	$ 0.252	$ 0.044	$ 0.025	15	1.7276904	1
FooHE2	Food_Mfg	Mfg. Food	HVAC	Existing	2	Improved Controls	32.7%	20.9%	$ 0.102	$ 0.077	$ 0.025	$ 0.025	10	2.6083486	1
FooHE3	Food_Mfg	Mfg. Food	HVAC	Existing	3	Recommissioning	72.6%	16.0%	$ 0.271	$ -	$ 0.271	$ 0.025	7	0.7996836	0
FooLT1	Food_Mfg	Mfg. Food	Lighting	Turnover	1	Efficient Lighting Equipment	30.4%	19.9%	$ 0.150	$ 0.103	$ 0.047	$ 0.025	10	1.8881036	1
FooLT2	Food_Mfg	Mfg. Food	Lighting	Turnover	2	HighBay Lighting Equipment	55.1%	34.1%	$ 0.376	$ 0.295	$ 0.081	$ 0.025	10	0.8252481	0
FooLE3	Food_Mfg	Mfg. Food	Lighting	Existing	3	Lighting Controls	42.3%	30.0%	$ 0.212	$ 0.157	$ 0.055	$ 0.025	10	1.3955445	1
FooME1	Food_Mfg	Mfg. Food	Motors	Existing	1	Fan System Optimization	29.6%	7.7%	$ 0.311	$ 0.156	$ 0.155	$ 0.025	10	0.9739933	0
FooME4	Food_Mfg	Mfg. Food	Motors	Existing	4	Material Handling VFD	51.6%	18.7%	$ 0.381	$ 0.229	$ 0.152	$ 0.025	10	0.8058521	0
FooME11	Food_Mfg	Mfg. Food	Motors	Existing	11	Motor Management Plan	48.9%	2.9%	$ 0.134	$ 0.054	$ 0.080	$ 0.025	10	2.0532738	1
FooMT13	Food_Mfg	Mfg. Food	Motors	Turnover	13	Motors: Rewind 101-200 HP	25.4%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	1.6333204	1
FooMT14	Food_Mfg	Mfg. Food	Motors	Turnover	14	Motors: Rewind 201-500 HP	35.6%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	1.6333204	1
FooMT15	Food_Mfg	Mfg. Food	Motors	Turnover	15	Motors: Rewind 20-50 HP	4.6%	0.9%	$ 0.431	$ 0.356	$ 0.075	$ 0.025	15	1.1993076	1
FooMT16	Food_Mfg	Mfg. Food	Motors	Turnover	16	Motors: Rewind 500+ HP	55.2%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	1.6333204	1
FooMT17	Food_Mfg	Mfg. Food	Motors	Turnover	17	Motors: Rewind 51-100 HP	15.2%	0.6%	$ 0.388	$ 0.321	$ 0.067	$ 0.025	15	1.32421	1
FooME18	Food_Mfg	Mfg. Food	Motors	Existing	18	Air Compressor Optimization	35.0%	30.1%	$ 0.151	$ 0.058	$ 0.093	$ 0.025	10	1.8547646	1
FooMT19	Food_Mfg	Mfg. Food	Motors	Turnover	19	Properly Sized Fans	15.0%	10.4%	$ 0.202	$ 0.122	$ 0.080	$ 0.025	10	1.4410513	1
FooMT2	Food_Mfg	Mfg. Food	Motors	Turnover	2	High efficiency Compressor motors	73.8%	1.1%	$ 0.430	$ 0.355	$ 0.075	$ 0.025	15	1.2026857	1
FooME20	Food_Mfg	Mfg. Food	Motors	Existing	20	Pump Energy Management	30.5%	7.5%	$ 0.134	$ 0.054	$ 0.080	$ 0.025	10	2.0532738	1
FooMT21	Food_Mfg	Mfg. Food	Motors	Turnover	21	Pump Equipment Upgrade	33.0%	20.0%	$ 0.156	$ 0.129	$ 0.027	$ 0.025	10	1.8032971	1
FooME22	Food_Mfg	Mfg. Food	Motors	Existing	22	Pump System Optimization	15.2%	12.1%	$ 0.391	$ 0.196	$ 0.195	$ 0.025	12	1.0186118	1
FooMT23	Food_Mfg	Mfg. Food	Motors	Turnover	23	Switch from Belt drive to Direct Drive	10.2%	7.5%	$ 0.268	$ 0.221	$ 0.046	$ 0.025	12	1.4491471	1
FooMT24	Food_Mfg	Mfg. Food	Motors	Turnover	24	Synchronous Belts	20.8%	1.1%	$ 0.268	$ 0.221	$ 0.046	$ 0.025	10	1.1176917	1
FooMT25	Food_Mfg	Mfg. Food	Motors	Turnover	25	Efficient Centrifugal Fan	10.5%	20.0%	$ 0.228	$ 0.188	$ 0.040	$ 0.025	10	1.2955531	1
FooMT26		Mfg. Food	Motors	Turnover	26	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	74.4%	0.91%	$ 2.085	$ 2.085	$ -	$ 0.025	15	0.2592562	0
FooMT27		Mfg. Food	Motors	Turnover	27	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	55.8%	0.39%	$ 0.436	$ 0.436	$ -	$ 0.025	15	1.1865697	1
FooMT28		Mfg. Food	Motors	Turnover	28	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	74.4%	0.7%	$ 1.249	$ 1.249	$ -	$ 0.025	15	0.4292646	0
FooMT29		Mfg. Food	Motors	Turnover	29	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	42.8%	0.9%	$ 0.372	$ 0.372	$ -	$ 0.025	15	1.3774963	1
FooMT3	Food_Mfg	Mfg. Food	Motors	Turnover	3	High Efficiency Motors	74.0%	1.5%	$ 0.545	$ 0.450	$ 0.095	$ 0.025	15	0.959915	0
FooMT30		Mfg. Food	Motors	Turnover	30	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	66.3%	0.4%	$ 0.799	$ 0.799	$ -	$ 0.025	15	0.6639478	0
FooMT7	Food_Mfg	Mfg. Food	Motors	Turnover	7	Air Compressor Demand Reduction	25.5%	15.9%	$ 0.107	$ 0.081	$ 0.026	$ 0.025	10	2.4864415	1
FooMT9	Food_Mfg	Mfg. Food	Motors	Turnover	9	Material Handling	51.6%	5.0%	$ 0.585	$ 0.483	$ 0.102	$ 0.025	10	0.5365358	0
FooOT1	Food_Mfg	Mfg. Food	Other	Turnover	1	Bldg Improvements	35.0%	20.4%	$ 0.248	$ 0.162	$ 0.087	$ 0.025	15	1.9820129	1
FooOE2	Food_Mfg	Mfg. Food	Other	Existing	2	Energy Project Management	27.0%	29.0%	$ 0.163	$ 0.134	$ 0.029	$ 0.025	11	1.9780551	1
FooOE3	Food_Mfg	Mfg. Food	Other	Existing	3	Integrated Plant Energy Management	22.0%	50.0%	$ 0.261	$ 0.215	$ 0.047	$ 0.025	11	1.2999303	1
FooOE4	Food_Mfg	Mfg. Food	Other	Existing	4	Plant Energy Management	27.0%	12.0%	$ 0.139	$ 0.114	$ 0.025	$ 0.025	10	1.968014	1
FooOT5	Food_Mfg	Mfg. Food	Other	Turnover	5	Transformers	20.0%	1.6%	$ 0.415	$ 0.399	$ 0.016	$ 0.025	15	1.2299225	1
MetCooT1	Primary_Metal_Mfg	Mfg. Metals	Process Cooling	Turnover	1	Equipment: Chillers	8.0%	17.9%	$ 0.330	$ 0.249	$ 0.081	$ 0.025	15	1.5160067	1
MetCooe2	Primary_Metal_Mfg	Mfg. Metals	Process Cooling	existing	2	Improved Controls	33.8%	6.0%	$ 1.118	$ 0.673	$ 0.445	$ 0.025	15	0.4710413	0
MetCooE3	Primary_Metal_Mfg	Mfg. Metals	Process Cooling	Existing	3	Optimization of operating parameters	35.0%	13.1%	$ 0.101	$ 0.039	$ 0.063	$ 0.025	3	0.777031	0
MetHeaE1	Primary_Metal_Mfg	Mfg. Metals	Process Heating	Existing	1	Improved Controls	40.1%	30.4%	$ 0.245	$ 0.147	$ 0.098	$ 0.025	10	1.1852223	1
MetHeaT2	Primary_Metal_Mfg	Mfg. Metals	Process Heating	Turnover	2	Metal: New Arc Furnace	10.3%	45.0%	$ 0.115	$ 0.102	$ 0.013	$ 0.025	10	2.2827899	1
MetHeaE3	Primary_Metal_Mfg	Mfg. Metals	Process Heating	Existing	3	Process Heat O&M	67.2%	28.6%	$ 0.257	$ 0.225	$ 0.032	$ 0.025	2	0.2267898	0
MetHT1	Primary_Metal_Mfg	Mfg. Metals	HVAC	Turnover	1	Equipment Upgrades	64.7%	16.4%	$ 0.296	$ 0.252	$ 0.044	$ 0.025	15	1.7276904	1
MetHE2	Primary_Metal_Mfg	Mfg. Metals	HVAC	Existing	2	Improved Controls	33.6%	20.9%	$ 0.102	$ 0.077	$ 0.025	$ 0.025	10	2.6083486	1

Measure Lookup	Industry	New Segment	New End-Use	Vintage	easure Numb	Measure	Applicability	Savings	Total Cost ($/kW Saved)	Equipment Cost	Labor Cost	Admin Costs ($/kWh Saved)	Life	TRC Test	Economic Flag
MetHE3	Primary_Metal_Mfg	Mfg. Metals	HVAC	Existing	3	Recommissioning	74.7%	16.0%	$ 0.271	$ -	$ 0.271	$ 0.025	7	0.7996836	0
MetLT1	Primary_Metal_Mfg	Mfg. Metals	Lighting	Turnover	1	Efficient Lighting Equipment	30.4%	19.9%	$ 0.150	$ 0.103	$ 0.047	$ 0.025	10	1.8881036	1
MetLT2	Primary_Metal_Mfg	Mfg. Metals	Lighting	Turnover	2	HighBay Lighting Equipment	55.1%	34.1%	$ 0.376	$ 0.295	$ 0.081	$ 0.025	10	0.8252481	0
MetLE3	Primary_Metal_Mfg	Mfg. Metals	Lighting	Existing	3	Lighting Controls	42.3%	30.0%	$ 0.212	$ 0.157	$ 0.055	$ 0.025	10	1.3955445	1
MetMT1	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	1	Air Compressor Demand Reduction	25.3%	15.9%	$ 0.107	$ 0.081	$ 0.026	$ 0.025	10	2.4864415	1
MetME10	Primary_Metal_Mfg	Mfg. Metals	Motors	Existing	10	Motor Management Plan	49.1%	2.9%	$ 0.134	$ 0.054	$ 0.080	$ 0.025	10	2.0532738	1
MetME12	Primary_Metal_Mfg	Mfg. Metals	Motors	Existing	12	Air Compressor Optimization	34.7%	30.1%	$ 0.151	$ 0.058	$ 0.093	$ 0.025	10	1.8547646	1
MetMT13	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	13	Motors: Rewind 101-200 HP	25.4%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	1.6353204	1
MetMT14	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	14	Motors: Rewind 201-500 HP	35.6%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	1.6353204	1
MetMT15	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	15	Motors: Rewind 20-50 HP	4.6%	0.9%	$ 0.431	$ 0.356	$ 0.075	$ 0.025	15	1.1993076	1
MetMT16	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	16	Motors: Rewind 500+ HP	55.2%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	1.6353204	1
MetMT17	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	17	Motors: Rewind 51-100 HP	15.2%	0.6%	$ 0.388	$ 0.321	$ 0.067	$ 0.025	15	1.32421	1
MetMT18	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	18	Properly Sized Fans	14.7%	10.4%	$ 0.202	$ 0.122	$ 0.080	$ 0.025	10	1.4410513	1
MetME19	Primary_Metal_Mfg	Mfg. Metals	Motors	Existing	19	Pump Energy Management	29.8%	7.5%	$ 0.134	$ 0.054	$ 0.080	$ 0.025	10	2.0532738	1
MetMT2	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	2	High efficiency Compressor motors	73.1%	1.1%	$ 0.430	$ 0.355	$ 0.075	$ 0.025	15	1.2026857	1
MetMT20	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	20	Pump Equipment Upgrade	32.3%	20.0%	$ 0.156	$ 0.129	$ 0.027	$ 0.025	10	1.8032971	1
MetME21	Primary_Metal_Mfg	Mfg. Metals	Motors	Existing	21	Pump System Optimization	14.9%	12.1%	$ 0.391	$ 0.196	$ 0.195	$ 0.025	12	1.0186118	1
MetMT22	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	22	Efficient Centrifugal Fan	10.3%	20.0%	$ 0.228	$ 0.188	$ 0.040	$ 0.025	10	1.2955531	1
MetMT23	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	23	Switch from Belt drive to Direct Drive	10.4%	7.5%	$ 0.268	$ 0.221	$ 0.046	$ 0.025	12	1.4491471	1
MetMT24	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	24	Synchronous Belts	20.6%	1.1%	$ 0.268	$ 0.221	$ 0.046	$ 0.025	10	1.1176917	1
MetMT25		Mfg. Metals	Motors	Turnover	25	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	74.4%	0.91%	$ 2.085	$ 2.085	$ -	$ 0.025	15	0.2592562	0
MetMT26		Mfg. Metals	Motors	Turnover	26	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	55.8%	0.39%	$ 0.436	$ 0.436	$ -	$ 0.025	15	1.1865697	1
MetMT27		Mfg. Metals	Motors	Turnover	27	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	74.4%	0.7%	$ 1.249	$ 1.249	$ -	$ 0.025	15	0.4292646	0
MetMT28		Mfg. Metals	Motors	Turnover	28	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	42.8%	0.9%	$ 0.372	$ 0.372	$ -	$ 0.025	15	1.3774963	1
MetMT29		Mfg. Metals	Motors	Turnover	29	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	66.3%	0.4%	$ 0.799	$ 0.799	$ -	$ 0.025	15	0.6639478	0
MetMT3	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	3	High Efficiency Motors	73.3%	1.5%	$ 0.545	$ 0.450	$ 0.095	$ 0.025	15	0.959915	0
MetME30	Primary_Metal_Mfg	Mfg. Metals	Motors	Existing	30	Fan System Optimization	29.0%	7.7%	$ 0.311	$ 0.156	$ 0.155	$ 0.025	10	0.9739933	0
MetMT8	Primary_Metal_Mfg	Mfg. Metals	Motors	Turnover	8	Material Handling	52.4%	5.0%	$ 0.585	$ 0.483	$ 0.102	$ 0.025	10	0.5365358	0
MetME4	Primary_Metal_Mfg	Mfg. Metals	Motors	Existing	4	Material Handling VFD	52.4%	18.7%	$ 0.381	$ 0.229	$ 0.152	$ 0.025	10	0.8058521	0
MetOT1	Primary_Metal_Mfg	Mfg. Metals	Other	Turnover	1	Bldg Improvements	35.0%	20.4%	$ 0.248	$ 0.162	$ 0.087	$ 0.025	15	1.9820129	1
MetOE2	Primary_Metal_Mfg	Mfg. Metals	Other	Existing	2	Energy Project Management	27.0%	29.0%	$ 0.163	$ 0.134	$ 0.029	$ 0.025	11	1.9780551	1
MetOE3	Primary_Metal_Mfg	Mfg. Metals	Other	Existing	3	Integrated Plant Energy Management	22.0%	50.0%	$ 0.261	$ 0.215	$ 0.047	$ 0.025	11	1.2999303	1
MetOE4	Primary_Metal_Mfg	Mfg. Metals	Other	Existing	4	Plant Energy Management	27.0%	12.0%	$ 0.139	$ 0.114	$ 0.025	$ 0.025	10	1.968014	1
MetOT5	Primary_Metal_Mfg	Mfg. Metals	Other	Turnover	5	Transformers	20.0%	1.6%	$ 0.415	$ 0.399	$ 0.016	$ 0.025	15	1.2299225	1
OthCooT1	Miscellaneous_Mfg	Mfg. Other	Process Cooling	Turnover	1	Equipment: Chillers	8.0%	17.9%	$ 0.330	$ 0.249	$ 0.081	$ 0.025	15	1.5160067	1
OthCooE2	Miscellaneous_Mfg	Mfg. Other	Process Cooling	Existing	2	Improved Controls	33.8%	6.0%	$ 1.118	$ 0.673	$ 0.445	$ 0.025	15	0.4710413	0
OthCooT3	one_Clay_Glass_Produc	Mfg. Other	Process Cooling	Turnover	3	Adjustable speed drive on compressors	34.0%	11.7%	$ 0.201	$ 0.121	$ 0.080	$ 0.025	10	1.4129454	1
OthCooE4	Miscellaneous_Mfg	Mfg. Other	Process Cooling	Existing	4	Optimization of operating parameters	35.0%	13.1%	$ 0.101	$ 0.039	$ 0.063	$ 0.025	3	0.777031	0
OthCooT5	Miscellaneous_Mfg	Mfg. Other	Process Cooling	Turnover	5	Cold Storage Retrofit	25.6%	20.7%	$ 0.250	$ 0.157	$ 0.093	$ 0.025	10	1.1623034	1
OthCooE6	Miscellaneous_Mfg	Mfg. Other	Process Cooling	Existing	6	Cold Storage Tuneup	10.0%	15.6%	$ 0.112	$ 0.047	$ 0.065	$ 0.025	3	0.7167421	0
OthHeae1	Miscellaneous_Mfg	Mfg. Other	Process Heating	existing	1	Improved Controls	41.7%	30.4%	$ 0.245	$ 0.147	$ 0.098	$ 0.025	10	1.1852223	1
OthHeae2	Miscellaneous_Mfg	Mfg. Other	Process Heating	existing	2	Process Heat O&M	69.8%	28.6%	$ 0.257	$ 0.225	$ 0.032	$ 0.025	2	0.2267898	0
OthHT1	Miscellaneous_Mfg	Mfg. Other	HVAC	Turnover	1	Equipment Upgrades	64.4%	16.4%	$ 0.296	$ 0.252	$ 0.044	$ 0.025	15	1.7276904	1
OthHE2	Miscellaneous_Mfg	Mfg. Other	HVAC	Existing	2	Improved Controls	33.4%	20.9%	$ 0.102	$ 0.077	$ 0.025	$ 0.025	10	2.6083486	1
OthHE3	Miscellaneous_Mfg	Mfg. Other	HVAC	Existing	3	Recommissioning	74.3%	16.0%	$ 0.271	$ -	$ 0.271	$ 0.025	7	0.7996836	0
OthLT1	Miscellaneous_Mfg	Mfg. Other	Lighting	Turnover	1	Efficient Lighting Equipment	30.4%	19.9%	$ 0.150	$ 0.103	$ 0.047	$ 0.025	10	1.8881036	1
OthLT2	Miscellaneous_Mfg	Mfg. Other	Lighting	Turnover	2	HighBay Lighting Equipment	55.1%	34.1%	$ 0.376	$ 0.295	$ 0.081	$ 0.025	10	0.8252481	0
OthLE3	Miscellaneous_Mfg	Mfg. Other	Lighting	Existing	3	Lighting Controls	42.3%	30.0%	$ 0.212	$ 0.157	$ 0.055	$ 0.025	10	1.3955445	1
OthMT1		Mfg. Other	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	74.4%	0.7%	$ 1.249	$ 1.249	$ -	$ 0.025	15	0.4292646	0
OthMT11	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	11	Air Compressor Demand Reduction	26.0%	15.9%	$ 0.107	$ 0.081	$ 0.026	$ 0.025	10	2.4864415	1
OthMT12	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	12	Material Handling	52.9%	5.0%	$ 0.585	$ 0.483	$ 0.102	$ 0.025	10	0.5365358	0
OthME13	Miscellaneous_Mfg	Mfg. Other	Motors	Existing	13	Material Handling VFD	52.9%	18.7%	$ 0.381	$ 0.229	$ 0.152	$ 0.025	10	0.8058521	0
OthME14	Miscellaneous_Mfg	Mfg. Other	Motors	Existing	14	Motor Management Plan	50.0%	2.9%	$ 0.134	$ 0.054	$ 0.080	$ 0.025	10	2.0532738	1
OthMT16	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	16	Motors: Rewind 101-200 HP	25.4%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	1.6353204	1
OthMT17	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	17	Motors: Rewind 201-500 HP	35.6%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	1.6353204	1
OthMT18	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	18	Motors: Rewind 20-50 HP	4.7%	0.9%	$ 0.431	$ 0.356	$ 0.075	$ 0.025	15	1.1993076	1
OthMT19	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	19	Motors: Rewind 500+ HP	55.2%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	1.6353204	1
OthMT2		Mfg. Other	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	42.8%	0.9%	$ 0.372	$ 0.372	$ -	$ 0.025	15	1.3774963	1
OthMT20	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	20	Motors: Rewind 51-100 HP	15.2%	0.6%	$ 0.388	$ 0.321	$ 0.067	$ 0.025	15	1.32421	1
OthMT21	one_Clay_Glass_Produc	Mfg. Other	Motors	Turnover	21	Air Compressor Equipment	17.0%	8.8%	$ 0.157	$ 0.130	$ 0.027	$ 0.025	10	1.7956084	1
OthMT22	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	22	Properly Sized Fans	15.3%	10.4%	$ 0.202	$ 0.122	$ 0.080	$ 0.025	10	1.4410513	1
OthME23	Miscellaneous_Mfg	Mfg. Other	Motors	Existing	23	Pump Energy Management	31.2%	7.5%	$ 0.134	$ 0.054	$ 0.080	$ 0.025	10	2.0532738	1
OthMT24	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	24	Pump Equipment Upgrade	33.8%	20.0%	$ 0.156	$ 0.129	$ 0.027	$ 0.025	10	1.8032971	1
OthME25	Miscellaneous_Mfg	Mfg. Other	Motors	Existing	25	Pump System Optimization	15.5%	12.1%	$ 0.391	$ 0.196	$ 0.195	$ 0.025	12	1.0186118	1
OthMT26	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	26	Switch from Belt drive to Direct Drive	10.5%	7.5%	$ 0.268	$ 0.221	$ 0.046	$ 0.025	12	1.4491471	1
OthMT27	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	27	Synchronous Belts	21.4%	1.1%	$ 0.268	$ 0.221	$ 0.046	$ 0.025	10	1.1176917	1
OthME28	Miscellaneous_Mfg	Mfg. Other	Motors	Existing	28	Air Compressor Optimization	35.6%	30.1%	$ 0.151	$ 0.058	$ 0.093	$ 0.025	10	1.8547646	1
OthMT29	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	29	Efficient Centrifugal Fan	10.7%	20.0%	$ 0.228	$ 0.188	$ 0.040	$ 0.025	10	1.2955531	1
OthMT3		Mfg. Other	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	66.3%	0.4%	$ 0.799	$ 0.799	$ -	$ 0.025	15	0.6639478	0
OthMT30		Mfg. Other	Motors	Turnover	30	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	74.4%	0.91%	$ 2.085	$ 2.085	$ -	$ 0.025	15	0.2592562	0
OthMT31		Mfg. Other	Motors	Turnover	31	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	55.8%	0.39%	$ 0.436	$ 0.436	$ -	$ 0.025	15	1.1865697	1
OthME4	Miscellaneous_Mfg	Mfg. Other	Motors	Existing	4	Fan System Optimization	30.1%	7.7%	$ 0.311	$ 0.156	$ 0.155	$ 0.025	10	0.9739933	0
OthMT5	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	5	High efficiency Compressor motors	75.1%	1.1%	$ 0.430	$ 0.355	$ 0.075	$ 0.025	15	1.2026857	1
OthMT6	Miscellaneous_Mfg	Mfg. Other	Motors	Turnover	6	High Efficiency Motors	75.6%	1.5%	$ 0.545	$ 0.450	$ 0.095	$ 0.025	15	0.959915	0
OthOT1	Miscellaneous_Mfg	Mfg. Other	Other	Turnover	1	Bldg Improvements	35.0%	20.4%	$ 0.248	$ 0.162	$ 0.087	$ 0.025	15	1.9820129	1
OthOE2	Miscellaneous_Mfg	Mfg. Other	Other	Existing	2	Energy Project Management	27.0%	29.0%	$ 0.163	$ 0.134	$ 0.029	$ 0.025	11	1.9780551	1

Measure Lookup	Industry	New Segment	New End-Use	Vintage	easure Numb	Measure	Applicability	Savings	Total Cost ($/kW Saved)	Equipment Cost	Labor Cost	Admin Costs ($/kWh Saved)	Life	TRC Test	Economic Flag
OthOE3	Miscellaneous_Mfg	Mfg. Other	Other	Existing	3	Integrated Plant Energy Management	22.0%	50.0%	$ 0.261	$ 0.215	$ 0.047	$ 0.025	11	1.2999303	1
OthOE4	Miscellaneous_Mfg	Mfg. Other	Other	Existing	4	Plant Energy Management	27.0%	12.0%	$ 0.139	$ 0.114	$ 0.025	$ 0.025	10	1.968014	1
OthOT5	Miscellaneous_Mfg	Mfg. Other	Other	Turnover	5	Transformers	20.0%	1.6%	$ 0.415	$ 0.399	$ 0.016	$ 0.025	15	1.2299225	1
PapCooT1	Paper_Mfg	Mfg. Paper	Process Cooling	Turnover	1	Equipment: Chillers	8.0%	17.9%	$ 0.330	$ 0.249	$ 0.081	$ 0.025	15	1.5160067	1
PapCooE2	Paper_Mfg	Mfg. Paper	Process Cooling	Existing	2	Improved Controls	33.8%	6.0%	$ 1.118	$ 0.673	$ 0.445	$ 0.025	15	0.4710413	0
PapCooT3	Paper_Mfg	Mfg. Paper	Process Cooling	Turnover	3	Adjustable speed drive on compressors	34.0%	11.7%	$ 0.201	$ 0.121	$ 0.080	$ 0.025	10	1.4129454	1
PapCooE4	Paper_Mfg	Mfg. Paper	Process Cooling	Existing	4	Optimization of operating parameters	35.0%	13.1%	$ 0.101	$ 0.039	$ 0.063	$ 0.025	3	0.777031	0
PapHeaE1	Paper_Mfg	Mfg. Paper	Process Heating	Existing	1	Improved Controls	38.1%	30.4%	$ 0.245	$ 0.147	$ 0.098	$ 0.025	10	1.1852223	1
PapHeaE2	Paper_Mfg	Mfg. Paper	Process Heating	Existing	2	Process Heat O&M	63.9%	28.6%	$ 0.257	$ 0.225	$ 0.032	$ 0.025	2	0.2267898	0
PapHT1	Paper_Mfg	Mfg. Paper	HVAC	Turnover	1	Equipment Upgrades	62.4%	16.4%	$ 0.296	$ 0.252	$ 0.044	$ 0.025	15	1.7276904	1
PapHE2	Paper_Mfg	Mfg. Paper	HVAC	Existing	2	Improved Controls	32.4%	20.9%	$ 0.102	$ 0.077	$ 0.025	$ 0.025	10	2.6083486	1
PapHE3	Paper_Mfg	Mfg. Paper	HVAC	Existing	3	Recommissioning	72.0%	16.0%	$ 0.271	$ -	$ 0.271	$ 0.025	7	0.7996836	0
PapLT1	Paper_Mfg	Mfg. Paper	Lighting	Turnover	1	Efficient Lighting Equipment	30.4%	19.9%	$ 0.150	$ 0.103	$ 0.047	$ 0.025	10	1.8881036	1
PapLT2	Paper_Mfg	Mfg. Paper	Lighting	Turnover	2	HighBay Lighting Equipment	55.1%	34.1%	$ 0.376	$ 0.295	$ 0.081	$ 0.025	10	0.8252481	0
PapLE3	Paper_Mfg	Mfg. Paper	Lighting	Existing	3	Lighting Controls	42.3%	30.0%	$ 0.212	$ 0.157	$ 0.055	$ 0.025	10	1.3955445	1
PapME1	Paper_Mfg	Mfg. Paper	Motors	Existing	1	Fan System Optimization	30.2%	7.7%	$ 0.311	$ 0.156	$ 0.155	$ 0.025	10	0.9739933	0
PapME10	Paper_Mfg	Mfg. Paper	Motors	Existing	10	Motor Management Plan	50.1%	2.9%	$ 0.134	$ 0.054	$ 0.080	$ 0.025	10	2.0532738	1
PapMT11	Paper_Mfg	Mfg. Paper	Motors	Turnover	11	Air Compressor Demand Reduction	25.8%	15.9%	$ 0.107	$ 0.081	$ 0.026	$ 0.025	10	2.4864415	1
PapMT13	Paper_Mfg	Mfg. Paper	Motors	Turnover	13	Motors: Rewind 101-200 HP	25.4%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	1.6353204	1
PapMT14	Paper_Mfg	Mfg. Paper	Motors	Turnover	14	Motors: Rewind 201-500 HP	35.6%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	1.6353204	1
PapMT15	Paper_Mfg	Mfg. Paper	Motors	Turnover	15	Motors: Rewind 20-50 HP	4.7%	0.9%	$ 0.431	$ 0.356	$ 0.075	$ 0.025	15	1.1993076	1
PapMT16	Paper_Mfg	Mfg. Paper	Motors	Turnover	16	Motors: Rewind 500+ HP	55.2%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	1.6353204	1
PapMT17	Paper_Mfg	Mfg. Paper	Motors	Turnover	17	Motors: Rewind 51-100 HP	15.2%	0.6%	$ 0.388	$ 0.321	$ 0.067	$ 0.025	15	1.32421	1
PapMT18	Paper_Mfg	Mfg. Paper	Motors	Turnover	18	Paper: Large Material Handling	25.2%	9.7%	$ 0.959	$ 0.850	$ 0.109	$ 0.025	10	0.3325223	0
PapMT19	Paper_Mfg	Mfg. Paper	Motors	Turnover	19	Paper: Material Handling	25.2%	13.1%	$ 0.801	$ 0.710	$ 0.091	$ 0.025	10	0.3959124	0
PapMT2	Paper_Mfg	Mfg. Paper	Motors	Turnover	2	High efficiency Compressor motors	74.7%	1.1%	$ 0.430	$ 0.355	$ 0.075	$ 0.025	15	1.2026857	1
PapMT20	Paper_Mfg	Mfg. Paper	Motors	Turnover	20	Paper: Premium Control Large Material	25.2%	18.7%	$ 0.549	$ 0.486	$ 0.062	$ 0.025	10	0.5704866	0
PapME21	Paper_Mfg	Mfg. Paper	Motors	Existing	21	Air Compressor Optimization	35.4%	30.1%	$ 0.151	$ 0.058	$ 0.093	$ 0.025	10	1.8547646	1
PapMT22	Paper_Mfg	Mfg. Paper	Motors	Turnover	22	Paper: Premium Fan	25.5%	20.0%	$ 0.227	$ 0.201	$ 0.026	$ 0.025	10	1.3001016	1
PapMT23	Paper_Mfg	Mfg. Paper	Motors	Turnover	23	Properly Sized Fans	15.3%	10.4%	$ 0.202	$ 0.122	$ 0.080	$ 0.025	10	1.4410513	1
PapME24	Paper_Mfg	Mfg. Paper	Motors	Existing	24	Pump Energy Management	32.3%	7.5%	$ 0.134	$ 0.054	$ 0.080	$ 0.025	10	2.0532738	1
PapMT25	Paper_Mfg	Mfg. Paper	Motors	Turnover	25	Pump Equipment Upgrade	34.9%	20.0%	$ 0.156	$ 0.129	$ 0.027	$ 0.025	10	1.8032971	1
PapME26	Paper_Mfg	Mfg. Paper	Motors	Existing	26	Pump System Optimization	16.1%	12.1%	$ 0.391	$ 0.196	$ 0.195	$ 0.025	12	1.0186118	1
PapMT27	Paper_Mfg	Mfg. Paper	Motors	Turnover	27	Switch from Belt drive to Direct Drive	10.6%	7.5%	$ 0.268	$ 0.221	$ 0.046	$ 0.025	12	1.4491471	1
PapMT28	Paper_Mfg	Mfg. Paper	Motors	Turnover	28	Synchronous Belts	21.4%	1.1%	$ 0.268	$ 0.221	$ 0.046	$ 0.025	10	1.1176917	1
PapMT29	Paper_Mfg	Mfg. Paper	Motors	Turnover	29	Efficient Centrifugal Fan	10.7%	20.0%	$ 0.228	$ 0.188	$ 0.040	$ 0.025	10	1.2955531	1
PapMT3	Paper_Mfg	Mfg. Paper	Motors	Turnover	3	High Efficiency Motors	76.7%	1.5%	$ 0.545	$ 0.450	$ 0.095	$ 0.025	15	0.959915	0
PapMT30		Mfg. Paper	Motors	Turnover	30	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	74.4%	0.91%	$ 2.085	$ 2.085	$ -	$ 0.025	15	0.2592562	0
PapMT31		Mfg. Paper	Motors	Turnover	31	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	55.8%	0.39%	$ 0.436	$ 0.436	$ -	$ 0.025	15	1.1865697	1
PapMT32		Mfg. Paper	Motors	Turnover	32	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	74.4%	0.7%	$ 1.249	$ 1.249	$ -	$ 0.025	15	0.4292646	0
PapMT33		Mfg. Paper	Motors	Turnover	33	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	42.8%	0.9%	$ 0.372	$ 0.372	$ -	$ 0.025	15	1.3774963	1
PapMT34		Mfg. Paper	Motors	Turnover	34	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	66.3%	0.4%	$ 0.799	$ 0.799	$ -	$ 0.025	15	0.6639478	0
PapMT8	Paper_Mfg	Mfg. Paper	Motors	Turnover	8	Material Handling	53.4%	5.0%	$ 0.585	$ 0.483	$ 0.102	$ 0.025	10	0.5365358	0
PapME9	Paper_Mfg	Mfg. Paper	Motors	Existing	9	Material Handling VFD	53.4%	18.7%	$ 0.381	$ 0.229	$ 0.152	$ 0.025	10	0.8058521	0
PapOT1	Paper_Mfg	Mfg. Paper	Other	Turnover	1	Bldg Improvements	35.0%	20.4%	$ 0.248	$ 0.162	$ 0.087	$ 0.025	15	1.9820129	1
PapOE10	Paper_Mfg	Mfg. Paper	Other	Existing	10	Plant Energy Management	27.0%	12.0%	$ 0.139	$ 0.114	$ 0.025	$ 0.025	10	1.968014	1
PapOT11	Paper_Mfg	Mfg. Paper	Other	Turnover	11	Transformers	20.0%	1.6%	$ 0.415	$ 0.399	$ 0.016	$ 0.025	15	1.2299225	1
PapOE2	Paper_Mfg	Mfg. Paper	Other	Existing	2	Energy Project Management	27.0%	29.0%	$ 0.163	$ 0.134	$ 0.029	$ 0.025	11	1.9780551	1
PapOE3	Paper_Mfg	Mfg. Paper	Other	Existing	3	Integrated Plant Energy Management	22.0%	50.0%	$ 0.261	$ 0.215	$ 0.047	$ 0.025	11	1.2999303	1
PapOT4	Paper_Mfg	Mfg. Paper	Other	Turnover	4	Kraft: Efficient Agitator	13.8%	50.0%	$ 0.104	$ 0.093	$ 0.012	$ 0.025	10	2.4899799	1
PapOT5	Paper_Mfg	Mfg. Paper	Other	Turnover	5	Kraft: Effluent Treatment System	9.2%	15.0%	$ 0.092	$ 0.082	$ 0.011	$ 0.025	10	2.7439682	1
PapOT6	Paper_Mfg	Mfg. Paper	Other	Turnover	6	Mech Pulp: Premium Process	22.5%	0.2%	$ 0.141	$ 0.125	$ 0.016	$ 0.025	5	0.9576841	0
PapOT7	Paper_Mfg	Mfg. Paper	Other	Turnover	7	Mech Pulp: Refiner Plate Improvement	35.5%	0.4%	$ 0.045	$ 0.040	$ 0.005	$ 0.025	1	0.4539346	0
PapOT8	Paper_Mfg	Mfg. Paper	Other	Turnover	8	Mech Pulp: Refiner Replacement	23.7%	10.0%	$ 0.735	$ 0.652	$ 0.084	$ 0.025	12	0.5510549	0
PapOT9	Paper_Mfg	Mfg. Paper	Other	Turnover	9	Paper: Efficient Pulp Screen	13.8%	15.0%	$ 0.226	$ 0.200	$ 0.026	$ 0.025	10	1.2864871	1
PlaCooE1	Chemical_Mfg	Mfg. Plastics	Process Cooling	Existing	1	Clean Room: Change Filter Strategy	10.0%	40.0%	$ 0.016	$ 0.012	$ 0.005	$ 0.025	1	0.7571936	0
PlaCooE2	Chemical_Mfg	Mfg. Plastics	Process Cooling	Existing	2	Clean Room: Chiller Optimize	28.3%	14.8%	$ 0.248	$ 0.124	$ 0.124	$ 0.025	10	1.171322	1
PlaCooT3	Chemical_Mfg	Mfg. Plastics	Process Cooling	Turnover	3	Clean Room: Clean Room HVAC	30.0%	9.0%	$ 0.204	$ 0.144	$ 0.061	$ 0.025	15	2.3477936	1
PlaCooT4	Chemical_Mfg	Mfg. Plastics	Process Cooling	Turnover	4	Equipment: Chillers	8.0%	17.9%	$ 0.330	$ 0.249	$ 0.081	$ 0.025	15	1.5160067	1
PlaCooE5	Chemical_Mfg	Mfg. Plastics	Process Cooling	Existing	5	Improved Controls	33.8%	6.0%	$ 1.118	$ 0.673	$ 0.445	$ 0.025	15	0.4710413	0
PlaCooT6	Chemical_Mfg	Mfg. Plastics	Process Cooling	Turnover	6	Adjustable speed drive on compressors	34.0%	11.7%	$ 0.201	$ 0.121	$ 0.080	$ 0.025	10	1.4129454	1
PlaCooE7	Chemical_Mfg	Mfg. Plastics	Process Cooling	Existing	7	Optimization of operating parameters	35.0%	13.1%	$ 0.101	$ 0.039	$ 0.063	$ 0.025	3	0.777031	0
PlaCooT8	Chemical_Mfg	Mfg. Plastics	Process Cooling	Turnover	8	Cold Storage Retrofit	25.6%	20.7%	$ 0.250	$ 0.157	$ 0.093	$ 0.025	10	1.1623034	1
PlaCooE9	Chemical_Mfg	Mfg. Plastics	Process Cooling	Existing	9	Cold Storage Tuneup	10.0%	15.6%	$ 0.112	$ 0.047	$ 0.065	$ 0.025	3	0.7167421	0
PlaHeaE1	Chemical_Mfg	Mfg. Plastics	Process Heating	Existing	1	Improved Controls	37.9%	30.4%	$ 0.245	$ 0.147	$ 0.098	$ 0.025	10	1.1852223	1
PlaHeaE2	Chemical_Mfg	Mfg. Plastics	Process Heating	Existing	2	Process Heat O&M	63.4%	28.6%	$ 0.257	$ 0.225	$ 0.032	$ 0.025	2	0.2267898	0
PlaHT1	Chemical_Mfg	Mfg. Plastics	HVAC	Turnover	1	Equipment Upgrades	62.9%	16.4%	$ 0.296	$ 0.252	$ 0.044	$ 0.025	15	1.7276904	1
PlaHE2	Chemical_Mfg	Mfg. Plastics	HVAC	Existing	2	Improved Controls	32.7%	20.9%	$ 0.102	$ 0.077	$ 0.025	$ 0.025	10	2.6083486	1
PlaHE3	Chemical_Mfg	Mfg. Plastics	HVAC	Existing	3	Recommissioning	72.6%	16.0%	$ 0.271	$ -	$ 0.271	$ 0.025	7	0.7996836	0
PlaLT1	Chemical_Mfg	Mfg. Plastics	Lighting	Turnover	1	Efficient Lighting Equipment	30.4%	19.9%	$ 0.150	$ 0.103	$ 0.047	$ 0.025	10	1.8881036	1
PlaLT2	Chemical_Mfg	Mfg. Plastics	Lighting	Turnover	2	HighBay Lighting Equipment	55.1%	34.1%	$ 0.376	$ 0.295	$ 0.081	$ 0.025	10	0.8252481	0
PlaLE3	Chemical_Mfg	Mfg. Plastics	Lighting	Existing	3	Lighting Controls	42.3%	30.0%	$ 0.212	$ 0.157	$ 0.055	$ 0.025	10	1.3955445	1
PlaMT1		Mfg. Plastics	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	42.8%	0.9%	$ 0.372	$ 0.372	$ -	$ 0.025	15	1.3774963	1
PlaMT10	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	10	Material Handling	52.3%	5.0%	$ 0.585	$ 0.483	$ 0.102	$ 0.025	10	0.5365358	0
PlaMT11	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	11	Air Compressor Demand Reduction	28.0%	15.9%	$ 0.107	$ 0.081	$ 0.026	$ 0.025	10	2.4864415	1
PlaME12	Chemical_Mfg	Mfg. Plastics	Motors	Existing	12	Material Handling VFD	52.3%	18.7%	$ 0.381	$ 0.229	$ 0.152	$ 0.025	10	0.8058521	0

Measure Lookup	Industry	New Segment	New End-Use	Vintage	easure Numb	Measure	Applicability	Savings	Total Cost ($/kW Saved)	Equipment Cost	Labor Cost	Admin Costs ($/kWh Saved)	Life	TRC Test	Economic Flag
PlaME13	Chemical_Mfg	Mfg. Plastics	Motors	Existing	13	Motor Management Plan	51.6%	2.9%	$ 0.134	$ 0.054	$ 0.080	$ 0.025	10	2.0532738	1
PlaMT15	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	15	Motors: Rewind 101-200 HP	25.4%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	1.6353204	1
PlaMT16	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	16	Motors: Rewind 201-500 HP	35.6%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	1.6353204	1
PlaMT17	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	17	Motors: Rewind 20-50 HP	4.6%	0.9%	$ 0.431	$ 0.356	$ 0.075	$ 0.025	15	1.1993076	1
PlaMT18	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	18	Motors: Rewind 500+ HP	55.2%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	1.6353204	1
PlaMT19	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	19	Motors: Rewind 51-100 HP	15.2%	0.6%	$ 0.388	$ 0.321	$ 0.067	$ 0.025	15	1.32421	1
PlaMT2		Mfg. Plastics	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	66.3%	0.4%	$ 0.799	$ 0.799	$ -	$ 0.025	15	0.6639478	0
PlaMT20	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	20	Properly Sized Fans	14.7%	10.4%	$ 0.202	$ 0.122	$ 0.080	$ 0.025	10	1.4410513	1
PlaME21	Chemical_Mfg	Mfg. Plastics	Motors	Existing	21	Air Compressor Optimization	38.3%	30.1%	$ 0.151	$ 0.058	$ 0.093	$ 0.025	10	1.8547646	1
PlaMF22	Chemical_Mfg	Mfg. Plastics	Motors	Existing	22	Pump Energy Management	31.4%	7.5%	$ 0.134	$ 0.054	$ 0.080	$ 0.025	10	2.0532738	1
PlaMT23	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	23	Pump Equipment Upgrade	34.0%	20.0%	$ 0.156	$ 0.129	$ 0.027	$ 0.025	10	1.8032971	1
PlaME24	Chemical_Mfg	Mfg. Plastics	Motors	Existing	24	Pump System Optimization	15.6%	12.1%	$ 0.391	$ 0.196	$ 0.195	$ 0.025	12	1.0186118	1
PlaMT25	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	25	Switch from Belt drive to Direct Drive	10.4%	7.5%	$ 0.268	$ 0.221	$ 0.046	$ 0.025	12	1.4491471	1
PlaMT26	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	26	Synchronous Belts	20.9%	1.1%	$ 0.268	$ 0.221	$ 0.046	$ 0.025	10	1.1176917	1
PlaMT27	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	27	Efficient Centrifugal Fan	10.3%	20.0%	$ 0.228	$ 0.188	$ 0.040	$ 0.025	10	1.2955531	1
PlaMT28		Mfg. Plastics	Motors	Turnover	28	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	74.4%	0.91%	$ 2.085	$ 2.085	$ -	$ 0.025	15	0.2592562	0
PlaMT29		Mfg. Plastics	Motors	Turnover	29	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	55.8%	0.39%	$ 0.436	$ 0.436	$ -	$ 0.025	15	1.1865697	1
PlaME3	Chemical_Mfg	Mfg. Plastics	Motors	Existing	3	Fan System Optimization	28.9%	7.7%	$ 0.311	$ 0.156	$ 0.155	$ 0.025	10	0.9739933	0
PlaMT30		Mfg. Plastics	Motors	Turnover	30	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	74.4%	0.7%	$ 1.249	$ 1.249	$ -	$ 0.025	15	0.4292646	0
PlaMT4	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	4	High efficiency Compressor motors	80.8%	1.1%	$ 0.430	$ 0.355	$ 0.075	$ 0.025	15	1.2026857	1
PlaMT5	Chemical_Mfg	Mfg. Plastics	Motors	Turnover	5	High Efficiency Motors	74.4%	1.5%	$ 0.545	$ 0.450	$ 0.095	$ 0.025	15	0.959915	0
PlaOT1	Chemical_Mfg	Mfg. Plastics	Other	Turnover	1	Bldg Improvements	35.0%	20.4%	$ 0.248	$ 0.162	$ 0.087	$ 0.025	15	1.9820129	1
PlaOE2	Chemical_Mfg	Mfg. Plastics	Other	Existing	2	Energy Project Management	27.0%	29.0%	$ 0.163	$ 0.134	$ 0.029	$ 0.025	11	1.9780551	1
PlaOE3	Chemical_Mfg	Mfg. Plastics	Other	Existing	3	Integrated Plant Energy Management	22.0%	50.0%	$ 0.261	$ 0.215	$ 0.047	$ 0.025	11	1.2999303	1
PlaOE4	Chemical_Mfg	Mfg. Plastics	Other	Existing	4	Plant Energy Management	27.0%	12.0%	$ 0.139	$ 0.114	$ 0.025	$ 0.025	10	1.968014	1
PlaOT5	Chemical_Mfg	Mfg. Plastics	Other	Turnover	5	Transformers	20.0%	1.6%	$ 0.415	$ 0.399	$ 0.016	$ 0.025	15	1.2299225	1
MinMT1		Mining	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	74.4%	0.91%	$ 2.085	$ 2.085	$ -	$ 0.025	15	0.2592562	0
MinME10	Mining	Mining	Motors	Existing	10	Motor Management Plan	50.0%	2.9%	$ 0.134	$ 0.054	$ 0.080	$ 0.025	10	2.0532738	1
MinMT12	Mining	Mining	Motors	Turnover	12	Motors: Rewind 101-200 HP	25.4%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	1.6353204	1
MinMT13	Mining	Mining	Motors	Turnover	13	Motors: Rewind 201-500 HP	35.6%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	1.6353204	1
MinMT14	Mining	Mining	Motors	Turnover	14	Motors: Rewind 20-50 HP	4.7%	0.9%	$ 0.431	$ 0.356	$ 0.075	$ 0.025	15	1.1993076	1
MinMT15	Mining	Mining	Motors	Turnover	15	Motors: Rewind 500+ HP	55.2%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	1.6353204	1
MinMT16	Mining	Mining	Motors	Turnover	16	Motors: Rewind 51-100 HP	15.2%	0.6%	$ 0.388	$ 0.321	$ 0.067	$ 0.025	15	1.32421	1
MinMT17	Mining	Mining	Motors	Turnover	17	Switch from Belt drive to Direct Drive	10.5%	7.5%	$ 0.268	$ 0.221	$ 0.046	$ 0.025	12	1.4491471	1
MinMT18	Mining	Mining	Motors	Turnover	18	Synchronous Belts	21.0%	1.1%	$ 0.268	$ 0.221	$ 0.046	$ 0.025	10	1.1176917	1
MinMT2		Mining	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	55.8%	0.39%	$ 0.436	$ 0.436	$ -	$ 0.025	15	1.1865697	1
MinMT3		Mining	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	74.4%	0.7%	$ 1.249	$ 1.249	$ -	$ 0.025	15	0.4292646	0
MinMT4		Mining	Motors	Turnover	4	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	42.8%	0.9%	$ 0.372	$ 0.372	$ -	$ 0.025	15	1.3774963	1
MinMT5		Mining	Motors	Turnover	5	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	66.3%	0.4%	$ 0.799	$ 0.799	$ -	$ 0.025	15	0.6639478	0
MinMT6	Mining	Mining	Motors	Turnover	6	High Efficiency Motors	75.0%	1.5%	$ 0.545	$ 0.450	$ 0.095	$ 0.025	15	0.959915	0
MinMT8	Mining	Mining	Motors	Turnover	8	Material Handling	53.0%	5.0%	$ 0.585	$ 0.483	$ 0.102	$ 0.025	10	0.5365358	0
MinME9	Mining	Mining	Motors	Existing	9	Material Handling VFD	53.0%	18.7%	$ 0.381	$ 0.229	$ 0.152	$ 0.025	10	0.8058521	0
NonCooT1	.umber_Wood_Product	Other Non Mfg.	Process Cooling	Turnover	1	Equipment: Chillers	7.7%	17.9%	$ 0.330	$ 0.249	$ 0.081	$ 0.025	15	1.5160067	1
NonCooE2	.umber_Wood_Product	Other Non Mfg.	Process Cooling	Existing	2	Improved Controls	32.3%	6.0%	$ 1.118	$ 0.673	$ 0.445	$ 0.025	15	0.4710413	0
NonCooT3	Agriculture	Other Non Mfg.	Process Cooling	Turnover	3	Milk Precooler - Dairy Plate Cooler	1.7%	3.24%	$ 0.660	$ 0.487	$ 0.173	$ 0.025	15	0.7855812	0
NonCooT4	.umber_Wood_Product	Other Non Mfg.	Process Cooling	Turnover	4	Adjustable speed drive on compressors	34.0%	11.7%	$ 0.201	$ 0.121	$ 0.080	$ 0.025	10	1.4129454	1
NonCooE5	.umber_Wood_Product	Other Non Mfg.	Process Cooling	Existing	5	Optimization of operating parameters	35.0%	13.1%	$ 0.101	$ 0.039	$ 0.063	$ 0.025	3	0.777031	0
NonHeaT1	Agriculture	Other Non Mfg.	Process Heating	Turnover	1	Crate Heating Pads	22.9%	17.51%	$ 0.181	$ 0.162	$ 0.019	$ 0.025	15	2.6154754	1
NonHeaT2	Agriculture	Other Non Mfg.	Process Heating	Turnover	2	Grain dryers	24.8%	23.52%	$ 8.260	$ 6.090	$ 2.169	$ 0.025	15	0.0649665	0
NonHeaE3	Agriculture	Other Non Mfg.	Process Heating	Existing	3	Heat Lamp Setback (Microzone)	22.9%	0.45%	$ 0.210	$ 0.210	$ -	$ 0.025	15	2.2866299	1
NonHeaE4	Agriculture	Other Non Mfg.	Process Heating	Existing	4	Heat Lamp/Heating Pad Controller	22.9%	1.75%	$ 0.129	$ 0.129	$ -	$ 0.025	15	3.4864178	1
NonHeaT5	Agriculture	Other Non Mfg.	Process Heating	Turnover	5	Heat Lamps	22.9%	3.38%	$ 0.023	$ 0.023	$ -	$ 0.025	10	6.6110631	1
NonHeaE6	.umber_Wood_Product	Other Non Mfg.	Process Heating	Existing	6	Improved Controls	37.9%	30.4%	$ 0.245	$ 0.147	$ 0.098	$ 0.025	10	1.1852223	1
NonHeaE7	.umber_Wood_Product	Other Non Mfg.	Process Heating	Existing	7	Process Heat O&M	63.4%	28.6%	$ 0.257	$ 0.225	$ 0.032	$ 0.025	2	0.2267898	0
NonHT1	Agriculture	Other Non Mfg.	HVAC	Turnover	1	Energy-Efficient Dehumidifier	49.7%	2.00%	$ 1.072	$ 0.791	$ 0.282	$ 0.025	15	0.5048113	0
NonHT2	.umber_Wood_Product	Other Non Mfg.	HVAC	Turnover	2	Equipment Upgrades	63.2%	16.4%	$ 0.296	$ 0.252	$ 0.044	$ 0.025	15	1.7276904	1
NonHT3	Agriculture	Other Non Mfg.	HVAC	Turnover	3	Heat Reclaimer	1.7%	42.00%	$ 0.171	$ 0.126	$ 0.045	$ 0.025	15	2.8203003	1
NonHT4	Agriculture	Other Non Mfg.	HVAC	Turnover	4	Heat Recovery Ventilators	49.7%	4.13%	$ 0.448	$ 0.330	$ 0.118	$ 0.025	10	0.7031566	0
NonHE5	.umber_Wood_Product	Other Non Mfg.	HVAC	Existing	5	Improved Controls	32.8%	20.9%	$ 0.102	$ 0.077	$ 0.025	$ 0.025	10	2.6083486	1
NonHT6	Agriculture	Other Non Mfg.	HVAC	Turnover	6	Infrared Film for Greenhouses	0.3%	11.06%	$ 0.261	$ 0.234	$ 0.028	$ 0.025	4	0.4758249	0
NonHT7	Agriculture	Other Non Mfg.	HVAC	Turnover	7	Programmable Ventilation Controller	49.7%	0.10%	$ 0.140	$ 0.140	$ -	$ 0.025	10	2.019673	1
NonHE8	.umber_Wood_Product	Other Non Mfg.	HVAC	Existing	8	Recommissioning	72.9%	16.0%	$ 0.271	$ -	$ 0.271	$ 0.025	7	0.7996836	0
NonHT9	Agriculture	Other Non Mfg.	HVAC	Turnover	9	Scroll Compressor	1.7%	7.50%	$ 1.006	$ 0.899	$ 0.107	$ 0.025	15	0.5374578	0
NonLT1	.umber_Wood_Product	Other Non Mfg.	Lighting	Turnover	1	Efficient Lighting Equipment	30.4%	19.9%	$ 0.150	$ 0.103	$ 0.047	$ 0.025	10	1.8881036	1
NonLT2	.umber_Wood_Product	Other Non Mfg.	Lighting	Turnover	2	HighBay Lighting Equipment	55.1%	34.1%	$ 0.376	$ 0.295	$ 0.081	$ 0.025	10	0.8252481	0
NonLE3	.umber_Wood_Product	Other Non Mfg.	Lighting	Existing	3	Lighting Controls	42.3%	30.0%	$ 0.212	$ 0.157	$ 0.055	$ 0.025	10	1.3955445	1
NonMT1		Other Non Mfg.	Motors	Turnover	1	Enhanced (Ultra-PE) Motor 125-200 HP, 1200-3600 RPM	55.8%	0.39%	$ 0.436	$ 0.436	$ -	$ 0.025	15	1.1865697	1
NonMT11	Agriculture	Other Non Mfg.	Motors	Turnover	11	Agricultural Exhaust Fans (Rate 21 CFM/Watt+)	49.7%	5.00%	$ 0.316	$ 0.283	$ 0.034	$ 0.025	15	1.6029537	1
NonMT15	Agriculture	Other Non Mfg.	Motors	Turnover	15	Low Pressure Irrigation	0.4%	50.00%	$ 0.993	$ 0.732	$ 0.261	$ 0.025	10	0.3215149	0
NonMT16	.umber_Wood_Product	Other Non Mfg.	Motors	Turnover	16	Material Handling	53.2%	5.0%	$ 0.585	$ 0.483	$ 0.102	$ 0.025	10	0.5365358	0
NonME17	.umber_Wood_Product	Other Non Mfg.	Motors	Existing	17	Material Handling VFD	53.2%	18.7%	$ 0.381	$ 0.229	$ 0.152	$ 0.025	10	0.8058521	0
NonME18	.umber_Wood_Product	Other Non Mfg.	Motors	Existing	18	Motor Management Plan	50.9%	2.9%	$ 0.134	$ 0.054	$ 0.080	$ 0.025	10	2.0532738	1
NonMT2		Other Non Mfg.	Motors	Turnover	2	Enhanced (Ultra-PE) Motor 20-40 HP, 1200-3600 RPM	74.4%	0.7%	$ 1.249	$ 1.249	$ -	$ 0.025	15	0.4292646	0
NonMT21	.umber_Wood_Product	Other Non Mfg.	Motors	Turnover	21	Motors: Rewind 101-200 HP	25.4%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	1.6353204	1
NonMT22	.umber_Wood_Product	Other Non Mfg.	Motors	Turnover	22	Air Compressor Demand Reduction	26.8%	15.9%	$ 0.107	$ 0.081	$ 0.026	$ 0.025	10	2.4864415	1
NonMT23	.umber_Wood_Product	Other Non Mfg.	Motors	Turnover	23	Motors: Rewind 201-500 HP	35.6%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	1.6353204	1

Measure Lookup	Industry	New Segment	New End-Use	Vintage	easure Numb	Measure	Applicability	Savings	Total Cost ($/kW Saved)	Equipment Cost	Labor Cost	Admin Costs ($/kWh Saved)	Life	TRC Test	Economic Flag
NonMT24	umber_Wood_Product	Other Non Mfg.	Motors	Turnover	24	Motors: Rewind 20-50 HP	4.7%	0.9%	$ 0.431	$ 0.356	$ 0.075	$ 0.025	15	1.1993076	1
NonMT25	umber_Wood_Product	Other Non Mfg.	Motors	Turnover	25	Motors: Rewind 500+ HP	55.2%	0.5%	$ 0.309	$ 0.256	$ 0.054	$ 0.025	15	1.6353204	1
NonMT26	umber_Wood_Product	Other Non Mfg.	Motors	Turnover	26	Motors: Rewind 51-100 HP	15.2%	0.6%	$ 0.388	$ 0.321	$ 0.067	$ 0.025	15	1.32421	1
NonMT27	umber_Wood_Product	Other Non Mfg.	Motors	Turnover	27	Properly Sized Fans	15.3%	10.4%	$ 0.202	$ 0.122	$ 0.080	$ 0.025	10	1.4410513	1
NonME28	umber_Wood_Product	Other Non Mfg.	Motors	Existing	28	Pump Energy Management	29.8%	7.5%	$ 0.134	$ 0.054	$ 0.080	$ 0.025	10	2.0532738	1
NonMT29	umber_Wood_Product	Other Non Mfg.	Motors	Turnover	29	Pump Equipment Upgrade	32.3%	20.0%	$ 0.156	$ 0.129	$ 0.027	$ 0.025	10	1.8032971	1
NonMT3		Other Non Mfg.	Motors	Turnover	3	Enhanced (Ultra-PE) Motor 250-500 HP, 1200-3600 RPM	42.8%	0.9%	$ 0.372	$ 0.372	$ -	$ 0.025	15	1.3774963	1
NonME30	umber_Wood_Product	Other Non Mfg.	Motors	Existing	30	Pump System Optimization	14.9%	12.1%	$ 0.391	$ 0.196	$ 0.195	$ 0.025	12	1.0186118	1
NonMT31	Irrigation	Other Non Mfg.	Motors	Turnover	31	SIS	76.5%	7.5%	$ 1.051	$ 0.869	$ 0.183	$ 0.025	7	0.2160587	0
NonMT32	umber_Wood_Product	Other Non Mfg.	Motors	Turnover	32	Air Compressor Equipment	17.6%	8.8%	$ 0.157	$ 0.130	$ 0.027	$ 0.025	10	1.7956084	1
NonMT33	umber_Wood_Product	Other Non Mfg.	Motors	Turnover	33	Switch from Belt drive to Direct Drive	10.5%	7.5%	$ 0.268	$ 0.221	$ 0.046	$ 0.025	12	1.4491471	1
NonMT34	umber_Wood_Product	Other Non Mfg.	Motors	Turnover	34	Synchronous Belts	20.9%	1.1%	$ 0.268	$ 0.221	$ 0.046	$ 0.025	10	1.1176917	1
NonMT35	Irrigation	Other Non Mfg.	Motors	Turnover	35	System Improvements	85.0%	8.0%	$ 0.416	$ 0.344	$ 0.072	$ 0.025	5	0.3694434	0
NonMT36	Agriculture	Other Non Mfg.	Motors	Turnover	36	Variable Speed Drives for Dairy Vacuum Pumps	1.7%	36.89%	$ 0.169	$ 0.151	$ 0.018	$ 0.025	15	2.8178663	1
NonMT37	Agriculture	Other Non Mfg.	Motors	Turnover	37	VFDs on Small Milking Machines	1.7%	3.22%	$ 0.832	$ 0.614	$ 0.219	$ 0.025	15	0.6381395	0
NonMT38	umber_Wood_Product	Other Non Mfg.	Motors	Turnover	38	Wood: Replace Pneumatic Conveyor	50.2%	29.0%	$ 0.018	$ 0.016	$ 0.002	$ 0.025	10	7.5954048	1
NonME39	umber_Wood_Product	Other Non Mfg.	Motors	Existing	39	Air Compressor Optimization	36.8%	30.1%	$ 0.151	$ 0.058	$ 0.093	$ 0.025	10	1.8547646	1
NonMT4		Other Non Mfg.	Motors	Turnover	4	Enhanced (Ultra-PE) Motor 50-100 HP, 1200-3600 RPM	66.3%	0.4%	$ 0.799	$ 0.799	$ -	$ 0.025	15	0.6639478	0
NonMT40	Agriculture	Other Non Mfg.	Motors	Turnover	40	Automatic Milker Takeoff	1.7%	3.00%	$ 0.763	$ 0.563	$ 0.200	$ 0.025	15	0.6940981	0
NonMT41	Agriculture	Other Non Mfg.	Motors	Turnover	41	Circulating Fans	49.7%	5.00%	$ 0.152	$ 0.136	$ 0.016	$ 0.025	10	1.8515842	1
NonMT42	umber_Wood_Product	Other Non Mfg.	Motors	Turnover	42	Efficient Centrifugal Fan	10.7%	20.0%	$ 0.228	$ 0.188	$ 0.040	$ 0.025	10	1.2955531	1
NonMT43		Other Non Mfg.	Motors	Turnover	43	Enhanced (Ultra-PE) Motor 1-15 HP, 1200-3600 RPM	74.4%	0.91%	$ 2.085	$ 2.085	$ -	$ 0.025	15	0.2592562	0
NonME5	umber_Wood_Product	Other Non Mfg.	Motors	Existing	5	Fan System Optimization	30.2%	7.7%	$ 0.311	$ 0.156	$ 0.155	$ 0.025	10	0.9739933	0
NonMT6	umber_Wood_Product	Other Non Mfg.	Motors	Turnover	6	High efficiency Compressor motors	77.5%	1.1%	$ 0.430	$ 0.355	$ 0.075	$ 0.025	15	1.2026857	1
NonMT7	Irrigation	Other Non Mfg.	Motors	Turnover	7	High Efficiency Motors	74.7%	1.5%	$ 0.545	$ 0.450	$ 0.095	$ 0.025	15	0.959915	0
NonMT8	Agriculture	Other Non Mfg.	Motors	Turnover	8	High Volume Low Speed Fans	49.7%	46.61%	$ 2.004	$ 1.883	$ 0.120	$ 0.025	15	0.2696483	0
NonMT9	Agriculture	Other Non Mfg.	Motors	Turnover	9	High-Efficiency Ventilation System	49.7%	5.66%	$ 1.366	$ 1.366	$ -	$ 0.025	10	0.2352187	0
NonOT1	umber_Wood_Product	Other Non Mfg.	Other	Turnover	1	Bldg Improvements	35.0%	20.4%	$ 0.248	$ 0.162	$ 0.087	$ 0.025	15	1.9820129	1
NonOT10	umber_Wood_Product	Other Non Mfg.	Other	Turnover	10	Transformers	20.0%	1.6%	$ 0.415	$ 0.399	$ 0.016	$ 0.025	15	1.2299225	1
NonOT2	Agriculture	Other Non Mfg.	Other	Turnover	2	Block Heater Timer	25.0%	2.50%	$ 0.048	$ 0.048	$ -	$ 0.025	10	4.3954752	1
NonOE3	umber_Wood_Product	Other Non Mfg.	Other	Existing	3	Energy Project Management	27.0%	29.0%	$ 0.163	$ 0.134	$ 0.029	$ 0.025	11	1.9780551	1
NonOT4	Agriculture	Other Non Mfg.	Other	Turnover	4	Grain bin aeration control systems	24.8%	2.25%	$ 0.168	$ 0.124	$ 0.044	$ 0.025	15	2.8110995	1
NonOT5	Agriculture	Other Non Mfg.	Other	Turnover	5	Greenhouse Heat Curtain	0.3%	16.76%	$ 0.056	$ 0.056	$ -	$ 0.025	5	1.9573629	1
NonOT6	Agriculture	Other Non Mfg.	Other	Turnover	6	High Efficiency Stock tank	22.9%	3.75%	$ 0.412	$ 0.368	$ 0.044	$ 0.025	10	0.7372664	0
NonOE7	umber_Wood_Product	Other Non Mfg.	Other	Existing	7	Integrated Plant Energy Management	22.0%	50.0%	$ 0.261	$ 0.215	$ 0.047	$ 0.025	11	1.2999303	1
NonOT8	Agriculture	Other Non Mfg.	Other	Turnover	8	Livestock Waterers	22.9%	11.25%	$ 0.327	$ 0.292	$ 0.035	$ 0.025	10	0.9161108	0
NonOE9	umber_Wood_Product	Other Non Mfg.	Other	Existing	9	Plant Energy Management	27.0%	12.0%	$ 0.139	$ 0.114	$ 0.025	$ 0.025	10	1.968014	1
MetPT1		Mfg. Metals	Process EC	Turnover	1	Electrical-Chemical Plating Bundle, Tank and Rectifier	65.0%	18.5%	$ 0.550	$ 0.450	$ 0.100	$ 0.025	15	0.936027	0
MinHT1	Mining	Mining	HVAC	Turnover	1	Equipment Upgrades	62.9%	16.4%	$ 0.296	$ 0.252	$ 0.044	$ 0.025	15	1.7276904	1
MinHE2	Mining	Mining	HVAC	Existing	2	Improved Controls	32.7%	20.9%	$ 0.102	$ 0.077	$ 0.025	$ 0.025	10	2.6083486	1
MinHE3	Mining	Mining	HVAC	Existing	3	Recommissioning	72.6%	16.0%	$ 0.271	$ -	$ 0.271	$ 0.025	7	0.7996836	0
MinLT1	Mining	Mining	Lighting	Turnover	1	Efficient Lighting Equipment	30.4%	19.9%	$ 0.150	$ 0.103	$ 0.047	$ 0.025	10	1.8881036	1
MinLT2	Mining	Mining	Lighting	Turnover	2	HighBay Lighting Equipment	55.1%	34.1%	$ 0.376	$ 0.295	$ 0.081	$ 0.025	10	0.8252481	0
MinLE3	Mining	Mining	Lighting	Existing	3	Lighting Controls	42.3%	30.0%	$ 0.212	$ 0.157	$ 0.055	$ 0.025	10	1.3955445	1