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January 15, 2010

VIA OVERNIGHT FEDERAL EXPRESSJames J. McNulty, Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street, 2nd Floor
Harrisburg, PA 17120**RECEIVED**JAN 15^{AL} 2010PA PUBLIC UTILITY COMMISSION
SECRETARY'S BUREAU

Re: *Joint Petition for Consolidation of Proceedings and Approval of Energy Efficiency and Conservation Plans of Metropolitan Edison Company, Pennsylvania Electric Company and Pennsylvania Power Company*
Docket Nos. M-2009-2092222, M-2009-2112952, M-2009-2112956

Dear Secretary McNulty:

On behalf of Metropolitan Edison Company ("Met-Ed"), Pennsylvania Electric Company ("Penelec") and Pennsylvania Power Company ("Penn Power"), enclosed for filing please find an original plus twelve (12) copies of each of the following documents:

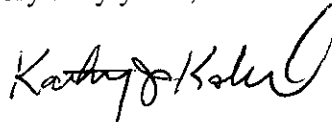
- Corrected, black-lined pages to be inserted in place of the same pages that were included in Met-Ed's corrected, Modified Energy Efficiency and Conservation Plan filed on December 23, 2009.
- Corrected, black-lined pages to be inserted in place of the same pages that were included in Penelec's corrected, Modified Energy Efficiency and Conservation Plan filed on December 23, 2009.
- Corrected, black-lined pages to be inserted in place of the same pages that were included in Penn Power's corrected, Modified Energy Efficiency and Conservation Plan filed on December 23, 2009.
- Letter from Mr. John E. Paganie, Vice President, Customer Service and Energy Efficiency, explaining the submission of the corrected, black-lined pages described above.

Copies of the filing have been served in accordance with the attached Certificate of Service. Please date stamp the extra copy and return it in the postage-prepaid envelope provided.

January 15, 2010

Please contact me if you have any questions.

Very truly yours,



Kathy J. Kolich
Senior Attorney

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Enclosures

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John E. Paganie
Vice President330-384-5845
Fax: 330-384-5909

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PA PUBLIC UTILITY COMMISSION
SECRETARY'S BUREAUPennsylvania Public Utility Commission
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Re: *Joint Petition for Consolidation of Proceedings and Approval of Energy Efficiency and Conservation Plans of Metropolitan Edison Company, Pennsylvania Electric Company and Pennsylvania Power Company*
Docket Nos. M-2009-2092222, M-2009-2112952, M-2009-2112956

To the Public Utility Commission of Pennsylvania:

Based on the December 31, 2009 Office of Small Business Advocate ("OSBA") comments regarding the redlining of certain documents submitted in the above referenced dockets, Metropolitan Edison Company ("Met-Ed"), Pennsylvania Electric Company ("Penelec") and Pennsylvania Power Company ("Penn Power") ("the Companies") again reviewed the black-lined versions of their Modified Energy Efficiency and Conservation ("EE&C") Plans previously filed on December 23, 2009, which compared the Companies' September 21, 2009 and December 2, 2009 filings. Due to the fact that there was no automatic comparison mechanism for the tables included in the EE&C Plans, the black-lining of these tables that was conducted for the December 23, 2009 filing had to be done manually. Upon further review of the December 23, 2009 black-lined versions submitted to the Commission, it was discovered that the formatting between the two filings was different, thus resulting in certain words and values being displayed differently in the two documents. The Companies were unaware of this anomaly and, because these documents had already been reviewed, there were changes that went undetected in the December 23, 2009 black-lined versions of the Plans that were submitted to the Commission.

Also during this review, the Companies discovered that Tables 5, 6A, 6B and 6C in the body of the Penelec filing had minor differences from the same tables which were correctly presented in Appendix G. This was not discovered during the proceeding by the Companies or by any party and was only detected during this latest review. While the black-lined version submitted on December 23, 2009 reflected the changes based on a comparison of the same pages included in Penelec's September and December plans, minor differences from Appendix G did not flow through to these tables that had already been copied into the body of the document.

As a result of the above, the Companies are enclosing corrected black-lined pages that were affected by these discrepancies. The attached pages, which reflect all changes – both those already identified in the December 23rd filing as well as those discussed above -- should be

inserted in place of the same pages that were included in the December 23rd filing. Also, in order to distinguish the corrected numbers in the aforementioned tables from the black-lined changes between the two Penelec documents, the corrected numbers are designated by a circle.

Inasmuch as all Penelec Plan calculations, including cost recovery and other table value derivatives, were based on the correct data reflected in Penelec's Appendix G, the results set forth in Penelec's Plan as filed on December 23rd are correct. Moreover, as the attached pages indicate, the changes that were inadvertently omitted from all three of the Companies' Plans in the December 23rd filing are insignificant and do not affect the end results set forth in any of these plans. In light of this, as well as the fact that the aggressive goals and time requirements of Act 129 are quickly approaching, the Companies respectfully ask this honorable Commission to approve the Companies' Modified Plans as filed on December 23, 2009 (and further corrected herein) at its January 28, 2010 Public Meeting.

The Companies apologize for any confusion that the above events may have caused the Commission or any of the parties and, after a thorough review of the Plans, they assure the Commission that all changes between the September 21, 2009 and December 2, 2009 filings have now been detected and identified for the parties.

Very truly yours,

A handwritten signature in black ink, appearing to read "John E. Paganis". The signature is written in a cursive, flowing style with a large initial "J".

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JAN 15 2010

PA PUBLIC UTILITY COMMISSION
SECRETARY'S BUREAU

METROPOLITAN EDISON COMPANY
Docket No. M-2009-2092222

REPLACEMENT PAGES FOR
ENERGY EFFICIENCY AND CONSERVATION PLAN

PUC Table 2: Summary of Portfolio Energy and Demand Savings

Table 2: Summary of Portfolio Energy and Demand Savings

Summary of Portfolio Energy and Demand Savings Program Year is June 1 – May 31								
MWh Saved for Consumption Reductions kW Saved for Peak Load Reductions	Program Year 2010		Program Year 2011		Program Year 2012		Program Year 2013	
	MWh Saved	kW Saved	MWh Saved	kW Saved	MWh Saved	kW Saved	MWh Saved	kW Saved
Baseline ¹	14,865,036	2,644,000	14,865,036	2,644,000	14,865,036	2,644,000	14,865,036	2,644,000
Residential Sector (exclusive of Low-Income) - Cumulative Projected Portfolio Savings ²	-16,020 <u>16,253</u>	-7,175 <u>9,085</u>	-92,760 <u>93,353</u>	38,949 <u>40,777</u>	-169,477 <u>170,433</u>	-70,168 <u>72,203</u>	237,994 <u>238,950</u>	-82,509 <u>84,545</u>
Residential Low-Income Sector - Cumulative Projected Portfolio Savings ²	-4,020 <u>1,068</u>	92 <u>96</u>	5,676 <u>5,842</u>	-524 <u>532</u>	-40,347 <u>10,636</u>	950 <u>970</u>	15,023 <u>15,437</u>	4,389 <u>1,409</u>
Commercial/Industrial Small Sector - Cumulative Projected Portfolio Savings ²	7,859	2,951	45,596	16,209	83,332	29,466	121,051	42,722
Commercial/Industrial Large Sector - Cumulative Net Weather Adjusted Savings ²	1,878	599	11,768	3,592	21,658	6,585	31,548	9,579
Governmental/Non-Profit Sector - Cumulative Projected Portfolio Savings ²	3,478	865	21,403	5,125	39,300	9,364	51,255	12,689
Original Warm Savings	—295	—32	—709	—77	—1,045	—114	—1,057	—115
PJM Peak Demand				10,000		10,000		
EE&C Plan Total - Cumulative Projected Savings	-30,550 <u>30,536</u>	11,714 <u>13,595</u>	177,914 <u>177,962</u>	-74,473 <u>76,235</u>	-325,159 <u>325,360</u>	126,648 <u>128,590</u>	-457,929 <u>458,243</u>	148,993 <u>150,943</u>
Percent Reduction From Baseline (MWh)	0.2%	0.54%	1.2%	2.98%	2.2%	4.98%	3.1%	6%
Commission Identified Goal			148,650				445,951	118,980
Percent Savings Due to Portfolio Above or Below Commission Goal			20%				3%	68%

¹ Commission approved Consumption Forecast and Peak Demand Forecast per Section H of the January 15 Implementation Order. (Template Section 10A & 10B)

² Adjusted for weather and extraordinary load as applicable.

³ kW savings depicted for 2013 as 1% above goal are due to savings accumulated from energy efficiency programs that run beyond the summer period of 2012 (June 1 – September 30)

Table 4: Program Summaries							
	Program Name	Program Market	Program Two Sentence Summary	Program Years Operated	Net Lifetime MWh Savings	Net Peak Demand kW Savings	Percentage of Portfolio and Total Lifetime MWh Savings %
Commercial/ Industrial Small Portfolio Programs	Energy Audit	Small C&I	Provides two levels of energy audit services 1) a simple walk-through audit for small business with non-complex loads, and 2) a more comprehensive assessment for medium to large non-residential customers to help identify existing end uses of energy and find specific ways in which energy savings can be achieved.	4	141,574	6,418	3.54%
	Equipment Rebate	Small C&I	Provides for the implementation of cost effective, high efficiency non-standard measures through the authorized Conservation Service Provider (CSP) contractor network for local, state and federal buildings, as well as for institutional customers.	4	1,012,858	36,306	24.73%
	Multiple Family	Small C&I	This program will be delivered in cooperation PHFA, and will target low income communities. The program seeks to motivate property owner/manager and landlords toward installing energy efficiency measures. Costs associated with Residential accounts will be tracked through the Residential multifamily program. Costs associated with non-residential accounts will be tracked through the C/I multifamily program.	4	-14,216	-237	0.3%
	Totals for C/I Small Sector					1,165,648	-42,961
Commercial/ Industrial Large Portfolio Programs	Equipment Rebate	Large C&I	Provides for the implementation of cost effective, high efficiency non-standard measures through the authorized Conservation Service Provider (CSP) contractor network for local, state and federal buildings, as well as for institutional customers.	4	303,364	9,385	7.43%
	Industrial Motors and VSD	Large C&I	This program is designed to encourage the company's commercial and industrial customers to: 1. Upgrade their existing motors to NEMA Premium® motors when switching out old motors due to breakdowns and or programmed replacements 2. Install variable speed drives on motors that do not always operate at the same speed.	4	89,703	193	2.42%
	Totals for C/I Large Sector					393,067	9,579
Governmental/ Non-Profit Portfolio Programs	Governmental & Institutional	Gov't	This program involves a feasibility study to identify energy savings opportunity to expedite the Federal and municipal agencies taking action. Provides for the implementation of cost effective, high efficiency standard and non-standard measures through a Conservation Service Provider (CSP) for local, state and federal buildings, as well as for institutional customers.	4	494,579	-12,452	11.8%
	Totals for Gov't/NP Sector Programs					505,795	-12,689
Total for Plan					4,182,317	-149,558	100.0%

Other Expenditures					
Other Expenditures Subtotal	790,000	3.80%	71%	3.78%	
EDC TOTAL	20,773,864 21,302,118	100.00%	100.00%	100.00%	0%
1) Portions of Governmental is served as part of C&I Small and C&I Large rate classes					

PUC Table 7A: TRC Benefits Table – Residential

Residential TRC Benefits By Program Per Year (\$000)														
Program	Program Year	TRC	Program Costs (\$000)	Program Benefits (\$000)	Capacity	Capacity	Energy	Energy	Load Reductions in kW		MWh Saved			
					Annual Benefits	Annual Gen/T&D	Annual Benefits	Annual On/Off Peak	Annual	Lifetime	Annual	Lifetime		
Demand Reduction	2010	1.43	1,841,857	2,641,935	2,405,425	See footnote 1	236,510	See footnote 2	3,464	30,368	169	16,826		
		1.53	2,803,098	4,294,891	3,731,911		562,980		5,374	32,404	402	27,894		
	2011	1.74	6,373,704	11,087,543	10,135,635		951,908		17,194	30,368	824	16,826		
		1.75	6,611,111	11,549,467	10,074,566		1,474,901		19,022	32,404	1,417	27,894		
	2012	2.13	5,321,180	11,332,256	10,303,216		940,020		30,368	30,368	1,455	16,826		
		2.02	5,964,296	12,038,390	10,556,679		1,481,711		32,404	32,404	2,411	27,894		
	2013	0.00	-	-	-		-		-	-	30,368	30,368	1,455	16,826
			-	-	-		-		-	-	32,404	32,404	2,411	27,894
	Home Energy Audits	2010	5.58	457,786	2,554,190		137,389		2,416,804	300	4,742	3,577	445,092	
			5.52	461,133	2,544,874		137,006		2,407,868	-	-	-	444,282	
2011		6.08	2,136,415	12,982,609	734,829	12,247,779	1,781	4,742	20,967	445,092				
		6.07	2,136,583	12,963,659	734,055	12,229,605	-	-	-	444,282				
2012		6.34	2,136,415	13,488,456	802,690	12,685,766	3,261	4,742	38,357	445,092				
		6.30	2,136,583	13,468,663	801,900	12,666,763	-	-	-	444,282				
2013		6.53	2,136,415	13,942,772	841,958	13,100,815	4,742	4,742	55,747	445,092				
		6.52	2,136,583	13,923,107	841,152	13,081,956	-	-	-	444,282				
Appliance Turn-In		2010	6.10	469,195	2,860,665	272,410	2,588,256	596	9,528	4,143	469,921			
			6.06	471,820	-	-	-	-	-	-	-			
	2011	6.54	2,293,998	15,001,887	1,478,510	13,523,377	3,573	9,528	24,859	469,921				
		-	2,294,129	-	-	-	-	-	-	-				
	2012	6.83	2,293,998	15,663,327	1,615,297	14,048,031	6,551	9,528	45,575	469,921				
		-	2,294,129	-	-	-	-	-	-	-				
2013	7.07	2,293,998	16,210,703	1,694,379	14,516,323	9,528	9,528	66,291	469,921					
	-	2,294,129	-	-	-	-	-	-	-					
EE HVAC	2010	1.20	1,190,259	1,425,038	485,780	939,258	836	13,374	1,174	184,136				
		1.19	1,194,639	-	-	-	-	-	-	187,223				
	2011	1.27	5,902,527	7,501,932	2,601,680	4,899,352	5,015	13,374	7,045	184,136				
		1.28	5,940,336	7,582,547	2,603,140	4,979,407	5,017	13,379	7,122	187,223				
	2012	1.33	5,902,527	7,849,753	2,801,016	5,048,737	9,196	13,374	12,917	184,136				
		1.34	5,940,336	7,933,619	2,802,567	5,131,052	9,198	13,379	13,071	187,223				
	2013	1.37	5,902,527	8,110,477	2,948,227	5,192,250	13,374	13,374	18,788	184,136				
		1.38	5,940,336	8,196,605	2,919,833	5,276,773	13,379	13,379	19,019	187,223				

EE Products	2010	3.02	1,084,847	3,273,333	416,321	2,857,013	714	10,893	4,617	533,087
		3.01	1,085,986					10,888		530,000
	2011	3.16	5,396,483	17,065,508	2,129,826	14,935,681	4,107	10,893	27,634	533,087
		3.17	5,358,950	16,983,993	2,128,367	14,855,626	4,105	10,888	27,557	530,000
	2012	3.29	5,396,483	17,751,141	2,293,025	15,458,116	7,500	10,893	50,651	533,087
		3.30	5,358,950	17,667,576	2,291,475	15,376,101	7,496	10,888	50,497	530,000
	2013	3.41	5,396,483	18,375,854	2,380,624	15,986,231	10,893	10,893	73,668	533,087
			5,358,950	18,289,726	2,388,018	15,901,708	10,888	10,888	73,437	530,000
New Construction	2010	2.35	927,633	2,180,593	797,285	1,383,309	1,037	12,442	1,376	220,440
		2.34	930,258							
	2011	2.48	5,044,758	12,497,906	4,638,612	7,859,294	6,739	12,442	8,944	220,440
			5,044,890							
	2012	2.58	5,044,758	13,008,739	4,927,590	8,081,148	12,442	12,442	16,512	220,440
			5,044,890							
	2013	0.00	525	-	-	-	12,442	12,442	16,512	220,440
			656							
Whole Building	2010	1.10	840,985	925,119	155,904	769,216	221	1,051	879	45,946
			843,658							
	2011	1.16	1,038,401	1,204,381	206,886	997,496	498	1,051	1,978	45,946
			1,038,535							
	2012	1.20	1,038,401	1,247,076	220,671	1,026,405	775	1,051	3,077	45,946
			1,038,535							
	2013	1.24	1,038,401	1,282,701	228,965	1,053,736	1,051	1,051	4,175	45,946
			1,038,535							
Multiple Family	2010	3.52	14,277	50,268	2,858	47,411	7	111	85	8,461
		3.24	15,527							
	2011	5.66	46,634	264,081	15,621	248,460	42	111	509	8,461
			46,696							
	2012	5.90	46,634	275,057	17,176	257,881	76	111	934	8,461
		5.82	46,696							
	2013	6.13	46,634	285,788	18,062	267,726	111	111	1,358	8,461
		6.12	46,696							
Total	2010	2.94	79,055,137	232,340,490	67,775,867	174,564,623	82,509	82,509	237,094	1,923,913
		2.91	80,917,649	235,093,781	59,202,993	175,890,788	84,545	84,545	238,950	1,934,167

1: Generation, Transmission and Distribution Capacity costs are combined in a sum of avoided capacity costs. These costs are then NPV back to the year the measure unit was installed. The combined avoided capacity costs can not be identified by component therefore the total avoided capacity costs for Generation, Transmission and Distribution are displayed here.

2: The on and off peak energy costs are combined in a sum of avoided energy costs. These costs are then NPV back to the year the measure unit was installed. The combined avoided energy costs can not be identified by component therefore the total avoided energy costs for on and off peak energy costs are displayed here.

PUC Table 7B: TRC Benefits Table - Residential Low-Income

Residential Low-Income		TRC Benefits By Program Per Year (\$000)												
Program	Year	TRC	Program Costs (\$000)	Program Benefits (\$000)	Capacity		Energy		Load Reductions in kW		MWh Saved			
					Annual Benefits	Annual Cap/T&D	Annual Benefits	Annual On/Off Peak	Annual	Lifetime	Annual	Lifetime		
Warm Plus	2010	0.49	425,508	208,999	13,133		195,866		24	238	258	25,410		
		0.52	441,552	229,719	14,122		215,597		24	268	307	27,251		
	2011	0.67	1,031,202	689,538	43,579	See footnote 1 on PUC Table 7A	645,959	See footnote 2 on PUC Table 7A	92	238	1,144	25,410		
		0.70	1,057,523	743,372	46,316		697,056		104	268	1,310	27,251		
		2012	0.68	1,070,556	730,431		48,059		682,372	165	238	2,044	25,410	
	0.72		1,097,927	789,221	51,288		737,933		186	268	2,334	27,251		
	2013	0.70	1,082,303	759,820	50,421		700,390		238	238	2,950	25,410		
0.74		1,109,988	821,782	53,895	767,887		268		268	3,363	27,251			
Residential Audits	2010	0.84	227,924	185,201	9,954				175,248		22	344	260	32,337
		0.67	276,914											
	2011	6.13	153,864	943,351	53,327	See footnote 1 on PUC Table 7A	890,024	See footnote 2 on PUC Table 7A	129	344	1,526	32,337		
			153,962											
		6.37	153,864	980,088	58,256		921,832		237	344	2,791	32,337		
	2013	6.58	153,864	1,013,155	61,108		952,047		344	344	4,056	32,337		
			153,962											
Appliance Turn-In	2010	4.00	207,084	206,574	19,184				187,390		41	657	299	34,034
		0.82	251,549											
	2011	7.40	146,380	1,082,830	103,963	See footnote 1 on PUC Table 7A	978,867	See footnote 2 on PUC Table 7A	246	657	1,793	34,034		
			146,446											
		7.72	146,380	1,130,201	113,418		1,016,783		452	657	3,286	34,034		
	2013	7.99	146,380	1,169,513	118,907		1,050,606		657	657	4,780	34,034		
			146,446											
Energy Efficient Products	2010	6.90	16,891	116,601	3,598				113,004		9	139	202	20,167
		6.72	17,362											
	2011	8.15	75,113	611,872	19,666	See footnote 1 on PUC Table 7A	592,206	See footnote 2 on PUC Table 7A	52	139	1,214	20,167		
			75,137											
		8.47	75,113	636,283	21,624		614,659		96	139	2,226	20,167		
	2013	8.80	75,113	660,864	22,740		638,125		139	139	3,237	20,167		
			75,137											
Original Warm Savings	2010									32		295		
	2011									109		1,004		
	2012							223		2,040				
	2013							339	N/A	3,105	N/A			
Original Warm Program Costs and Benefits are not included in the Plan, only the Savings														
Total		2.14	5,187,526	11,125,324	760,927		10,364,386		1,380	1,380	18,129	111,948		
		2.10	5,379,450	11,320,628	771,365		10,549,263		1,409	1,409	15,437	113,789		

PUC Table 7C: TRC Benefits Table - Commercial/Industrial Small

Commercial/Industrial Small		TRC Benefits By Program Per Year (\$000)											
Program	Program Year	TRC	Program Costs (\$000)	Program Benefits (\$000)	Capacity	Capacity	Energy	Energy	Load Reductions in kW		MWh Saved		
					Annual Benefits	Annual Gen/T&D	Annual Benefits	Annual On/Off Peak	Annual	Lifetime	Annual	Lifetime	
Energy Audit	2010	2.58	329,172	850,249	165,620	See footnote 1 on PUC Table 7A	684,629	See footnote 2 on PUC Table 7A	401	6,418	1,420	141,574	
		2.55	333,079										
	3.04	1,484,257	4,511,013	905,351	3,605,662		2,407		6,418	8,522	141,574		
		1,484,452											
	3.20	1,484,257	4,748,350	995,488	3,752,863		4,413		6,418	15,623	141,574		
Equipment Rebate	2010	2.67	2,308,210	6,152,015	1,500,638	4,651,377	2,550	36,306	6,439	1,012,858			
		2.65	2,323,315		1,577,665	4,574,350							
	2.77	11,004,151	30,434,573	7,113,267	23,321,306	13,802	36,306	37,074	1,012,858				
		11,004,906		7,526,395	22,908,178								
	2.88	11,004,151	31,688,842	7,631,017	24,057,825	25,054	36,306	67,709	1,012,858				
Multiple Family	2010	1.02	62,787	64,194	11,405	52,789	15	237	53	11,216			
		1.14	46,634	332,977	60,322	272,656	89	237	315	11,216			
	1.39	46,634	344,432	64,079	280,352	163	237	578	11,216				
	1.60	46,634	354,222	66,350	287,873	237	237	840	11,216				
Total	2010	2.91	40,305,293	117,124,312	27,502,727	89,621,585	42,961	42,961	121,892	1,165,648			
		2.89	40,124,468	116,028,487	28,701,989	87,326,498	42,724	42,724	121,051	1,154,432			

PUC Table 7E: TRC Benefits Table - Governmental/Non-Profit

Governmental/Non-Profit	TRC Benefits By Program Per Year, (\$000)												
	Program	Program Year	TRC	Program Costs (\$000)	Program Benefits (\$000)	Capacity	Capacity	Energy	Energy	Load Reductions in kW		MWh Saved	
						Annual Benefits	Annual Gen/T&D	Annual Benefits	Annual % On/Off Peak	Annual	Lifetime	Annual	Lifetime
Governmental & Institutional	2010	1.0986	1,401,798	2,801,619	508,161	See footnote 1 on PUC Table 7A		2,293,458	See footnote 2 on PUC Table 7A	850	12,452	3,425	494,579
		1.93	1,484,221	2,865,813	534,973			2,330,840		865	12,689	3,478	505,795
	2011	2.1253	7,100,236	15,089,959	2,712,335			12,377,624		5,036	12,452	21,088	494,579
		2.09	7,390,404	15,422,937	2,855,287			12,567,650		5,125	12,689	21,403	505,795
	2012	2.2131	7,067,456	15,640,809	2,892,354			12,748,555		9,201	12,452	38,723	404,579
		2.17	7,357,623	15,985,241	3,045,506			12,939,735		9,364	12,689	39,300	505,795
	2013	2.2034	5,048,052	11,122,884	2,318,883			8,804,000		12,451	12,452	50,415	494,579
		2.15	5,338,219	11,477,106	2,478,324			8,998,783		12,689	12,689	51,255	505,795
	Total	2.17	20,617,543	44,655,371	8,431,634			36,223,637		12,451	12,452	50,415	494,579
		2.12	21,570,467	45,751,026	8,914,089			36,837,008		12,689	12,689	51,255	505,795

Appendix E

Measure Name	Program	Rate Class	kWh Savings	kW Savings	Life	Source of Saving Values and Life
1 DLC-CAC	Demand	Res	36120	0.7201.600	13	TRM Smart Grid Installation Estimate
2 DLC-Pool Pumps	Demand	Res	38120	+4.702.350	13	Smart Grid Installation for CAC +TRM
3 DLC-Water Heat	Demand	Res	38120	+0.701.950	13	Smart Grid Installation for CAC +TRM
4 1-Res Home Audits - CFL 4 - Low Flow 2	1-Res Audits	Res	337	0.044	7	Sum of Other Measures Listed
5 1-Res Home Audits - CFL 4 - Low Flow 2	1-Res Audits	Res	337	0.044	7	Sum of Other Measures Listed
6 Schools Childern Education-No Savings	1-Res Audits	Res	166	0.009	6	4 CFLs from TRM
7 Refrigerator/Freezer recycling	2-RES App Turn-In	Res	1,728	0.238	8	TRM
8 Room Air Conditioners	2-RES App Turn-In	Res	108	0.072	5	TRM + Energy Star Calculatoer
9 ASHP - SEER 15	3-RES EE HVAC	Res	1,944	0.297	12	TRM
10 CAC - SEER 15	3-RES EE HVAC	Res	343	0.297	15	TRM
11 CAC - Maintenance	3-RES EE HVAC	Res	334	0.290	7	TRM
12 Furnacc Fans	3-RES EE HVAC	Res	367	0.000	15	ACEEE PA Report
13 EE Ground Source Heat Pump	3-RES EE HVAC	Res	4,574	0.106	15	TRM
14 Solar Water Heating	4-Res-EE P	Res	2,371	0.481	15	DSMore MI Database
15 HP Water Hcater	4-Res-EE P	Res	2,371	0.481	15	DSMore MI Database
16 EE Water Heater	4-Res-EE P	Res	319	0.065	15	Manufacturer Supplied
17 Programable Thermostat_Heat	1-Res Audits	Res	466	0.000	15	DEER with Electric Heat
18 Programable Thermostat_CAC	4-Res-EE P	Res	39	0.066	15	DEER with CAC
19 CFL bulbs regular-15	1-Res Audits	Res	166	0.009	6-4	TRM
20 CFL bulbs regular-15	4-Res-EE P	Res	166	0.009	6-4	TRM
21 CFL bulbs regular - Outside - 15	4-Res-EE P	Res	80	0.000	6-4	TRM but Estimate of Hours from Survey
22 CFL bulbs regular - 19	4-Res-EE P	Res	52	0.003	6-4	TRM
23 Clothes Washer Energy Star, Electric Waterheater, El	4-Res-EE P	Res	258	0.015	11	TRM with Electric Heat
24 Dehumidifiers	4-Res-EE P	Res	117	0.010	12	TRM
25 Freezers Energy Star-Chest Freezer	4-Res-EE P	Res	52	0.011	13	TRM
26 Holiday Lights	4-Res-EE P	Res	64	0.000	10	DSMore MI Database
27 LED Night Light	1-Res Audits	Res	44	0.000	12	DSMore MI Database
28 Pump and Motor Single Speed	4-Res-EE P	Res	694	0.357	10	DSMore MI Database
29 Refrigerators-Freezers Energy Star - Side by Side	4-Res-EE P	Res	95	0.013	13	TRM
30 Refrigerators-Freezers Energy Star - Top Freezer	4-Res-EE P	Res	90	0.013	13	TRM
31 Room Air Conditioners	4-Res-EE P	Res	88	0.059	10	TRM
32 Smart Strip plug outlet	4-Res-EE P	Res	184	0.013	5	DSMore MI Database
33 Torchicre Floor Lamps	4-Res-EE P	Res	105	0.006	10	TRM
34 Residential New Construction - 15%	5-RES New Con	Res	1,225	0.923	15	ACEEE PA Report
35 Residential New Construction - 30%	5-RES New Con	Res	2,449	1.845	15	ACEEE PA Report
36 Coiling Fans	6-Res Whole	Res	180	0.020	10	ACEEE PA Report
37 Estar Windows	6-Res Whole	Res	700	0.038	15	ACEEE PA Report
38 Duct sealing 20 leakage base	6-Res Whole	Res	669	0.580	15	ACEEE PA Report
39 Low Flow Showerheads	6-Res Whole	Res	250	0.028	10	ACEEE PA Report
40 Kitchen Aerator	6-Res Whole	Res	114	0.024	9	DEER with Electric Heat

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Appendix E

41	Bathroom Acrator	6-Res Whole	Res	57	0.012	9	DEER with Electric Heat
42	Pipe Wrap	6-Res Whole	Res	325	0.037	13	DEER with Electric Heat
43	Roof Insulation	6-Res Whole	Res	703	0.079	15	ACEEE PA Report
44	Whole Building	6-Res Whole	Res	0	0.000	10	
45	Low Income Warm Program Through Act129	7-Low Income	LI RES	725	0.080	15	07 WARM Program M&V Average Savings
46	<u>Low Income Warm Program Through Act129 (Additi</u>	<u>7-Low Income</u>	<u>LI RES</u>	<u>184</u>	<u>0.013</u>	<u>5</u>	<u>DSMore MI Database</u>
47	1-Res Home Audits - CFL 4 - Low Flow 2 Water Heat	1-Res Audits LI	LI RES	337	0.044	7-266667	Sum of Other Measures Listed
47	48 Schools Childern Education-No Savings	1-Res Audits LI	LI RES	166	0.009	6-4	4 CFLs from TRM
48	49 Refrigerator/Freezer recycling	2-RES App Turn-In LI	LI RES	1,728	0.238	8	TRM
49	50 Programable Thermostat_Heat	1-Res Audits LI	LI RES	466	0.000	15	DEER with Electric Heat
50	51 CFL bulbs regular-15 -Free No Water Heat	1-Res Audits LI	LI RES	\$166	\$0.009	6-4	TRM
51	52 CFL bulbs regular-15 -Free No Water HeatMailed At	4-Res-EE P LI	LI RES	166	0.009	6-4	TRM
52	53 CFL bulbs regular - Outside - 15 - Store Rebates	4-Res-EE P LI	LI RES	80	0.000	6-4	TRM but Estimate of Hours from Survey
53	54 CFL bulbs regular - 19 - Store Rebates	4-Res-EE P LI	LI RES	52	0.003	6-4	TRM
54	55 LED Night Light	1-Res Audits LI	LI RES	44	0.000	12	DSMore MI Database
55	56 Low Income Lighting-Warm Light	7-Low Income	LI RES	69	0.000	6-4	4 CFLs using 1 hour a day.
56	57 Low Income Lighting-Warm SmartStrip	7-Low Income	LI RES	184	0.013	5	DSMore MI Database
57	58 Low Income Lighting-Low Usage	7-Low Income	LI RES	206	0.017	6-4	4 CFLs
57	59 Multiple Family - CFL Lighting	8-Multiple Family	Res	206	0.017	6-4	4 CFLs
58	60 Multiple Family - T8-Lighting	<u>2-Governmental Programs</u>	<u>Gov</u>	127	0.036	15	TRM
59	61 Commercial, Industrial Audit - Sm&Md	1-C/I Audits	SM C&I	0	0.000	0	
60	62 Commercial, Industrial Audit - Large	1-C/I Audits	LG C&I	0	0.000	0	
61	63 Commercial CFL Program	1-C/I Audits	SM C&I	198	0.056	6-4	1 CFL using ACEEE Estimate of Comm Hours
62	64 Commercial, Industrial Audit - Gov	1-C/I Audits	Gov	0	0.000	0	
63	65 Exterior HID replacement above 175W to 250W HID	2-Governmental Programs	Gov	409	0.000	12	DSMore MI Database
64	66 HPT8 4ft 4 lamp, T12 to HPT8	2-Governmental Programs	Gov	127	0.036	15	TRM
65	67 LED Exit Signs Electronic Fixtures (RetrofitOnly)	2-Governmental Programs	Gov	158	0.018	10	TRM
66	68 Occupancy Sensors under 500 W	2-Governmental Programs	Gov	397	0.099	10	DSMore MI Database
67	69 LED Auto Traffic Signals	2-Governmental Programs	Gov	535	0.061	10	TRM 8"
68	70 LED Pedestrian Signals	2-Governmental Programs	Gov	946	0.108	10	TRM
69	71 Street Lighting - 175 Mercury to 100 HPS	2-Governmental Programs	Gov	329	0.000	10	=(175-100)*365*12/1000
70	72 Water-Cooled cent Chiller 150 - 300 ton 0.57 kW/ton	2-Governmental Programs	Gov	11,891	8.576	15	TRM
71	73 Water-Cooled Centrifugal Chiller < 150 ton0.56 kW/i	2-Governmental Programs	Gov	13,285	9.581	15	TRM
72	74 AC <65,000 I Ph	3-C/I Equip	SM C&I	452	0.406	15	TRM
73	75 AC 65,000 - 135,000	3-C/I Equip	SM C&I	587	0.795	15	TRM
74	76 AC 240,000 - 760,000	3-C/I Equip	SM C&I	2,098	2.741	15	TRM
75	77 Clothes Washer CEE TierI, Electric Water heater, Etc	3-C/I Equip	SM C&I	633	0.666	10	DSMore MI Database
76	78 Demand-controlled ventilation (DCV)	3-C/I Equip	SM C&I	8,000	1.340	15	ACEEE PA Report
77	79 Efficient Refrigeration Condenser	3-C/I Equip	SM C&I	120	0.118	15	DSMore MI Database
78	80 ENERGY STAR Commercial Solid Door Freezers 1cs	3-C/I Equip	SM C&I	520	0.059	12	DSMore MI Database
79	81 ENERGY STAR Commercial Solid Door Freezers 20	3-C/I Equip	SM C&I	507	0.058	12	DSMore MI Database
80	82 ENERGY STAR Commercial Solid Door Refrigerator	3-C/I Equip	SM C&I	905	0.103	12	DSMore MI Database
81	83 ENERGY STAR Commercial Solid Door Refrigerator	3-C/I Equip	SM C&I	1,069	0.122	12	DSMore MI Database
82	84 ENERGY STAR Ice Machines less than 500 lbs	3-C/I Equip	SM C&I	1,652	0.189	12	DSMore MI Database

Appendix E

83	<u>85</u>	ENERGY STAR Ice Machines 500 to 1000 lbs	3-C/I Equip	SM C&I	2,695	0.308	12	DSMore MI Database
84	<u>86</u>	ENERGY STAR Ice Machines more than 1000 lbs	3-C/I Equip	SM C&I	6,048	0.690	12	DSMore MI Database
85	<u>87</u>	ENERGY STAR Steam Cookers 3 Pan	3-C/I Equip	SM C&I	11,188	2.550	12	DSMore MI Database
86	<u>88</u>	Exterior HID replacement above 175W to <u>250W HID</u>	3-C/I Equip	SM C&I	409	0.000	12	DSMore MI Database
87	<u>89</u>	EE Water Heater	3-C/I Equip	SM C&I	319	0.065	15	Manufacturer Supplied
88	<u>90</u>	HP Water Heater (Base Usage 22831)	3-C/I Equip	SM C&I	14,200	2.880	15	ACEEE PA Report
89	<u>91</u>	HPT8 4ft 4 lamp, T12 to HPT8	3-C/I Equip	SM C&I	127	0.036	15	TRM
90	<u>92</u>	LED Exit Signs Electronic Fixtures (RetrofitOnly)	3-C/I Equip	SM C&I	158	0.018	10	TRM
94	<u>93</u>	Occupancy Sensors under 500 W	3-C/I Equip	SM C&I	397	0.099	10	DSMore MI Database
92	<u>94</u>	Plug Load Occupancy Sensors Document <u>Stations</u>	3-C/I Equip	SM C&I	803	0.055	5	DSMore MI Database
93	<u>95</u>	Commercial Smart Strip plug outlet	3-C/I Equip	SM C&I	184	0.013	5	DSMore MI Database
94	<u>96</u>	Pre Rinse Sprayers	3-C/I Equip	SM C&I	1,396	0.116	5	DSMore MI Database
95	<u>97</u>	Refrigerant charging correction	3-C/I Equip	SM C&I	712	1.014	10	DSMore MI Database
96	<u>98</u>	Refrigeration Commissioning	3-C/I Equip	SM C&I	375	0.043	3	DSMore MI Database
97	<u>99</u>	Strip curtains for walk-ins - freezer	3-C/I Equip	SM C&I	613	0.070	4	DSMore MI Database
98	<u>100</u>	Vending Equipment Controller	3-C/I Equip	SM C&I	800	0.210	5	DSMore MI Database
99	<u>101</u>	Window Film	3-C/I Equip	SM C&I	256	0.147	10	DSMore MI Database
400	<u>102</u>	Setback/Setup	3-C/I Equip	SM C&I	842	-0.007	9	DSMore MI Database
404	<u>103</u>	Demand-controlled ventilation (DCV)	4-C/I Equip	LG C&I	8,000	1.340	15	ACEEE PA Report
402	<u>104</u>	Exterior HID replacement above 175W to <u>250W HID</u>	4-C/I Equip	LG C&I	409	0.000	12	DSMore MI Database
403	<u>105</u>	HPT8 4ft 4 lamp, T12 to HPT8	4-C/I Equip	LG C&I	127	0.036	15	TRM
404	<u>106</u>	Occupancy Sensors under 500 W	4-C/I Equip	LG C&I	397	0.099	10	DSMore MI Database
405	<u>107</u>	Water-Cooled cent Chiller 150 - 300 ton <u>0.57 kW/ton</u>	4-C/I Equip	LG C&I	11,891	8.576	15	TRM
406	<u>108</u>	Water-Cooled Centrifugal Chiller < 150 ton <u>0.56 kW/t</u>	4-C/I Equip	LG C&I	13,285	9.581	15	TRM
407	<u>109</u>	Window Film	4-C/I Equip	LG C&I	12,802	7.344	15	DSMore MI Database
408	<u>110</u>	Motors 1 HP 1200	5-IND MOTOR	LG C&I	97	0.007	15	TRM
409	<u>111</u>	Motors 5 HP 1200	5-IND MOTOR	LG C&I	329	0.025	15	TRM
440	<u>112</u>	Motors 10 HP 1200	5-IND MOTOR	LG C&I	467	0.036	15	TRM
441	<u>113</u>	Motors 20 HP 1200	5-IND MOTOR	LG C&I	857	0.065	15	TRM
442	<u>114</u>	Motors 1 HP 3600	5-IND MOTOR	LG C&I	66	0.005	15	TRM
443	<u>115</u>	Motors 5 HP 3600	5-IND MOTOR	LG C&I	174	0.013	15	TRM
444	<u>116</u>	Motors 10 HP 3600	5-IND MOTOR	LG C&I	324,934 45	0.024723 5	15	TRM
445	<u>117</u>	Motors 20 HP 3600	5-IND MOTOR	LG C&I	501,683 72	0.03847 2	15	TRM
446	<u>118</u>	Water Pumps with VFD's	5-IND MOTOR	LG C&I	1,360	0.0240 27	15	TRM
447	<u>119</u>	HVAC Fans with VFD's	5-IND MOTOR	LG C&I	1,653	0.0292 03	15	TRM
448	<u>120</u>	Air Compressors with VFD's	5-IND MOTOR	LG C&I	774	0.013674 4	15	TRM
449	<u>121</u>	Water Pumps with VFD's	5-IND MOTOR	LG C&I	6,800	0.1204 33	15	TRM
420	<u>122</u>	HVAC Fans with VFD's	5-IND MOTOR	LG C&I	8,265	0.1460 15	15	TRM
424	<u>123</u>	Air Compressors with VFD's	5-IND MOTOR	LG C&I	3,870	0.0683 7	15	TRM
422	<u>124</u>	Water Pumps with VFD's	5-IND MOTOR	LG C&I	13,600	0.2402 67	15	TRM
423	<u>125</u>	HVAC Fans with VFD's	5-IND MOTOR	LG C&I	16,530	0.292 03	15	TRM
424	<u>126</u>	Air Compressors with VFD's	5-IND MOTOR	LG C&I	7,740	0.13674 7	15	TRM

Appendix F

Measure Name	Program	Rate Class	Number of 2010				Participants Assumptions
			Program participants/ Measure Units	Number of 2011 Program participants/ Measure Units	Number of 2012 Program participants/ Measure Units	Number of 2013 Program participants/ Measure Units	
1 DLC-CAC	Demand	Res	4,052,959	45,200,338	14,026,7148	0	Res*Sat*Survey-Reduced by SmartGrid
2 DLC-Pool Pumps	Demand	Res	404,16	700,92	640,77	0	Res*Sat*Survey-Reduced by SmartGrid
3 DLC-Pool Pumps	Demand	Res	63	226,90	271,50	0	Res*Sat*Survey-Reduced by SmartGrid
4 1-Res Home Audits - CFL 4 - Low Flow 2 Water Heat	1-Res Audits	Res	4,790	23,950	23,950	23,950	Res*Sat*Survey * 93.2%
5 1-Res Home Audits - CFL 4 - Low Flow 2	1-Res Audits	Res	25	125	125	125	Res*Sat*Survey
6 Schools Children Education-No Savings	1-Res Audits	Res	699	1,398	1,398	1,398	Estimate of Activity * 93.2%
7 Refrigerator/Freezer recycling	2-RES App Turn-In	Res	2,109	10,545	10,545	10,545	Res*Sat*Survey * 93.2%
8 Room Air Conditioners	2-RES App Turn-In	Res	400	2,000	2,000	2,000	Budgetary Limits
9 ASHP - SEER 15	3-RES EE HVAC	Res	111	554	554	554	10% of CAC
10 CAC - SEER 16	3-RES EE HVAC	Res	1,108	5,538	5,538	5,538	Res*Sat*Survey - Minus 10%
11 CAC - Maintenance	3-RES EE HVAC	Res	1,316	6,581	6,581	6,581	Res*Sat*Survey
12 Furnace Fans	3-RES EE HVAC	Res	26	132	132	132	Budgetary Limits
13 EE Ground Source Heat Pump	4-Res-EE P	Res	0	15	15	15	Budgetary Limits
14 Solar Water Heating	4-Res-EE P	Res	0	15	15	15	Budgetary Limits
15 HP Water Heater	4-Res-EE P	Res	0	50	50	50	Budgetary Limits
16 EE Water Heater	4-Res-EE P	Res	1,356	6,782	6,782	6,782	Res*Sat*Survey
17 Programmable Thermostat_Heat	4-Res-EE P	Res	1,172	5,858	5,858	5,858	Res*Sat*Survey * 93.2%
18 Programmable Thermostat_CAC	4-Res-EE P	Res	1,538	7,691	7,691	7,691	Res*Sat*Survey
19 CFL bulbs regular-15 -Free No Water Heat	1-Res Audits	Res	5,235	26,174	26,174	26,174	Res*Sat*Survey * 93.2%
CFL bulbs regular-15 -Free No Water Heat Mailed At Request	4-Res-EE P	Res	2,749	13,747	13,747	13,747	Res*Sat*Survey * 93.2%
21 CFL bulbs regular - Outside - 15 - Store Rebates	4-Res-EE P	Res	6,405	32,027	32,027	32,027	Res*Sat*Survey * 93.2%
22 CFL bulbs regular - 19 - Store Rebates	4-Res-EE P	Res	29,125	145,625	145,625	145,625	Res*Sat*Survey * 93.2%
Clothes Washer Energy Star, Electric Water heater, Electric Dryer	4-Res-EE P	Res	40	200	200	200	Budgetary Limits
24 Dehumidifiers	4-Res-EE P	Res	40	200	200	200	Budgetary Limits
25 Freezers Energy Star-Chest Freezer	4-Res-EE P	Res	40	200	200	200	Budgetary Limits
26 Holiday Lights	4-Res-EE P	Res	504	2,518	2,518	2,518	Res*Sat*Survey
27 LED Night Light	4-Res-EE P	Res	699	1,398	1,398	1,398	Free to School Audits * 93.2%
28 Pump and Motor Single Speed	4-Res-EE P	Res	293	1,465	1,465	1,465	Res*Sat*Survey
29 Refrigerators-Freezers Energy Star - Side by Side	4-Res-EE P	Res	40	200	200	200	Budgetary Limits
30 Refrigerators-Freezers Energy Star - Top Freezer	4-Res-EE P	Res	40	200	200	200	Budgetary Limits
31 Room Air Conditioners	4-Res-EE P	Res	3,230	12,919	12,919	12,919	Res*Sat*Survey
32 Smart Strip plug outlet	4-Res-EE P	Res	3,231	16,157	16,157	16,157	(Res*Sat*Survey)*25%
33 Torchiere Floor Lamps	4-Res-EE P	Res	100	500	500	500	Budgetary Limits
34 Residential New Construction - 15%	5-RES New Con	Res	333	1,833	1,833	0	Budgetary Limits
35 Residential New Construction - 30%	5-RES New Con	Res	333	1,833	1,833	0	Budgetary Limits
36 Ceiling Fans	6-Res Whole	Res	120	150	150	150	Budgetary Limits
37 Estar Windows	6-Res Whole	Res	120	150	150	150	Budgetary Limits
38 Duct sealing 20 leakage base	6-Res Whole	Res	200	250	250	250	Budgetary Limits
39 Low Flow Showerheads	6-Res Whole	Res	800	1,000	1,000	1,000	Budgetary Limits
40 Kitchen Aerator	6-Res Whole	Res	800	1,000	1,000	1,000	Budgetary Limits
41 Bathroom Aerator	6-Res Whole	Res	800	1,000	1,000	1,000	Budgetary Limits
42 Pipe Wrap	6-Res Whole	Res	200	250	250	250	Budgetary Limits
43 Roof Insulation	6-Res Whole	Res	200	250	250	250	Budgetary Limits
44 Whole Building	6-Res Whole	Res	800	1,000	1,000	1,000	Budgetary Limits
45 Low Income Warm Program Through Act129	7-Low Income	I+RES	142	346	360	364	WARM Forecast * 25%
Low Income Warm Program Through Act129 (Additional SmartStrips)	7-Low Income	I+RES	42	114	119	120	WARM Forecast * 25% * 1/3
46 1-Res Home Audits - CFL 4 - Low Flow 2 Water Heat	1-Res Audits LI	I+RES	349	1,747	1,747	1,747	Res*Sat*Survey * 6.8%
47 Schools Children Education-No Savings	1-Res Audits LI	I+RES	51	102	102	102	Estimate of Activity * 6.8%
48 Refrigerator/Freezer recycling	2-RES App Turn-In LI	I+RES	154	769	769	769	Res*Sat*Survey * 6.8%
49 Programmable Thermostat_Heat	1-Res Audits LI	I+RES	85	427	427	427	Res*Sat*Survey * 6.8%
50 CFL bulbs regular-15 -Free No Water Heat	1-Res Audits LI	I+RES	382	1,910	1,910	1,910	Res*Sat*Survey * 6.8%
CFL bulbs regular-15 -Free No Water Heat Mailed At Request	4-Res-EE P LI	I+RES	201	1,003	1,003	1,003	Res*Sat*Survey * 6.8%
51 CFL bulbs regular - Outside - 15 - Store Rebates	4-Res-EE P LI	I+RES	467	2,337	2,337	2,337	Res*Sat*Survey * 6.8%
52 CFL bulbs regular - 19 - Store Rebates	4-Res-EE P LI	I+RES	2,125	10,625	10,625	10,625	Res*Sat*Survey * 6.8%
53 LED Night Light	1-Res Audits LI	I+RES	51	102	102	102	Free to School Audits * 6.8%
54 Low Income Lighting-Warm Light	7-Low Income	I+RES	567	1,385	1,441	1,458	WARM Forecast
55 Low Income Lighting-Warm SmartStrip	7-Low Income	I+RES	187	457	475	481	WARM Forecast * 1/3
56 Low Income Lighting-Low Usage	7-Low Income	I+RES	429	2,143	2,143	2,143	Low Income - Low Usage Count

Appendix F

59	57	Multiple Family - CFL Lighting	8-Multiple Family	Res	367	1,833	1,833	1,833	PAHA Provided
60	58	Multiple Family - T8-Lighting	8-Multiple Family	SM-C&E1	367	1,833	1,833	1,833	PAHA Provided
61	60	Commercial, Industrial Audit - Sm&Md	1-C/I Audits	SM-C&E1	150	750	750	750	Budgetary Limits
62	60	Commercial, Industrial Audit - Large	1-C/I Audits	LG-C&E1	15	75	75	75	Budgetary Limits
63	61	Commercial CFL Program	1-C/I Audits	SM-C&E1	6,375	31,877	31,877	31,877	Comm*Survey
64	62	Commercial, Industrial Audit - Gov	1-C/I Audits	Gov	10	10	10	10	Budgetary Limits
65	63	Exterior HID replacement above 175W to 250W HID retrofit	2-Governmental Programs	Gov	37	203	203	0	Base on Fed Sales
66	64	HPT8 4ft 4 lamp, T12 to HPT8	2-Governmental Programs	Gov	753	4,142	4,142	0	Base on Fed Sales
67	65	LED Exit Signs Electronic Fixtures (Retrofit Only)	2-Governmental Programs	Gov	83	458	458	0	Base on Fed Sales
68	66	Occupancy Sensors under 500 W	2-Governmental Programs	Gov	83	458	458	0	Base on Fed Sales
69	67	LED Auto Traffic Signals	2-Governmental Programs	Gov	1,000	5,500	5,500	0	Intersection Estimate
70	68	LED Pedestrian Signals	2-Governmental Programs	Gov	250	1,375	1,375	0	Intersection Estimate
71	69	Street Lighting - 175 Mercury to 100 HPS	2-Governmental Programs	Gov	1,176	5,881	5,881	5,881	Street Light Count
72	70	Water-Cooled cent Chiller 150 - 300 ton 0.57 kW/ton with 0.46 kW/ton IPLV	2-Governmental Programs	Gov	0	8	7	0	Fed Large User Counts
73	71	Water-Cooled Centrifugal Chiller < 150 ton 0.56 kW/ton with 0.53 kW/ton IPLV	2-Governmental Programs	Gov	0	8	7	0	Fed Large User Counts
74	72	AC <65,000 1 Ph	3-C/I Equip	SM-C&E1	100	500	500	500	Budgetary Limits
75	73	AC 65,000 - 135,000	3-C/I Equip	SM-C&E1	40	200	200	200	Budgetary Limits
76	74	AC 240,000 - 760,000	3-C/I Equip	SM-C&E1	40	200	200	200	Budgetary Limits
77	75	Clothes Washer CEE Tier1, Electric Water heater, Electric Dryer	3-C/I Equip	SM-C&E1	40	200	200	200	Budgetary Limits
78	76	Demand-controlled ventilation (DCV)	3-C/I Equip	SM-C&E1	25	125	125	125	Budgetary Limits
79	77	Efficient Refrigeration Condenser	3-C/I Equip	SM-C&E1	40	200	200	200	Budgetary Limits
80	78	ENERGY STAR Commercial Solid Door Freezers less than 20ft3	3-C/I Equip	SM-C&E1	25	125	125	125	Budgetary Limits
81	79	ENERGY STAR Commercial Solid Door Freezers 20 to 48 ft3	3-C/I Equip	SM-C&E1	25	125	125	125	Budgetary Limits
82	80	ENERGY STAR Commercial Solid Door Refrigerators less than 20ft3	3-C/I Equip	SM-C&E1	25	125	125	125	Budgetary Limits
83	81	ENERGY STAR Commercial Solid Door Refrigerators 20 to 48 ft3	3-C/I Equip	SM-C&E1	25	125	125	125	Budgetary Limits
84	82	ENERGY STAR Ice Machines less than 500 lbs	3-C/I Equip	SM-C&E1	50	250	250	250	Budgetary Limits
85	83	ENERGY STAR Ice Machines 500 to 1000 lbs	3-C/I Equip	SM-C&E1	50	250	250	250	Budgetary Limits
86	84	ENERGY STAR Ice Machines more than 1000 lbs	3-C/I Equip	SM-C&E1	50	250	250	250	Budgetary Limits
87	85	ENERGY STAR Steam Cookers 3 Pan	3-C/I Equip	SM-C&E1	50	250	250	250	Budgetary Limits
88	86	Exterior HID replacement above 175W to 250W HID retrofit	3-C/I Equip	SM-C&E1	478	2,390	2,390	2,390	Comm*Survey
89	87	EE Water Heater (Base Usage 22831)	3-C/I Equip	SM-C&E1	222	1,112	1,112	1,112	Comm*Survey Minus 10%
90	88	HP Water Heater (Base Usage 22831)	3-C/I Equip	SM-C&E1	25	125	125	125	10% of Water Heating
91	89	HPT8 4ft 4 lamp, T12 to HPT8	3-C/I Equip	SM-C&E1	9,769	48,845	48,845	48,845	Comm*Survey*Square Foot Estimate
92	90	LED Exit Signs Electronic Fixtures (Retrofit Only)	3-C/I Equip	SM-C&E1	8,078.1	40,390.7	40,390.7	40,390.7	Comm*Survey
93	91	Occupancy Sensors under 500 W	3-C/I Equip	SM-C&E1	1,414	7,071	7,071	7,071	Comm*Survey
94	92	Plug Load Occupancy Sensors Document Stations	3-C/I Equip	SM-C&E1	354	1,061	1,061	1,061	Comm*Survey
95	93	Smart Strip plug outlet	3-C/I Equip	SM-C&E1	1,616	8,079	8,079	8,079	Comm*Survey
96	94	Pre Rinse Sprayers	3-C/I Equip	SM-C&E1	50	250	250	250	Budgetary Limits
97	95	Refrigerant charging correction	3-C/I Equip	SM-C&E1	1,538	6,151	6,151	6,151	Comm*Survey
98	96	Refrigeration Commissioning	3-C/I Equip	SM-C&E1	50	250	250	250	Budgetary Limits
99	97	Strip curtains for walk-ins - freezer	3-C/I Equip	SM-C&E1	50	250	250	250	Budgetary Limits
100	98	Vending Equipment Controller	3-C/I Equip	SM-C&E1	50	250	250	250	Budgetary Limits
101	99	Window Film	3-C/I Equip	SM-C&E1	50	250	250	250	Budgetary Limits
102	100	Setback/Setup	3-C/I Equip	SM-C&E1	50	250	250	250	Budgetary Limits
103	101	Demand-controlled ventilation (DCV)	4-C/I Equip	LG-C&E1	1	4	4	4	Budgetary Limits
104	102	Exterior HID replacement above 175W to 250W HID retrofit	4-C/I Equip	LG-C&E1	254	2,595	2,595	2,595	Comm*Survey
105	103	HPT8 4ft 4 lamp, T12 to HPT8	4-C/I Equip	LG-C&E1	5,190	25,951	25,951	25,951	Comm*Survey*Square Foot Estimate
106	104	Occupancy Sensors under 500 W	4-C/I Equip	LG-C&E1	751	3,757	3,757	3,757	Comm*Survey
107	105	Water-Cooled cent Chiller 150 - 300 ton 0.57 kW/ton with 0.46 kW/ton IPLV	4-C/I Equip	LG-C&E1	20	100	100	100	Budgetary Limits
108	106	Water-Cooled Centrifugal Chiller < 150 ton 0.56 kW/ton with 0.53 kW/ton IPLV	4-C/I Equip	LG-C&E1	5	25	25	25	Budgetary Limits
109	107	Window Film	4-C/I Equip	LG-C&E1	20	100	100	100	Budgetary Limits
110	108	Motors 1 HP 1200	5-IND MOTOR	LG-C&E1	75	375	375	375	Using NJ Experience for Motor Program
111	109	Motors 5 HP 1200	5-IND MOTOR	LG-C&E1	50	250	250	250	Using NJ Experience for Motor Program
112	110	Motors 10 HP 1200	5-IND MOTOR	LG-C&E1	25	125	125	125	Using NJ Experience for Motor Program

Appendix F

<u>113</u>	441 Motors 20 HP 1200	5-IND MOTOR	145-664	10	50	50	Using NJ Experience for Motor Program
<u>114</u>	442 Motors 1 HP 3600	5-IND MOTOR	466-664	75	375	375	Using NJ Experience for Motor Program
<u>115</u>	443 Motors 5 HP 3600	5-IND MOTOR	466-664	50	250	250	Using NJ Experience for Motor Program
<u>116</u>	444 Motors 10 HP 3600	5-IND MOTOR	466-664	25	125	125	Using NJ Experience for Motor Program
<u>117</u>	445 Motors 20 HP 3600	5-IND MOTOR	466-664	10	50	50	Using NJ Experience for Motor Program
<u>118</u>	446 Water Pumps with VFD's	5-IND MOTOR	466-664	5	25	25	Using NJ Experience for Motor Program
<u>119</u>	447 HVAC Fans with VFD's	5-IND MOTOR	466-664	5	25	25	Using NJ Experience for Motor Program
<u>120</u>	448 Air Compressors with VFD's	5-IND MOTOR	466-664	5	25	25	Using NJ Experience for Motor Program
<u>121</u>	449 Water Pumps with VFD's	5-IND MOTOR	466-664	5	25	25	Using NJ Experience for Motor Program
<u>122</u>	450 HVAC Fans with VFD's	5-IND MOTOR	466-664	5	25	25	Using NJ Experience for Motor Program
<u>123</u>	424 Air Compressors with VFD's	5-IND MOTOR	466-664	5	25	25	Using NJ Experience for Motor Program
<u>124</u>	422 Water Pumps with VFD's	5-IND MOTOR	466-664	5	25	25	Using NJ Experience for Motor Program
<u>125</u>	423 HVAC Fans with VFD's	5-IND MOTOR	466-664	5	25	25	Using NJ Experience for Motor Program
<u>126</u>	424 Air Compressors with VFD's	5-IND MOTOR	466-664	5	25	25	Using NJ Experience for Motor Program

Calculation of Metropolitan Edison Company's Energy Efficiency and Conservation ("EEC") Charge ("EEC-C") Rates
Effective February 1, 2010 November 4, 2009

Line No.	Description	Met-Ed Residential Customer Class (1)	Met-Ed Non-profit Customer Class (2)	Met-Ed Commercial Customer Class (2)-(3)	Met-Ed Street Lighting Customer Class (4)	Met-Ed Industrial Customer Class (4)-(5)	Met-Ed Total (4)-(6)
1	2% of Met-Ed's Annual Revenues for 12 Months Ended 12/31/2006 for Maximum Annual Cost Recovery						\$ 24,866,894 (A)
2	Revenue Adjustment Factor (48 Months / 43 Months) 2% of Met-Ed's Annual Revenues for 12 Months Ended 12/31/2006 for Maximum Annual Cost Recovery for 48 months ending May 31, 2013 (Line 1 x 4 years)						1,146,279 \$ - 99,467,576
3	Maximum Annual Costs Recovery as Adjusted (Line 1 x Line 2) Met-Ed's Estimated EEC Program Costs for 48 Months Ending May 31, 2013 (PUC Table 5)	\$ 58,676,942	\$ 308,227	\$ 13,554,699	\$ 3,639,122	\$ 5,869,483	\$ 82,048,473
4	Met-Ed's Estimated EEC Program Costs for 43 Months Ending May 31, 2013 PJM Peak Demand Program (PUC Table 3)	\$ 56,622,607	\$ -	\$ 17,473,080	\$ -	\$ 8,999,869	\$ 83,095,456 \$ 3,160,000
5	Percentage of Customer Class Program Costs to Total Company Program Costs Met-Ed's Common Costs Allocated to Applicable Customer Sector (PUC Table 6b)	68.14%		21.03%		10.83%	100.00%
		\$ 2,861,963	\$ 14,100	\$ 620,065	\$ 166,473	\$ 413,057	\$ 4,075,658
6	Allocation of Annual Maximum Cost Recovery (Line 3, Column 4 x Line 5)	\$ 18,844,568		\$ 5,837,590		\$ 3,006,234	\$ 27,758,392
	Met-Ed's Estimated PJM Economic Load Response Program Costs	\$ -	\$ -	\$ -	\$ -	\$ 13,158	\$ 13,158
7	Met-Ed Subtotal subject to 2% cap (Sum Lines 3-6)	\$ 61,538,905	\$ 322,327	\$ 14,174,764	\$ 3,805,595	\$ 9,455,698	\$ 89,297,289
8	Met-Ed's Share of Statewide Evaluator Costs	\$ 706,171	\$ 3,479	\$ 152,997	\$ 41,076	\$ 101,919	\$ 1,005,642
9	Total EEC Costs for 48 months Ending May 31, 2013 (Sum Line 7 + 8)	\$ 62,245,076	\$ 325,806	\$ 14,327,761	\$ 3,846,671	\$ 9,557,617	\$ 90,302,931
10	Total EEC Costs on Annualized Basis (Line 9 / 40 months x 12 months)	\$ 18,673,523	\$ 97,742	\$ 4,298,328	\$ 1,154,001	\$ 2,867,285	\$ 27,090,879
11	Customer Class Projected 2010 Kilowatt-Hours ("kWh") Delivered or Peak Load Contribution Kilowatt ("kW")	5,863,499,734 kWh 5,826,777,288 kWh	87,175,162 kWh	2,944,863,408 kWh 2,963,550,940 kWh	34,380,000 kWh	5,768,372,924 kWh 10,348,632 kWh	14,673,435,764 kWh
12	EEC-C Rates Before Pa Gross Receipts Tax Gross-Up Factor (Line 106 / Line 117)	\$ 0.00317 per kWh \$ 0.00320 per kWh	\$ 0.00112 per kWh	\$ 0.00498 per kWh \$ 0.00145 per kWh	\$ 0.03357 per kWh	\$ 0.00062 per kWh \$ 0.27707 per kWh	
13	Pa Gross Receipts Tax Gross-Up Factor [1 / (1-T)] with T = 5.90% Pa Gross Receipts Tax in Base Rates]	1.062699	1.062699	1.062699	1.062699	1.062699	
14	Proposed EEC-C Rates Effective February 1, 2009 (Line 128 X Line 139)	\$ 0.00337 per kWh \$ 0.00340 per kWh	\$ 0.00119 per kWh	\$ 0.00340 per kWh \$ 0.00154 per kWh	\$ 0.03567 per kWh	\$ 0.00055 per kWh \$ 0.29 per kWh	

(A) Pennsylvania's Act 129 of 2008 states that the maximum annual cost recovery for Energy Efficiency and Conservation Programs cannot exceed 2% of the electric distribution company's total annual revenue as of December 31, 2006.

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SECRETARY'S BUREAU

PENNSYLVANIA ELECTRIC COMPANY
Docket No. M-2009-2112952

REPLACEMENT PAGES FOR
ENERGY EFFICIENCY AND CONSERVATION PLAN

PUC Table 2: Summary of Portfolio Energy and Demand Savings

Summary of Portfolio Energy and Demand Savings								
Program Year is June 1 – May 31								
MWh Saved for Consumption Reductions kW Saved for Peak Load Reductions	Program Year 2010		Program Year 2011		Program Year 2012		Program Year 2013	
	MWh Saved	kW Saved	MWh Saved	kW Saved	MWh Saved	kW Saved	MWh Saved	kW Saved
Baseline ¹	14,399,289	2,395,000	14,399,289	2,395,000	14,399,289	2,395,000	14,399,289	2,395,000
Residential Sector (exclusive of Low-Income) - Cumulative Projected Portfolio Savings ²	<u>13,548</u> 13,602	<u>3,507</u> 3,523	<u>78,091</u> 78,418	<u>29,165</u> 29,257	<u>142,610</u> 143,209	<u>54,219</u> 54,388	<u>201,769</u> 202,639	<u>62,636</u> 62,881
Residential Low-Income Sector - Cumulative Projected Portfolio Savings ²	<u>1,539</u> <u>1,614</u>	<u>148</u> <u>153</u>	<u>-8,329</u> <u>8,587</u>	<u>-776</u> <u>795</u>	<u>15,154</u> <u>15,604</u>	<u>1,410</u> <u>1,441</u>	<u>22,013</u> <u>22,664</u>	<u>-2,047</u> <u>2,093</u>
Commercial/Industrial Small Sector - Cumulative Projected Portfolio Savings ²	8,304	2,794	48,498	15,681	88,692	28,569	128,869	41,455
Commercial/Industrial Large Sector - Cumulative Net Weather Adjusted Savings ²	2,424	607	14,614	3,642	26,803	6,677	38,992	9,712
Governmental/Non-Profit Sector - Cumulative Projected Portfolio Savings ²	<u>3,777</u> <u>3,832</u>	<u>844</u> <u>859</u>	<u>23,214</u> <u>23,541</u>	<u>5,090</u> <u>5,182</u>	<u>42,632</u> <u>43,230</u>	<u>9,316</u> <u>9,485</u>	<u>54,753</u> <u>55,623</u>	<u>12,500</u> <u>12,746</u>
Original Warm Savings	—632	—108	—1,516	—258	—2,247	—383	—2,343	—400
PJM Peak Demand				10,000		10,000		
EE&C Plan Total - Cumulative Projected Savings	<u>30,279</u> <u>29,722</u>	<u>—8,023</u> <u>7,920</u>	<u>-174,588</u> <u>173,331</u>	<u>-64,706</u> <u>64,466</u>	<u>-318,737</u> <u>316,940</u>	<u>110,744</u> <u>110,392</u>	<u>-449,609</u> <u>447,917</u>	<u>128,996</u> <u>128,642</u>
Percent Reduction From Baseline (MWh)	0.2%	0.3%	1.2%	2.7%	2.2%	4.6%	3.1%	5%
Commission Identified Goal			143,993				431,979	107,775
Percent Savings Due to Portfolio Above or Below Commission Goal			204%				4%	3-2%

¹ Commission approved Consumption Forecast and Peak Demand Forecast per Section H of the January 15 Implementation Order. (Template Section 10A & 10B)

² Adjusted for weather and extraordinary load as applicable.

³ kW savings depicted for 2013 as 1% above goal are due to savings accumulated from energy efficiency programs that run beyond the summer period of 2012 (June 1 – September 30)

2.2. Plan data: Costs, Cost-effectiveness and Savings by program, sector and portfolio

See PUC Tables 1-4

2.3. Budget and Parity Analysis

PUC Table 5: Budget and Parity Analysis

Customer Class	Average Annualized Budget	% of Total EDC Budget	% of Total Budget Allocating Government & Other	% of Total Customer Revenue	Difference
Residential	10,284,513 10,219,975	55.13% 54.51%			0
Residential Low Income	1,686,404 1,758,175	9.04% 38%			0
Residential Subtotal	11,970,917 11,978,150	64.17% 63.89%	64.17% 63.89%	43.7% 43.5%	20%
C&I Small	2,719,638 2,829,109	14.58% 15.09%	21.3% (18.7%)	23% 6.9%	(-82%)
C&I Large	1,314,090 1,309,826	7.04% 6.99%	14.5% 9.1%	28.5% 7%	(-18% 19%)
C&I Subtotal	4,033,728 4,138,935	21.62% 22.08%	35.8% (27.9%)	56.3% 55.4%	(-20% 27%)
Governmental/Non-Profit Gov Street Lighting	1,860,505 690,644	9.97% 3.68%	3.68%	0.63%	3.06%
Governmental/Non-Profit Subtotal	1,860,505	9.97%			
Residential/C&I/Governmental/Non-Profit Subtotal	17,865,151	95.77%			
GS/Public Service, MS	60,838	0.32%	0.32%	0.48%	(-0.16%)
Gov Multi-Family	71,068	0.38%	NA	NA	NA
Gov Small C&I	614,799	3.28%	NA	NA	NA
Gov Large C&I	403,303	2.15%	NA	NA	NA
Governmental/Non-Profit Subtotal	1,840,652	9.82%	4.0%	1.1%	3%
Other Expenditures Subtotal		4.23%			

Large Commercial & Industrial			
EE&C Program	Cost Elements (\$)		
	<i>Total Incentives</i>	<i>Operations Costs</i>	<i>Total Budget (2010-2013)</i>
Equipment Rebates	3,910,105	625,154,627.070	4,535,259,537.175
Industrial Motors and VSD	580,320	109,592,121.811	689,912,702.131
PJM Demand Response	3,160,000		3,160,000
Totals	7,650,425	734,745,748.881	8,385,1718,399.306

Governmental/Non-Profit			
EE&C Program	Cost Elements (\$)		
	<i>Total Incentives</i>	<i>Operations Costs</i>	<i>Total Budget (2010-2013)</i>
Governmental & Institutional Street Lighting	4,231,161,713.850	2,826,031,048.725	7,057,192,762.575
Totals GS/Public Service, MS	4,231,161,189.274	2,826,031,154.079	7,057,192,243.353
Multiple Family	212,676	71,598	284,273
Governmental & Institutional	3,328,036	744,371	4,072,408
Totals	4,443,836	2,918,773	7,362,609

<u>Consultant Costs and Employee Expenses for Plan Development</u>	<u>\$296,312</u>	<u>Sum of Appendix D 1-4 Lines 149-152 Totals</u>	<u>\$189,317</u>	<u>\$55,555</u>	<u>\$39,562</u>	<u>\$11,877</u>
<u>Online Audit Tool Costs</u>	<u>\$147,105</u>	<u>Residential</u>	<u>\$147,105</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
<u>Measurement and Verification Tracking and Reporting Software</u>	<u>\$756,540</u>	<u>Sum of Appendix D 1-4 Lines 149-152 Totals</u>	<u>\$483,362</u>	<u>\$141,842</u>	<u>\$101,010</u>	<u>\$30,325</u>
<u>Enhanced Measurement and Verification Requirements</u>	<u>\$2,759,184</u>	<u>Sum of Appendix D 1-4 Lines 149-152 Totals</u>	<u>\$1,762,875</u>	<u>\$517,314</u>	<u>\$368,396</u>	<u>\$110,599</u>
<u>External Legal Fees</u>	<u>\$52,538</u>	<u>Sum of Appendix D 1-4 Lines 149-152 Totals</u>	<u>\$33,567</u>	<u>\$9,850</u>	<u>\$7,015</u>	<u>\$2,106</u>
<u>Totals</u>	<u>\$4,011,679</u>	<u>-</u>	<u>\$2,616,227</u>	<u>\$724,561</u>	<u>\$515,984</u>	<u>\$154,907</u>

Table 6C: Summary of Portfolio EE&C Costs

Portfolio	Total Sector Portfolio Specific Costs	Total Common Costs	Total of All Costs
Residential (Including Low-Income)	Total Sector Portfolio Specific Costs	Total Common Costs	Total of All Costs
Residential (Including Low-Income)	\$47,912,600	\$2,616,227	\$50,528,827
Commercial/Industrial -- Small	\$17,600,832 (\$14,059,905)	\$1,582,636 (\$724,561)	\$49,187,466 (\$14,784,466)
Commercial/Industrial -- Small/Large	\$17,036,865 (\$10,012,518)	\$513,766 (\$515,984)	\$17,550,631 (\$10,528,502)
Commercial/Industrial -- Large/Governmental/Non-profit	\$9,082,900 (\$3,005,928)	\$301,104 (\$154,907)	\$10,384,000 (\$3,160,835)
Governmental/Non-profit	Governmental is served as part of C&I Small and C&I Large rate classes		
Totals	\$74,620,602	\$2,397,506	\$77,018,109
Totals	\$74,990,951	\$4,011,679	\$79,002,630

7.4 Provide and describe tariffs and a Section 1307 cost recovery mechanism. Provide all calculations and supporting cost documentation. Is this section numbered correctly?

Consistent with Act 129, the Company's tariff will contain a Section 1307 cost recovery mechanism for the recovery of energy efficiency and conservation program costs. Under the Company's proposal, the EEC-C rates requested in this proceeding would remain in effect for the duration of the EE&C Program. However, upon determination that the EEC-C rates would result in material over or under-collections of recoverable costs incurred or expected to be incurred during the program period (November/July 1, 2009 through May 31, 2013), the Company may request that the Commission approve interim revisions to the EEC-C rates to be effective thirty days from the date of filing. An interim change in the EEC-C rates may address a re-allocation of program expenses between customer classes.

The Company is submitting the following as Appendix H:

PUC Table 7A: TRC Benefits Table – Residential

Residential		TRC Benefits By Program Per Year (\$000)											
Program	Year	TRC	Program Costs (\$000)	Program Benefits (\$000)	Capacity	Capacity	Energy	Energy	Load Reductions in kW		MWh Saved		
					Annual Benefits	Annual Gen/T&D	Annual Benefits	Annual On/Off Peak	Annual	Lifetime	Annual	Lifetime	
Demand Reduction	2010	1.43	524,628	750,110	2,405,425	See footnote 1	(1,655,314)	See footnote 2	978	27,729	47	15,405	
		1.42	528,565		679,447		70,664						
	2011	1.75	6,350,568	11,130,140	10,135,635		994,505		14,656	27,729	701	15,405	
					10,096,446		1,033,695						
2012	2.15	5,282,556	11,334,614	10,392,216	942,397	27,729	27,729	1,331	15,405				
				10,313,109	1,021,504								
Home Energy Audits	2010	5.47	414,360	2,264,529	137,389	2,127,139	305	4,762	3,243	355,176			
		5.42	417,707		139,898	2,124,630							
	2011	6.05	1,838,774	11,125,795	734,829	10,390,966	1,791	4,762	18,504	355,176			
					738,341	10,387,454							
2012	6.30	1,838,774	11,576,736	802,690	10,774,046	3,276	4,762	33,764	355,176				
				806,456	10,770,280								
2013	6.51	1,838,774	11,976,953	841,958	11,134,996	4,762	4,762	49,025	355,176				
				845,879	11,131,074								
Appliance Turn-In	2010	6.08	315,727	1,919,906	272,410	1,647,496	392	6,264	2,692	305,608			
		6.03	318,352		178,487	1,741,419							
	2011	6.59	1,526,660	10,058,834	1,478,510	8,580,324	2,349	6,264	16,152	305,608			
					968,986	9,089,848							
2012	6.87	1,526,660	10,495,445	1,615,297	8,880,148	4,307	6,264	29,612	305,608				
				1,058,881	9,436,564								
2013	7.11	1,526,660	10,857,988	1,694,379	9,163,609	6,264	6,264	43,072	305,608				
				1,110,819	9,747,169								
EE HVAC	2010	0.98	458,445	450,847	485,780	(34,934)	301	4,829	321	55,020			
			461,291		178,851	271,995							
	2011	1.08	2,273,454	2,459,203	2,603,140	(143,937)	1,810	4,829	2,007	55,020			
			2,273,596		958,333	1,500,870							
2012	1.13	2,273,454	2,575,922	2,802,567	(226,645)	3,320	4,829	3,693	55,020				
		2,273,596		1,030,612	1,545,310								
2013	1.17	2,273,454	2,661,433	2,919,833	(258,400)	4,829	4,829	5,379	55,020				
		2,273,596		1,073,202	1,588,231								

EE Products	2010	3.23	1,157,246	3,738,156	416,321	3,321,835	654	10,109	5,418	608,168
		<u>3.22</u>	<u>1,159,919</u>		<u>362,353</u>	<u>3,375,802</u>				
	2011	3.39	5,808,022	19,700,318	2,128,367	17,571,951	3,806	10,109	32,632	608,168
			<u>5,808,155</u>		<u>1,886,155</u>	<u>17,814,163</u>				
	2012	3.53	5,808,022	20,477,242	2,291,475	18,185,768	6,958	10,109	59,846	608,168
			<u>5,808,155</u>		<u>2,036,228</u>	<u>18,441,014</u>				
	2013	3.65	5,808,022	21,205,219	2,388,018	18,817,201	10,109	10,109	87,060	608,168
			<u>5,808,155</u>		<u>2,124,604</u>	<u>19,080,615</u>				
New Construction	2010	2.39	583,708	1,392,246	797,285	594,961	648	7,776	860	137,775
		<u>2.37</u>	<u>586,333</u>		<u>498,303</u>	<u>893,943</u>				
	2011	2.53	3,153,171	7,975,661	4,638,612	3,337,049	4,212	7,776	5,590	137,775
			<u>3,153,302</u>		<u>2,899,133</u>	<u>5,076,529</u>				
	2012	2.63	3,153,171	8,298,223	4,927,590	3,370,633	7,776	7,776	10,320	137,775
			<u>3,153,302</u>		<u>3,079,744</u>	<u>5,218,479</u>				
	2013	0.00	525	-	-	-	7,776	7,776	10,320	137,775
			<u>656</u>							
Whole Building	2010	1.13	840,985	951,234	155,904	795,330	221	1,051	879	45,946
			<u>843,658</u>							
	2011	1.19	1,038,401	1,237,595	206,886	1,030,709	498	1,051	1,978	45,946
			<u>1,038,535</u>							
	2012	1.23	1,038,401	1,280,947	220,671	1,060,276	775	1,051	3,077	45,946
			<u>1,038,535</u>							
	2013	1.27	1,038,401	1,317,278	228,965	1,088,314	1,051	1,051	4,175	45,946
			<u>1,038,535</u>							
Multiple Family	2010	3.68	14,608	53,782	2,858	50,924	7	115	88	8,764
		<u>3.39</u>	<u>15,858</u>		<u>2,960</u>	<u>50,822</u>				
	2011	5.84	48,292	282,236	15,621	266,615	43	115	528	8,764
			<u>48,354</u>		<u>16,179</u>	<u>266,057</u>				
	2012	6.08	48,292	293,768	17,176	276,592	79	115	967	8,764
			<u>48,354</u>		<u>17,790</u>	<u>275,978</u>				
	2013	6.32	48,292	305,066	18,062	287,004	115	115	1,407	8,764
		<u>6.31</u>	<u>48,354</u>		<u>18,708</u>	<u>286,358</u>				
Total		3.18	59,850,505	190,147,425	57,775,867	132,371,558	62,636	62,636	201,769	1,531,861
			<u>59,875,188</u>		<u>43,932,330</u>	<u>146,215,095</u>				

1: Generation, Transmission and Distribution Capacity costs are combined in a sum of avoided capacity costs. These costs are then NPV back to the year the measure unit was installed. The combined avoided capacity costs can not be identified by component therefore the total avoided capacity costs for Generation, Transmission and Distribution are displayed here.

2: The on and off peak energy costs are combined in a sum of avoided energy costs. These costs are then NPV back to the year the measure unit was installed. The combined avoided energy costs can not be identified by component therefore the total avoided energy costs for on and off peak energy costs are displayed here.

PUC Table 7B: TRC Benefits Table - Residential Low-Income

Residential Low-Income		TRC Benefits By Program Per Year (\$000)													
Program	Year	TRC	Program Costs (\$000)		Program Benefits (\$000)		Capacity	Capacity	Energy	Energy	Load Reductions in kW		MWh Saved		
			TRC	Program Costs (\$000)	Program Benefits (\$000)	Annual Benefits	Annual Gen/T&D	Annual Benefits	Annual On/Off Peak	Annual	Lifetime	Annual	Lifetime		
Warm Plus	2010	0.77	547,692	421,638	13,133	See footnote 1 on PUC Table 7A	See footnote 2 on PUC Table 7A	408,505	55	565	468	47,527			
		0.80	569,614	454,889	39,022			415,867	60	611	543	50,423			
	2011	0.98	1,346,688	1,324,386	43,579			1,280,907	220	565	2,005	47,527			
		1.02	1,387,430	1,410,760	116,175			1,294,585	238	611	2,263	50,423			
	2012	1.00	1,405,341	1,411,490	48,059			1,262,431	390	565	3,577	47,527			
		1.04	1,447,965	1,506,285	129,126			1,377,159	422	611	4,028	50,423			
	2013	1.02	1,461,551	1,496,511	50,421			1,446,089	565	565	5,184	47,527			
		1.06	1,505,977	1,599,415	138,672			1,460,743	611	611	5,835	50,423			
	Residential Audits	2010	0.72	242,120	246,042			9,954	See footnote 1 on PUC Table 7A	See footnote 2 on PUC Table 7A	236,089	33	521	355	38,735
			0.59	416,827				15,226			230,816				
2011		6.11	198,800	1,214,457	53,327	1,161,130	196	521			2,027	38,735			
			198,898		80,616	1,133,841									
2012		6.36	198,800	1,263,658	58,256	1,205,401	358	521			3,699	38,735			
		6.35	198,898		88,065	1,175,592									
2013		6.58	198,800	1,307,519	61,108	1,246,410	521	521			5,370	38,735			
		6.57	198,898		92,375	1,215,143									
Appliance Turn-In		2010	0.76	275,426	209,000	19,184	See footnote 1 on PUC Table 7A	See footnote 2 on PUC Table 7A			189,816	40	645	293	33,385
			0.62	337,116		18,819					190,182				
	2011	7.62	143,593	1,094,514	103,963	990,552			242	645	1,758	33,385			
			143,643		101,980	992,535									
	2012	7.95	143,593	1,141,601	113,418	1,028,183			443	645	3,224	33,385			
			143,643		111,255	1,030,346									
	2013	8.22	143,593	1,180,844	118,907	1,061,937			645	645	4,689	33,385			
			143,643		116,639	1,064,205									
	Energy Efficient Products	2010	7.19	35,161	252,753	3,598			See footnote 1 on PUC Table 7A	See footnote 2 on PUC Table 7A	249,155	20	317	423	42,176
			7.09	35,633		8,170					244,582				
2011		7.96	166,464	1,325,065	19,666	1,305,399	119	317			2,539	42,176			
			166,487		44,663	1,280,402									
2012		8.27	166,464	1,377,258	21,624	1,355,634	218	317			4,654	42,176			
			166,487		49,109	1,328,149									
2013		8.59	166,464	1,429,744	22,740	1,407,005	317	317			6,770	42,176			
			166,487		51,643	1,378,101									
Original Warm Savings		2010										408	1,149	632	101,060
		2011										366	1,149	2,147	101,060
	2012								749	1,149	4,395	101,060			
	2013								1,149	1,149	6,777	101,060			
Total		2.41	6,940,562	16,696,479	760,937			15,935,643	2,047	2,047	28,750	262,883			
		2.35	7,227,648	17,013,804	1,201,555			15,812,249	2,093	2,093	22,664	164,719			

PUC Table 7C: TRC Benefits Table - Commercial/Industrial Small

Commercial/Industrial Small		TRC Benefits By Program Per Year (\$000)												
Program	Program Year	TRC	Program Costs (\$000)	Program Benefits (\$000)	Capacity	Capacity	Energy	Energy	Load Reductions in kW		MWh Saved			
					Annual Benefits	Annual Gen/T&D	Annual Benefits	Annual On/Off Peak	Annual	Lifetime	Annual	Lifetime		
Energy Audit	2010	4.24	324,316	1,375,343	165,620	See footnote 1 on PUC Table 7A	1,209,723	See footnote 2 on PUC Table 7A	667	10,678	2,363	235,522		
		4.19	328,223		275,525		1,099,818							
	2011	4.37	1,670,576	7,305,866	905,351		6,400,515		4,004	10,678	14,177	235,522		
			1,670,771		1,506,140		5,799,726							
2012	4.61	1,670,576	7,696,948	995,488	6,701,460	7,341	10,678	25,991	235,522					
		1,670,771		1,656,092	6,040,856									
2013	4.81	1,670,576	8,033,055	1,046,849	6,986,206	10,678	10,678	37,804	235,522					
		1,670,771		1,741,536	6,291,519									
Equipment Rebate	2010	2.03	2,703,759	5,501,037	1,500,638		4,000,399	2,126	30,779	5,941	961,866			
		2.02	2,718,864		1,348,116		4,152,921							
	2011	2.11	13,012,972	27,465,866	7,113,267		20,352,598	11,677	30,779	34,321	961,866			
			13,013,727		6,546,440		20,919,425							
2012	2.20	13,012,972	28,581,252	7,631,017		20,950,236	21,228	30,779	62,702	961,866				
		13,013,727		7,016,081		21,565,172								
2013	2.27	13,012,972	29,476,653	7,942,343		21,534,310	30,779	30,779	91,064	961,866				
		13,013,727		7,298,926		22,177,727								
Multiple Family	2010	1.05	64,853	68,346	11,405		56,942	15	246	54	11,617			
	2011	7.34	48,292	354,337	60,322		294,015	92	246	326	11,617			
	2012	7.59	48,292	366,390	64,079		302,311	169	246	598	11,617			
	2013	7.80	48,292	376,733	66,350		310,383	246	246	870	11,617			
Total		2.47	47,288,447	116,601,827	27,502,727		89,099,100	41,702	41,702	129,739	1,209,005			
		2.45	47,100,582	115,436,021	27,388,854		88,047,166	41,457	41,457	128,869	1,197,388			

PUC Table 7D: TRC Benefits Table - Commercial/Industrial Large

Commercial/Industrial Large		TRC Benefits By Program Per Year (\$000)												
Program	Program Year	TRC	Program Costs (\$000)	Program Benefits (\$000)	Capacity Annual	Capacity Annual	Energy Annual	Energy Annual	Load Reductions in kW		MWh Saved			
					Benefits	Gen/T&D	Benefits	On/Off Peak	Annual	Lifetime	Annual	Lifetime		
Equipment Rebate	2010	1.1347	1,322,522	1,500,613	437,093	See footnote 1 on PUC Table 7A	1,063,521	See footnote 2 on PUC Table 7A	587	9,384	1,736	324,653		
		1.13	1,324,189	423,515	1,077,098									
	2011	1.1917	6,634,231	7,906,335	2,313,735		5,592,600		3,519	9,384	10,485	324,653		
		1.19	6,634,314	2,244,716	5,661,619									
	2012	1.2415	6,634,231	8,236,626	2,461,443		5,775,183		6,452	9,384	19,234	324,653		
		1.24	6,634,314	2,391,528	5,845,098									
2013	1.281	6,634,231	8,498,352	2,550,591	5,947,761		9,384		9,384	27,983	324,653			
	1.28	6,634,314	2,480,053	6,018,299										
Industrial Motors and VSD	2010	1.8978	256,845	487,445	9,279		See footnote 1 on PUC Table 7A		478,166	See footnote 2 on PUC Table 7A	21	329	688	146,970
		1.82	267,470	15,790	471,655									
	2011	2.3617	1,073,849	2,536,141	49,077				2,487,064		123	329	4,128	146,970
		2.36	1,074,380	83,514	2,452,627									
	2012	2.4306	1,073,849	2,619,779	52,135	2,567,644		226	329		7,569	146,970		
		2.44	1,074,380	88,717	2,531,061									
2013	2.512	1,073,849	2,697,519	53,982	2,643,538	329		329	11,009		146,970			
	2.51	1,074,380	91,860	2,605,659										
Total		1.40	24,703,606	34,482,811	7,927,334	26,555,477		9,712	9,712		38,992	471,623		
			24,717,741	7,819,694	26,663,117									

PUC Table 7E: TRC Benefits Table - Governmental/Non-Profit

Governmental/Non-Profit	TRC Benefits By Program Per Year (\$000)												
	Program	Program Year	TRC	Program Costs (\$000)	Program Benefits (\$000)	Capacity	Capacity	Energy	Energy	Load Reductions in kW		MWh Saved	
						Annual	Annual	Annual	Annual	Annual	Lifetime	Annual	Lifetime
						Benefits	Gen/T&D	Benefits	On/Off Peak	Annual	Lifetime	Annual	Lifetime
Governmental & Institutional	2010	1.9341	1,497,906	2,897,156	508,161		2,388,994		844	12,501	3,777	527,915	
		1.87	1,582,395	2,965,502	521,012	See footnote	2,444,490	See footnote	859	12,747	3,832	539,532	
	2011	2.0775	7,535,158	15,653,951	2,712,335	1 on PUC	12,941,616	2 on PUC	5,090	12,501	23,214	527,915	
		2.04	7,835,654	16,008,288	2,840,072	Table 7A	13,168,216	Table 7A	5,182	12,747	23,541	539,532	
	2012	2.165	7,502,377	16,242,918	2,892,254		13,350,664		9,316	12,501	42,632	527,915	
		2.13	7,802,874	16,609,308	3,032,406		13,576,902		9,485	12,747	43,230	539,532	
	2013	2.0493	5,316,563	10,895,399	2,318,883		8,576,516		12,500	12,501	54,753	527,915	
		2.01	5,617,059	11,272,132	2,391,327		8,880,805		12,746	12,747	55,623	539,532	
Total		2.09	21,852,004	45,689,424	8,431,634		37,257,790		12,500	12,501	54,753	527,915	
		2.05	22,837,983	46,855,230	8,784,818		38,070,412		12,746	12,747	55,623	539,532	

Appendix E

	Measure Name	Program	Rate Class	kWh		Life	Source of Saving Values and Life
				Savings	kW Savings		
1	DLC-CAC	Demand	Res	36	0.720	13	TRM
2	DLC-Pool Pumps	Demand	Res	38	1.470	13	TRM
3	DLC-Water Heat	Demand	Res	38	1.070	13	TRM
4	1-Res Home Audits - CFL 4 - Low Flow 2	1-Res Audits	Res	337	0.044	7	Sum of Other Measures Listed
5	1-Res Home Audits - CFL 4 - Low Flow 2	1-Res Audits	Res	337	0.044	7	Sum of Other Measures Listed
6	Schools Children Education-No Savings	1-Res Audits	Res	166	0.009	6	4 CFLs from TRM
7	Refrigerator/Freezer recycling	2-RES App Turn-In	Res	1,728	0.238	8	TRM
8	Room Air Conditioners	2-RES App Turn-In	Res	73	0.072	5	TRM + Energy Star Calculator
9	ASHP - SEER 15	3-RES EE HVAC	Res	1,972	0.297	12	TRM
10	CAC - SEER 15	3-RES EE HVAC	Res	231	0.297	15	TRM
11	CAC - Maintenance	3-RES EE HVAC	Res	225	0.290	7	TRM
12	Furnace Fans	3-RES EE HVAC	Res	367	0.000	15	ACEEE PA Report
13	EE Ground Source Heat Pump	3-RES EE HVAC	Res	4,711	0.106	15	TRM
14	Solar Water Heating	4-Res-EE P	Res	2,371	0.481	15	DSMore MI Database
15	HP Water Heater	4-Res-EE P	Res	2,371	0.481	15	DSMore MI Database
16	EE Water Heater	4-Res-EE P	Res	319	0.065	15	Manufacturer Supplied
17	Programable Thermostat_Heat	1-Res Audits	Res	466	0.000	15	DEER with Electric Heat
18	Programable Thermostat_CAC	4-Res-EE P	Res	39	0.066	15	DEER with CAC
19	CFL bulbs regular-15	1-Res Audits	Res	166	0.009	6-4	TRM
20	CFL bulbs regular-15	4-Res-EE P	Res	166	0.009	6-4	TRM
21	CFL bulbs regular - Outside - 15	4-Res-EE P	Res	80	0.000	6-4	TRM but Estimate of Hours from Survey
22	CFL bulbs regular - 19	4-Res-EE P	Res	52	0.003	6-4	TRM
23	Clothes Washer Energy Star, Electric Water <u>heater, [1]</u>	4-Res-EE P	Res	258	0.015	11	TRM with Electric Heat
24	Dehumidifiers	4-Res-EE P	Res	117	0.010	12	TRM
25	Freezers Energy Star-Chest Freezer	4-Res-EE P	Res	52	0.011	13	TRM
26	Holiday Lights	4-Res-EE P	Res	64	0.000	10	DSMore MI Database
27	LED Night Light	1-Res Audits	Res	44	0.000	12	DSMore MI Database
28	Pump and Motor Single Speed	4-Res-EE P	Res	694	0.357	10	DSMore MI Database
29	Refrigerators-Freezers Energy Star - Side by Side	4-Res-EE P	Res	95	0.013	13	TRM
30	Refrigerators-Freezers Energy Star - Top Freezer	4-Res-EE P	Res	90	0.013	13	TRM
31	Room Air Conditioners	4-Res-EE P	Res	59	0.059	10	TRM
32	Smart Strip plug outlet	4-Res-EE P	Res	184	0.013	5	DSMore MI Database
33	Torchiere Floor Lamps	4-Res-EE P	Res	105	0.006	10	TRM
34	Residential New Construction - 15%	5-RES New Con	Res	1,225	0.923	15	ACEEE PA Report
35	Residential New Construction - 30%	5-RES New Con	Res	2,449	1.845	15	ACEEE PA Report
36	Ceiling Fans	6-Res Whole	Res	180	0.020	10	ACEEE PA Report
37	Estar Windows	6-Res Whole	Res	700	0.038	15	ACEEE PA Report
38	Duct sealing 20 leakage base	6-Res Whole	Res	669	0.580	15	ACEEE PA Report
39	Low Flow Showerheads	6-Res Whole	Res	250	0.028	10	ACEEE PA Report
40	Kitchen Aerator	6-Res Whole	Res	114	0.024	9	DEER with Electric Heat
41	Bathroom Aerator	6-Res Whole	Res	57	0.012	9	DEER with Electric Heat
42	Pipe Wrap	6-Res Whole	Res	325	0.037	13	DEER with Electric Heat
43	Roof Insulation	6-Res Whole	Res	703	0.079	15	ACEEE PA Report
44	Whole Building	6-Res Whole	Res	-9	0.000	10	
45	Low Income Warm Program Through Act12j	7-Low Income	LI RES	998	0.170	15	07' WARM Program M&V Average Savings

Appendix E

	Measure Name	Program	Rate Class	kWh Savings	kW Savings	Life	Source of Saving Values and Life
46	<u>Low Income Warm Program Through Act 129 (Additi</u>	<u>7-Low Income</u>	<u>LI RES</u>	<u>184</u>	<u>0.013</u>	<u>5</u>	<u>DSMore MI Database</u>
46	<u>47 1-Res Home Audits - CFL 4 - Low Flow 2 Water Heat</u>	1-Res Audits LI	LI RES	337	0.044	7-26667	Sum of Other Measures Listed
47	<u>48 Schools Children Education-No Savings</u>	1-Res Audits LI	LI RES	166	0.009	6-4	4 CFLs from TRM
48	<u>49 Refrigerator/Freezer recycling</u>	2-RES App Turn-In LI	LI RES	1,728	0.238	8	TRM
49	<u>50 Programable Thermostat_Heat</u>	1-Res Audits LI	LI RES	466	-0	15	DEER with Electric Heat
50	<u>51 CFL bulbs regular-15 -Free No Water Heat</u>	1-Res Audits LI	LI RES	\$166	\$0.009	6-4	TRM
51	<u>52 CFL bulbs regular-15 -Free No Water Heat Mailed At</u>	4-Res-EE P LI	LI RES	166	0.009	6-4	TRM
52	<u>53 CFL bulbs regular - Outside - 15 - Store Rebates</u>	4-Res-EE P LI	LI RES	80	0.000	6-4	TRM but Estimate of Hours from Survey
53	<u>54 CFL bulbs regular - 19 - Store Rebates</u>	4-Res-EE P LI	LI RES	52	0.003	6-4	TRM
54	<u>55 LED Night Light</u>	1-Res Audits LI	LI RES	44	0.000	12	DSMore MI Database
55	<u>56 Low Income Lighting-Warm Light</u>	7-Low Income	LI RES	69	0.000	6-4	4 CFLs using 1 hour a day.
	<u>57 Low Income Lighting-Warm SmartStrip</u>	<u>7-Low Income</u>	<u>LI RES</u>	<u>184</u>	<u>0.013</u>	<u>5</u>	<u>DSMore MI Database</u>
56	<u>58 Low Income Lighting-Low Usage</u>	7-Low Income	LI RES	206	0.017	6-4	4 CFLs
57	<u>59 Multiple Family - CFL Lighting</u>	8-Multiple Family	Res	206	0.017	6-4	4 CFLs
58	<u>60 Multiple Family - T8-Lighting</u>	2-Governmental Programs	Gov	127	0.036	15	TRM
59	<u>61 Commercial, Industrial Audit - Sm&Md</u>	1-C/I Audits	SM C&I	-0	0.000	0	
60	<u>62 Commercial, Industrial Audit - Large</u>	1-C/I Audits	LG C&I	-0	0.000	0	
64	<u>63 Commercial CFL Program</u>	1-C/I Audits	SM C&I	198	0.056	6-4	1 CFL using ACEEE Estimate of Comm Hou
62	<u>64 Commercial, Industrial Audit - Gov</u>	1-C/I Audits	Gov	-0	0.000	0	
63	<u>65 Exterior HID replacement above 175W to 250W HID</u>	2-Governmental Programs	Gov	409	0.000	12	DSMore MI Database
64	<u>66 HPT8 4ft 4 lamp, T12 to HPT8</u>	2-Governmental Programs	Gov	127	0.036	15	TRM
65	<u>67 LED Exit Signs Electronic Fixtures (RetrofitOnly)</u>	2-Governmental Programs	Gov	158	0.018	10	TRM
66	<u>68 Occupancy Sensors under 500 W</u>	2-Governmental Programs	Gov	397	0.099	10	DSMore MI Database
67	<u>69 LED Auto Traffic Signals</u>	2-Governmental Programs	Gov	535	0.061	10	TRM 8"
68	<u>70 LED Pedestrian Signals</u>	2-Governmental Programs	Gov	946	0.108	10	TRM
69	<u>71 Street Lighting - 175 Mercury to 100 HPS</u>	2-Governmental Programs	Gov	329	0.000	10	=(175-100)*365*12/1000
70	<u>72 Water-Cooled cent Chiller 150 - 300 ton 0.57 kW/ton</u>	2-Governmental Programs	Gov	7,997	8.576	15	TRM
71	<u>73 Water-Cooled Centrifugal Chiller < 150 ton 0.56 kW/t</u>	2-Governmental Programs	Gov	8,934	9.581	15	TRM
72	<u>74 AC <65,000 1 Ph</u>	3-C/I Equip	SM C&I	304	0.406	15	TRM
73	<u>75 AC 65,000 - 135,000</u>	3-C/I Equip	SM C&I	395	0.795	15	TRM
74	<u>76 AC 240,000 - 760,000</u>	3-C/I Equip	SM C&I	1,376	2.741	15	TRM
75	<u>77 Clothes Washer CEE Tier1, Electric Water heater, Ele</u>	3-C/I Equip	SM C&I	633	0.666	10	DSMore MI Database
76	<u>78 Demand-controlled ventilation (DCV)</u>	3-C/I Equip	SM C&I	8,000	1.340	15	ACEEE PA Report
77	<u>79 Efficient Refrigeration Condenser</u>	3-C/I Equip	SM C&I	120	0.118	15	DSMore MI Database
78	<u>80 ENERGY STAR Commercial Solid Door Freezers les</u>	3-C/I Equip	SM C&I	520	0.059	12	DSMore MI Database
79	<u>81 ENERGY STAR Commercial Solid Door Freezers 20</u>	3-C/I Equip	SM C&I	507	0.058	12	DSMore MI Database
80	<u>82 ENERGY STAR Commercial Solid Door Refrigerator</u>	3-C/I Equip	SM C&I	905	0.103	12	DSMore MI Database
81	<u>83 ENERGY STAR Commercial Solid Door Refrigerator</u>	3-C/I Equip	SM C&I	1,069	0.122	12	DSMore MI Database
82	<u>84 ENERGY STAR Ice Machines less than 500 lbs</u>	3-C/I Equip	SM C&I	1,652	0.189	12	DSMore MI Database
83	<u>85 ENERGY STAR Ice Machines 500 to 1000 lbs</u>	3-C/I Equip	SM C&I	2,695	0.308	12	DSMore MI Database
84	<u>86 ENERGY STAR Ice Machines more than 1000 lbs</u>	3-C/I Equip	SM C&I	6,048	0.690	12	DSMore MI Database
85	<u>87 ENERGY STAR Steam Cookers 3 Pan</u>	3-C/I Equip	SM C&I	11,188	2.550	12	DSMore MI Database
86	<u>88 Exterior HID replacement above 175W to 250W HID</u>	3-C/I Equip	SM C&I	409	0.000	12	DSMore MI Database
87	<u>89 EE Water Heater</u>	3-C/I Equip	SM C&I	319	0.065	15	Manufacturer Supplied
88	<u>90 HP Water Heater (Base Usage 22831)</u>	3-C/I Equip	SM C&I	14,200	2.880	15	ACEEE PA Report

Appendix E

Measure Name	Program	Rate Class	kWh Savings	kW Savings	Life	Source of Saving Values and Life
89 91 HPT8 4ft 4 lamp, T12 to HPT8	3-C/I Equip	SM C&I	127	0.036	15	TRM
90 92 LED Exit Signs Electronic Fixtures (RetrofitOnly)	3-C/I Equip	SM C&I	158	0.018	10	TRM
94 93 Occupancy Sensors under 500 W	3-C/I Equip	SM C&I	397	0.099	10	DSMore MI Database
92 94 Plug Load Occupancy Sensors Document Stations	3-C/I Equip	SM C&I	803	0.055	5	DSMore MI Database
93 95 Commercial Smart Strip plug outlet	3-C/I Equip	SM C&I	184	0.013	5	DSMore MI Database
94 96 Pre Rinse Sprayers	3-C/I Equip	SM C&I	1,396	0.116	5	DSMore MI Database
95 97 Refrigerant charging correction	3-C/I Equip	SM C&I	712	1.014	10	DSMore MI Database
96 98 Refrigeration Commissioning	3-C/I Equip	SM C&I	375	0.043	3	DSMore MI Database
97 99 Strip curtains for walk-ins - freezer	3-C/I Equip	SM C&I	613	0.070	4	DSMore MI Database
98 100 Vending Equipment Controller	3-C/I Equip	SM C&I	800	0.210	5	DSMore MI Database
99 101 Window Film	3-C/I Equip	SM C&I	256	0.147	10	DSMore MI Database
100 102 Setback/Setup	3-C/I Equip	SM C&I	842	-0.007	9	DSMore MI Database
101 103 Demand-controlled ventilation (DCV)	4-C/I Equip	LG C&I	8,000	1.340	15	ACEEE PA Report
102 104 Exterior HID replacement above 175W to 250W HID	4-C/I Equip	LG C&I	409	0.000	12	DSMore MI Database
103 105 HPT8 4ft 4 lamp, T12 to HPT8	4-C/I Equip	LG C&I	127	0.036	15	TRM
104 106 Occupancy Sensors under 500 W	4-C/I Equip	LG C&I	397	0.099	10	DSMore MI Database
105 107 Water-Cooled cent Chiller 150 - 300 ton 0.57 kW/ton	4-C/I Equip	LG C&I	7,997	8.576	15	TRM
106 108 Water-Cooled Centrifugal Chiller < 150 ton 0.56 kW/t	4-C/I Equip	LG C&I	8,934	9.581	15	TRM
107 109 Window Film	4-C/I Equip	LG C&I	12,802	7.344	15	DSMore MI Database
108 110 Motors 1 HP 1200	5-IND MOTOR	LG C&I	97	0.007	15	TRM
109 111 Motors 5 HP 1200	5-IND MOTOR	LG C&I	329	0.025	15	TRM
110 112 Motors 10 HP 1200	5-IND MOTOR	LG C&I	467	0.036	15	TRM
111 113 Motors 20 HP 1200	5-IND MOTOR	LG C&I	857	0.065	15	TRM
112 114 Motors 1 HP 3600	5-IND MOTOR	LG C&I	66	0.005	15	TRM
113 115 Motors 5 HP 3600	5-IND MOTOR	LG C&I	174	0.013	15	TRM
114 116 Motors 10 HP 3600	5-IND MOTOR	LG C&I	3254.9344	0.0254723	15	TRM
115 117 Motors 20 HP 3600	5-IND MOTOR	LG C&I	5021.6837	0.038472	15	TRM
116 118 Water Pumps with VFD's	5-IND MOTOR	LG C&I	1,360	0.024027	15	TRM
117 119 HVAC Fans with VFD's	5-IND MOTOR	LG C&I	1,653	0.029203	15	TRM
118 120 Air Compressors with VFD's	5-IND MOTOR	LG C&I	774	0.0143674	15	TRM
119 121 Water Pumps with VFD's	5-IND MOTOR	LG C&I	6,800	0.120433	15	TRM
120 122 HVAC Fans with VFD's	5-IND MOTOR	LG C&I	8,265	0.146045	15	TRM
121 123 Air Compressors with VFD's	5-IND MOTOR	LG C&I	3,870	0.06837	15	TRM
122 124 Water Pumps with VFD's	5-IND MOTOR	LG C&I	13,600	0.240267	15	TRM
123 125 HVAC Fans with VFD's	5-IND MOTOR	LG C&I	16,530	0.29203	15	TRM
124 126 Air Compressors with VFD's	5-IND MOTOR	LG C&I	7,740	0.137674	15	TRM

Appendix F

Measure Name	Program	Rate Class	Number of 2010 Program participants/ Measure Units	Number of 2011 Program participants/ Measure Units	Number of 2012 Program participants/ Measure Units	Number of 2013 Program participants/ Measure Units	Participants Assumptions	
1	DLC-CAC	Demand	Res	1,090	15,344	14,881	0	Res*Sat*Survey
2	DLC-Pool Pumps	Demand	Res	57	700	540	0	Res*Sat*Survey
3	DLC-Pool Pumps	Demand	Res	2	90	119	0	Res*Sat*Survey
4	1-Res Home Audits - CFL 4 - Low Flow 2 Water Heat	1-Res Audits	Res	4,825	24,125	24,125	24,125	Res*Sat*Survey * 93.2%
5	1-Res Home Audits - CFL 4 - Low Flow 2	1-Res Audits	Res	25	125	125	125	Res*Sat*Survey
6	Schools Children Education-No Savings	1-Res Audits	Res	1,352	2,703	2,703	2,703	Estimate of Activity * 93.2%
7	Refrigerator/Freezer recycling	2-RES App Turn-In	Res	1,374	6,868	6,868	6,868	Res*Sat*Survey * 93.2%
8	Room Air Conditioners	2-RES App Turn-In	Res	305	1,525	1,525	1,525	Budgetary Limits
9	ASHP - SEER 15	3-RES EE HVAC	Res	43	214	214	214	10% of CAC
10	CAC - SEER 16	3-RES EE HVAC	Res	428	2,141	2,141	2,141	Res*Sat*Survey - Minus 10%
11	CAC - Maintenance	3-RES EE HVAC	Res	442	2,211	2,211	2,211	Res*Sat*Survey
12	Furnace Fans	3-RES EE HVAC	Res	9	44	44	44	Budgetary Limits
13	EE Ground Source Heat Pump	4-Res-EE P	Res	0	15	15	15	Budgetary Limits
14	Solar Water Heating	4-Res-EE P	Res	0	15	15	15	Budgetary Limits
15	HP Water Heater	4-Res-EE P	Res	0	100	100	100	Budgetary Limits
16	EE Water Heater	4-Res-EE P	Res	1,081	5,406	5,406	5,406	Res*Sat*Survey
17	Programable Thermostat_Heat	4-Res-EE P	Res	334	1,670	1,670	1,670	Res*Sat*Survey * 93.2%
18	Programable Thermostat_CAC	4-Res-EE P	Res	885	4,424	4,424	4,424	Res*Sat*Survey
19	CFL bulbs regular-15 -Free No Water Heat	1-Res Audits	Res	4,903	24,515	24,515	24,515	Res*Sat*Survey * 93.2%
	CFL bulbs regular-15 -Free No Water Heat Mailed At Request	4-Res-EE P	Res	4,671	23,354	23,354	23,354	Res*Sat*Survey * 93.2%
21	CFL bulbs regular - Outside - 15 - Store Rebates	4-Res-EE P	Res	5,978	29,890	29,890	29,890	Res*Sat*Survey * 93.2%
22	CFL bulbs regular - 19 - Store Rebates	4-Res-EE P	Res	42,234	211,172	211,172	211,172	Res*Sat*Survey * 93.2%
	Clothes Washer Energy Star, Electric Water heater, Electric Dryer	4-Res-EE P	Res	200	1,000	1,000	1,000	Budgetary Limits
23	Dryer	4-Res-EE P	Res	200	1,000	1,000	1,000	Budgetary Limits
24	Dehumidifier	4-Res-EE P	Res	200	1,000	1,000	1,000	Budgetary Limits
25	Freezers Energy Star-Chest Freezer	4-Res-EE P	Res	200	1,000	1,000	1,000	Budgetary Limits
26	Holiday Lights	4-Res-EE P	Res	536	2,681	2,681	2,681	Res*Sat*Survey
27	LED Night Light	4-Res-EE P	Res	1,352	2,703	2,703	2,703	Free to School Audits * 93.2%
28	Pump and Motor Single Speed	4-Res-EE P	Res	231	1,156	1,156	1,156	Res*Sat*Survey
29	Refrigerators-Freezers Energy Star - Side by Side	4-Res-EE P	Res	200	1,000	1,000	1,000	Budgetary Limits
30	Refrigerators-Freezers Energy Star - Top Freezer	4-Res-EE P	Res	200	1,000	1,000	1,000	Budgetary Limits
31	Room Air Conditioners	4-Res-EE P	Res	2,741	10,964	10,964	10,964	Res*Sat*Survey
32	Smart Strip plug outlet	4-Res-EE P	Res	2,746	13,728	13,728	13,728	(Res*Sat*Survey)*25%
33	Torchiere Floor Lamps	4-Res-EE P	Res	300	1,500	1,500	1,500	Budgetary Limits
34	Residential New Construction - 15%	5-RES New Con	Res	208	1,146	1,146	0	Budgetary Limits
35	Residential New Construction - 30%	5-RES New Con	Res	208	1,146	1,146	0	Budgetary Limits
36	Ceiling Fan	6-Res Whole	Res	120	150	150	150	Budgetary Limits
37	Estar Windows	6-Res Whole	Res	120	150	150	150	Budgetary Limits
38	Duct sealing 20 leakage base	6-Res Whole	Res	200	250	250	250	Budgetary Limits
39	Low Flow Showerheads	6-Res Whole	Res	800	1,000	1,000	1,000	Budgetary Limits
40	Kitchen Aerator	6-Res Whole	Res	800	1,000	1,000	1,000	Budgetary Limits
41	Bathroom Aerator	6-Res Whole	Res	800	1,000	1,000	1,000	Budgetary Limits
42	Pipe Wrap	6-Res Whole	Res	200	250	250	250	Budgetary Limits
43	Roof Insulation	6-Res Whole	Res	200	250	250	250	Budgetary Limits
44	Whole Building	6-Res Whole	Res	800	1,000	1,000	1,000	Budgetary Limits
45	Low Income Warm Program Through Act129	7-Low Income	LI-RES	220	538	563	587	WARM Forecast * 25%
	<u>Low Income Warm Program Through Act129 (Additional SmartStrips)</u>	<u>7-Low Income</u>	<u>LI-RES</u>	<u>23</u>	<u>178</u>	<u>186</u>	<u>194</u>	<u>WARM Forecast * 25% * 1/3</u>
46	SmartStrips	7-Low Income	LI-RES	23	178	186	194	WARM Forecast * 25% * 1/3
47	1-Res Home Audits - CFL 4 - Low Flow 2 Water Heat	1-Res Audits LI	LI-RES	530	2,651	2,651	2,651	Res*Sat*Survey * 6.8%
48	Schools Children Education-No Savings	1-Res Audits LI	LI-RES	149	297	297	297	Estimate of Activity * 6.8%
49	Refrigerator/Freezer recycling	2-RES App Turn-In LI	LI-RES	151	755	755	755	Res*Sat*Survey * 6.8%
50	Programable Thermostat_Heat	1-Res Audits LI	LI-RES	37	183	183	183	Res*Sat*Survey * 6.8%

Appendix F

	Measure Name	Program	Rate Class	Number of 2010 Program participants/ Measure Units	Number of 2011 Program participants/ Measure Units	Number of 2012 Program participants/ Measure Units	Number of 2013 Program participants/ Measure Units	Participants Assumptions
51	59 CFL bulbs regular-15 -Free No Water Heat	1-Res Audits LJ	H-RFS	539	2,694	2,694	2,694	Res*Sat*Survey * 6.8%
	CFL bulbs regular-15 -Free No Water Heat Mailed At Request	4-Res-EE P LI	H-RFS	513	2,566	2,566	2,566	Res*Sat*Survey * 6.8%
52	52 CFL bulbs regular - Outside - 15 - Store Rebates	4-Res-EE P LI	H-RFS	657	3,284	3,284	3,284	Res*Sat*Survey * 6.8%
53	53 CFL bulbs regular - 19 - Store Rebates	4-Res-EE P LI	H-RFS	4,641	23,203	23,203	23,203	Res*Sat*Survey * 6.8%
54	54 LED Night Light	1-Res Audits LJ	H-RFS	149	297	297	297	Free to School Audits * 6.8%
55	55 Low Income Lighting-Warm Light	7-Low Income	H-RFS	879	2,152	2,252	2,348	WARM Forecast
56	56 Low Income Lighting-Warm SmartStrip	7-Low Income	H-RFS	200	710	743	773	WARM Forecast * 1.3
57	57 Low Income Lighting-Low Usage	7-Low Income	H-RFS	663	3,316	3,316	3,316	Low Income - Low Usage Count
58	58 Multiple Family - CFL Lighting	8-Multiple Family	Res	380	1,899	1,899	1,899	PAHA Provided
59	59 Multiple Family - T8-Lighting	8-Multiple Family	SM-C&I	380	1,899	1,899	1,899	PAHA Provided
60	60 Commercial, Industrial Audit - Sm&M	1-C/I Audits	SM-C&I	150	750	750	750	Budgetary Limits
61	61 Commercial, Industrial Audit - Large	1-C/I Audits	SM-C&I	15	75	75	75	Budgetary Limits
62	62 Commercial CFL Program	1-C/I Audits	SM-C&I	10,606	53,031	53,031	53,031	Comm*Survey
63	63 Commercial, Industrial Audit - Gov	1-C/I Audits	Gov	0	60	60	60	Budgetary Limits
64	64 Exterior HID replacement above 175W to 250W HID retrofit	2-Governmental Programs	Gov	47	261	261	0	Base on Fed Sales
65	65 HPT8 4ft 4 lamp, T12 to HPT8	2-Governmental Programs	Gov	506	2,782	2,782	0	Base on Fed Sales
66	66 LED Exit Signs Electronic Fixtures (Retrofit Only)	2-Governmental Programs	Gov	83	458	458	0	Base on Fed Sales
67	67 Occupancy Sensors under 500 W	2-Governmental Programs	Gov	83	458	458	0	Base on Fed Sales
68	68 LED Auto Traffic Signals	2-Governmental Programs	Gov	1,333	7,333	7,333	0	Intersection Estimate
69	69 LED Pedestrian Signals	2-Governmental Programs	Gov	333	1,833	1,833	0	Intersection Estimate
70	70 Street Lighting - 175 Mercury to 100 HPS	2-Governmental Programs	Gov	892	4,462	4,462	4,462	Street Light Count
71	71 Water-Cooled cent Chiller 150 - 300 ton 0.57 kW/ton with 0.46 kW/ton IPLV	2-Governmental Programs	Gov	0	8	7	0	Fed Large User Counts
72	72 Water-Cooled Centrifugal Chiller < 150 ton 0.56 kW/ton with 0.53 kW/ton IPLV	2-Governmental Programs	Gov	0	8	7	0	Fed Large User Counts
73	73 AC <65,000 l Ph	3-C/I Equip	SM-C&I	100	500	500	500	Budgetary Limits
74	74 AC 65,000 - 135,000	3-C/I Equip	SM-C&I	40	200	200	200	Budgetary Limits
75	75 AC 240,000 - 760,000	3-C/I Equip	SM-C&I	40	200	200	200	Budgetary Limits
76	76 Clothes Washer CEE Tier1, Electric Water heater, Electric Dryer	3-C/I Equip	SM-C&I	40	200	200	200	Budgetary Limits
77	77 Demand-controlled ventilation (DCV)	3-C/I Equip	SM-C&I	25	125	125	125	Budgetary Limits
78	78 Efficient Refrigeration Condenser	3-C/I Equip	SM-C&I	40	200	200	200	Budgetary Limits
79	79 ENERGY STAR Commercial Solid Door Freezers less than 20ft3	3-C/I Equip	SM-C&I	25	125	125	125	Budgetary Limits
80	80 ENERGY STAR Commercial Solid Door Freezers 20 to 48 ft3	3-C/I Equip	SM-C&I	25	125	125	125	Budgetary Limits
81	81 ENERGY STAR Commercial Solid Door Refrigerators less than 20ft3	3-C/I Equip	SM-C&I	25	125	125	125	Budgetary Limits
82	82 ENERGY STAR Commercial Solid Door Refrigerators 20 to 48 ft3	3-C/I Equip	SM-C&I	25	125	125	125	Budgetary Limits
83	83 ENERGY STAR Ice Machines less than 500 lbs	3-C/I Equip	SM-C&I	50	250	250	250	Budgetary Limits
84	84 ENERGY STAR Ice Machines 500 to 1000 lbs	3-C/I Equip	SM-C&I	50	250	250	250	Budgetary Limits
85	85 ENERGY STAR Ice Machines more than 1000 lbs	3-C/I Equip	SM-C&I	50	250	250	250	Budgetary Limits
86	86 ENERGY STAR Steam Cookers 3 Pan	3-C/I Equip	SM-C&I	50	250	250	250	Budgetary Limits
87	87 Exterior HID replacement above 175W to 250W HID retrofit	3-C/I Equip	SM-C&I	972	4,858	4,858	4,858	Comm*Survey
88	88 EE Water Heater (Base Usage 22831)	3-C/I Equip	SM-C&I	140	698	698	698	Comm*Survey Minus 10%
89	89 HP Water Heater (Base Usage 22831)	3-C/I Equip	SM-C&I	25	125	125	125	10% of Water Heating
90	90 HPT8 4ft 4 lamp, T12 to HPT8	3-C/I Equip	SM-C&I	10,369	51,843	51,843	51,843	Comm*Survey*Square Foot Estimate
91	91 LED Exit Signs Electronic Fixtures (Retrofit Only)	3-C/I Equip	SM-C&I	3,910.7	19,553.6	19,553.6	19,553.6	Comm*Survey
92	92 Occupancy Sensors under 500 W	3-C/I Equip	SM-C&I	2,467	12,334	12,334	12,334	Comm*Survey

Appendix F

Measure Name	Program	Rate Class	Number of 2010 Program participants/ Measure Units	Number of 2011 Program participants/ Measure Units	Number of 2012 Program participants/ Measure Units	Number of 2013 Program participants/ Measure Units	Participants Assumptions
94 92 Plug Load Occupancy Sensors Document Stations	3-C/I Equip	\$M-C&I	396	1,189	1,189	1,189	Comm*Survey
95 93 Smart Strip plug outlet	3-C/I Equip	\$M-C&I	1,373	6,864	6,864	6,864	Comm*Survey
96 94 Pre Rinse Sprayers	3-C/I Equip	\$M-C&I	50	250	250	250	Budgetary Limits
97 95 Refrigerant charging correction	3-C/I Equip	\$M-C&I	1,094	4,378	4,378	4,378	Comm*Survey
98 96 Refrigeration Commissioning	3-C/I Equip	\$M-C&I	50	250	250	250	Budgetary Limits
99 97 Strip curtains for walk-ins - freezer	3-C/I Equip	\$M-C&I	50	250	250	250	Budgetary Limits
100 98 Vending Equipment Controller	3-C/I Equip	\$M-C&I	50	250	250	250	Budgetary Limits
101 99 Window Film	3-C/I Equip	\$M-C&I	50	250	250	250	Budgetary Limits
102 460 Setback/Setup	3-C/I Equip	\$M-C&I	50	250	250	250	Budgetary Limits
103 404 Demand-controlled ventilation (DCV)	4-C/I Equip	E-G-C&I	1	4	4	4	Budgetary Limits
104 402 Exterior HID replacement above 175W to 250W HID retrofit	4-C/I Equip	E-G-C&I	578	3,086	3,086	3,086	Comm*Survey
105 402 HPT8 4ft 4 lamp, T12 to HPT8	4-C/I Equip	E-G-C&I	6,172	30,860	30,860	30,860	Comm*Survey*Square Foot Estimate
106 404 Occupancy Sensors under 500 W	4-C/I Equip	E-G-C&I	1,468	7,342	7,342	7,342	Comm*Survey
107 465 Water-Cooled cent Chiller 150 - 300 ton 0.57 kW/ton with 0.46 kW/ton IPLV	4-C/I Equip	E-G-C&I	10	50	50	50	Budgetary Limits
108 406 Water-Cooled Centrifugal Chiller < 150 ton 0.56 kW/ton with 0.53 kW/ton IPLV	4-C/I Equip	E-G-C&I	3	15	15	15	Budgetary Limits
109 402 Window Film	4-C/I Equip	E-G-C&I	20	100	100	100	Budgetary Limits
110 408 Motors 1 HP 1200	5-IND MOTOR	E-G-C&I	100	500	500	500	Using NJ Experience for Motor Program
111 409 Motors 5 HP 1200	5-IND MOTOR	E-G-C&I	75	375	375	375	Using NJ Experience for Motor Program
112 440 Motors 10 HP 1200	5-IND MOTOR	E-G-C&I	50	250	250	250	Using NJ Experience for Motor Program
113 441 Motors 20 HP 1200	5-IND MOTOR	E-G-C&I	25	125	125	125	Using NJ Experience for Motor Program
114 442 Motors 1 HP 3600	5-IND MOTOR	E-G-C&I	100	500	500	500	Using NJ Experience for Motor Program
115 443 Motors 5 HP 3600	5-IND MOTOR	E-G-C&I	75	375	375	375	Using NJ Experience for Motor Program
116 444 Motors 10 HP 3600	5-IND MOTOR	E-G-C&I	50	250	250	250	Using NJ Experience for Motor Program
117 445 Motors 20 HP 3600	5-IND MOTOR	E-G-C&I	25	125	125	125	Using NJ Experience for Motor Program
118 444 Water Pumps with VFD's	5-IND MOTOR	E-G-C&I	8	40	40	40	Using NJ Experience for Motor Program
119 447 HVAC Fans with VFD's	5-IND MOTOR	E-G-C&I	8	40	40	40	Using NJ Experience for Motor Program
120 448 Air Compressors with VFD's	5-IND MOTOR	E-G-C&I	8	40	40	40	Using NJ Experience for Motor Program
121 449 Water Pumps with VFD's	5-IND MOTOR	E-G-C&I	8	40	40	40	Using NJ Experience for Motor Program
122 420 HVAC Fans with VFD's	5-IND MOTOR	E-G-C&I	8	40	40	40	Using NJ Experience for Motor Program
123 421 Air Compressors with VFD's	5-IND MOTOR	E-G-C&I	8	40	40	40	Using NJ Experience for Motor Program
124 422 Water Pumps with VFD's	5-IND MOTOR	E-G-C&I	8	40	40	40	Using NJ Experience for Motor Program
125 423 HVAC Fans with VFD's	5-IND MOTOR	E-G-C&I	8	40	40	40	Using NJ Experience for Motor Program
126 424 Air Compressors with VFD's	5-IND MOTOR	E-G-C&I	8	40	40	40	Using NJ Experience for Motor Program

Calculation of Pennsylvania Electric Company's Energy Efficiency and Conservation ("EEC") Charge ("EEC-C") Rates
Effective February 1, 2010 November 4, 2009

Line No.	Description	Penelec Residential Customer Class (1)	Penelec Non-Profit Customer Class (2)	Penelec Commercial Customer Class (3) (4)	Penelec Street Lighting Customer Class (4)	Penelec Industrial Customer Class (5) (4)	Penelec Total (6) (4)
1	2% of Penelec's Annual Revenues for 12 Months Ended 12/31/2006 for Maximum Annual Cost Recovery						\$ 22,974,742 (A)
2	Revenue Adjustment Factor (48 Months / 42 Months) 2% of Penelec's Annual Revenues for 12 Months Ended 12/31/2006 for Maximum Annual Cost Recovery for 48 months ending May 31, 2013 (Line 1 x 4 years)						4,146,279 \$ 91,898,968
3	Maximum Annual Costs Recovery as Adjusted (Line 1 X Line 2) Penelec's Estimated EEC Program Costs for 48 Months Ending May 31, 2013 (PUC Table 5)	\$ 47,912,600	\$ 243,353	\$ 14,059,905	\$ 2,762,575	\$ 6,852,518	\$ 25,646,222 \$ 71,830,951
4	Penelec's Estimated EEC Program Costs for 42 Months Ending May 31, 2013 PJM Peak Demand Program (PUC Table 3)	\$ 47,600,832		\$ 17,036,865		\$ 9,982,906 \$ 3,160,000	\$ 74,620,603 \$ 3,160,000
5	Percentage of Customer Class' Program Costs to Total Company Program Costs Penelec's Common Costs Allocated to Applicable Customer Sector (PUC Table 6b)	63.70% \$ 2,816,227	\$ 12,393	22.83% \$ 724,561	\$ 142,514	13.38% \$ 515,984	100.00% \$ 4,011,679
6	Allocation of Annual Maximum Cost Recovery (Line 3 - Column 4 X Line 5) Penelec's Estimated PJM Economic Load Response Program Costs	\$ 16,350,725		\$ 5,855,032		\$ 3,431,465 \$ 35,065	\$ 25,646,222 \$ 35,065
7	Penelec Subtotal subject to 2% cap (Sum Lines 3-6)	\$ 50,528,827	\$ 255,746	\$ 14,784,466	\$ 2,905,089	\$ 10,563,567	\$ 79,037,695
8	Penelec's Share of Statewide Evaluator Costs	\$ 542,718	\$ 2,571	\$ 150,305	\$ 29,564	\$ 107,036	\$ 832,194
9	Total EEC Costs for 48 months Ending May 31, 2013 (Sum Line 7 + 8)	\$ 51,071,545	\$ 258,317	\$ 14,934,771	\$ 2,934,653	\$ 10,670,603	\$ 79,869,889
10	Total EEC Costs on Annualized Basis (Line 9 / 40 months x 12 months)	\$ 15,321,464	\$ 77,495	\$ 4,480,431	\$ 880,396	\$ 3,201,181	\$ 23,960,967
11	Customer Class Projected 2010 Kilowatt-Hours ("kWh") Delivered or Peak Load Contribution Kilowatt ("kW")	4,690,463,830 kWh 4,572,033,364 kWh	59,885,748 kWh	3,665,834,663 kWh 3,654,379,378 kWh	41,720,178 kWh	6,001,210,816 kWh 10,338,168 kWh	14,287,765,056 kWh
12	EEC-C Rates Before Pa Gross Receipts Tax Gross-Up Factor (Line 6 + Line 7) (Line 10 / Line 11)	\$ 0.00356 per kWh \$ 0.00335 per kWh	\$ 0.00129 per kWh	\$ 0.00158 per kWh \$ 0.00123 per kWh	\$ 0.02110 per kWh	\$ 0.00057 per kWh \$ 0.30965 per kWh	
13	Pa Gross Receipts Tax Gross-Up Factor [1 / (1-T) with T = 5.90% Pa Gross Receipts Tax in Base Rates]	1.062699	1.062699	1.062699	1.062699	1.062699	
14	Proposed EEC-C Rates Effective November 4, 2009-February 1, 2010 (Line 8 x Line 13) (Line 12 X Line 13)	\$ 0.00378 per kWh \$ 0.00358 per kWh	\$ 0.00137 per kWh	\$ 0.00168 per kWh \$ 0.00131 per kWh	\$ 0.02242 per kWh	\$ 0.00061 per kWh \$ 0.33 per kWh	

(A) Pennsylvania's Act 129 of 2008 states that the maximum annual cost recovery for Energy Efficiency and Conservation Programs cannot exceed 2% of the electric distribution company's total annual revenue as of December 31, 2006.

PENNSYLVANIA POWER COMPANY
Docket No. M-2009-2112956

REPLACEMENT PAGES FOR
ENERGY EFFICIENCY AND CONSERVATION PLAN

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PUC Table 7A: TRC Benefits Table – Residential

TRC Benefits By Program Per Year (\$000)													
Residential Program	Program Year	TRC	Program Costs (\$000)	Program Benefits (\$000)	Capacity		Energy		Load Reductions in kW		MWh Saved		
					Annual Benefits	Annual Gen/T&D	Annual Benefits	Annual On/Off Peak	Annual	Lifetime	Annual	Lifetime	
Demand Reduction	2010	1.11 1.08	138,200 142,238	153,190	139,265	See footnote 1		13,925	See footnote 2	243	2,755	12	1,516
	2011	1.48	724,570	1,075,207	979,687			95,520		1,841	2,755	87	1,516
	2012	1.80	366,244	660,835	604,148			56,687		2,755	2,755	131	1,516
	2013	0.00	0	0	0			0		2,755	2,755	131	1,516
Home Energy Audits	2010	4.29 4.21	173,454 176,798	743,896	35,310			708,586		88	1,340	1,198	154,445
	2011	5.02 5.01	717,238 717,405	3,597,162	183,217			3,413,945		505	1,340	6,709	154,445
	2012	5.21	717,238	3,738,613	201,442			3,537,171		923	1,340	12,221	154,445
	2013	5.39	717,238	3,865,921	212,017			3,653,904		1,340	1,340	17,732	154,445
Appliance Turn-In	2010	4.90 4.76	89,669 92,294	439,774	42,818			396,956		106	1,697	750	85,250
	2011	5.83	396,368	2,311,842	233,261			2,078,581		636	1,697	4,498	85,250
	2012	6.10	396,368	2,418,092	256,440			2,161,652		1,167	1,697	8,246	85,250
	2013	6.32	396,368	2,506,538	269,889			2,236,648		1,697	1,697	11,994	85,250
EE HVAC	2010	0.84 0.83	308,082 312,463	259,304	110,109			149,195		234	3,749	234	35,684
											3,750		36,765
	2011	0.92 0.93	1,491,644 1,504,393	1,375,673	594,394			781,279		1,406	3,749	1,405	35,684
				1,398,103	594,790			803,313			3,750	1,432	36,765
	2012	0.97 0.98	1,491,644 1,504,393	1,453,319	646,687			806,632		2,577	3,749	2,575	35,684
			1,476,438	647,112			829,326		2,578	3,750	2,629	36,765	
2013	1.01 1.02	1,491,644 1,504,393	1,508,230	677,290			830,940		2,749	3,749	3,746	35,684	
			1,532,009	677,731			854,277		3,750	3,750	3,827	36,765	
EE Products	2010	2.59 2.58	318,185 319,324	823,880	73,042			750,837		157	2,451	1,469	166,594
											2,449		165,513
	2011	2.80 2.81	1,554,460 1,541,987	4,354,111	384,233			3,969,879		922	2,451	8,853	166,594
				4,331,682	383,836			3,947,845		921	2,449	8,826	165,513
	2012	2.92 2.93	1,554,460 1,541,987	4,526,291	418,477			4,117,814		1,686	2,451	16,237	166,594
			4,513,172	418,052			4,095,119		1,685	2,449	16,183	165,513	
2013	3.03 3.04	1,554,460 1,541,987	4,706,640	438,579			4,268,060		2,451	2,451	23,621	166,594	
			4,682,861	438,138			4,244,723		2,449	2,449	23,540	165,513	

**Energy Efficiency and Conservation Plan
Cost Effectiveness**

New Construction	2010	4.89	239,783	432,407	161,316	271,091	259	3,111	344	55,110
		1.78	242,408							
	2011	1.97	1,261,583	2,489,006	944,243	1,544,763	1,685	3,111	2,236	55,110
			1,261,715							
	2012	2.06	1,261,583	2,602,544	1,011,434	1,591,110	3,111	3,111	4,128	55,110
		1,261,715								
2013	0.00	525	-0	-0	-0	3,111	3,111	4,128	55,110	
		656								
Whole Building	2010	0.58	152,498	87,845	15,549	72,296	27	189	104	7,873
		0.57	155,171							
	2011	0.65	284,146	183,714	33,213	150,501	81	189	311	7,873
			284,280							
	2012	0.67	284,146	190,860	35,723	155,136	135	189	519	7,873
		284,280								
2013	0.69	284,146	196,731	37,225	159,505	189	189	727	7,873	
		284,280								
Multiple Family	2010	4.63	7,666	12,389	727	11,662	2	32	24	2,431
		1.39	8,916							
	2011	4.80	13,579	65,240	3,990	61,250	12	32	146	2,431
		4.78	13,641							
	2012	5.01	13,579	68,070	4,417	63,653	22	32	268	2,431
4.99		13,641								
2013	5.22	13,579	70,815	4,661	66,154	32	32	390	2,431	
		13,641								
Total		2.55	18,414,445	46,928,136	8,752,803	38,175,333	15,323	15,323	62,468	508,904
			18,439,128							

1: Generation, Transmission and Distribution Capacity costs are combined in a sum of avoided capacity costs. These costs are then NPV back to the year the measure unit was installed. The combined avoided capacity costs can not be identified by component therefore the total avoided capacity costs for Generation, Transmission and Distribution are displayed here.

2: The on and off peak energy costs are combined in a sum of avoided energy costs. These costs are then NPV back to the year the measure unit was installed. The combined avoided energy costs can not be identified by component therefore the total avoided energy costs for on and off peak energy costs are displayed here.

PUC Table 7B: TRC Benefits Table - Residential Low-Income

Residential Low-Income		TRC Benefits By Program Per Year (\$000)										
Program	Year	TRC	Program Costs (\$000)	Program Benefits (\$000)	Capacity	Capacity	Energy	Energy	Load Reductions in kW		MWh Saved	
					Annual	Annual	Annual	Annual	Annual	Lifetime	Annual	Lifetime
					Benefits	Gen/T&D	Benefits	On/Off Peak				
Warm Plus	2010	0.49	233,444	114,235	10,341		103,894		18	118	157	10,706
		0.50	243,963	123,015	10,775		112,241		20	131	180	11,507
	2011	0.87	267,909	233,476	17,549	See footnote 1 on PUC Table 7A	215,927	See footnote 2 on PUC Table 7A	51	118	523	10,706
		0.91	279,320	253,775	18,616		235,159		57	131	596	11,507
	2012	0.94	268,594	243,762	19,045		224,717		85	118	890	10,706
		0.95	280,413	265,883	20,307		245,576		94	131	1,016	11,507
	2013	0.94	269,142	253,430	19,923		233,507		118	118	1,260	10,706
0.99		281,287	277,160	21,308	255,852		131		131	1,440	11,507	
Residential Audits	2010	0.62	123,996	76,785	3,622				73,162		9	139
		0.51	150,966									
	2011	5.17	72,213	373,080	18,879	See footnote 1 on PUC Table 7A	354,200	See footnote 2 on PUC Table 7A	52	139	698	16,017
		5.16	72,326				366,960		95	139	1,272	16,017
	2012	5.37	72,213	387,722	20,762		379,127		139	139	1,845	16,017
		5.36	72,326									
	2013	5.55	72,213	400,982	21,855							
5.54		72,326										
Appliance Turn-In	2010	0.50	91,232	45,940	4,399				41,541		11	172
		0.41	112,125									
	2011	6.26	38,574	241,444	23,941	See footnote 1 on PUC Table 7A	217,503	See footnote 2 on PUC Table 7A	65	172	470	8,924
		6.25	38,640				226,191		118	172	862	8,924
	2012	6.55	38,574	252,489	26,298		234,033		172	172	1,253	8,924
		6.53	38,640									
	2013	6.78	38,574	261,701	27,668							
6.77		38,640										

**Energy Efficiency and Conservation Plan
Cost Effectiveness**

Energy Efficient Products	2010	5.29	10,209	54,030	1,801		52,228		30	79	109	10,889		
			<u>5.06</u>	<u>10,680</u>					<u>5</u>					
	2011	6.82	41,702	284,201	9,886	See footnote 1 on PUC Table 7A	274,315	See footnote 2 on PUC Table 7A	54	79	655	10,889		
			<u>6.81</u>	<u>41,725</u>			<u>30</u>							
	2012	7.10	41,702	296,023	10,943		285,081		79	79	1,202	10,889		
		<u>7.09</u>	<u>41,725</u>				<u>54</u>							
2013	7.38	41,702	307,829	11,548	296,281		79		79	1,748	10,889			
			<u>41,725</u>											
Original Warm Savings	2010								37		238			
	2011								127		810			
	2012								258		1,654			
	2013								394	N/A	2,524	N/A		
Original Warm Program Costs and Benefits are not included in the Plan, only the Savings														
Total		2.22	1,721,992	3,827,129	248,460		3,578,670		508	508	6,106	46,535		
		<u>2.15</u>	<u>1,816,826</u>	<u>3,902,059</u>	<u>252,607</u>		<u>3,649,452</u>		<u>520</u>	<u>520</u>	<u>6,286</u>	<u>47,336</u>		

PUC Table 7C: TRC Benefits Table - Commercial/Industrial Small

Commercial/Industrial Small		TRC Benefits By Program Per Year (\$000)										
Program	Program Year	TRC	Program Costs (\$000)	Program Benefits (\$000)	Capacity	Capacity	Energy	Energy	Load Reductions in kW		MWh Saved	
					Annual Benefits	Annual Gen/T&D	Annual Benefits	Annual On/Off Peak	Annual	Lifetime	Annual	Lifetime
Energy Audit	2010	2.47	137,062	337,959	66,174	See footnote 1 on PUC Table 7A	271,784	See footnote 2 on PUC Table 7A	181	2,896	641	63,882
		2.40	140,969				1,493,292		1,086	2,896	3,845	63,882
	2011	3.41	544,767	1,856,449	363,157		1,619,771		1,991	2,896	7,050	63,882
			544,962									
	2012	1.61	1,257,947	2,021,748	401,976		1,684,399	2,896	2,896	10,254	63,882	
			1,258,142									
	2013	1.68	1,257,947	2,108,602	424,204							
			1,258,142									
Equipment Rebate	2010	2.02	964,250	1,952,144	493,660		1,458,484		955	13,810	2,327	383,521
		1.99	979,354									
	2011	2.24	4,444,654	9,951,565	2,395,777		7,555,788		5,240	13,810	13,455	383,521
			4,445,407									
	2012	2.39	4,444,654	10,613,378	2,587,368		8,026,010		9,525	13,810	24,583	383,521
			4,445,407									
	2013	2.47	4,444,654	10,962,947	2,702,114		8,260,833		13,812	13,810	35,706	383,521
			4,445,407									
Multiple-Family	2010	0.67	21,606	14,543	2,652		11,891		4	68	15	3,223
			13,579	75,713	14,114		61,599		26	68	91	3,223
	2011	5.58	13,579	78,566	15,118		63,448		47	68	166	3,223
			13,579	80,967	15,722		65,245		68	68	241	3,223
	2012	5.79	13,579	80,967	15,722							
			13,579	80,967	15,722							
	2013	5.96	13,579	80,967	15,722							
			13,579	80,967	15,722							
Total		2.28	17,558,269	40,054,582	9,482,036		30,572,546		16,776	16,775	46,201	450,627
		2.27	17,517,791	39,804,793	9,434,430		30,370,363		16,708	16,707	45,959	447,403

PUC Table 7D: TRC Benefits Table - Commercial/Industrial Large

Commercial/Industrial Large		TRC Benefits By Program Per Year (\$000)										
Program	Program Year	TRC	Program Costs (\$000)	Program Benefits (\$000)	Capacity	Capacity	Energy	Energy	Load Reductions in kW		MWh Saved	
					Annual Benefits	Annual Gen/T&D	Annual Benefits	Annual On/Off Peak	Annual	Lifetime	Annual	Lifetime
Equipment Rebate	2010	0.939 0.94	516,585 518,252	485,069	152,526		332,542		254	4,074	560	119,480
	2011	+0.042 1.00	2,812,600 2,812,683	2,824,408	816,230		2,008,178		1,527	4,074	3,715	119,480
	2012	+1.1234 1.12	2,686,710 2,686,794	3,018,123	875,898		2,142,225		2,801	4,074	6,870	119,480
	2013	1.16	2,686,710 2,686,794	3,116,653	911,696	See footnote 1 on PUC Table 7A	2,204,958	See footnote 2 on PUC Table 7A	4,074	4,074	10,025	119,480
	2010	+1.1406 1.03	94,129 105,054	107,706	2,899		104,807		5	75	166	35,408
2011	2.2062 2.20	261,771 262,302	577,528	15,425	562,102		28		75	995	35,408	
2012	2.3493 2.34	261,771 262,302	614,988	16,523	598,465		51		75	1,823	35,408	
2013	2.4194 2.41	261,771 262,302	633,336	17,182	616,153		75		75	2,652	35,408	
Total		1.19	9,582,347 9,596,483	11,377,811	2,808,380		8,569,431		4,149	4,149	12,677	154,888

PUC Table 7E: TRC Benefits Table - Governmental/Non-Profit

Governmental/Non-Profit	TRC Benefits By Program Per Year (\$000)												
	Program	Year	TRC	Program Costs (\$000)	Program Benefits (\$000)	Capacity	Capacity	Energy	Energy	Load Reductions in kW		MWh Saved	
						Annual Benefits	Annual Gen/T&D	Annual Benefits	Annual On/Off Peak	Annual	Lifetime	Annual	Lifetime
Governmental & Institutional	2010	1.6276	559,950	911,402	175,175			736,227		343	5,020	1,274	181,903
	2011	1.54	601,192	925,945	177,827	See footnote 1 on PUC Table 7A	748,118	See footnote 2 on PUC Table 7A	347	5,088	1,289	185,126	
		1.9383	2,614,880	5,068,490	935,165				2,032	5,020	7,899	181,903	
		1.91	2,699,140	5,144,204	949,279				2,058	5,088	7,990	185,126	
	2012	1.9766	2,740,770	5,417,485	1,011,334	4,406,154	3,722	5,020	14,525	181,903			
		1.95	2,825,029	5,496,051	1,026,450	4,469,601	3,769	5,088	14,691	185,126			
2013	1.913	1,832,847	3,506,233	811,085	2,695,148	5,020	5,020	18,399	181,903				
	1.87	1,917,107	3,587,200	826,806	2,760,393	5,088	5,088	18,640	185,126				
Total	1.92	7,748,447	14,903,610	2,932,756	11,970,854	5,020	5,020	18,399	181,903				
	1.88	8,042,468	15,153,399	2,980,362	12,173,037	5,088	5,088	18,640	185,126				

Calculation of Pennsylvania Power Company's Energy Efficiency and Conservation ("EEC") Charge ("EEC-C") Rates
Effective February 1, 2010 November 1, 2009

Line No.	Description	Penn Power Residential Customer Class (1)	Penn Power Non-Profit Customer Class (2)	Penn Power Commercial Customer Class (3) (4)	Penn Power Street Lighting Customer Class (4)	Penn Power Industrial Customer Class (5) (4)	Penn Power Total (6) (4)
1	2% of Penn Power's Annual Revenues for 12 Months Ended 12/31/2006 for Maximum Annual Cost Recovery						\$ 6,659,789 (A)
2	Revenue Adjustment Factor (48 Months / 43 Months) 2% of Penn Power's Annual Revenues for 12 Months Ended 12/31/2006 for Maximum Annual Cost Recovery for 48 months ending May 31, 2013 (Line 1 x 4 years)						1,116,279 \$ 26,639,156
3	Maximum Annual Costs Recovery as Adjusted (Line 4 X Line 2) Penn Power's Estimated EEC Program Costs for 48 Months Ending May 31, 2013 (PUC Table 5)	\$ 12,917,611	\$ 15,251	\$ 4,545,597	\$ 328,225	\$ 2,626,118	\$ 20,432,832
4	Penn Power's Estimated EEC Program Costs for 43 Months Ending May 31, 2013 PJM Peak Demand Program (PUC Table 3)	\$ 12,798,095	\$ -	\$ 4,860,135	\$ -	\$ 7,336,505	\$ 24,994,735 \$ 4,740,000 \$ 4,740,000
5	Percentage of Customer Class' Program Costs to Total Company Program Costs Penn Power's Common Costs Allocated to Applicable Customer Sector (PUC Table 6b)	64.20%		19.44%		29.36%	100.00%
		\$ 548,134	\$ 617	\$ 184,041	\$ 13,291	\$ 298,237	\$ 1,044,320
6	Allocation of Annual Maximum Cost Recovery (Line 3 - Column 4 X Line 5)	\$ 3,806,302		\$ 4,445,205		\$ 2,182,676	\$ 7,434,183
	Penn Power Subtotal subject to 2% cap (Sum Lines 3-6)	\$ 13,465,745	\$ 15,868	\$ 4,729,638	\$ 341,546	\$ 7,664,355	\$ 26,217,152
7	Penn Power's Share of Statewide Evaluator Costs	\$ 74,616	\$ 84	\$ 25,054	\$ 1,809	\$ 40,599	\$ 142,164
8	Total EEC Costs for 48 months Ending May 31, 2013 (Sum Line 6 + 7)	\$ 13,540,363	\$ 15,952	\$ 4,754,692	\$ 343,355	\$ 7,704,954	\$ 26,359,316
9	Total EEC Costs on Annualized Basis (Line 8 / 40 months x 12 months)	\$ 4,062,109	\$ 4,786	\$ 1,426,408	\$ 103,007	\$ 2,311,486	\$ 7,907,796
10	Customer Class Projected 2010 Kilowatt-Hours ("kWh") Delivered or Billing kVA	1,762,213,534 kWh 1,759,929,372 kWh	2,278,938 kWh	4,284,287,225 kWh 1,294,292,443 kWh	6,541,188 kWh	4,644,272,016 kWh 3,980,504 kWh	4,667,873,774 kWh
11	EEC-C Rates Before Pa Gross Receipts Tax Gross-Up Factor (Line 9 / Line 7) (Line 9 / Line 10)	\$ 0.00246 per kWh \$ 0.00231 per kWh	\$ 0.00210 per kWh	\$ 0.00112 per kWh \$ 0.00110 per kWh	\$ 0.01575 per kWh	\$ 0.00435 per kWh \$ 0.58070 per kVA	
12	Pa Gross Receipts Tax Gross-Up Factor [1 / (1-T) with T = 4.40% Pa Gross Receipts Tax in Base Rates]	1.046025	1.046025	1.046025	1.046025	1.046025	
13	Proposed EEC-C Rates Effective November 1, 2009 - February 1, 2010 (Line 8 X Line 12) (Line 11 X Line 12)	\$ 0.00226 per kWh \$ 0.00242 per kWh	\$ 0.00220 per kWh	\$ 0.00117 per kWh \$ 0.00115 per kWh	\$ 0.01647 per kWh	\$ 0.00441 per kWh \$ 0.61 per kVA	

(A) Pennsylvania's Act 129 of 2008 states that the maximum annual cost recovery for Energy Efficiency and Conservation Programs cannot exceed 2% of the electric distribution company's total annual revenue as of December 31, 2006.

PUC Table 7C: TRC Benefits Table - Commercial/Industrial Small

Commercial/Industrial Small		TRC Benefits By Program Per Year (\$000)												
Program	Program Year	TRC	Program Costs (\$000)	Program Benefits (\$000)	Capacity Annual Benefits	Capacity Annual Gen/T&D	Energy Annual Benefits	Energy Annual On/Off Peak	Load Reductions in kW		MWh Saved			
									Annual	Lifetime	Annual	Lifetime		
Energy Audit	2010	2.47	137,062	337,959	66,174	See footnote 1 on PUC Table 7A	271,784	See footnote 2 on PUC Table 7A	181	2,896	641	63,882		
		2.40	140,969											
	2011	3.41	544,767	1,856,449	363,157		1,493,292		1,086	2,896	3,845	63,882		
			544,962											
2012	1.61	1,257,947	2,021,748	401,976	1,619,771	1,991	2,896	7,050	63,882					
		1,258,142												
2013	1.68	1,257,947	2,108,602	424,204	1,684,399	2,896	2,896	10,254	63,882					
		1,258,142												
Equipment Rebate	2010	2.02	964,250	1,952,144	493,660	1,458,484	955	13,810	2,327	383,521				
		1.99	979,354											
	2011	2.24	4,444,654	9,951,565	2,395,777	7,555,788	5,240	13,810	13,455	383,521				
			4,445,407											
2012	2.39	4,444,654	10,613,378	2,587,368	8,026,010	9,525	13,810	24,583	383,521					
		4,445,407												
2013	2.47	4,444,654	10,962,947	2,702,114	8,260,833	13,812	13,810	35,706	383,521					
		4,445,407												
Multiple Family	2010	0.67	21,606	14,543	2,652	11,891	4	68	15	3,223				
	2011	5.58	13,579	75,713	14,114	61,599	26	68	91	3,223				
2012	5.79	13,579	78,566	15,118	63,448	47	68	166	3,223					
2013	5.96	13,579	80,967	15,722	65,245	68	68	241	3,223					
Total		2.28	17,558,269	40,054,582	9,482,036	30,572,546	16,776	16,775	46,201	450,627				
		2.27	17,517,791	39,804,793	9,434,430	30,370,363	16,708	16,707	45,959	447,403				

Energy Efficiency and Conservation Plan
Portfolio/Program Summary Tables & Charts

Table 4: Program Summaries

Program Name		Program Metric	Program Two Surface Summary	Program Years Operated	Net Energy Savings (MMBtu)	Net Peak Demand (kW)	Percentage of Portfolio and Total Program Savings
Commercial/ Industrial Small Portfolio Programs	Energy Audit	Small C&I	Provides two levels of energy audit services: 1) a simple walk-through audit for small business with non-complex loads, and 2) a more comprehensive assessment for medium to large non-residential customers to help identify existing end uses of energy and find specific ways in which energy savings can be achieved.	4	63,882	2,896	4.6%
	Equipment Rebate	Small C&I	Provides for the implementation of cost effective, high efficiency non-standard measures through the authorized Conservation Service Provider (CSP) contractor network for local, state and federal buildings, as well as for institutional customers.	4	383,521	13,810	27.7%
	Multiple Funding	Small C&I	This program will be delivered in cooperation with EPA and will target low-income communities. The program seeks to motivate property owners/tenants and landlords toward an energy efficiency program. Contractors with Residential accounts will be tracked through the Residential Incentivity program. Contractors selected with non-residential accounts will be tracked through the C&I Incentivity program.	4	3,223	68	0.2%
	Totals for C/I Small Sector				450,627	16,726	32.6%
Commercial/ Industrial Large Portfolio Programs	Equipment Rebate	Large C&I	Provides for the implementation of cost effective, high efficiency non-standard measures through the authorized Conservation Service Provider (CSP) contractor network for local, state and federal buildings, as well as for institutional customers.	4	119,480	4,074	8.6%
	Industrial Motors and VSD	Large C&I	This program is designed to encourage the company's commercial and industrial customers for: 1. Upgrade their existing motors to NEMA Premium® 2. Install variable speed drives on motors that do not always operate at the same speed.	4	35,408	75	2.6%
	Totals for C/I Large Sector				154,888	4,149	11.3%
Governmental/ Non-Profit Portfolio Programs	Governmental & Institutional	Govt	This program involves a feasibility study to identify energy savings opportunity to expedite the Federal and municipal agencies taking action. Provides for the implementation of cost effective, high efficiency standard and non-standard measures through a Conservation Service Provider (CSP) for local, state and federal buildings, as well as for institutional customers.	4	151,903	5,424	13.1%
	Totals for Gov/VNP Sector Programs				185,126	5,088	13.8%
	Total for Plan				1,385,934	42,237	100.0%

Appendix E

Measure Name	Program	Rate Class	kWh Savings	kW Savings	Life	Source of Saving Values and Life
1 DLC-CAC	Demand	Res	36	0.720	13	TRM
2 DLC-Pool Pumps	Demand	Res	38	1.470	13	TRM
3 DLC-Water Heat	Demand	Res	38	1.070	13	TRM
4 1-Res Home Audits - CFL 4 - Low Flow 2	1-Res Audits	Res	337	0.044	7	Sum of Other Measures Listed
5 1-Res Home Audits - CFL 4 - Low Flow 2	1-Res Audits	Res	337	0.044	7	Sum of Other Measures Listed
6 Schools Childern Education-No Savings	1-Res Audits	Res	166	0.009	6	4 CFLs from TRM
7 Refrigerator/Freezer recycling	2-RES App Turn-In	Res	1,728	0.238	8	TRM
8 Room Air Conditioners	2-RES App Turn-In	Res	71	0.072	5	TRM + Energy Star Calcuator
9 ASHP - SEER 15	3-RES EE HVAC	Res	2,008	0.297	12	TRM
10 CAC - SEER 15	3-RES EE HVAC	Res	225	0.297	15	TRM
11 CAC - Maintenance	3-RES EE HVAC	Res	219	0.290	7	TRM
12 Furnace Fans	3-RES EE HVAC	Res	367	0.000	15	ACEEE PA Report
13 EE Ground Source Heat Pump	3-RES EE HVAC	Res	4,804	0.106	15	TRM
14 Solar Water Heating	4-Res-EE P	Res	2,371	0.481	15	DSMore MI Database
15 HP Water Heater	4-Res-EE P	Res	2,371	0.481	15	DSMore MI Database
16 EE Water Heater	4-Res-EE P	Res	319	0.065	15	Manufacturer Supplied
17 Programable Thermostat_Heat	1-Res Audits	Res	466	0.000	15	DEER with Electric Heat
18 Programable Thermostat_CAC	4-Res-EE P	Res	39	0.066	15	DEER with CAC
19 CFL bulbs regular-15	1-Res Audits	Res	166	0.009	6-4	TRM
20 CFL bulbs regular-15	4-Res-EE P	Res	166	0.009	6-4	TRM
21 CFL bulbs regular - Outside - 15	4-Res-EE P	Res	80	0.000	6-4	TRM but Estimate of Hours from Survey
22 CFL bulbs regular - 19	4-Res-EE P	Res	52	0.003	6-4	TRM
23 Clothes Washer Energy Star, Electric Water heater, [1]	4-Res-EE P	Res	258	0.015	11	TRM with Electric Heat
24 Dehumidifiers	4-Res-EE P	Res	117	0.010	12	TRM
25 Freezers Energy Star-Chest Freezer	4-Res-EE P	Res	52	0.011	13	TRM
26 Holiday Lights	4-Res-EE P	Res	64	0.000	10	DSMore MI Database
27 LED Night Light	1-Res Audits	Res	44	0.000	12	DSMore MI Database
28 Pump and Motor Single Speed	4-Res-EE P	Res	694	0.357	10	DSMore MI Database
29 Refrigerators-Freezers Energy Star - Side by Side	4-Res-EE P	Res	95	0.013	13	TRM
30 Refrigerators-Freezers Energy Star - Top Freezer	4-Res-EE P	Res	90	0.013	13	TRM
31 Room Air Conditioners	4-Res-EE P	Res	58	0.059	10	TRM
32 Smart Strip plug outlet	4-Res-EE P	Res	184	0.013	5	DSMore MI Database
33 Torchiere Floor Lamps	4-Res-EE P	Res	105	0.006	10	TRM
34 Residential New Construction - 15%	5-RES New Con	Res	1,225	0.923	15	ACEEE PA Report
35 Residential New Construction - 30%	5-RES New Con	Res	2,449	1.845	15	ACEEE PA Report
36 Ceiling Fans	6-Res Whole	Res	180	0.020	10	ACEEE PA Report
37 Estar Windows	6-Res Whole	Res	700	0.038	15	ACEEE PA Report
38 Duct sealing 20 leakage base	6-Res Whole	Res	669	0.580	15	ACEEE PA Report
39 Low Flow Showerheads	6-Res Whole	Res	250	0.028	10	ACEEE PA Report
40 Kitchen Aerator	6-Res Whole	Res	114	0.024	9	DEER with Electric Heat
41 Bathroom Aerator	6-Res Whole	Res	57	0.012	9	DEER with Electric Heat
42 Pipe Wrap	6-Res Whole	Res	325	0.037	13	DEER with Electric Heat
43 Roof Insulation	6-Res Whole	Res	703	0.079	15	ACEEE PA Report
44 Whole Building	6-Res Whole	Res	-9	0.000	10	
45 Low Income Warm Program Through Act12	7-Low Income	LI RES	1,218	0.190	15	07 WARM Program M&V Average Savings

Appendix E

	Measure Name	Program	Rate Class	kWh Savings	kW Savings	Life	Source of Saving Values and Life
46	Low Income Warm Program Through Act129 (Additi	7-Low Income	LI RES	184	0.013	5	DSMore MI Database
46	47 1-Res Home Audits - CFL 4 - Low Flow 2 Water Heat	1-Res Audits LI	LI RES	337	0.044	7.266667	Sum of Other Measures Listed
47	48 Schools Childern Education-No Savings	1-Res Audits LI	LI RES	166	0.009	6.4	4 CFLs from TRM
48	49 Refrigerator/Freezer recycling	2-RES App Turn-In LI	LI RES	1,728	0.238	8	TRM
49	50 Programable Thermostat_Heat	1-Res Audits LI	LI RES	466	-0.000	15	DEER with Electric Heat
50	51 CFL bulbs regular-15 -Free No Water Heat	1-Res Audits LI	LI RES	\$166	\$0.009	6.4	TRM
54	52 CFL bulbs regular-15 -Free No Water Heat Mailed At	4-Res-EE P LI	LI RES	166	0.009	6.4	TRM
52	53 CFL bulbs regular - Outside - 15 - Store Rebates	4-Res-EE P LI	LI RES	80	0.000	6.4	TRM but Estimate of Hours from Survey
53	54 CFL bulbs regular - 19 - Store Rebates	4-Res-EE P LI	LI RES	52	0.003	6.4	TRM
54	55 LED Night Light	1-Res Audits LI	LI RES	44	0.000	12	DSMore MI Database
55	56 Low Income Lighting-Warm_Ligh	7-Low Income	LI RES	69	0.000	6.4	4 CFLs using 1 hour a day.
56	57 Low Income Lighting-Warm SmartStrip	7-Low Income	LI RES	184	0.013	5	DSMore MI Database
56	58 Low Income Lighting-Low Usage	7-Low Income	LI RES	206	0.017	6.4	4 CFLs
57	59 Multiple Family - CFL Lighting	8-Multiple Family	Res	206	0.017	6.4	4 CFLs
58	60 Multiple Family - T8-Lighting	8-Multiple Family	Res	127	0.036	15	TRM
59	61 Commercial, Industrial Audit - Sm&Md	1-C/I Audits	SM C&I	-0	0.000	0	
60	62 Commercial, Industrial Audit - Large	1-C/I Audits	LG C&I	-0	0.000	0	
64	63 Commercial CFL Program	1-C/I Audits	SM C&I	198	0.056	6.4	1 CFL using ACEEE Estimate of Comm Hours
62	64 Commercial, Industrial Audit - Gov	1-C/I Audits	Gov	-0	0.000	0	
63	65 Exterior HID replacement above 175W to 250W HID	2-Governmental Programs	Gov	409	0.000	12	DSMore MI Database
64	66 HPT8 4ft 4 lamp, T12 to HPT8	2-Governmental Programs	Gov	127	0.036	15	TRM
65	67 LED Exit Signs Electronic Fixtures (RetrofitOnly)	2-Governmental Programs	Gov	158	0.018	10	TRM
66	68 Occupancy Sensors under 500 W	2-Governmental Programs	Gov	397	0.099	10	DSMore MI Database
67	69 LED Auto Traffic Signals	2-Governmental Programs	Gov	535	0.061	10	TRM 8"
68	70 LED Pedestrian Signals	2-Governmental Programs	Gov	946	0.108	10	TRM
69	71 Street Lighting - 175 Mercury to 100 HPS	2-Governmental Programs	Gov	329	0.000	10	=(175-100)*365*12/1000
70	72 Water-Cooled cent Chiller 150 - 300 ton 0.57 kW/ton	2-Governmental Programs	Gov	7,802	8.576	15	TRM
74	73 Water-Cooled Centrifugal Chiller < 150 ton 0.56 kW/t	2-Governmental Programs	Gov	8,716	9.581	15	TRM
72	74 AC <65,000 1 Ph	3-C/I Equip	SM C&I	296	0.406	15	TRM
73	75 AC 65,000 - 135,000	3-C/I Equip	SM C&I	385	0.795	15	TRM
74	76 AC 240,000 - 760,000	3-C/I Equip	SM C&I	1,376	2.741	15	TRM
75	77 Clothes Washer CEE Tier1, Electric Water heater, Ele	3-C/I Equip	SM C&I	633	0.666	10	DSMore MI Database
76	78 Demand-controlled ventilation (DCV)	3-C/I Equip	SM C&I	8,000	1.340	15	ACEEE PA Report
77	79 Efficient Refrigeration Condenser	3-C/I Equip	SM C&I	120	0.118	15	DSMore MI Database
78	80 ENERGY STAR Commercial Solid Door Freezers les	3-C/I Equip	SM C&I	520	0.059	12	DSMore MI Database
79	81 ENERGY STAR Commercial Solid Door Freezers 20	3-C/I Equip	SM C&I	507	0.058	12	DSMore MI Database
80	82 ENERGY STAR Commercial Solid Door Refrigerator	3-C/I Equip	SM C&I	905	0.103	12	DSMore MI Database
84	83 ENERGY STAR Commercial Solid Door Refrigerator	3-C/I Equip	SM C&I	1,069	0.122	12	DSMore MI Database
82	84 ENERGY STAR Ice Machines less than 500 lbs	3-C/I Equip	SM C&I	1,652	0.189	12	DSMore MI Database
83	85 ENERGY STAR Ice Machines 500 to 1000 lbs	3-C/I Equip	SM C&I	2,695	0.308	12	DSMore MI Database
84	86 ENERGY STAR Ice Machines more than 1000 lbs	3-C/I Equip	SM C&I	6,048	0.690	12	DSMore MI Database
85	87 ENERGY STAR Steam Cookers 3 Pan	3-C/I Equip	SM C&I	11,188	2.550	12	DSMore MI Database
86	88 Exterior HID replacement above 175W to 250W HID	3-C/I Equip	SM C&I	409	0.000	12	DSMore MI Database
87	89 EE Water Heater	3-C/I Equip	SM C&I	319	0.065	15	Manufacturer Supplied
88	90 HP Water Heater (Base Usage 22831)	3-C/I Equip	SM C&I	14,200	2.880	15	ACEEE PA Report

Appendix E

Measure Name	Program	Rate Class	kWh Savings	kW Savings	Life	Source of Saving Values and Life
91 HPT8 4ft 4 lamp, T12 to HPT8	3-C/I Equip	SM C&I	127	0.036	15	TRM
92 LED Exit Signs Electronic Fixtures (RetrofitOnly)	3-C/I Equip	SM C&I	158	0.018	10	TRM
93 Occupancy Sensors under 500 W	3-C/I Equip	SM C&I	397	0.099	10	DSMore MI Database
94 Plug Load Occupancy Sensors Document Stations	3-C/I Equip	SM C&I	803	0.055	5	DSMore MI Database
95 Commercial Smart Strip plug outlet	3-C/I Equip	SM C&I	184	0.013	5	DSMore MI Database
96 Pre Rinse Sprayers	3-C/I Equip	SM C&I	1,396	0.116	5	DSMore MI Database
97 Refrigerant charging correction	3-C/I Equip	SM C&I	712	1.014	10	DSMore MI Database
98 Refrigeration Commissioning	3-C/I Equip	SM C&I	375	0.043	3	DSMore MI Database
99 Strip curtains for walk-ins - freezer	3-C/I Equip	SM C&I	613	0.070	4	DSMore MI Database
100 Vending Equipment Controller	3-C/I Equip	SM C&I	800	0.210	5	DSMore MI Database
101 Window Film	3-C/I Equip	SM C&I	256	0.147	10	DSMore MI Database
102 Setback/Setup	3-C/I Equip	SM C&I	842	-0.007	9	DSMore MI Database
103 Demand-controlled ventilation (DCV)	4-C/I Equip	LG C&I	8,000	1.340	15	ACEEE PA Report
104 Exterior HID replacement above 175W to 250W HID	4-C/I Equip	LG C&I	409	0.000	12	DSMore MI Database
105 HPT8 4ft 4 lamp, T12 to HPT8	4-C/I Equip	LG C&I	127	0.036	15	TRM
106 Occupancy Sensors under 500 W	4-C/I Equip	LG C&I	397	0.099	10	DSMore MI Database
107 Water-Cooled cent Chiller 150 - 300 ton 0.57 kW/ton	4-C/I Equip	LG C&I	7,802	8.576	15	TRM
108 Water-Cooled Centrifugal Chiller < 150 ton 0.56 kW/t	4-C/I Equip	LG C&I	8,716	9.581	15	TRM
109 Window Film	4-C/I Equip	LG C&I	12,802	7.344	15	DSMore MI Database
110 Motors 1 HP 1200	5-IND MOTOR	LG C&I	97	0.007	15	TRM
111 Motors 5 HP 1200	5-IND MOTOR	LG C&I	329	0.025	15	TRM
112 Motors 10 HP 1200	5-IND MOTOR	LG C&I	467	0.036	15	TRM
113 Motors 20 HP 1200	5-IND MOTOR	LG C&I	857	0.065	15	TRM
114 Motors 1 HP 3600	5-IND MOTOR	LG C&I	66	0.005	15	TRM
115 Motors 5 HP 3600	5-IND MOTOR	LG C&I	174	0.013	15	TRM
116 Motors 10 HP 3600	5-IND MOTOR	LG C&I	325	0.025	15	TRM
117 Motors 20 HP 3600	5-IND MOTOR	LG C&I	502	0.038	15	TRM
118 Water Pumps with VFD's	5-IND MOTOR	LG C&I	1,360	0.024	15	TRM
119 HVAC Fans with VFD's	5-IND MOTOR	LG C&I	1,653	0.029	15	TRM
120 Air Compressors with VFD's	5-IND MOTOR	LG C&I	774	0.014	15	TRM
121 Water Pumps with VFD's	5-IND MOTOR	LG C&I	6,800	0.120	15	TRM
122 HVAC Fans with VFD's	5-IND MOTOR	LG C&I	8,265	0.146	15	TRM
123 Air Compressors with VFD's	5-IND MOTOR	LG C&I	3,870	0.068	15	TRM
124 Water Pumps with VFD's	5-IND MOTOR	LG C&I	13,600	0.240	15	TRM
125 HVAC Fans with VFD's	5-IND MOTOR	LG C&I	16,530	0.292	15	TRM
126 Air Compressors with VFD's	5-IND MOTOR	LG C&I	7,740	0.137	15	TRM

Appendix F

Measure Name	Program	Rate Class	Number of 2010 Program participants/ Measure Units	Number of 2011 Program participants/ Measure Units	Number of 2012 Program participants/ Measure Units	Number of 2013 Program participants/ Measure Units	Participants Assumptions	
1	DLC-CAC	Demand	Res	270	1,745	1,004	0	Res*Sat*Survey
2	DLC-Pool Pumps	Demand	Res	14	93	36	0	Res*Sat*Survey
3	DLC-Pool Pumps	Demand	Res	1	27	36	0	Res*Sat*Survey
4	1-Res Home Audits - CFL 4 - Low Flow 2 Water Heat	1-Res Audits	Res	1,369	6,844	6,844	6,844	Res*Sat*Survey * 93.2%
5	1-Res Home Audits - CFL 4 - Low Flow 2	1-Res Audits	Res	25	125	125	125	Res*Sat*Survey
6	Schools Children Education-No Savings	1-Res Audits	Res	679	1,358	1,358	1,358	Estimate of Activity * 93.2%
7	Refrigerator/Freezer recycling	2-RES App Turn-In	Res	384	1,922	1,922	1,922	Res*Sat*Survey * 93.2%
8	Room Air Conditioners	2-RES App Turn-In	Res	42	212	212	212	Budgetary Limits
9	ASHP - SEER 15	3-RES EE HVAC	Res	27	133	133	133	10% of CAC
10	CAC - SEER 16	3-RES EE HVAC	Res	266	1,332	1,332	1,332	Res*Sat*Survey - Minus 10%
11	CAC - Maintenance	3-RES EE HVAC	Res	419	2,093	2,093	2,093	Res*Sat*Survey
12	Furnace Fans	3-RES EE HVAC	Res	8	42	42	42	Budgetary Limits
13	EE Ground Source Heat Pump	4-Res-EE P	Res	0	5	5	5	Budgetary Limits
14	Solar Water Heating	4-Res-EE P	Res	0	5	5	5	Budgetary Limits
15	HP Water Heater	4-Res-EE P	Res	0	10	10	10	Budgetary Limits
16	EE Water Heater	4-Res-EE P	Res	358	1,792	1,792	1,792	Res*Sat*Survey
17	Programmable Thermostat_Heat	4-Res-EE P	Res	580	2,901	2,901	2,901	Res*Sat*Survey * 93.2%
18	Programmable Thermostat_CAC	4-Res-EE P	Res	88	439	439	439	Res*Sat*Survey
19	CFL bulbs regular-15 -Free No Water Heat	1-Res Audits	Res	1,109	5,543	5,543	5,543	Res*Sat*Survey * 93.2%
	CFL bulbs regular-15 -Free No Water Heat Mailed At							
20	Request	4-Res-EE P	Res	1,123	5,613	5,613	5,613	Res*Sat*Survey * 93.2%
21	CFL bulbs regular - Outside - 15 - Store Rebates	4-Res-EE P	Res	1,970	9,852	9,852	9,852	Res*Sat*Survey * 93.2%
22	CFL bulbs regular - 19 - Store Rebates	4-Res-EE P	Res	11,313	56,563	56,563	56,563	Res*Sat*Survey * 93.2%
	Clothes Washer Energy Star, Electric Water heater,							
23	Electric Dryer	4-Res-EE P	Res	50	250	250	250	Budgetary Limits
24	Dehumidifier	4-Res-EE P	Res	50	250	250	250	Budgetary Limits
25	Freezers Energy Star-Chest Freezer	4-Res-EE P	Res	50	250	250	250	Budgetary Limits
26	Holiday Light	4-Res-EE P	Res	145	727	727	727	Res*Sat*Survey
27	LED Night Light	4-Res-EE P	Res	679	1,358	1,358	1,358	Free to School Audits * 93.2%
28	Pump and Motor Single Speed	4-Res-EE P	Res	81	404	404	404	Res*Sat*Survey
29	Refrigerators-Freezers Energy Star - Side by Side	4-Res-EE P	Res	50	250	250	250	Budgetary Limits
30	Refrigerators-Freezers Energy Star - Top Freezer	4-Res-EE P	Res	50	250	250	250	Budgetary Limits
31	Room Air Conditioners	4-Res-EE P	Res	469	1,877	1,877	1,877	Res*Sat*Survey
32	Smart Strip plug outlet	4-Res-EE P	Res	709	3,545	3,545	3,545	(Res*Sat*Survey)*25%
33	Torchiere Floor Lamps	4-Res-EE P	Res	100	500	500	500	Budgetary Limits
34	Residential New Construction - 15%	5-RES New Con	Res	83	458	458	0	Budgetary Limits
35	Residential New Construction - 30%	5-RES New Con	Res	83	458	458	0	Budgetary Limits
36	Ceiling Fans	6-Res Whole	Res	15	30	30	30	Budgetary Limits
37	Estar Windows	6-Res Whole	Res	15	30	30	30	Budgetary Limits
38	Duct sealing 20 leakage base	6-Res Whole	Res	25	50	50	50	Budgetary Limits
39	Low Flow Showerheads	6-Res Whole	Res	100	200	200	200	Budgetary Limits
40	Kitchen Aerator	6-Res Whole	Res	100	200	200	200	Budgetary Limits
41	Bathroom Aerator	6-Res Whole	Res	100	200	200	200	Budgetary Limits
42	Pipe Wrap	6-Res Whole	Res	30	60	60	60	Budgetary Limits
43	Roof Insulation	6-Res Whole	Res	15	30	30	30	Budgetary Limits
44	Whole Building	6-Res Whole	Res	200	400	400	400	Budgetary Limits
45	Low Income Warm Program Through Act129	7-Low Income	L-RES	68	75	75	75	WARM Forecast * 25%
	<u>Low Income Warm Program Through Act129 (Additional)</u>							
46	<u>SmartStrips</u>	<u>7-Low Income</u>		<u>23</u>	<u>25</u>	<u>25</u>	<u>25</u>	<u>WARM Forecast * 25% * 1/3</u>
47	1-Res Home Audits - CFL 4 - Low Flow 2 Water Heat	1-Res Audits LI	L-RES	144	718	718	718	Res*Sat*Survey * 6.8%
48	Schools Children Education-No Savings	1-Res Audits LI	L-RES	71	143	143	143	Estimate of Activity * 6.8%
49	Refrigerator/Freezer recycling	2-RES App Turn-In LI	L-RES	40	202	202	202	Res*Sat*Survey * 6.8%
50	Programmable Thermostat_Heat	1-Res Audits LI	L-RES	61	304	304	304	Res*Sat*Survey * 6.8%

Appendix F

Measure Name	Program	Rate Class	Number of 2010 Program participants/ Measure Units	Number of 2011 Program participants/ Measure Units	Number of 2012 Program participants/ Measure Units	Number of 2013 Program participants/ Measure Units	Participants Assumptions
50 51 CFL bulbs regular-15 -Free No Water Heat	1-Res Audits LI	LI-RES	116	582	582	582	Res*Sat*Survey * 6.8%
CFL bulbs regular-15 -Free No Water Heat Mailed At Request	4-Res-EE P LI	LI-RES	118	589	589	589	Res*Sat*Survey * 6.8%
52 53 CFL bulbs regular - Outside - 15 - Store Rebates	4-Res-EE P LI	LI-RES	207	1,034	1,034	1,034	Res*Sat*Survey * 6.8%
53 54 CFL bulbs regular - 19 - Store Rebates	4-Res-EE P LI	LI-RES	1,188	5,938	5,938	5,938	Res*Sat*Survey * 6.8%
54 55 LED Night Light	1-Res Audits LI	LI-RES	71	143	143	143	Free to School Audits * 6.8%
55 56 Low Income Lighting-Warm Light	7-Low Income	LI-RES	273	665	693	714	WARM Forecast
57 Low Income Lighting-Warm SmartStrip	7-Low Income	LI-RES	90	220	220	226	WARM Forecast * 1/3
56 58 Low Income Lighting-Low Usage	7-Low Income	LI-RES	183	915	915	915	Low Income - Low Usage Count
57 59 Multiple Family - CFL Lighting	8-Multiple Family	Res	105	527	527	527	PAHA Provided
58 60 Multiple Family - T8-Lighting	8-Multiple Family	SM-C&E	105	527	527	527	PAHA Provided
59 61 Commercial, Industrial Audit - Sm&Mt	1-C/I Audits	SM-C&E	50	250	250	250	Budgetary Limits
60 62 Commercial, Industrial Audit - Large	1-C/I Audits	LG-C&E	5	25	75	75	Budgetary Limits
61 63 Commercial CFL Program	1-C/I Audits	SM-C&E	2,877	14,384	14,384	14,384	Comm*Survey
62 64 Commercial, Industrial Audit - Gov Exterior HID replacement above 175W to 250W HID retrofit	1-C/I Audits	Gov	10	20	0	0	Budgetary Limits
63 65 HPT8 4ft 4 lamp, T12 to HPT8	2-Governmental Programs	Gov	5	26	26	0	Base on Fed Sales
64 66 LED Exit Signs Electronic Fixtures (Retrofit Only)	2-Governmental Programs	Gov	221	1,215	1,215	0	Base on Fed Sales
65 67 Occupancy Sensors under 500 W	2-Governmental Programs	Gov	42	229	229	0	Base on Fed Sales
66 68 LED Auto Traffic Signals	2-Governmental Programs	Gov	42	229	229	0	Base on Fed Sales
67 69 LED Pedestrian Signals	2-Governmental Programs	Gov	500	2,750	2,750	0	Intersection Estimate
68 70 Street Lighting - 175 Mercury to 100 HPS	2-Governmental Programs	Gov	125	688	688	0	Intersection Estimate
69 71 Water-Cooled cent Chiller 150 - 300 ton 0.57 kW/ton with 0.46 kW/ton IPLV	2-Governmental Programs	Gov	115	574	574	574	Street Light Count
70 72 Water-Cooled Centrifugal Chiller < 150 ton 0.56 kW/ton with 0.53 kW/ton IPLV	2-Governmental Programs	Gov	0	2	2	0	Fed Large User Counts
71 73 AC <65,000 \$ Ph	3-C/I Equip	SM-C&E	0	2	2	0	Fed Large User Counts
72 74 AC 65,000 - 135,000	3-C/I Equip	SM-C&E	50	250	250	250	Budgetary Limits
73 75 AC 135,000 - 240,000	3-C/I Equip	SM-C&E	25	125	125	125	Budgetary Limits
74 76 AC 240,000 - 760,000 Clothes Washer CEE Tier1, Electric Water heater, Electric Dryer	3-C/I Equip	SM-C&E	25	125	125	125	Budgetary Limits
75 77 Demand-controlled ventilation (DCV)	3-C/I Equip	SM-C&E	35	175	175	175	Budgetary Limits
76 78 Efficient Refrigeration Condenser	3-C/I Equip	SM-C&E	10	50	50	50	Budgetary Limits
77 79 ENERGY STAR Commercial Solid Door Freezers less than 20ft3	3-C/I Equip	SM-C&E	10	50	50	50	Budgetary Limits
78 80 ENERGY STAR Commercial Solid Door Freezers 20 to 48 ft3	3-C/I Equip	SM-C&E	5	25	25	25	Budgetary Limits
79 81 ENERGY STAR Commercial Solid Door Refrigerators less than 20ft3	3-C/I Equip	SM-C&E	5	25	25	25	Budgetary Limits
80 82 ENERGY STAR Commercial Solid Door Refrigerators 20 to 48 ft3	3-C/I Equip	SM-C&E	5	25	25	25	Budgetary Limits
81 83 ENERGY STAR ice Machines less than 500 lbs.	3-C/I Equip	SM-C&E	5	25	25	25	Budgetary Limits
82 84 ENERGY STAR ice Machines 500 to 1000 lbs	3-C/I Equip	SM-C&E	20	100	100	100	Budgetary Limits
83 85 ENERGY STAR ice Machines more than 1000 lbs	3-C/I Equip	SM-C&E	20	100	100	100	Budgetary Limits
84 86 ENERGY STAR Steam Cookers 3 Pan	3-C/I Equip	SM-C&E	20	100	100	100	Budgetary Limits
85 87 Exterior HID replacement above 175W to 250W HID retrofit	3-C/I Equip	SM-C&E	33	165	165	165	Budgetary Limits
86 88 EE Water Heater (Base Usage 22831)	3-C/I Equip	SM-C&E	60	301	301	301	Comm*Survey
87 89 HP Water Heater (Base Usage 22831)	3-C/I Equip	SM-C&E	82	411	411	411	Comm*Survey Minus 10%
88 90 HPT8 4ft 4 lamp, T12 to HPT8	3-C/I Equip	SM-C&E	25	125	125	125	10% of Water Heating
89 91 LED Exit Signs Electronic Fixtures (Retrofit Only)	3-C/I Equip	SM-C&E	2,843	14,217	14,217	14,217	Comm*Survey*Square Foot Estimate
90 92 Occupancy Sensors under 500 W	3-C/I Equip	SM-C&E	1,527.2	7,636.1	7,636.1	7,636.1	Comm*Survey
91 93	3-C/I Equip	SM-C&E	550	2,752	2,752	2,752	Comm*Survey

Appendix F

Measure Name	Program	Rate Class	Number of 2016 Program participants/ Measure Units	Number of 2011 Program participants/ Measure Units	Number of 2012 Program participants/ Measure Units	Number of 2013 Program participants/ Measure Units	Participants Assumptions
92 94 Plug Load Occupancy Sensors Document Stations	3-C/I Equip	SM-C&I	115	346	346	346	Comm*Survey
92 95 Smart Strip plug outlet	3-C/I Equip	SM-C&I	354	1,772	1,772	1,772	Comm*Survey
94 96 Pre Rinse Sprayers	3-C/I Equip	SM-C&I	35	175	175	175	Budgetary Limits
95 97 Refrigerant charging correction	3-C/I Equip	SM-C&I	501	2,005	2,005	2,005	Comm*Survey
96 98 Refrigeration Commissioning	3-C/I Equip	SM-C&I	15	75	75	75	Budgetary Limits
97 99 Strip curtains for walk-ins - freezer	3-C/I Equip	SM-C&I	15	75	75	75	Budgetary Limits
98 100 Vending Equipment Controller	3-C/I Equip	SM-C&I	25	125	125	125	Budgetary Limits
99 101 Window Film	3-C/I Equip	SM-C&I	25	125	125	125	Budgetary Limits
100 102 Setback/Setup	3-C/I Equip	SM-C&I	15	75	75	75	Budgetary Limits
101 103 Demand-controlled ventilation (DCV) Exterior HID replacement above 175W to 250W HID retrofit	4-C/I Equip	LG-C&I	0	4	4	4	Budgetary Limits
102 104 retrofit	4-C/I Equip	LG-C&I	45	1,075	1,075	1,075	Comm*Survey
103 105 HPT8 4ft 4 lamp, T12 to HPT8	4-C/I Equip	LG-C&I	2,149	10,746	10,746	10,746	Comm*Survey*Square Foot Estimate
104 106 Occupancy Sensors under 500 W Water-Cooled cent Chiller 150 - 300 ton 0.57 kW/ton with 0.46 kW/ton IPLV	4-C/I Equip	LG-C&I	416	2,080	2,080	2,080	Comm*Survey
105 107 Water-Cooled Centrifugal Chiller < 150 ton 0.56 kW/ton with 0.53 kW/ton IPLV	4-C/I Equip	LG-C&I	8	40	40	40	Budgetary Limits
106 108	4-C/I Equip	LG-C&I	5	25	25	25	Budgetary Limits
107 109 Window Film	4-C/I Equip	LG-C&I	5	25	25	25	Budgetary Limits
108 110 Motors 1 HP 1200	5-IND MOTOR	LG-C&I	25	125	125	125	Using NJ Experience for Motor Program
109 111 Motors 5 HP 1200	5-IND MOTOR	LG-C&I	15	75	75	75	Using NJ Experience for Motor Program
110 112 Motors 10 HP 1200	5-IND MOTOR	LG-C&I	10	50	50	50	Using NJ Experience for Motor Program
111 113 Motors 20 HP 1200	5-IND MOTOR	LG-C&I	5	25	25	25	Using NJ Experience for Motor Program
112 114 Motors 1 HP 3600	5-IND MOTOR	LG-C&I	25	125	125	125	Using NJ Experience for Motor Program
113 115 Motors 5 HP 3600	5-IND MOTOR	LG-C&I	15	75	75	75	Using NJ Experience for Motor Program
114 116 Motors 10 HP 3600	5-IND MOTOR	LG-C&I	10	50	50	50	Using NJ Experience for Motor Program
115 117 Motors 20 HP 3600	5-IND MOTOR	LG-C&I	5	25	25	25	Using NJ Experience for Motor Program
116 118 Water Pumps with VFD's	5-IND MOTOR	LG-C&I	2	10	10	10	Using NJ Experience for Motor Program
117 119 HVAC Fans with VFD's	5-IND MOTOR	LG-C&I	2	10	10	10	Using NJ Experience for Motor Program
118 120 Air Compressors with VFD's	5-IND MOTOR	LG-C&I	2	10	10	10	Using NJ Experience for Motor Program
119 121 Water Pumps with VFD's	5-IND MOTOR	LG-C&I	2	10	10	10	Using NJ Experience for Motor Program
120 122 HVAC Fans with VFD's	5-IND MOTOR	LG-C&I	2	10	10	10	Using NJ Experience for Motor Program
121 123 Air Compressors with VFD's	5-IND MOTOR	LG-C&I	2	10	10	10	Using NJ Experience for Motor Program
122 124 Water Pumps with VFD's	5-IND MOTOR	LG-C&I	2	10	10	10	Using NJ Experience for Motor Program
123 125 HVAC Fans with VFD's	5-IND MOTOR	LG-C&I	2	10	10	10	Using NJ Experience for Motor Program
124 126 Air Compressors with VFD's	5-IND MOTOR	LG-C&I	2	10	10	10	Using NJ Experience for Motor Program

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Joint Petition for Consolidation of	:	
Proceedings and Approval of Energy	:	Docket Nos. M-2009-2092222
Efficiency and Conservation Plans of	:	M-2009-2112952
Metropolitan Edison Company,	:	M-2009-2112956
Pennsylvania Electric Company and	:	
Pennsylvania Power Company	:	

CERTIFICATE OF SERVICE

I hereby certify that I have this day served a true and correct copy of the foregoing document upon the individuals listed below, in accordance with the requirements of 52 Pa. Code § 1.54 (relating to service by a participant).

Service by overnight Federal Express, as follows:

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Pennsylvania Public Utility Commission
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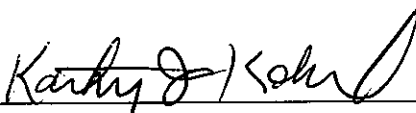
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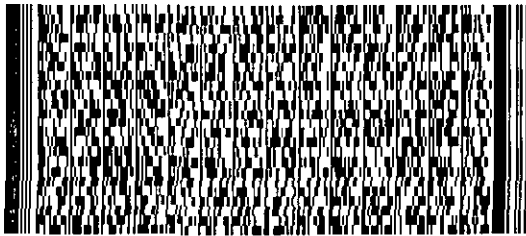
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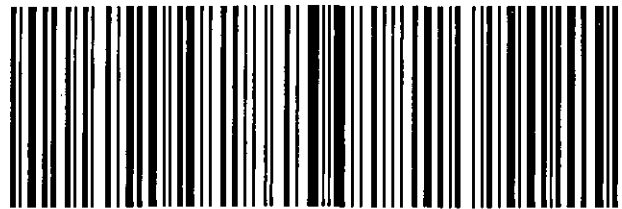


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