

Kathy J. Kolich Senior Corporate Counsel 330-384-4580 Fax: 330-384-3875

November 22, 2013

Rosemary Chiavetta, Secretary Pennsylvania Public Utility Commission Commonwealth Keystone Building 400 North Street, 2<sup>nd</sup> Floor Harrisburg, PA 17120 RECEIVED

NOV 2 2 2013

PA PUBLIC UTILITY COMMISSION SECRETARY'S BUREAU

Request for Expedited Approval of Proposed Minor EE&C Plan Changes Pursuant to the June 10, 2011 Final Order in Docket No. M-2008-2069887

Metropolitan Edison Company Docket No. M-2012-2334387 Pennsylvania Electric Company Docket No. M-2012-2334392 Pennsylvania Power Company Docket No. M-2012-2334395 West Penn Power Company Docket No. M-2012-2334398

Dear Secretary Chiavetta:

Enclosed are four (4) originals (one for each docket) of the Petition for Expedited Approval of Proposed Minor Changes to the Energy Efficiency and Conservation Plans (and related exhibits) of each of the FirstEnergy Pennsylvania Utilities (Metropolitan Edison Company, Pennsylvania Electric Company, Pennsylvania Power Company and West Penn Power Company). Also enclosed is one (1) extra copy of each of the Companies' respective petitions (without exhibits).

Please date stamp the additional copy of these Petitions and return them to me in the enclosed, postage-prepaid envelope. Should you have any questions regarding this matter, please do not hesitate to contact me.

Very truly yours,

Karty & Kolin

kag

Enclosures

cc: Parties of record

### BEFORE THE PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Power Company's Request for Expedited Approval of Proposed Minor Act 129 EE&C Plan Changes Pursuant to the June 10, 2011 Final Order in Docket No. M-2008-2069887

Docket No. M-2012-2334395

RECEIVED

NOV 2 2 2013

PA PUBLIC UTILITY COMMISSION SECRETARY'S BUREAU

PENNSYLVANIA POWER COMPANY'S REQUEST FOR EXPEDITED APPROVAL OF PROPOSED MINOR EE&C PLAN CHANGES PURSUANT TO THE JUNE 10, 2011 FINAL ORDER IN DOCKET NO. M-2008-2069887

John F. Povilaitis (Attorney No. 28944) Buchanan, Ingersoll & Rooney, P.C. 409 Second Street, Suite 500 Harrisburg, PA 17101-1357 Direct Dial: (717) 237-4825

Email: John.Povilaitis@bipc.com

Kathy J. Kolich (Attorney No. 92203) FirstEnergy Service Company 76 South Main Street Akron, OH 44309 Direct Dial: (330) 384-4580

Email: kjkolich@firstenergycorp.com

Lauren M. Lepkoski (Attorney No. 94800) FirstEnergy Service Company 2800 Pottsville Pike P.O. Box 16001 Reading, PA 19612-6001

Direct Dial: (610) 921-6203

Email: llepkoski@firstenergycorp.com

Counsel for:

Pennsylvania Power Company

Dated: November 22, 2013

#### Introduction

Pursuant to the June 10, 2011 Opinion and Order of the Pennsylvania Public Utility Commission ("Commission"), entered in *Energy Efficiency and Conservation Program*, Docket No. M-2008-2069887 ("June 10 Order"), Pennsylvania Power Company ("Penn Power" or "Company") hereby requests expedited approval of its proposed minor changes to certain residential and government programs included in its Act 129 Phase II Energy Efficiency and Conservation ("EE&C") Plan, which was approved on March 14, 2013 in Docket No. M-2012-2334395. Specifically, through this request, Penn Power is proposing to shift to its Low Income Program budgeted funds of \$126,253, a portion of which will come from both the Company's Residential Home Performance Program ("RHP") and its Residential Energy Efficient Products Program ("EEP"). Penn Power is also proposing to add a measure to its Government and Institutional Program.

A redline/revised version of the relevant portions of Penn Power's currently approved EE&C Plan, including the appropriate tables and appendices, that illustrates the aforementioned changes is attached as Exhibit A. The Company is also posting, concurrent with this filing, a complete redlined version of its proposed plan on its website for public inspection.

As explained below, the proposed minor changes qualify for expedited approval as outlined in the June 10 Order. Accordingly, Penn Power respectfully requests that the Commission Staff approve the proposed minor changes described herein consistent with the timelines set forth in the Commission's June 10 Order.

In support of its proposed changes, Penn Power offers the following:

#### BACKGROUND

#### A. Procedural History

- 1. On November 13, 2012, Penn Power, along with its sister utilities, Metropolitan Edison Company, Pennsylvania Electric Company and West Penn Power Company (collectively, "Companies) each filed their respective Phase II EE&C Plans.
- 2. On January 17, 2013 an evidentiary hearing was held before the Administrative Law Judge. At the hearing, the pre-filed testimony and exhibits of all parties were admitted into evidence. In addition, the Companies entered into two stipulations, one with Comverge, Inc. ("Comverge"); the other, with Met-Ed Industrial Users Group, Penelec Industrial Customer Alliance, Penn Power Users Group and West Penn Industrial Intervenors. Both stipulations were entered into the record. The Companies also reached a settlement with the Office of Consumer Advocate, The Coalition for Affordable Utility Services and Energy Efficiency in Pennsylvania, The Community Action Association of Pennsylvania and Comverge. The terms of the settlement were entered into the record during the evidentiary hearing as "FirstEnergy Term Sheet." During the hearing, the Companies submitted oral rebuttal testimony in support of the terms included in the FirstEnergy Term Sheet and on January 28, 2013, the terms were memorialized in a Joint Petition for Full Settlement of Non-Reserved Issues ("Settlement"), which was filed with the Commission and either supported or unopposed by all parties.<sup>1</sup>
- 3. One of the provisions of the Settlement provides that:

The Companies will revise its Low Income Programs to target increased energy savings by at least 10% over the plan targets as currently proposed for low income programs. To the extent that additional funding is required to support the targeted increase in energy savings, the Companies will shift up to \$1 million in funds currently included in the general residential programs to specific low income programs, with the understanding that within 60 days of the Companies' EE&C plans being approved, the Companies will meet with Signatory Parties who are interested in low income programs to discuss the results of its evaluation to increase the energy savings achieved through the dedicated low income programs and any requirement that additional funds should be allocated to its low income programs. ... [Settlement, para. 7].

- 4. On March 14, 2013, the Commission entered an Opinion and Order, approving the Settlement and generally approving each of the Companies' respective EE&C Plans, with minor exceptions ("March 14, 2013 Order").
- 5. In compliance with the Settlement, the Companies met with interested parties to discuss opportunities identified to increase the energy savings targeted through the Companies' specific low income programs and the programs that would allow for the shifting of budget dollars to each of the Companies' respective low income programs, without adversely affecting projected plan savings or overall budgets within the residential class. The results of these meetings are being proposed through this Petition.
- 6. Further, and independent of the Settlement, Penn Power desires to add an additional measure to its Government and Institutional Program that will encourage customers from this sector to retrofit or install more efficient specialized processes, equipment and applications.

<sup>&</sup>lt;sup>1</sup> As a result of the Settlement and related stipulations, the only issues that were challenged during the evidentiary hearing were those raised by UGI Utilities, Inc. - Gas Division, UGI Penn Natural Gas, Inc., and UGI Central Penn Gas, Inc. (collectively, "UGI"), which involved fuel switching.

7. Based upon the foregoing, the Company submits this Petition for approval by the Staff, pursuant to the Commission's June 10 Order.

#### B. June 10 Order

- 8. The June 10 Order provides for an alternative process for Commission review of minor changes to EE&C Plans. Under this process, Electric Distribution Companies ("EDCs") file the proposed changes with the Commission. Interested parties have 15 days to comment on the filing, with any reply comments due 10 days thereafter. Within 35 days after filing the proposed minor changes, the Commission Staff must issue a Secretarial Letter approving or disapproving some or all of the proposed changes and may also refer some or all of the proposed changes to the Office of Administrative Law Judge.
- 9. The June 10 Order requires Penn Power to file sufficient documentation to support the proposed minor EE&C Plan changes, and to include the affected pages of the plan, a redlined version of the affected pages and an explanation of how the proposed minor changes affect the previously approved plan. In addition, the Commission requires an EDC, upon the filing of its petition for minor changes, to post a complete redlined version of its EE&C Plan (with proposed modifications) on its website for public inspection.
- 10. The June 10 Order allows the following to be approved through the expedited process:
  - The elimination of a measure that is underperforming, no longer viable for reasons of cost-effectiveness, savings or market penetration or has met its approved budgeted funding, participation level or amount of savings;

- The transfer of funds from one measure or program to another measure or program within the same customer class; and
- Adding a measure or changing the conditions of a measure, such as its
  eligibility requirements, technical description, rebate structure or amount,
  projected savings, estimated incremental costs, projected number of
  participants, or other conditions so long the change does not increase the
  overall costs to that customer class.
- 11. The proposed minor changes to Penn Power's EE&C Plan fall within the aforementioned categories because they involve (i) the transfer of funds from one program to another program within the same customer class, (the Residential Customer Class); and (ii) the adding of a measure to the Government & Institutional Program with no increase in the overall cost to the government/educational/non-profit sector.

#### SPECIFIC CHANGES AND EXPLANATIONS FOR CHANGES

- 12. As previously explained, one of the provisions of the Settlement requires the Company "to revise its Low Income Programs to target increasing the energy savings by at least 10% over the plan targets as currently proposed for low income programs ...", provided that such a change does not adversely affect the Company's ability to achieve its statutory targets within the 2% spending cap.
- Penn Power gained significant experience in the implementation of its Phase I and Phase II EE&C Plans. In order to comply with the condition of the Settlement mentioned above, the Company, in collaboration with interested parties, identified additional opportunities to achieve additional energy savings through its direct low income programs. To pursue the additional opportunities, Penn Power proposes to increase the budget for the Residential Low Income Program by \$126,253 and use these funds to (i) serve additional lower cost water heat and

baseload homes; (ii) add additional low cost measures; (iii) increase energy efficiency kits targeted to low energy-use homes, and (iv) target low income customers for the installation of heat pump water heaters. Penn Power also proposes to provide customized Energy Usage Reports to identified low income customers in an effort to achieve additional savings with little or no effort, and to promote other potential energy savings measures and programs. The Company projects that all of these changes will generate approximately 472 MWh in savings.

- 14. To support the increase in budget for the Residential Low Income Program, Penn Power proposes to decrease the budgets for the Residential Home Performance Program and the Residential Energy Efficient Products Program by \$119,081 and \$21,552, respectively. These budget reductions are accommodated through a reduction in administration and incentive costs of these programs, which have been revised based upon updated forecasts, and through a slight reduction in the general residential Energy Efficiency Kit and Energy Usage Report measures. These changes are expected to reduce energy savings through the RHP and EEP programs by approximately 375 and 0 MWh, respectively, with such reductions being completely offset by the increase in savings generated through the proposed modifications to the low income programs.
- 15. Penn Power also proposes to add a custom measure to its Government & Institutional Program, with no change to the program projections or budget. This measure is currently available under the Company's Commercial/Industrial small and large sector programs, and encourages customers to retrofit or install more

efficient specialized processes, equipment and applications. Adding this measure to the Government & Institutional Program will not only provide additional opportunities for government/educational/non-profit sector customers to participate in the Company's program, but will also add program implementation flexibility that supports the Company in meeting its program projections.

- 16. These changes will best position Penn Power to increase the energy savings expected to be achieved through its direct low income programs as contemplated in the Settlement, and should support Penn Power in its attempt to achieve its Commission-adopted goal of 4.5% reduction from the low income sector and 10% reduction from the government/educational/non-profit sector.
- 17. The impact of these minor changes are summarized in Exhibit A, which consists of a table showing the proposed program unit, savings and budget changes, and a redline version of the relevant portions of Penn Power's currently approved EE&C Plan, including revised Table 14, and Appendices C, D-2, D-3, D-4 and E.
- 18. These budget changes also have a negligible impact on the cost-effectiveness of the programs as summarized in Exhibit B, which includes a table summarizing the impact on cost-effectiveness of the programs based on the proposed program savings and budget changes, and will have no effect on the remainder of the Company's Phase II EE&C Plan or the residential rate as currently reflected in the Company's Rider EEC-C.<sup>2</sup>
- 19. In accordance with the June 10 Order, the Company posted, concurrent with the filing of this Petition, a redline version of its entire EE&C Plan on its website at:

<sup>&</sup>lt;sup>2</sup> While there is a slight change in the overall projected budget, the difference from that on which the current EEC-C rider is based is insignificant and, will be reconciled during the next rider filing.

https://www.firstenergycorp.com/content/customer/customer\_choice/pennsylvania/pennsylvania\_tariffs.html#CommissionApprovedPlans

WHEREFORE, based upon the foregoing, Penn Power respectfully asks that Staff approve the proposed changes described herein in accordance with the Commission's June 10, 2011 Opinion and Order, entered in Docket No. M-2008-2069887.

Respectfully submitted,

Kathy J. Kolich (Attorney No. 92203)

Karty & Kolink

FirstEnergy Service Company

76 South Main Street Akron, OH 44309

Direct Dial: (330) 384-4580

Email: kjkolich@firstenergycorp.com

Lauren M. Lepkoski (Attorney No. 94800)

FirstEnergy Service Company

2800 Pottsville Pike

P.O. Box 16001

Reading, PA 19612-6001

Direct Dial: (610) 921-6203

Email: llepkoski@firstenergycorp.com

John F. Povilaitis (Attorney No. 28944)

Buchanan, Ingersoll & Rooney, P.C. 409 Second Street, Suite 500

Harrisburg, PA 17101-1357

Direct Dial: (717) 237-4825

Email: John.Povilaitis@bipc.com

Dated: November 22, 2013

RECEIVED

NOV 2 2 2013

PA PUBLIC UTILITY COMMISSION SECRETARY'S BUREAU

# Penn Power Exhibits

Case No. M-2012-2334395

### RECEIVED

NOV 2 2 2013

PA PUBLIC UTILITY COMMISSION SECRETARY'S BUREAU

Penn Power - Exhibit A - Units, Savings and Budget Assessment

TOTAL SHIPSTER		igo tilla isa	-50111000			_			
Program	Approved Plan Units	Proposed Plan Units	Totall Unit Impact	Approved Plan Savings (MWh)	Proposed Plan Savings (MWh)	Total Savings	Approved Plan Budget	Proposed : Plan Budget	Total Budget Umpact
Energy Efficient Products Program	507,270	507,270	0	16,554	16,554	0	\$2,085,240	\$2,063,688	(S21,552)
Home Performance Program	87,630	86,250	(1,380)	24,458	24,083	(375)	\$5,644,982	\$5,525,901	(\$119,081)
Low Income Program	5,174	17,094	11,920	2,067	2,539	472	\$2,973,454	\$3,099,707	\$126,253
Totuls	600,074	610,614	10,540	43,079	43,176	97	\$10,703,676	\$10,689,296	(\$14,380)

#### Notes:

<sup>1.</sup> Plan Units per Appendix D-3

<sup>2.</sup> Plan Savings per Appendix E, Table 7A for EE Products and Home Performance, and Table 16 for Low Income (Includes dedicated Low Income Energy Usage Reports)

<sup>3.</sup> Plan Budget per Appendix E, Table 6A



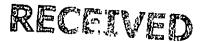
#### Pennsylvania Power Company

#### **Energy Efficiency & Conservation Plan**

(For the Period June 1, 2013 through May 31, 2016)

Proposed Minor EE&C Plan Changes dated November 22February-6, 2013

Docket No. M-2012-2334395



NOV 2 2 2013

PA PUBLIC UTILITY LIU IMMSSION SECRETARY'S BUREAU

#### LIST OF TABLES

Table 1: Existing & New Program Measures	9
Table 2: Program Summary Descriptions	1
Table 3: Program Delivery Channels	12
Table 4: FirstEnergy Energy Savings Targets per Act 129	18
Table 5: FirstEnergy Spending Caps per Act 129	18
Table 6: Program Major End Uses	31
Table 7: Existing & New Residential Program Names & Descriptions	31
Table 8: Proposed Residential Portfolio	32
Table 9: Existing & New Small C/I Programs	5(
Table 10: Proposed Small C/I Portfolio	50
Table 11: Existing & New Large C/I Programs	66
Table 12: Proposed Large C/I Portfolio	66
Table 13: Existing & New Government Programs	78
Table 14: Proposed Government Portfolio	78
Table 15: Residential Low Income Sub-Measures	19
Table 16: Residential Low Income Savings Projection	<u>27</u>
TABLE OF FIGURES	
Figure 1: FirstEnergy EE&C Plan Development Process	14
Figure 2: Gantt Chart of Program Schedule Summary2	21
Figure 3: Model Process Diagram2	9
Figure 4: Sub-Program Implementation Schedule9	4
Figure 5: Organization Chart9	15
Figure 6: High Level Overview of EM&V9	7
Figure 7: Program Feedback Loop Process	8

The total proposed cost of the Phase II Plan is \$20 million as reported in Table 3 in Appendix E. These costs will be recovered through the Company's Rider S, which is summarized in Section 1.8 and is subject to approval by the Commission as part of this Plan. The successful implementation of this Plan is projected to generate Total Discounted Lifetime Benefits of approximately \$30 million, as shown in Table 1 located in Appendix E which results in a score on the Total Resource Cost ("TRC") test of 1.4.5

FirstEnergy has developed a successful strategy for achieving EE&C targets throughout its footprint. This strategy includes the use of outsourced vendors with expertise in program management, program marketing and program tracking and reporting. This network of contractors reports to a core team within the FirstEnergy Energy Efficiency group, which oversees the implementation, tracking and evaluation of programs and measures throughout the period the various EE&C plans are in effect. Programs are monitored for performance against projections and, if needed, adjustments are made to improve performance, including a shift of emphasis from lesser performing programs to those with more success. Rebate levels are routinely reviewed and assessed against market conditions, with modifications to rebate levels made if deemed appropriate after discussing the matter with FirstEnergy's energy efficiency consultants, contractors, vendors and stakeholders. This strategy was put in place during Phase I of Act 129 and has proven to be successful. The Company intends to continue this practice throughout Phase II.

#### 1.1.1 Summary of Proposed Minor Changes (filed November 22, 2013)

Penn Power filed its Phase II EE&C Plan on November 13, 2012. Subsequent to the filing, the parties filed with the Commission a Joint Petition for Full Settlement of Non-Reserved Issues ("Settlement") on January 28, 2013. On March 14, 2013, the Commission entered an Opinion and Order, approving the Settlement and generally approving each of the Companies' respective EE&C Plans, with minor exceptions.

#### One of the provisions of the Settlement provided that:

The Companies will revise its Low Income Programs to target increased energy savings by at least 10% over the plan targets as currently proposed for low income programs. To the extent that additional funding is required to support the targeted increase in energy savings, the Companies will shift up to \$1 million in funds currently included in the general residential programs to specific low income programs, with the understanding that within 60 days of the Companies' EE&C plans being approved, the Companies will meet with Signatory Parties who are interested in low income programs to discuss the results of its evaluation to increase the energy savings achieved through the dedicated low income programs and any requirement that additional funds should be allocated to its low income programs. . . . [Settlement, para, 7].

<sup>&</sup>lt;sup>5</sup> See Section 8.0 for a discussion on the TRC test.

Penn Power gained significant experience in the implementation of its Phase I and Phase II EE&C Plans. In order to comply with the condition of the Settlement mentioned above, the Company, in collaboration with interested parties, identified additional opportunities to achieve additional energy savings through its direct low income programs. To pursue the additional opportunities, Penn Power proposes to increase the budget for the Residential Low Income Program by \$126,253 and use these funds to (i) serve additional lower cost water heat and baseload homes; (ii) add additional low cost measures; (iii) increase energy efficiency kits targeted to low energy-use homes, and (iv) target low income customers for the installation of heat pump water heaters. Penn Power also proposes to provide customized Energy Usage Reports to identified low income customers. The Company projects that these changes will generate approximately 472 MWh in savings.

To support the increase in budget for the Residential Low Income Program, Penn Power proposes to decrease the budgets for the Residential Home Performance Program ("RHP") and the Residential Energy Efficient Products Program ("EEP") by \$119,081 and \$21,552, respectively. These budget reductions are accommodated through a reduction in administration and incentive costs of these programs, based upon updated forecasts, and through a slight reduction in the general residential Energy Efficiency Kit and Energy Usage Report measures. These changes are expected to reduce energy savings through the RHP and EEP programs by approximately 375 and 0 MWh, respectively, with such reductions being completely offset by the increase in savings generated through the proposed modifications to the low income programs.

Penn Power also proposes to add a custom measure to its Government & Institutional Program, with no change to the program projections or budget. This measure is currently available under the Company's Commercial/Industrial small and large sector programs, and encourages customers to retrofit or install more efficient specialized processes, equipment and applications. Adding this measure to the Government & Institutional Program will not only provide additional opportunities for government/educational/non-profit sector customers to participate in the Company's program, but will also add program implementation flexibility that supports the Company in meeting its program projections.

These changes will best position Penn Power to increase the energy savings expected to be achieved through its direct low income programs as contemplated in the Settlement, and should support Penn Power in its attempt to achieve its Commission-adopted goal of 4.5% reduction from the low income sector and 10% reduction from the government/educational/non-profit sector.

The impact of these minor changes are illustrated in revised Table 14, and Appendices C. D-2, D-3, D-4 and E of the Company's Phase II EE&C Plan. These budget changes have a negligible impact on the cost-effectiveness of the programs as illustrated in Appendix E, Tables I and 7, and will have no effect on the remainder of the Company's Phase II EE&C Plan or the residential rate as currently reflected in the Company's Rider EEC-C.

#### 3.5. Governmental/Educational/Non-Profit Sector Programs. 13

The table below compares the program included in the Existing Plan with that included in the Phase II Plan, along with a program description:

Table 13: Existing & New Government Programs

August 2000 Communication of the Communication of t	Government Program	Program Description					
Governmental & Institutional Program	Governmental & Institutional Programs	This program provides financial incentives and support to Governmental & institutional customers for the installation of energy efficient equipment and products.					
Muki-Family-Tanants	Sovething it institutions of Programs						

The table below details each measure that is offered in the programs listed in Table 13 and whether it is an existing or new measure:

**Table 14: Government Portfolio** 

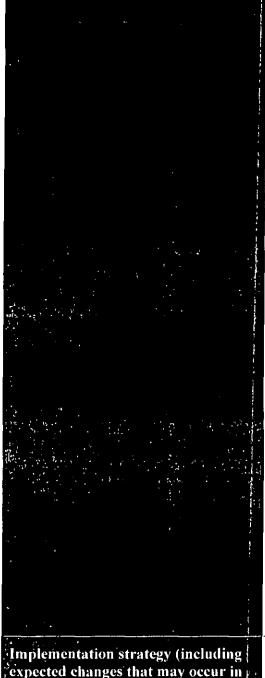
The second of th	} Pro	posed Government Partfolio			
Program	Sub Program .	Measuro	Measure Status		
		LED Traffic Signals	Existing		
1	Outdoor Lighting	Energy Efficient Street & Area Lighting (Tariff / Util Owned)	Existing		
		Energy Efficient Exterior Lighting (Tariff / Cust Owned)	Existing		
1		Energy Efficient Extenor Lighting - Non Profil	Existing		
i		Linear Fluorescent Retrofits (Striding & Non Striding) - Non Profit	Existing		
1	Lighting	Energy Efficient Lighting Products - Non Profit	Existing		
		LED Exil Sign (Retrofit Only) - Non Profit	Existing		
		Lighting Centrals (Occupancy & Daylight) - Non Profit	Existing		
Ι Γ	Audits	Audit - Govi	Existing		
	Addits	Audits w Direct Install Measures - Govi	New		
		Air Candide 2 ng - Non Prost (1)	New		
Governmental & Institutional		Heat Jump - Nor) - roll, 11	New		
		Ground Sour, a [ acceptation ] - { acceptation }	New		
Program	HVAC & Water Heating	PTA CAMPS PROJECT IN CONTROL OF CONTROL	New		
		PTHP - Non Profit	New		
		Room Air Conditioner - Non Profit	Now		
		Efficient Water Heater - Non Profit	Naw		
I		Reingerator Recycling - Non Profit	New		
		Freezer Recycling - Non Profit	New		
l .	Appliances	Room Air Conditioner Recycling - Non Profit	New		
1	Appliances	Refrigerator - Non Protit	New		
1		Freezer - Non Profit	New		
		EE Office Equipment - Non Profit	New		
	Multi Family	Audit - Multifamily - Govi	Existing		
	muu ramely	Energy Efficiency Measures - Multifamily - Gov	Existing		

<sup>&</sup>lt;sup>13</sup> Additional measures may be incorporated, as appropriate, as new measures are approved for inclusion in the TRM.

73.7	ž.	Proposed Government Portfolio	
Program	Sub Program	Measure	Measure Status
		LEO Traffic Signals	Existing
	Outdoor Lighting	Energy Efficient Street & Area Lighting (Tanff / Util Owned)	Existing
		Energy Efficient Extenor Lighting (Tanfi / Cust Owned)	Existing
		Energy Efficient Extenor Lighting - Non Profit	Existing
		Linear Fluorescent Retrofits (Stndrd & Non Stndrd) - Non Profit	Existing
	Lighting	Energy Efficient Lighting Products - Non Profit	Existing
ſ		LED Exit Sign (Retrofit Only) - Non Profit	Existing
		Lighting Controls (Occupancy & Daylight) - Non Profit	Existing
	Audita	Audit - Govi	Existing
	Addida	Audits w/ Direct Install Measures - Govt	Now
		Air Conditioning - Non Profit	New
		Heat Pump - Non Profit	New
Governmental & Institutional	HVAC & Water Heating	Ground Source Heat Pump - Non Profit	New
Program		PTAC - Non Profit	New
		PTHP - Non Profit	New
		Room Air Conditioner - Non Profit	New
		Efficient Water Healer - Non Profit	New
_		Refrigerator Recycling - Non Profit	New
<u>†</u>		Freezer Recycling - Non Profit	New
	Appliances	Room Air Conditioner Recycling - Non Profit	New
	Appliances	Refrigerator - Non Profit	New
		Freezer - Non Profit	New
		EE Office Equipment - Non Profit	New
<u> </u>	Maid Paulie	Audit - Multifamily - Govi	Existing
	Multi Family	Energy Efficiency Measures - Multifamily - Govi	Existing
	Custom	Custom - Non Profit	New

Below are the program descriptions for the Government sector included in the Phase II Plan:

#### Program Title and Program years Government & Institutional Program during which program will be June 2013 - May 2016 implemented Objective(s) This is an expansion of the existing Governmental & Institutional Programs and Multi-Family-Tenants Program with the addition of new measures as indicated in the overview of Section 3.5, Table 14. In addition, the consolidated program is broken into the following sub-programs: Outdoor Lighting **HVAC & Water Heating** Appliances Lighting Audits Multi Family Custom The primary objective of the program is to accelerate the adoption and increase the market share of high efficiency equipment among government and institutional customers by reducing the first cost of high efficiency equipment thereby encouraging the adoption of high efficient equipment in lieu of standard equipment at the end of the useful life of measures, or as early replacement. The ultimate goal is influencing future customer behavior toward energy efficiency measures and practices. This program will provide financial support through incentives to the government and institutional customer who implements qualifying high efficiency measures, recycles inefficient appliances or retrofit specialized processes and applications to higher efficiency processes and applications. Prescriptive and performance incentives are intended to reduce customer's capital investment for qualifying high efficiency equipment. Relevant metrics are provided in Appendices D-E. Commercial, industrial, and municipal customers of the **Farget market** Company meeting the Government and Institutional definitions under Act 129 with buildings or equipment in the Company's Pennsylvania service territory. Specifically the HVAC & Water Heating, Appliances, Lighting, Audits, and Multi Family Sub Programs target Non Profit customers on the Company's Non Profit rate schedule(s). Additionally the Outdoor Lighting Sub



family C&I customers with federal financing toward the Government Goal in the program.

Energy Efficiency Measures - Multifamily - Govt measure within the Government & Institutional Program will include a variety of items meant to introduce customer segments to energy efficient technologies that can be easily installed in the home, and serve as a gateway for broader home efficiency education. Provided items may include, but not limited to: Educational Materials, CFLs, Smart Strips, Faucet Aerators, Low Flow Shower Heads, Furnace Whistles, etc. Provided items and targeted segments are subject to change during the course of this Plan, and may initially include:

#### Efficiency Measures - Standard

Provides non-electric water heating energy efficiency measures to non-electric water heating customers.

#### Efficiency Measures - All Electric

Provides electric water heating energy efficiency measures to electric water heating customers.

#### Custom

Custom measures within the Government & Institutional Program are intended to encourage customers to retrofit to or install more efficient specialized processes, equipment, and applications in an effort to reduce both energy consumption and demand. Calculated or performance based and prescriptive incentives will be provided to customers based upon an analysis of potential energy savings on a case by case basis for upgrading less efficient specialized processes, equipment and applications (e.g. variable frequency drives, food service equipment, HVAC, process change, etc.) to high efficiency specialized processes, equipment and applications. Custom measures must be installed and operational during the term of this Plan and program.

The Company through a competitive bidding process intends to contract with a qualified Vendor on a performance basis to insure creativity and motivation toward obtaining participation and meeting the goal. The Vendor will conduct the marketing and rebate fulfillment aspects of this program. The Company expects implementation will be traditional and will attempt to align with the PA Companies for consistency across the state. Additionally providing target marketing to specific customer

sectors to insure awareness in the program and enhance participation. Intra Company resources will be utilized to

different program years)

#### 9. Plan Compliance Information and Other Key Issues

- 9.1. Plan Compliance Issues. 14
- 9.1.1. Describe how the plan provides a variety of energy efficiency and conservation measures and will provide the measures equitably to all classes of customers in accordance with the August 2, 2012 Implementation Order.

The Plan addresses all customer sectors with a variety of programs that offer a range of services from passive education (on-line audits) through direct installation of measures (Home Performance Audits, Low-Income Comprehensive weatherization services) and helps overcome first cost barriers through incentives to customers and trade allies. Table 2 in Section 1 presents a summary description of the programs by sector and detailed descriptions are provided in Section 3. Appendix D provides a listing of measures to all classes of customers.

9.1.2. Provide a statement delineating the manner in which the EE&C plan will achieve the requirements of the program under 66 Pa. C.S. §§ 2806.1(c).

The Phase II Plan has been developed to incorporate a comprehensive set of programs that, based on known conditions, will enable the Company to achieve the goals established under Act 129 for energy reductions, all achieved within the spending caps. See Table 2 in Appendix E for the projected energy reductions by each year and in total for the Phase II Plan.

9.1.3. Provide a statement delineating the manner in which the EE&C plan will achieve the Low-Income requirements prescribed in the August 2, 2012 Implementation Order.

There are two low-income targets under the Implementation Order. The first is to obtain a minimum of four-and-a-half percent (4.5%) of its consumption reduction requirements from the low-income sector. The Phase II Plan is designed to achieve that requirement through the combination of direct low-income customer participation in the Low-Income program, dedicated program components directly targeted to low-income customers and the proportion of low-income customer participation in the residential sector programs as assessed through tracking and surveys.

The second requirement is that each EE&C Plan include specific energy efficiency measures for households at or below 150% of the federal poverty income guidelines ("FPIG"), in proportion to that sector's share of the total energy usage in the EDC's service territory.<sup>15</sup>

<sup>&</sup>lt;sup>14</sup> These sub-sections may reference other chapters of the plan as they may restate what was included elsewhere in the plan, and are collected here only for convenience of review.

<sup>15 2012</sup> Implementation Order at 53.

This requirement is achieved by including measures that number at least proportional to low-income sector energy usage in the program targeted directly to low-income customers.<sup>16</sup>

The Low Income program includes the following services that are targeted directly to low-income customers:

- WARM Plus Component (Comprehensive weatherization services)
- WARM Extra Measures (Extra measures provided directly to customers participating in the Company's LIURP or WARM Plus programs.)
- Low Income Low Use Program (Energy Efficiency Measures provided to customers through direct mail kits or other channels)
- Primarily in Multi-Family Units (Appliance Replacement)
- Audit Multi Family, including installation of basic energy efficiency measures

The Company also will directly target customized Energy Usage Reports to identified low-income customers, with specific education, energy savings recommendations and marketing for this sector.

In accordance with the 2012 Implementation Order, the Company will complete a survey of customers participating in its residential sector programs in order to inform the savings associated with low-income customers in these programs. In the Phase II Plan the Company conservatively assumed an 11% participation level across the residential sector measures that have a limited incremental cost.

In addition to achieving 4.5% of total plan savings from the Low-Income sector, the Phase II Plan also meets the requirement for the Company to offer a proportionate number of measures to Low-Income customers. Table 15 below lists 42 measures that are provided directly at no cost to Low Income customers through the Phase II Plan. The measures listed in Tables 7, 9, 11 and 13 include a total of 72 additional non-low-income measures (without double counting measures offered in multiple sectors) resulting in a total of 113 measures, of which low-income represents 36%, significantly greater than the target percentages (all under 11%).

Phase 2 Low-Income Target Proportions by EDC

EDC	Percent 2011 kWh Usage Low-Income Households vs. Total Consumption
Duquesne	8.402%
PECO	8.799%
PPL	9.950%
Met-Ed	8.787%
Penelec	10.231%
Penn Power	10.639%
West Penn Power	8.794%

<sup>&</sup>lt;sup>16</sup> Targets provided in an October 10, 2012 memo from the SWE follow:

Table 15: Residential Low Income Sub-Measures

Dedicated to Low-Income Customers
AC/Heating System Filter Replacement and Tune-Up
Air Sealing
Appliance Timers
Central Air Conditioner
CFL Torchiere Floor Lamp
CFLs
Clothes Line Installation
Clothes Washer
Dehumidifier
Door Repair or Replacement
Duct Insulation
Duct Sealing
Electric Baseboard Heater Replacement
Electric Clothes Dryer
Electric Dryer Venting Repair or Replacement
Electric Furnace
Electric Heat Pump
Energy Education
Exhaust Fan Repair and Replacement
Faucet Aerator
Freezer Replacement
Furnace Whistle
Gravity Film Exchange (Drain Water Heat Recovery System)
Health and Safety Measures
Heated Waterbed Mattress Replacement
Insulation (attic, wall, floor, band joist, basement, crawl space)
LED Nightlight
Low Flow Shower Head
Plumbing and Electrical Repairs
Reflective Roof Coating
Reflective Window Tint
Refrigerator Replacement
Room Air Conditioner Cover
Room Air Conditioner Replacement
Smart Strip
Storm Windows & Doors
Thermostat Replacement and Repair
Water Heater Pipe Insulation
Water Heater Replacement
Well Pump
Window Quilt
Windows

The table below provides the Company's projections of the savings under the Phase II Plan through direct low-income customer participation in the Low-Income program, dedicated Energy Usage Reports directly targeted to identified low-income customers and the

proportion of low-income customer participation in the residential sector programs as assessed through tracking and surveys.

Table 16: Residential Low Income Savings Projection

Cumulative MWh Projections	Penn Power
Low Income Human Services & Home Performance	2,225
Low Income Dedicated Energy Usage Reports	314
Low Income Programs Sub-Total	2,539
Low Income participation in Residential Programs	2,269
Total	4,808
4.5% Target	4,298

9.1.4. Provide a statement delineating the manner in which the EE&C plan will achieve the Government/Educational/Non-Profit requirements prescribed in the August 2, 2012 Implementation Order.

While all non-residential buildings are eligible for the prescriptive and custom energy efficiency programs through the Commercial/Industrial Small and Large sector programs, special efforts are targeted at these subdivisions of the government sector in recognition of their unique decision-making and financing processes for making capital improvements to facilities. This Plan will achieve Government/Non-Profit requirements through the combination of program services targeted for federal government facilities, local government facilities, non-profits and schools through the Government Program and the services provided to Government/Non-Profit customers under the Commercial/Industrial Small and Large sector programs. The Company's programs will leverage existing Company Area Manager relationships and vendors who will specifically provide support to governmental accounts to get projects completed. Government programs are described in Section 3.5

9.1.5. Describe how an EDC will ensure that no more than two percent of funds available to implement the plan shall be allocated for experimental equipment or devices.

The Phase II Plan focuses on encouraging the accelerated adoption of commercially available technologies for achieving the energy efficiency. See Appendix D for the measures included in the Phase II Plan. No program or services are specifically devoted to encouraging experimental equipment or devices.

9.1.6. Describe how the plan will be competitively neutral to all distribution customers even if they are receiving supply from an EGS.

All programs are available to customers who receive distribution service from the Company regardless of shopping status, and will be offered on a non-discriminatory basis. Likewise,

## Appendix C: Program Costs and Savings by Program Year

PA PUBLIC UTILITY COMMISSION SECRETARY'S BUREAU

Appendix C: Program costs and savings by program year o Program Year is June 1 - May 31

	A15 145			. •	Penn Power	Marie & Carlo						. 5.
		7.7		_	Direct Costs				Administrative	Costs		· · · · · · · · · · · · · · · · · · ·
	get en en lange Sk		2013 Program	2013			Total 2013	19	2013 Tracking 8		Total 2013 Administrative	
Sector	· Program	Sub Program	Administration	Marketing		2013 Incentives	Direct Costs	2013 Labor	Reporting	2013 Other	Costs	2013 Total Costs
Respectat	Appliance Turn-In Program	Appliance Turn-In	j \$185.424	\$66,750	\$14 089	\$108 875)	\$375 135	\$10 137	\$5 258	\$1,505	517 010	5392 148
	Energy Efficient Products Program	Appuances	\$25,727	\$409	\$308	\$117,415	\$144,859	\$107	\$55	\$17	5180	\$145,039
		Consumer Electronics	\$10,000	\$0	\$164	\$19,300	\$29,454	S57	530	\$9	\$96	\$29,560
	1	HVAC & Water Heating	\$50,373	\$9,903	\$148	\$129,440	\$189,864	\$51	\$27	<b>\$</b> 8]	\$86	\$189,950
		Lightung	\$92,430		\$27 085	\$165 500	\$320,903	\$9,433	\$4,902	\$1,493	\$15 828	\$336,731
	Home Performance Program	Audits	\$79,504	\$9,467	\$875	\$103,500	\$193,446	\$988	\$513	\$156	\$1,657	\$195,100
		Behavioral	\$516,926	\$0	522,582	\$0	\$\$39,508	\$25,502	\$13,252	\$4,037	542,791	\$582.299
	1	Kits	\$139,595	\$44,027	\$8,130	\$783,000	\$974,853		\$4,771	\$1 453	\$15,406	\$990,258
	<u> </u>	New Homes	\$74 657	\$4 <u>.620</u>	\$126	\$168,750	\$248.353	\$142	\$74	523	\$239	\$248 592
Residential Low-income	Low Income Program	Home Performance	\$39,199	\$1,115	520	\$0	\$40 334	\$22	\$12	54	\$37	\$40,371
	<u> </u>	Human Services	\$935 270	\$23.622	\$41,500	\$0	\$1,000,392	\$70,500	\$19 792	\$87 529	\$177,821	\$1,178 213
Small C&I	C&I Energy Efficient Equipment Program - Small	Appliances	\$55,314	\$10,838	\$3,524	589 407	\$159 064	3,647	\$1.895	\$577	\$5,119	\$165,202
		Custom Equipment	\$291,109	\$99	\$94	\$87,250	\$378,5	\$97	\$50	\$15	\$163	\$378,714
	•	Food Service	\$1,372	\$535	\$507	5238, 133	\$240,5	<b>V</b>	\$273	\$83	\$881	\$241,427
	i	HVAC & Water Heating	\$1,094	\$426	\$404	\$52,076	\$54,0	Tie.	\$217	\$66	\$702	\$54,703
ļ		Lighting	529 220		\$10,804	\$130 134	\$181,55		\$5 809	\$1 770	\$18 758	\$200 308
	C&I Energy Efficient Buildings Program • Small	Audis	\$21,135	\$5,892	\$221	\$86,655	903	436	<b>\$4</b> \$	\$14	\$145	\$114 048
		Custom Suikings	\$31,668	\$15,150	\$155	\$29 260		550	\$31	\$10	\$101	\$76,345
		Kirts	\$42,835	\$18,089	\$14,946	\$62,100	\$13,000	\$5,827	\$3,028	\$922	\$9,777	\$147,747
	<u> </u>	New Buildings	\$5,811	51 083	\$11	\$1,50		\$4	S2	5:	\$7	\$8 419
Large C&I	CAI Energy Efficient Equipment Program - Large	Custom Equipment	\$24,851	58	\$47	\$244,510	219,478	54	\$2	51	\$7	\$269,483
		Lighting	\$20,391	57,949	\$44 403	A52,3 W	135,359	\$3,708	\$1,927	\$587	\$6,222	\$141,281
	<u> </u>	HN/AC	\$124		\$269	64.	\$25,083		512	54	\$38	\$25 121
	C&I Energy Emicient Buildings Program - Large	Audits	\$11,310		\$18 <u>,633</u>	\$54,890	\$50.2	\$1,346	\$700	5213	\$2,259	\$92 506
	<u> </u>	Custom Buildings	\$15 834	\$7,580	\$26 086	916	W 172	\$1 885	\$979	\$298	\$3 162	\$125,579
Government	Governmental & Institutional Program	Appliances	\$839		\$260		12,105	\$82	\$42	\$13	5137	\$2,242
l	1	Audits	\$2,002		3195	3.0	\$60,888	\$61	\$32	S10	\$103	\$60,991
l	1	HVAC & Water Heacing	\$56		7.77	12,5	\$3,127	\$73	\$38	\$12	\$123	\$3,250
		Lighting	\$905		3.3	\$2,20	\$7,272	\$1,194	\$620	\$189	\$2,004	\$9,275
	ł	Outdoor Lighting	\$315		327	▲9,214	\$10,979	\$416	\$216	\$66	5697	\$11,677
L	<u> </u>	Multifamily	\$53 882		<b>33,</b> 926	<b>G</b> 1 900	\$77.110	\$917	\$476	\$145	\$1 539	\$78,648
Grand Total			\$2,760 570	\$285	5 10 5	\$2 22 .079	\$6 211.136	\$157,675	\$65 091	\$101,328	\$324 0941	\$6 535 229

Includes costs for plan development, modeling, employee expenses, and legal tees.

<sup>1.</sup> This table does not reflect the commitments made through the Joint Settlement because further work with enter ested stakeholders is required because further level of the plane will be further reduned committee with Commission requirements for changes to the plan

Appendix C: Program costs and savings by program year o Program Year is June 1 - May 31

5-7					Penn Power							
	and the second of the second	× 4.5			Direct Costs				Administrative	Costs		
			£ .	1 8 8 8 B							Total 2014	
			2014 Program	2014			Total 2014		2014 Tracking &		Administrative	
Sector	Program .	Sub Program	Administration	Marketing	2014 M&V	2014 Incentives	Direct Costs	2014 Labor	Reporting	2014 Other		2014 Total Costs
(carpensal	Appliance Turn-In Program	Appliance Turn-In	5189 503	366 750	\$14 399	5108 875	\$379 5281	\$10 693	\$5 809	\$661	517 163	\$396 691
	Energy Efficient Products Program	Apprances	527,315	\$418	\$315	5117,415	\$145,462	5115	\$62	\$7	5184	\$145,646
		Consumer Electronics	512,264	\$0	\$201	\$21,600	\$34,065	\$73	\$40	35	\$117	\$34,187
	J	HVAC & Water Heating	\$51,481	\$10,121	\$151	\$129,440	\$191,193	\$55	\$30	\$3	\$88	\$191,281
		Lighting	\$54 454	\$36 676	\$27 648	\$165 500	\$3.24 289	\$10 071	\$5,471	\$622	\$16 165	\$340 454
	Home Performance Program	Audits	\$73,604	\$7,059	\$613	\$76,500	\$157,9751	\$655	\$356	541	\$1,052	\$159,028
	i	Behavioral	\$454 006	\$0	\$23,285	so	5477,291	\$24,906	\$13,531	\$1,539	\$39 976	\$517.267
	1	Krts	\$144 270	\$44 027	\$8,383	\$783,000	\$979 5820		\$4,871	\$554	\$14,392	\$994,072
	<u> </u>	New Homes	\$76 503	\$4 722	\$130	\$168 750	\$250,105	5139	\$76	\$9	\$223	\$250,329
Residential Low-Income	Low Income Program	Home Performance	\$40,061	\$1,115	\$20	50	\$41,1971	522	\$12	51	\$35	\$41,232
		Human Services	5756 280	\$16 863	\$42,413	50	\$815 556	\$72.051	\$17.505	\$85 285	\$174 841	\$990 397
Small C&I	C&I Energy Efficient Equipment Program - Small	Appliances	\$89,010	\$13,200	\$5,541	\$159,819	\$267,569		\$3,499	\$398	\$10,337	\$277.907
	1	Custom Equipment	\$297,512	199	\$79	\$87,250	\$384.93	591	\$50	\$61	\$147I	\$385,086
		Food Service	\$1,523	\$586	\$465	5259,891	\$262.465			\$33	5868	\$263,333
	1	HVAC & Water Heating	\$1,689	\$650	\$516	\$65,577	\$68 4 2	51050	\$326	\$37	\$963	\$59,325
	1	Lighting	\$29 696	\$11,432	\$9.071	\$130 134	\$160.33		\$5,728	\$652	\$16 924	\$197.256
	C&I Energy Efficient Buildings Program - Small	Audes	\$20,315	\$5,397	\$226	\$86,655	5212 593	<del></del>	\$42	\$5	\$125	\$112,718
		Custom Buildings	\$28,769	\$13,772	\$158	\$29,260	1		\$30	S3		
		Kida	\$43,777	\$1,681	\$15,275	\$62,100	C. C.	5 239	\$2,845	\$324	\$87	\$72,047
	<b>}</b>	New Existence	\$5,682	\$984	511	\$1,50	7 77	4 54	\$2,645 \$2	\$324 \$6	\$8,409	\$131,242
arge C&I	C&I Energy Efficient Equipment Program - Large	Custom Enument	\$36 282	\$12	\$69	\$373.215	507	57		50	\$5	\$8,790
•		Lighting	\$20,722	\$7,977	\$45,360	\$67.1	1 47 31	54 347	\$2,362	\$259	\$11	\$409 603
		HVAC	\$126	348	\$275		\$25.091	\$26	514		\$6,978	\$143,353
	C&I Energy Efficient Buildings Program - Large	Augts	\$10,275	\$4 919	\$14,282	SE (\$54.800)	22.03	\$1,165	\$633	\$2 \$72	\$42	\$25,133
		Custom Buildings	\$22 604	\$10 821	\$31,421	Stat 430		\$2.562	\$1 392	\$158	\$1,869	\$86,235
Government	Governmental & Institutional Program	Appliances	\$864	\$276	5291	25.50	32,289	32.302 392	\$1.592	\$158	\$4 112	\$204,368
		Audis	\$2,046	\$110	5199		\$60,936	\$63	\$34		\$145	\$2,437
		HVAC & Water Heating	\$60	\$23	- 5	TO THE	\$3,174	\$60 \$80	\$54 \$43	\$4	\$101	\$61,036
		Lighting	\$920	5354	437	12.20	\$7,354	51,228	\$667	\$5 \$76	\$128	\$3,300
	i	Outdoor Lighting	\$320	\$123	250	10.214	\$11,008	\$427	\$232		\$1,970	\$9,325
		Mutitamily	\$55.067	•	979	ST 900	\$76 523	1943	\$232 \$512	\$25	\$686	\$11,694
Grand Total	<u> </u>	1	\$2 587 209	526	3 600	\$316 375	\$6 292 536	\$162 277	\$66,523	858	\$1 513	\$78.¢36
	in donment modeling amployee expenses and leave		12 301 203	44.04		<b>₹ 18</b> 439	<u> </u>	\$162.227	\$66,523	\$90 661	\$319,662	\$6,612,297

Includes costs for plan development, modeling, employee expenses, and legal fees.

ed. Upon completion, the plans will be further redained consistent with Commission requirements for changes to the plan

<sup>1.</sup> This table does not retect the commitments made through the Joint Sectioners because further work with reterested stakenolders is required to the process. Upon completion, the plans will be further reduced on

Appendix C: Program costs and savings by program year o Program Year is June 1 - May 31

F 3 1	وه در او والمع الميوون			• =	Penn Power							
*****					Direct Costs				Administrative	Costs		
	The state of the s		2015 Program	2015			Total 2015				Total 2015	
Sector	Program	Sub Program		Marketing	2015 MAV	2015 Incentives	Direct Costs	20151.abov	2015 Tracking & Reporting	2015 Other*	Administrative Costs	2015 Total Costs
Residential	Appliance Turn-In Program	Appliance Turn-In	\$193,672	\$66,750	\$14.716	\$108 875		\$11,164	\$5,€08	5638)	517 410	
	Energy Efficient Products Program	Appliances .	\$27,916	\$427	5321	\$117,415		\$121	<u>551</u>	\$7	\$189	\$146.268
	" "	Consumer Electronics	\$14 623	\$0	5239	\$23,900	\$38,762	\$90	\$45	55	5141	\$38,903
		HVAC & Water Heaping	\$52,614	\$10,345	\$154	\$129,440	\$192,552	\$58	\$29	53	\$90	3192.642
		Lighang	\$96 542	\$37 483	\$28 223	\$165 500		\$10.541	\$5.345	\$608	\$16 594	
. Fric	riome Performance Program	Austs	\$70,400	\$4 542	5334	\$49,500		\$353	\$178	\$20	\$551	
	•	Behavioral	\$438 334	\$0	\$24,011	\$0	\$462,345	\$25,414	\$12,767	\$1,453	\$39.534	
		Kits	\$149,080	\$44,027	\$8 645	\$783,000	\$984 757	\$9,150	\$4,596	\$523	\$14.269	
	.1	New Homes [	\$78 186	\$4 826	\$134	5168 750	\$251 697	\$142	\$71	581	\$221	
Residential Low-Income	Low Income Program	Home Performance	\$40,943	\$1,115	\$21	50	\$42,079	\$22	511	51	\$34	
	.	Human Services	\$969 481	\$21,069	\$43 345	50	\$1 033 696	£73 636	\$21 074	\$87,523	\$182 234	
Small C&I	CAI Energy Efficient Equipment Program - Small	Appliances	\$90,958	\$13,206	\$5,552	\$159,819	\$269657	\$6,756	\$3 394	\$386	\$10,536	
	1	Custom Equipment	\$304,057	\$101	\$80	\$87,250	539149	196	\$48	\$5	\$150	
		Food Service	\$1,556	\$599	\$475	\$259,891	\$262.5	liegt.		532	\$884	\$263,406
		HVAC & Water Heating	\$1,726	\$865	<b>5</b> 527	\$65,577	568,4		\$316	\$36	\$981	569 476
		Lighting	\$30 349	\$11623	59 271	\$130,134	518143	51 25	\$5.556	\$632	\$17 249	
	C&I Energy Efficient Buildings Program - Small	Audits	\$20,752	\$5,505	<b>5</b> 231	\$86,655	153	18A A2:	541	35	\$ 127	
		Custom Buildings	\$29,402	\$14 075	\$162	\$29,260		157	\$29	\$3	\$89	
	1	rices	\$44,740	\$1,718	\$15,611	\$62,103	\$17.30	\$5,499	\$2,762	\$314	\$8,575	\$132,744
		New Buildings	\$5 807	\$1,005	\$72	\$1542	A 731	A \$4	\$2	sol	\$6	\$8,337
Large C&I	C&I Energy Efficient Equipment Program - Large	Custom Equatorers	\$37,080	512	\$70	5373,230	0,393	\$7	\$3	\$0	\$11	
		Lighting	\$21,178	\$8,153	\$46,358	£52,3 T			\$2.292	\$261	\$7,116	\$145,121
	<u> </u>	HVAC	\$128		\$281	24,642	\$25,10		\$14	5.2	543	\$25,144
	C&I Energy Etholent Busings Program - Large	Audits	\$10,501	\$5.027	\$14,597	54 890		\$1,222	\$614	\$70	\$1,906	\$86,920
=	<u> </u>	Custem Suidings	523 101	\$11,059	\$32,112	\$13, 430		\$2,689	\$1 351	\$154	54 194	\$205 896
Government	Governmental & Institutional Program	Appliances	\$883		\$298	<b>100</b>	\$2,315	\$97	\$49	\$6	\$151	\$2,466
	1	Auchts	\$2,091		\$202	253/60	\$60,985	\$65	\$33	\$	\$103	\$61,088
	i	HVAC & Water Heating	\$51		P9	\$2.50		\$83	\$42	\$5	\$130	\$3,312
	1	Lighting	2940		System 1	\$2,201	\$7,458	51,287	\$647	\$74	\$2,008	\$9,475
	1	Outdoor Lighting	\$327	<b>X</b> 26	\$ 360	A9.214	\$11,047	\$448	\$225	\$26	\$699	\$11,746
<u> </u>	J	Mutulamity	\$56,279		E 044	£1 900	\$77 804	2892	\$497	\$57	\$1 542	
Grand Total	evelopment, modeling, employee expenses, and lega		\$2,813,728	\$266, \$22	350	53 75 675	\$6,504,067	\$167 020	\$67.987	\$92,880	\$327.867	56 831 934

Includes costs for plan development, modeling, employee expenses, and legal fees.

ator course to be deed. Upon completion, the plans will be further reduced consistent with Commission requirements for changes to the plans. 1. This table does not reflect the commitments made through the Joint Settlement because further work with interested stakeholders is requi

Appendix C: Program costs and savings by program year o Program Year is June 1 - May 31

					Penn Power							
					Direct Costs	_			Administrative	Costs		
											Total	
	3 77.7						Total				2013-2015	
Sector	4-12-0		2013-2015 Program			2013-2015	2013-2015			2013-2015	Administrative	2013-2015 Total
Residential	Appliance Turn-In Program	Sub Program	Administration	Marketing	2013-2015 M&V	Incentives **		2013-2015 Labor	& Reporting	Other*	Costs	Costs
A STATE OF THE STATE OF T	Energy Ethicient Products Program	Appliance Turn-In	\$558,600	\$200 250	\$43,205	\$326 625	51 138 680	\$31,994	\$16 685	\$2 904	\$51,584	
	Energy condent Products Program	Appliances	\$81,958	\$1,253		\$352,245	\$436,400	\$343	\$179	\$31	\$553	
		Consumer Electronics	\$36,887	50		\$64,800.	\$102,291	\$221	\$115	\$19	\$354	\$102.64
		HVAC & Water Heating	\$154,468	\$30,368		\$388,320	\$573,609	\$164	\$85	\$15	\$265	\$573,874
	Home Performance Program	Lighting	\$283 437	\$110.047	\$82,957	\$496 500	\$972,940			\$2,724	\$48 588	
	none renormance mogram	Audits Behavioral	\$223,608	\$21,069	\$1,621	\$229,500	\$476,198		\$1,047	\$217	\$3 261	\$479,458
	1		\$1,409 266	\$0		\$0	\$1,479,144		\$39,550	\$7,029	\$122 400	\$1,601,545
		Kits New Homes	\$433,046	\$132,081	\$25,158	\$2,349,000	\$2,939,284	\$27,298	\$14 239	\$2,530	\$44,067	\$2,983,357
Residential Low-Income	Low Income Program	Home Performance	\$229 546	\$14 168	\$390	\$506 250	\$750 355	\$424	\$221	\$39	\$684	\$751 039
	Low income Program	Human Senices	\$120,203	\$3,346	\$51	\$0	\$123 610	556	\$34	\$6	\$106	\$123,716
Small C&I	C&I Energy Efficient Equipment Program - Small	Appliances	\$2,661 031	\$61 554			\$2 849 844	2 316,187		\$260 337	\$534 895	\$3 384 739
	own county branes and break stolkett - 20091	Custom Equipment	\$235,297	\$37,246		\$409,045	\$695,310		\$8,768	\$1,361	\$26,691	\$723,302
		Food Service	5892,677	\$299	\$253	\$251,750	\$1,154 520	[ V29-	\$148	\$26	\$459	\$1,155,438
	1	HVAC & Water Heating	\$4.451 \$4.509	\$1,720	\$1,448	\$757,915	\$765,51	7 1/48	\$551	5149	\$2,633	\$768,167
	1	Lighting		\$1,741	\$1,448	\$183,230	\$190 92	5 197	\$859	\$139	\$2,646	\$193,574
	C&I Energy Efficient Buildings Program - Small	Audits	\$89 265	\$34 506	\$29 146	\$390,402	4643 319	532304	\$17.094	\$3 053	\$52,931	\$596,250
	CON CHANGE CONTRACT PROGRAM - SCHOOL	Custom Buildings	\$62.212	\$16,794	\$679	\$259,965		245	\$128	\$23	\$396	\$340,046
	1	Kas	\$89,839	\$43,007	\$475	\$87,782	\$22,30	\$172	\$90	\$16	\$278	\$221,379
		New Buildings	\$131,352 \$17,300	\$21,487 \$3.072	\$45,833 \$34	\$196.33		\$16,565	\$8,636	\$1,560	\$26,761	5411,733
aroe C&I	C&I Energy Ethoers Ecuspment Program - Large	Custom Enumera	\$98,213			\$4 5 \$5	927	512	<b>5</b> 6	51	\$20	S24 947
	on oray parameter rings in targe	Lighting	\$62,291	533		40.00	389 452	517	29	\$1	\$28	\$1,089,490
		HVAC	\$62,291	\$24 079 \$146		3, 30, 935	\$409 439	\$12,619		\$1,716	\$20,316	\$429,755
	C&I Energy Efficient Buildings Program - Large	Audits	\$32,085	\$15,360		7 1 3 2 5 7 S	Arr 1	\$76	\$40	\$7	\$123	\$75 398
	and any and a construction of the construction	Custom Buildings	\$61.540	\$15,350 \$29,460	\$47,512 \$89 620	Z VIZ Z P		\$3,733	\$1,946	\$355	\$6,034	\$265,661
Government	Governmental & Institutional Program	Appliances	\$2,586	\$29 460	702.070	2477.0	\$524 396 \$6,709	\$7,136	\$3,722	\$610	\$11,468	\$535 864
		Audis	\$6,139	\$331	47	\$175.4	\$182,809	\$270	\$141	\$24	\$435	
		HVAC & Water Heating	\$176	\$68		3113.73	182,809	\$190	\$99	\$17	\$306	\$183,119
		Lighting	\$2,765	\$06 \$1.060	ET as	30,495	\$22.093	\$236	\$123	\$21	\$381	\$9,863
	l .	Outdoor Lighting	\$963		64 058	A A		\$3,709	\$1,934	\$338	\$5,982	\$28,075
	· ·	Multifamily	\$165 227		5 058 058	.642 700	\$33 035 \$231 437	\$1,291	\$673	\$118	\$2,082	\$35,117
Grand Total	<del></del>	··/	\$8,151.507	\$815.37	1 1 1	\$923 129	\$19 007 838		\$1 485	\$260	\$4,594	\$236 030
Inchese costs for plan of	evelopment, madeing, employee expenses, and legal		30,101,307	*11334	<del>(3 ' )                                  </del>	- 4403 (23	\$19 001 530	\$486 972	\$199 601	\$295,050	\$971 622	\$19 979 460

ludes costs for plan development, modeling, employee expenses, and legal tees.

s are exempleted. Upon completion, the plans will be further reduced consistent with Commission requirements for changes to the plans. 1. This table does not reflect the commitments made through the Joint Settlement because further work with interested stakeholders is required

Residential Portfolio (exclusive of Low-Income)	1.			1	( IRC Ben	efits By Pro	Ро <mark>wег</mark> gram Per Year (	\$000)				
			Program	Program 💆			Ene		Load Red	fuctions in kW	MWh	Saved
			Costs	Benefits 🖑			Алг	nal				
Program	Program Year	TRC	(\$000)	(\$000)	A Benefits	Gen/T&D	Benefits	On/Off Peak	Annual	Lifetime	Annual	Lifetime
_	2013	i	283	65	14,658	See footnote 1	50,401	See tootnote 2	151		1,451	
Appliance Turn-In Program	2014		288	121	18,013	1	103,357		301		2,902	ĺ
Appliance Turn-in Program	2015		293	194	32,451	l '	161,286		452		4,354	ĺ
	Total	1.3	1 779 l	1.005	135,195	Į	869.677			3,253	.,	21.601
	2013		566	118	13,470	ì	104,859		138		5,475	
Energy Efficient Products Program	2014		574	233	16,650		215,875		278		10,993	
Fleridy Current Lingues Lindisti	2015	í. <u> </u>	583 (	368	30,170	í	338,295		420		16,554	ł
	Total	1.2	1,555	1.859	134,967	1	723.741			3,458	.0,001	42,601
- · · · · · · · · · · · · · · · · · · ·	2013	I	1,934	809	110,127	1	2008,910		1,131		13,001	
Home Performance Program	2014	i .	1,851	1,087	85,326	l <i>1</i>	1,002148		1,427		18,831	1
Totale Performance Program	2015		1,822	1,455	123,234	l 6	1,33 1402		1,715		24 458	i
	Total	1.2	5,075	6.128	489,620	l 18	1,33 Gr 5.638.357			11,244	,-00	132,077
Total		1.2	7,409	8,992	759,782		8,232, 5		1	17,955		196,279

1; Generation, Transmission and Distribution Capacity costs are combined in a sum of avoided capacity costs. These costs are a NPD to the same 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 and distribution are display.

2: The on and off peak energy costs are combined in a sum of avoided energy costs. These costs are then NPV the type year to reasure to was installed. The combine component, therefore, the total avoided energy costs for on and off peak energy costs are displayed here.

was installed. The combined avoided energy costs can not be identified by

The state of the s		A	1			Penn P						•
Residential Low-Income Portfolio	resta e estable			ig_20% - ,	🔩 TPC Bene	fits By Prog	ram Per Year (	(000				
N. 25			Program	Program	Capaci		Ene		Load Rec	ductions in kW	MANA.	Saved
Program			Costs	Benefits 🤼	Annua	d State	Ann					
Program	Program Year	TRC .	. (\$000)	: (\$000)	Benefits	Gen/TaD .	Benefits	On/Off Peak	Annual	Lifetime	Annual	Lifetime
	2013		1,228		40,858	See factnote 1	45,420	See footnote 2	112		1,025	1
Low Income Program	2014		1,041	Total Section	2.156	J	68,422		203	1	1,378	
FOR RICOING FIOGRAM	2015		1.267	129	21,899	Į.	106,790		305		2.067	ſ
	Total	0.2	AT100	129	103,626	ı	555.616		1 222	2,580	100,5	13,465
Total		0.2	3,190		103,626		555,616 (		T .	2.580		13.
1: Generation, Transmission and Distinuity can not be identified by component; therefore, 2: The on and off peak energy costs are component; therefore, the total avoided en 3. This table does not reflect the commisme reduced consistent with Commission require	ore, the total avoided ca embined in a sum of a very costs for on a very ents made through the J	apacity costs for accuracy cost peak starty of Joint Settle 1	23 23 25	Transmission, and osts of then NP objects of them NP objects.	d Distribution are / back to the year	displayed here the measure u	Ind was installed.	The combined av	oided energy	costs can not be i	dentified by	<del></del> -

Appendix C: Program costs and savings by program year o Program Year is June 1 - May 31

		- Kill (1994)			Penn Power	1.57	4 * **					
		1.			Direct Costs				Administrative	Cours		
	The second second	آ با	2013 Program	2013			Total 2013		2013 Tracking &		Total 2013 Administrative	
Sector	Program	Sub Program	Administration	Marketing	2013 M&V 1	2013 Incentives	Direct Costs	2013 Labor		2013 Other		2013 Total Costs
Residential	Appliance Turn-in Program	Appliance Turn-th	\$185 424	\$66,750	\$14 089	\$108 875		\$10 137	\$5,268	\$1 605	\$17,010	\$392,148
	Energy Efficient Products Program	Appliances	\$26,727	\$409	\$308	\$113,775	\$141,219	\$107	\$56	\$17	\$180	5141,399
	_ ··	Consumer Sectionics	\$10,000	SG	\$164	\$19,300	\$29,454	\$57	\$30	\$6	\$95	\$29,560
	)	HVAC & Water Heating	\$50,373	\$9,903	\$148	\$129.340	\$159754	\$51	\$27	SA	\$86	5189.650
	L	Lighting	\$92,430	\$35,887	\$27,085	\$165,500	\$320,903	\$9,433	\$4,902	\$1,493	\$15,828	\$336,731
	Home Performance Program	Audts	\$79,604	\$9,467	\$884	\$103,500	5193,455	\$988	\$513	\$156	\$1,657	\$195,112
	l	Behavioral -	\$509.225	SO	\$22,484	so	\$531,709	\$25,502	\$13,252	\$4,037	\$42.791	\$574,500
	1	Kas	\$139 695	\$44,027	\$8,217	\$768,500	\$960 440	\$9,181	\$4,771	\$1,453	\$15,406	\$975,845
L.		New Homes	574 B57	\$4 620	\$12E	\$158,750	\$248 354	5142	\$74	\$23	\$239	\$248 594
Residential Low-Income	Low Income Program	Home Performance	\$39,199	\$1,115	\$20	\$0		\$22	\$12		\$37	\$40,371
<u>L</u>	<u> </u>	Human Services	\$977 456	\$23.865	\$41,500	\$0	\$1,042,821	\$70 500	\$19,792	\$87 529	\$177.821	\$1,220,642
Small C&I	C&I Energy Efficient Equipment Program - Small	Appliances	\$55,314	\$10,838	\$3,524	\$89,407	\$159.0841	\$3,647	\$1,895	\$577	\$6,119	\$165,202
		Custom Equipment	\$291,109	\$99	\$94	\$57,250	\$378,551	\$97	\$50	\$15	\$163	\$378,714
	1	Food Service	\$1,372	<b>\$</b> 535	\$507	\$238,133	5240,547	\$525	\$273	583	\$891	\$241,427
		HVAC & Water Heating	\$1,094	\$426	\$404	\$52,076	554 000	\$418	\$217	\$65	\$702	\$54,703
	<u></u>	Lighting	\$29,220	\$11,391	\$10 804	\$130 134	\$181 550	\$11,180	\$5,809	\$1,770	\$18,758	\$200 308
	C&I Energy Efficient Buildings Program - Small	Audis	\$21,135	\$5,692	\$221	\$86,655	5113,903	\$86	\$45	\$14	\$145	\$114.048
	I	Custom Buildings	\$31,668	\$15,160	\$155	\$29,260	576,243	\$60	\$31	510	\$101	\$76,345
	1	Kes	\$42,835	\$18,089	\$14,946	\$62,100	\$137,970	\$5,827	\$3,028	\$922	\$9,777	\$147,747
<u> </u>	<u> </u>	New Buildings	SS 811	\$1 083	\$11	\$1 507	58 412	54	\$2	\$1	57	\$8 419
Large C&I	CAI Energy Efficient Equipment Program - Large	Custom Equipment	\$24,851	\$8	547	\$244,570	\$259,476	\$4	\$2	S1	571	5269,483
		Lighting	\$20,391	\$7,949	\$44,403	\$62,316	\$135,059	\$3,708	\$1,927	\$587	\$5,222	5141,281
	<u> </u>	HVAC	\$124	\$48	\$269	\$24 842	\$25,083	\$22	\$12	54	\$38	\$25,121
	C&I Energy Efficient Buildings Program - Large	Auxins	\$11,310	\$5,414	\$18,633	\$54,890	\$90,248	\$1,346	\$700	\$213	\$2,259	592,500
<u>_</u>	<u> </u>	Custom Buildings	\$15,834	\$7.580	\$26,086	\$72 916		\$1.885	\$979	\$298	\$3,1621	\$125,579
Government	Governmental & Institutional Program	Appliances	\$839	\$274	\$260	\$732	\$2,105	\$82	\$42	513	\$137	\$2,242
		Audia	\$2,002	\$110	\$195	\$58,581	\$50,888	\$61	\$32	\$10	\$103	\$60,991
	1	HVAC & Water Heating	\$56	S22	\$234	\$2,815	\$3,127	\$73	\$38	\$12	\$123	\$3,250
	1	Lighting	\$905	\$353	\$3,813	\$2,201	\$7,272	\$1,194	\$620	\$189	\$2,004	\$9,275
	I	Outdoor Lighting	2375	\$123	\$1,327	\$9,214	\$10,979	\$415		\$66	\$697	511,577
<del></del>	_l,	Multiprinty	\$\$3,B82	\$4 400	\$2,928	\$15 900	577,110	\$917	\$476	\$145	\$1,539	578,648
Grand Total	hydroment modeling ampletes as present and least		\$2,795,055	<b>\$285</b> .837	\$243,692	\$2,902,839	\$6,227,524	\$157.675	\$65,091	\$101 328	5324 094	\$6,551,718

Includes costs for plan development, modeling, employee expenses, and legal fees "Includes Low Income

Appendix C: Program costs and savings by program year o Program Year is June 1 - May 31

	5 % -				Penn Pawer						_	
	_ / ·				Direct Costs				- Administrative	Costs		
			2014 Program	2014			Total 2014		2014 Tracking &		Total 2014 Administrative	
Sector	Program	Sub Program	Administration	Marketing	2014 M&V	2014 Incentives	Direct Costs	2014 Labor		2014 Other		2014 Total Costs
Residential	Appliance Turn-in Program	Appliance Turn-to	\$189 503	\$65,750	514 399	\$106 6751	5379 528	\$10 693	\$5,809	\$661	\$17 1631	\$396 691
	Energy Efficient Products Program	Appl:ances	\$27,257	5418	\$315	\$113,775	\$141,765	\$115	\$62	57	\$1841	\$141,949
	i '	Consumer Electronics	\$12,264	50	\$201	\$21,600	\$34,065	\$73	\$40	\$5	\$117	\$34,182
	ļ	HVAC & Water Heating	\$51,481	\$10,121	\$151	\$129,340	\$191,093	555	530	\$3	882	3191,181
		Lighting	\$89 411	\$36 676	\$27,648	\$ 165 500	\$319 238	\$10,071	\$5,471	5622	\$16,165	\$335,401
	Home Performance Program	Audits	\$73,889	\$7,059	\$624	\$76,500	\$158,073	\$655	\$356	\$41	\$1,052	\$159,125
	}	Behavioral -	\$447,243	50	\$23,350	sol	\$470,593	524.908	\$13,531	\$1,539	\$39,976	\$510,569
	l	Kas	\$141,566	\$42,843	\$8,304	\$747,830	5940,573	\$8,967	\$4,871	\$554	\$14,392	\$964,965
	<u></u>	New Homes	\$76 503	S4 722	\$132	\$168,750	5250 108	\$139	\$76	256	\$223	\$250,331
Residential Low-Income	Low Income Program	Home Performance	\$40,061	\$1,115	\$21	\$01	\$41,197	522	\$12	\$1	\$35	\$41,232
	<u> </u>	Human Services	\$795,797	\$16,863	\$42,413	\$0	\$655,073	572.051	\$17,505	\$85,285	5174 841	\$1,029,914
Small C&I	C&) Energy Efficient Equipment Program - Small	Appliances	589,010	\$13,200	\$5,541	\$159,819	\$267,569	\$6,440	53,499	\$358	\$10,337	\$277,907
		Custom Equipment	5297,512	\$99	\$79	\$87,250	\$384,939	591	\$50	\$6	\$147	\$385,086
		Food Service	\$1,523	\$586	\$465	\$259,891	\$262,465	\$541	\$294	\$33	\$868	\$263,333
	}	HVAC & Water Heating	51,689	\$650	\$516	\$65,577	\$68,432	\$600	\$326	\$37	\$963	\$69,395
	<u></u>	Lighting	<u>\$29</u> 696	\$11 432	\$9,071	<u>\$130,</u> 134	\$:80 332	\$10,544	\$5,728	\$652	\$16.924	\$197,256
	C&I Energy Efficient Buildings Program - Small	Auxins	\$20,315	\$5,397	\$226	\$86,655	\$112,593	\$78	\$42	\$5	\$125	\$112,718
		Custom Buildings	\$28,769	\$13,772	\$158	\$29,260	\$71,950	\$54	\$30	\$3	\$87	\$72,047
		Kes	\$43,777	\$1,581	\$15,275	\$62,100	5122,633	\$5,239	\$2.846	\$324	\$8,409	\$131,242
	<u> </u>	New Buildings	\$5,682	5984	\$11	\$1,507	\$8 184	\$4	\$2	sol	\$6	\$8,190
Larga C8I	C&I Energy Efficient Equipment Program - Large	Custom Equipment	\$36,282	\$12	\$69	\$373,230	\$409,593	\$7	\$4	\$0	5111	\$409.503
		Dighting	\$20,722	\$7,977	\$45,360	\$62,316	\$135,375	\$4,347	\$2,362	\$269	\$5,978	\$143,353
	<del></del>	HVAC	\$126	\$48	\$275	<u>\$24</u> 642	\$25,091	\$26	\$14	\$2	\$42	\$25,133
	C&1 Energy Efficient Buildings Program - Large	Auda	\$10,275	\$4,919	\$14 282	\$54,890	\$84,366	\$1,165	\$633	572	\$1,669	\$86,235
	<del> </del>	Custom Buildings	\$22 604	510.821	<b>\$3</b> 1,421	\$135,430	\$200 276	S2 562	\$1,392	\$156	\$4 112	\$204 388
Government	Governmental & Institutional Program	Appliances	\$864	\$276	5291	\$858	\$2,289	\$92	\$50	\$6	\$148	\$2,437
		Audis	\$2,046	\$110	\$199	\$58,581	\$60,936	\$63	\$34	\$4]	\$101	\$61,036
	1	HVAC & Water Heating	\$60	\$23	\$252	\$2,840	\$3,174	\$80	\$43	\$5	\$128	\$3,302
	1	Lighting	\$920	\$354	\$3,879	\$2,201	57,354	\$1,228	\$667	\$76	\$1,970	\$9,325
	1	Outdoor Lighting	\$320	5123	\$1,350	\$9,214	\$11,008	\$427	\$232	\$26	\$686	\$11,694
Grand Total	<del></del>	Mutafamily	\$55,067	\$2,577	\$2.979	\$15,900	\$76,523	\$943	\$512	\$58)	\$ <u>1</u> 513	\$78,036
	evelopment, modeling, employee expenses, and legal		\$2 612 265	\$261,609	\$249 258	\$3 154 465	\$6 277,597	\$162,277	\$66 523	\$90,861	\$319 662	\$6,597,259

Includes costs for plan development, modeling, employee expenses, and legal fees \*\* Includes Low Income

Appendix C: Program costs and savings by program year o Program Years June 1 - May 31

	The second second				Penn Power							
					Direct Costs				Administrative	Çosts		
											Total 2015	
			2015 Program	2015			Total 2015		2015 Trackino &		Admenistrative	
Sector	Program	Sub Program	Administration	Marketing	2015 M&V	2015 Incentives	Direct Costs	2015 Labor	Reporting	2015 Other*		2015 Total Costs
Residential	Appliance Turn-In Program	Appliance Turn-In	\$193 672	\$66,750	\$14,716	\$108,875	\$384 014	\$11 154	\$5,608	\$638	\$17,4101	\$401,424
	Energy Efficient Products Program	Appliances	\$27,857	\$-527	\$321	\$113,775	5142,380	\$121	\$61	\$71	\$189	\$142,569
	1	Consumer Electronics	\$14,623	\$0	\$239	\$23,900	\$38,762	590	545	\$5	\$141	\$38,903
		HVAC & Water Heating	\$52,614	\$10,344	\$154	\$129,340	5192,452	\$58	529	\$3	\$90	\$192,542
		Lighting	<b>5</b> 91 379	\$37 483	\$26,223	\$165,500	5322,585	\$10641	\$5 345	\$608	\$16 594	\$339,180
	Home Performance Program	Audis	\$70,446	\$4 542	\$340	\$49,500	\$124 829	\$353	5178	520	\$551	\$125,380
	1	Behaviora/ *	\$431,604	\$0	\$24,082	3.0	\$455,686	\$25,414	\$12.767	\$1,453	\$39.634	\$495,520
		Kits	\$146,388	542,843	\$8,565	\$747,830	\$945.626	\$9,150	\$4,598	\$523	\$14 269	\$959.895
	1	New Homes	578 186	\$4 826	\$137	\$168,750	\$251 899	\$142	571	SÉ.	5221	\$252 120
Residential Low-Income	Low Income Program	Home Performance	\$40,943	\$1,115	521	Sor		\$22	511	51	\$34	\$42,114
		Human Services	\$1,013,544	\$21,312	\$43,346	sc	\$1,078 202	\$73,636	521.074	\$87 523	\$182,234	\$1 260,435
Small C&J	C&I Energy Efficient Equipment Program - Small	Appliatices	\$90,968	\$13,208	\$5,662	\$159,819	\$269,657	\$6,758	\$3,394	\$386	\$10,536	\$280,193
		Custom Equipment	\$304,057	\$101	\$80	\$87,250	\$391,488	\$96	548	35	\$150	\$391,638
1	1	Food Service	\$1,558	\$599	\$475	\$259,891	\$262,522	\$567	\$285	\$32	\$884	\$263,406
	)	HVAC & Water Heating	\$1,726	\$665	\$527	\$65,577	\$68,495	\$629	\$316		\$981	\$69,475
		Lighting	\$30,349	\$11,683	\$9.271	\$130,134	\$181 437	\$11,060	\$5 556	<b>\$6</b> 32	\$17 249	\$198,685
	C&I Energy Efficient Buildings Program - Small	Audits	\$20,762	\$5,506	\$231	\$86,655	\$113,153	581	541	\$5	5127	\$113,280
		Custom Buildings	\$29,402	\$14,075	\$162	\$29,260	\$72,899	\$57	\$29	\$3	\$89	\$72,988
	1	Kras	\$44,740	\$1,718	\$15,611	\$62,100	\$124,169	\$5,499		\$374	\$8,575	\$132,744
		New Buildings	\$5,807	\$1 005	\$12	\$1,507	\$8 331	. \$4	\$2	sol	\$6	\$8,337
Large C&I	C&t Energy Efficient Equipment Program - Large	Custorn Equipment	\$37,080	\$12	\$70	\$373,230	\$410,393	<u>\$7</u>	\$3	501	511	\$410,403
		Lighting	\$21,176	\$8,153	\$46,358	\$62,316	\$138,005	\$4,563	\$2,292	\$261	57,116	\$145,121
1	<u> </u>	HVAC	\$128	549	\$281	\$24,642	\$25 101	528	\$14	\$2	\$43	\$25,144
	C&I Energy Efficient Buildings Program - Large	Audis	\$10,501	\$5,027	\$14,597	\$54,890	\$85,014	\$1,222	\$614	\$70	\$1,906	\$86,920
	<u> </u>	Custom Buildings	523 101	511.059	\$32,112	\$135,430	\$201 703	\$2 689	\$1 351	\$154	\$4 154	\$205,696
Government	Governmental & Institutional Program	Appliances	\$863	\$276	\$296	\$858	\$2,315	\$97	\$49	\$6	\$151	\$2,466
		Audits	\$2,091	\$110	\$203	\$58,581	\$60,985	\$66	\$33	\$4	\$103	\$61,088
	l	HVAC & Water Heating	\$61	\$23	\$257	\$2,840	\$3,182	\$83	\$42	\$5	\$130	\$3,312
	l .	Lighting	\$940		\$3,964	\$2,201	\$7,466	\$1,287	\$647	\$74	\$2,008	\$9,475
	1	Outdoor Lighting	\$327	\$126	\$1,380	\$9,214	\$11,047	\$448		\$26	\$699	\$11,746
	<u> </u>	Mutidamily	\$56 279		\$3,044	\$15,900		\$989		\$57	\$1,542	\$79,346
Grand Total			\$2 843 393	\$265.981	\$254.741	\$3,129 765	\$6,493 880	\$167.020		\$92,860	\$327,867	\$6,821,748

Includes costs for plan development, modeling, employee expenses, and legal fees in Includes Low Income

Appendix C: Program costs and savings by program year o Program Year is June 1 - May 31

					Penn Power							
				-	Direct Costs				Administrative	Costs		
Sector	Procesam	Sub Program	2013-2015 Program Administration	2013-2015 Marketing	2013-2015 M&V	2013-2015 Incentives	Total 2013-2015 Direct Costs	2013-2015 Labor	2013-2015 Tracking & Reporting	2013-2015 Other		2013-2015 Total
Residential	(Apphance Turn-In Program	Appliance Turn-In	\$568,500	\$200 250	\$43,205	\$326,6251	\$1,138,680)	\$31,994		\$2,904	Costs \$51,5841	Costs \$1 190/260
	Energy Efficient Products Program	Appliances Consumer Bectronics HVAC & Water Heating Lighting	\$81,841 \$36,887 \$154,468 \$273,220	\$1,253 \$0 \$30,368 \$110,047	\$945 \$604 \$452 \$82,957	\$341,325 \$64,800 \$388,020 \$496,500	\$425,364 \$102,291 \$573,309 \$962,724	\$343 \$221 \$164 \$30 145	\$179 \$115 \$86	\$31 \$19 \$15	\$553 \$354 \$265	\$425,917 \$102,645 \$573,574
	Home Performance Program	Aucts Betwooral Kits New Homes	\$223,940 \$1,388,271 \$427,680 \$229,546	\$21,059 \$0 \$129,713 \$14,168	\$1,848 \$69,917 \$25,086 \$397	\$229,500 \$0 \$2,264,160 \$506,250	\$476,356 \$1,458,188 \$2,846,639 \$750,361	\$1,997 \$75,622 \$27,298 \$424	\$1,547 \$39,550 \$14,239	\$2.724 \$2.17 \$7,029 \$2,530	\$48 588 \$3,261 \$122,400 \$44,067	\$1,011 312 \$479,617 \$1,580,588 \$2,890,700
Residential Low-Income	Low Income Program	Home Performance Human Services	\$120,203 \$2,786,797	\$3,346 \$62,040	\$62 \$127,259	\$0 \$0	\$123,611 \$2,976,096	\$68 \$215,187	\$34	\$39 \$6 \$260.337	\$684 \$106	\$751 045 \$123,717
Small C&I	C&I Energy Efformt Equipment Program - Small	Appliances Custom Equipment Food Service HVAC & Water Heating Lighting	\$235,292 \$892,677 \$4,451 \$4,509 \$89,265	\$37,246 \$299 \$1,720 \$1,741 \$34,506	\$14,727 \$253 \$1,448 \$1,448 \$29,146	\$409,045 \$261,750 \$757,915 \$163,230 \$390,402	\$696,310 \$1,154,979 \$765,534 \$190,928 \$543,319	\$16,842 \$284 \$1,633 \$1,647 \$32,784	\$8,788 \$148 \$851 \$859	\$1,361 \$26 \$149 \$139	\$534,895 \$26,991 \$459 \$2,633 \$2,646	\$3,510,991 \$723,302 \$1,155,438 \$768,167 \$193,574
	C&I Spergy Efficient Buildings Program - Small	Audits Custom Buildings Kits New Buildings	\$62,212 \$89,639 \$131,352 \$17,300	\$16,794 \$43,007 \$21,487 \$3,072	\$679 \$475 \$45.833 \$34	\$259,9651 \$87,780 \$186,300 \$4,521	\$339,650 \$221,102 \$384,972 \$24,927	\$245 \$172 \$16,565 \$12	\$128 \$90 \$8,636	\$3 <u>063</u> \$23 \$15 \$1,560	\$52 931 \$396 \$276 \$26,761	\$596 250 \$340,046 \$221,379 \$411,733
Large C&I	C&I Energy Ethoent Equipment Program - Large	Custom Equipment Lighting HVAC	\$98,213 \$62,291 \$375	\$33 \$24,079 \$148	\$186 \$136,121 \$825	\$991,030 \$196,948 \$73,926	\$1,069,462 \$409,439 \$75,274	\$17 \$12,619 \$76	\$9 \$6,581	\$1 \$1 \$1,116 \$7	\$28 \$28 \$20,316 \$123	\$24 947 \$1,089,490 \$429,755 \$75 398
	C&I Energy Efficient Buildings Program - Large	Audits Custom Buildings	\$32,065 \$61,540	515,360 529,460	\$47,512 \$89,620	\$164,670 \$343,776	\$259,627 \$524 396	\$3,733 \$7,136	\$1,946	\$355 \$610	\$5,034 \$11,468	\$265,661
Government	Governmental & Institutional Program	Appliances Audits HVAC & Water Heating Lighting Outdoor Lighting Mutitismity	\$2,586 \$6,139 \$176 \$2,765 \$963 \$165,227	\$826 \$331 \$68 \$1,069 \$372 \$9,568	\$849 \$597 \$743 \$11,656 \$4,058 \$8,951	\$2,448 \$175,743 \$8,495 \$6,603 \$27,642 \$47,700	\$6,709 \$182,809 \$9,482 \$22,093 \$33,035	\$270 \$190 \$236 \$3,708 \$1,291	\$141 \$99 \$123 \$1,934 \$673	\$24 \$17 \$21 \$338 \$118	\$435 \$306 \$381 \$5,982 \$2,082	\$535 864 \$7,145 \$183,115 \$9,663 \$28,075 \$35,117
Grand Total		1	\$8,250,713	\$813.428	\$747,691	\$27,700 \$9 187,069	\$231 437 \$18 999 1011	\$2.848 \$486.97		\$260 \$285,050	\$4 594 \$971.622	\$236,030 \$19,970,724

\*\* Includes costs for plan \*\*
\*\*\* Includes Low Income

Residential Portfolio (exclusive of Low-Income)	• *	Program Costs	Program Benefits	Capa		gram Per Year (	rgy	Load Red	uctions in kW	MWh	: Saved	
Program	Program Year +	TRC -	(\$000)	(\$000)	Benefits	Gen/T&D	Benefits	On/Off Peak	Annual	Lifetime	Annual	Lifetime
	2013		283	65	14,658	See tootnote 1	50,401	See footnote 2	151	<u>GREENING</u>	1.451	Liteative
Appliance Turn-In Program	2014		288	121	18,013		103,357		301		2,902	
Appearing Familia Togram	2015		293	194	32,451		161,286		452		4,354	
	Total	1.3	779	1,005	135,195	)	869.677			3,253		21,601
	2013		566	118	13,470	ì	104,859		138		5,475	
Energy Efficient Products Program	2014		569	233	16,650	j .	215,875		278	į.	10.993	1
	2015		578	368	30,170		338,295		420	ĺ	16,554	ĺ
	Total	1.2	1.546	1,859	134,967		1.723,741		] [	3.458		42.501
	2013		1,925	802	108,924	1	692,762		1,119		12,897	
Home Performance Program	2014		1,828 ]	1,073	84,270		989,102		1,409		18.592	1
	2015		1,799	1,432	121,585		1,310,812		1,692		24,083	1
	Total	1.2	5.025	5,041	484.069	!	5,556,942		, , ,	11,128		130,143
Total		1.7	7,351	8,905	754,232	j	8,150,360			17.839		194,34

<sup>1;</sup> 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.

<sup>2;</sup> 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.

Residential Low-Income Portfolio	The state of the			TRC Benefits By Pro	Power gram Per Year (S	\$000)			-	
		Program Costs	Program Benefits	Capacity :	Ene Ann	rgy	Load Red	ductions in kW	: MWh	Saved
Program	Program Year	TRC (\$000)	(\$000)	Benefits - " GenfT&D"	Benefits	On/Off Peak	Annual	Lifetime	Annual	Lifetime
Low Income Program	2013 2014 2015 Total	1,27 1,08 1,31 0.3 3,30	0 100 2 163	22,413 See footnote 1 26,312 47,427 224,385	49,517 73,789 115,677 602,410	See footnote 2	230 440 660	5.609	1,086 1,475 2,225	14,615
Total		0.3 3,30		224,385	602,410	-		5,609		14,615

<sup>1:</sup> 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

<sup>1:</sup> Generation, Transmission and Distribution Capacity costs are continued in a source apacity 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.

<sup>3:</sup> Includes Human Services and Home Performance Sub-Programs

# Appendix D: Calculation Methods and Assumptions

PA PUBLIC UTILITY COMMISSION SECRETARY'S BUREAU



Appendix D-2: Measure Assumptions

Sector	Program	Sub Program	Measure	Measure Life	rified kWh	Verilied kW		Incremental Cost	Modeled .			rce of Savings	Source of
esidential	Appliance Turn-In Program	Appliance Turn-In	Freezer Recycling	8.0	863	0.1069	0.59	\$0.00	\$50.00		2012 PA TRA		Energy Ethoency Consulare
			Retrigerator Recycling	8.0	629	0.0779		\$0.00			2012 PA TRI		Energy Ethoency Consultant
			Room Air Conditioner Recycling	4.01	207			\$0.00			2012 PA TRA		Energy Efficiency Consultant
	Energy Efficient Products Program	Appliances	Clothes Washer	11.0	143			\$250.00	\$94.00		2012 PA TRA		Vid-Attantic TRM
	į.	ſ	Dehumidsler	12.0	1521			\$=5.00	\$13.00	\$0.00	2012 PA TRA	<del>-</del>	Dhe TRM
		1	Retngerator	13.0	113			\$104.00	\$63.00		2012 PA TRA		Mid-Atlantic TRM
			Freezer	12.0	73			\$104.00	\$31.00		2012 PA TRA		Nd-Attacke TRM
	l control of the cont	L	Pool Pump Motor	10.0	525	0.2776		\$290.00			2012 PA TRI.		Mid-Attacke TRM
		Consumer Electronics	Smart Strip	5.0	182	0.0129		\$21.00			2012 PA TRA		Md-Albric TRM
		""	Television	15.0	249	0.0380	0.32	\$1.00			2012 PA TRA		
	f	}	EE Office Equipment	5.0	175			\$1.00			2012 PA TRA		Energy Efficiency Consultant
	ľ	HVAC & Water Heating	Central Air Conditioner	14.0	106	0.1167		\$357.00	\$150.00		2012 PA TRI		Energy Ethiciency Consultant
		1	Furnace Fan	15.0	480	0.1228		\$200.00	\$100.00		2012 PA TRI		2008 DEER
			Ground Source Heat Pump	15.0	2.826	0.0819		\$10,000,00	\$600.00		2012 PA TRA		Mid-Attarsic TRM
			Heat Pump	12.0	611	0.1157	1	\$411.00					Company Assumption
	l .	J	HVAC Maintenance	5.0	283	0.2602		\$85.00			2012 PA TRI		2006 DEER
		1	Room Air Conditioner	9.0	19	0.0635	<b>432</b>				2012 PA TRA		Historic Actuals
		1	Whole House Fan	15.0	215		0.32	2400.00	\$31.00		2012 PA TRN		Mad-Attactic TRM
	1		Ductless Mini-Split	15.0	153	0.207	0.32	3400.00	\$125.00		2012 PA TRM		Energy Ethiciency Consultant
			Etilicient Water Heater	12.2	1231		0.32	\$1,00.00	\$375.00		2012 PA TRA		Energy Efficiency Consultant
		Lighting	Energy Efficient Lighting Products	6.8	959 26			<b>983</b> 06	\$245.00		2012 PA TR&		2008 DEER & Ohio TRM
	]		Torchere Floor Lamp	10.0	97	0.0013	0.32	<b>1713-</b> 07	\$1.00		2012 PA TRI		2006 DEER
		ſ	LED Holday Lighting	10.0		0.000	A 100	\$5.00	\$10.00		2012 PA TRA		2008 DEER
	Home Performance Program	Audes	On-Line Aude	6.9				\$4.86			2012 PA TRN		Company Assumption
		1	Audi	10.5		C yist			\$54.00]		2012 PA TRU		Historic Actuals
		Behavioral	Energy Usage Reports				0.65	\$554.40			2012 PA TRN		Energy Efficiency Consultan
		Kás	Energy Eticiency Measures	N 0		<b>60</b> 5206	240 .00	\$0.00		\$6.00	Company Ass	authorion .	N'A
	1	New Homes	(New Construction	(8)	<b>A</b>	0.0167	3.81	\$42.82	\$54.00		2012 PA TRN		Historic Actuals
		TVEN FIGURES	New Construction	13/0(8)	1. 12	0.4312	0.80	\$2,249,00	\$750.00	50.00	Historic Actua	ks	Historic Actuals
idential Low- ime	Low Income Program	Home Performance	Appliance Replacement	7.0	.176		0.65	\$0.00	\$0.00	\$0.00	2012 PA TRM		No Uptront Cost to Custome
		<u> </u>	Audit - Multifarmily	10.5	72	0.2089	0.65	\$554.40	\$0.00		2012 PA TRN		No Uptront Cost to Custome
		Human Services	Comprehensive	A STATE OF THE PARTY OF THE PAR	(c)	0.3905	1.00	\$0.00	\$0.00		Historic Actua		No Uptront Cost to Custome
			Extra Measures	1 27	2-4	0.0223	1.00	\$0.00	\$0.00		Historic Actua		No Unitroni Cost to Custome
			Energy Efficiency Measures - Low Income		<b>▲</b> 308[	0.0141	0.65	\$0.00			2012 PA TRA		No Uptrorit Cost to Custome

Appendix D-2: Measure Assumptions

والمعارب المعطوري	Program	· 中国 (1)	Measure		Penn Power	e iş eve				ear in	4	
÷.			7 - 3 - 3			* . · ·				e e e		
Sector						Verified kWh	Verified kW		Incremental			Source of
3600	Program	SUS Program;	Measure	2,58	Measure Life	Savings	Savings	NTG	Cost 😁 🗖	* Rebate	O&M Benefit Source of Savings	. Incremental Cost
Residential	Appliance Turn-in Program	Appliance Turn-In	Freezer Recycling		108	253	0 1059	0.59	\$0.00	\$50.00	\$0.00\2012 PA TRM	Energy Efficiency Consultan
ł	1	i	Retrigerator Recycling		80	629	0.0775	0.59	\$0.00	\$50.00	\$0.00 2012 PA TRM	Energy Efficiency Consultan
}			Room Air Conditioner Recycling		40	207	0 6390	0.59		\$31.00	\$0.0012012 PA TRM	Energy Etholency Consultan
1	Energy Efficient Products Program	Appliances	Clothes Washer		110	143	0.0146	0.32	\$250 00	\$92.00	\$6 00 2012 PA TRIK	Mid-Atlantic TRM
	l .	1	Dehumidder		120	152	0.0097	0 32	\$45.00	\$11.00	\$0 00 2012 PA TRM	One TRM
1		1	Reingerator		13 0	113	0.0129	0 32		\$81.00	SO 00 2012 PA TRM	Mxt-Atlantic TRM
ł	ł	l .	Freezer		12 0	73	0.0084	0.32	\$104.00	\$29.00	\$0.00 2012 PA TRM	Mid-Apantic TRM
,	i		Pool Pump Motor		100	525	0 2775	0.32		\$63.00	\$0,00 2012 PA TRM	Mxl-Attentic TRM
		Consumer Electronics	Smart Stno		50	187	0.0129	0 32	\$21.00	\$13.00	50 00 2012 PA TRM	Mid-Atlantic TRM
		1	Television		15 0	249	0 0380	0.32	\$1.00	\$10.00	50 0012012 PA TRM	Energy Efficiency Consultan
<u> </u>	Į.		RE Office Equipment		5.0	175	0 0236	0.32	\$1 00	\$25 00	50 00 2012 PA TRM	Energy Efficiency Consultan
1		HVAC & Water Heating	Central Air Conditioner		14.0	106	0.1167	0 32	\$357.00	\$150.00	50 00 2012 PA TRM	2008 DEER
J	J	1	Furnace Fan		15.0	480	0.1228	0 32	\$200.00	\$100.00	\$0.00 2012 PA TRM	Mid-Atlantic TRM
		1	Ground Source Heat Pump		15 0	2,826		0 32	\$10,000,00	\$600 00	\$6.00(2012 PA TRM	Company Assumption
i		1	Heat Pumo		12 0	611		0.32	5411.00	\$313.00	50 0012012 PA TRM	12008 DEER
1		1	HVAC Maintenance		5.0	283		0 32	585 00	\$60 00	\$0 0012012 PA TRM	Historic Actuals
<u> </u>		1	Room Air Conditioner		90	19		0.32	\$60,00	\$29 00	\$0.0012012 PA TRM	Wid-Atlantic TRM
			Whole House Fan		15 0	215	0.0000	0 32	\$400.00	\$125.00	\$0.00 2012 PA TRM	Energy Efficiency Consultan
		<b>!</b>	Ductiess Mini-Split		15 0	153	9 2070	0 32	\$1,200,00	\$375.00	\$0.00[2012 PA TRM	Energy Efficiency Consultan
ł	ł		Efficient Water Heater		12 2	959	0.0879	0.32	\$635.06	\$245 60	\$0 00 2012 PA TRM	2008 DEER & Ohio TRM
ŀ	1	Lighting	Energy Efficient Lighting Products		6.8	28	0.0013	0 32	\$2 47	\$1.00	\$0 00 2012 PA TRM	2008 DEER
	i	1	Torchiere Floor Lamp		100	97	0.0048	0.32	\$5 00	\$10.00	\$0.00(2012 PA TRM	2008 DEER
		<del></del>	LED Holiday Lighting		10 0	11	0.0000	0.32	\$4 86	\$4 00	50 0012012 PA TRM	Company Assumption
i	Home Performance Program	Aucts	On-Line Audit		5 9	407	0.0.96	0.65	\$42.82	\$54 00	\$0.0012012 PA TRM	Historic Actuals
		<u> </u>	Audd		10.5	572	0.2089	0.65	\$554.40	\$375,00	\$0 00 2012 PA TRM	Energy Efficiency Consultan
ļ	]	Behavioral	Energy Usage Reports		10	173	0.0206	100	\$0.00	\$0.00	\$0.00 Company Assumption	N/A
Į.		KES	Energy Ediciency Measures		59	347(	0.0167	081	542 82	\$53.00	\$0 00/2012 PA TRM	Historic Actuals
l	<del> </del> -	New Homes	New Construction		15 0	1,552	0 4312	080	\$2 249 00	\$750.00	\$0.00 Historic Actuals	Historic Actuals
Residential Low-	Low Income Program	Home Performance	Appliance Replacement		7.0	1,176	0.1458	0 65	00 02	\$0.00	\$0 00 2012 PA TRM	No Upfront Cost to Customer
Income	I	ļ	Audz - Mutufamily		10 5	672		0 65	\$554 40	\$0.00	\$0 00 2012 PA TRM	No Uptront Cost to Customer
l	1	Human Services	Comprehensive		8.0	1 060		1 00	\$0.00	50 00	\$0 00 Historic Actuals	No Uptront Cost to Customer
ŀ		1	Extra Measures		8.0	279	0 0223	1 00	50 00	\$0.00	\$0.00 Histone Actuals	No Upfront Cost to Customer
L	<u> </u>	<u> </u>	Energy Efficiency Measures - Low Income		6.6	308	0.0141	0 65	\$0.00	50 00		No Untront Cost to Customer

### Appendix D-3: Number of Units o Program Year is June 1 - May 31

Program Name	Sub Program	Penn Power Measure Name			_
Appliance Turn-In Program	Appliance Turn-In	Refrigerator Recycling	2013 Units	2014 Units	2015 Units
	Appliance 1strem	Freezer Recycling	1,650	1.650	1,650
	ĺ	Room Air Conditioner Recycling	450	450	450
Home Performance Program	Audits	On-Line Audit	125	125	125
	^ tools	Audit	1,500	1,000	500
	Behavioral	Energy Usage Reports	60	60	60
	Kits	Energy Efficiency Measures	40,275	40,275	40.275
	New Homes		14,500	14,500	14,500
Energy Efficient Products Program	Appliances	New Construction Clothes Washer	225	225	225
<b>4</b> ,	rippiences	Dehumidifier		525 525 250 250 395 895 450 150 60 60 300 400	525
		Refrigerator			250
		Freezer			895
		Pool Pump Motor			150
	Consumer Electronics	Smart Strip			60
	Consumer Electronics	Television			300
		EE Office Equipment			500
	HVAC & Water Heating	HVAC Maintenance			600
	nvac a vralei neating	Control Air Condition	400	400	400
		Central Air Conditions Ground Source Heal Pusps	25	25	25
		Whole House Fan	40	40	40
	}		50	50	50
		Room Air Congitioner Furnace Fa	50	50	50
	1	Heat Pund	125	125	125
			30	30	30
	•	Quotless Uni-Scale	30	30	30
	Lighting	Elicient Wahrs Feater	150	150	150
	Lighting	Enably Efficient Lighting Froducts	165,000	165,000	165,000
		Torchista Floor anno	10	10	10
Low Income Program		ED Horday Lighting	100	100	100
Low movement rogicality	Hame Performance	ance Replacement	10	10	10
	11	Medit Multifamily	25	25	25
	Human Services	Comprehensive	201	201	201
		Extra Veasures	398	398	398
<del></del>		Entrey Efficiency Measures - Low Income	2.181		1,091

Appendix D-3: Number of Units

o Program Year is June 1 - May 31

Program Name	Sub Program	Penn Power			
Appliance Turn-In Program	Appliance Turn-In	Measure Name Refrigerator Recycling	2013 Units	2014 Units	2015 Units
Application very first registration	Appliance rum-in	Freezer Recycling	1,650	1,650	1,650
			450	450	450
Home Performance Program	Audits	Room Air Conditioner Recycling On-Line Audit	125	125	125
The state of the s	Locales	Audit	1,500	1,000	500
	Behavioral 1	Energy Usage Reports	60	60	60
	Kits	Energy Usage Reports  [Energy Efficiency Measures	39,675	39,675	39,675
	New Homes	New Construction	14.500	14,110	14.110
Energy Efficient Products Program	Appliances	Clothes Washer	225	225	
	Appliances	Dehumidifier	525	525	525
	)	Refrigerator	250	250	250
		Freezer	895	895	895
	ļ	Pool Pump Motor	150	150	150
	Consumer Electronics	Smart Strip		60	60
	Consumer Electronics	Television	100	200	300
		EE Office Equipment	300	400	500
	HVAC & Water Heating	HVAC Maintenance	600	600	600
	TING 6 Viale: Fleshing	Central Air Conditioner	400	400	400
		Ground Source Heat Pump	25	25	25
		Whole House Fan	40	40	40
		Room Air Conditioner	50	50	50
	1	Furnace Fan	50 125	50	50
		Heat Pump	30	125	125
		Ductless Mini-Split	30	30	30
		Efficient Water Heater	150	30 150	30
	Lighting	Energy Efficient Lighting Products	165,000	165,000	150 165,000
	[-33	Torchiere Floor Lamp	103,000	103,000	105,000
		LED Holiday Lighting	100	100	_
Low Income Program	Home Performance	Appliance Replacement	10	100	100
	]	Audit - Multifamily	25	25	25
	Human Services	Comprehensive	284	284	284
		Extra Measures	4,235	4,235	4,235
	1	Energy Efficiency Measures - Low Income	2.261	7,200	1,171

1. Includes Low Income

Appendix D-4: Calculation Methods and Assumptions - Rebate Strategy

Program 📜 💱	Measure Name 220 - 200	Eligibility / Description	Rebate Strategy
	Air Condoming - Non Profit	Replacement or new installation of a Single Package or Split System AC. (unitary air, water or evaporatively cooled) exceeding IECC 2006 Table 503.2.3 (1)	Up to \$75 / Ton
	Heat Pump - Non Profit	Replacement or new installation of a Single Package or Split System HP. (unitary air, water or evaporatively cooled) exceeding IECC 2006 Table 503.2.3 (1)	Up to \$75 / Tan
	Ground Source Heat Pump - Non Profit	Replacement or new Grounnd Water & Source Heat Pumps < 135kBtuH, meeting CEE Tier 1 of >=15.5EER Cool & >=3.5 COP Heat	Up to \$75 / Ton
	PTAC - Non Profit	Replacement or new installation of units meeting CEE Tier 1 of >=11.6 EER Cod	Up to \$150 per Unit
	PTHP - Non Profit	Replacement or new installation of units meeting CEE Tier1 of >=11.2 Cool & STCOR Last	Up to \$150 per Unit
	Room Air Conditioner - Non Profit	Purchase and installation of Energy Star (>=9.4 EER) or CEE SHEATTING (>=3.4 EER) quality of units	Up to \$45 per Unit
	Etticlent Water Heater - Non Profit	Replacement of existing electric storage tank the units heal of by Receive Electiv/EF >,93, HP w/ EF >2.0 & Solar w/ EF >1.84	Sotar = Up to \$500 Heat Pump = Up to \$300 EE Resistive = Up to \$125
l Governmental & Institutional Program	Refrigerator Recycling - Non Profit	Removal of an existing inefficient unit generally older that so years from service prior to end of useful life thru recycling	Up to \$50 per Unit
ı	Freezer Recycling - Non Profit	Removal of an existing a ccient unit games bodier that 10 years from service prior to end of useful life thru recycling	Up to \$50 per Unit
	Room Air Conditioner Recycling - Non-Profit	Removal of an exist permetterent and upon service prior to end of useful kite thru recycling	Up to \$50 per Unit
	ReIngerator - Non Profit	Purchase and retails 65 is a new linit meeting either Energy Star or CEE Tier 2, >=20% or >=25% respectively lower series, consumption the test all standard.	Up to \$78 per Unit
	Freezer - Non Prof.:	Purchase and installation of a new unit meeting either Energy Star or CEE Tier 2, >=20% or >=25% respectively lower energy construction than the federal standard.	Up to \$78 per Unit
	EE Office Equipment - Non Profs	Rurchase and restallation of Energy Star qualifying units	N/A
	Audit - Mutitamily - Govt	In-Har-e Audit w/ direct install measures. Also provides incentive for comprehensive measures including but not limited to: Windows, Duct Sealing, and Wall & Attic Insulation, etc., Eligible to customers w/ electric water heating, and/or central electric HVAC systems.	Aud.t = \$250 + Recommendations up to \$.11/kWh
	Energy Etticiency Measures - Multifarmity - Govi	Opt in Kit with energy efficiency measures including but not limited to: CFLs, Night Lights etc. mailed at customers request. Adoption of an energy efficiency school curriculum provided by teachers or districts which encourages efficient practices & installation of efficiency measures at home.	Up to \$100 in EE Measures

Appendix D-4: Calculation Methods and Assumptions - Rebate Strategy

2. 75 Program 2013	Measure Name	Eligibility / Description	Rebate Strategy
	Air Conditioning - Non Profit	Replacement or new installation of a Single Package or Spla System AC, (undary air, water or evaporatively cooled) exceeding IECC 2006 Table 503.2.3 (1)	Up to \$75 / Ton
	Heat Pump - Non Profit	Replacement or new installation of a Single Package or Spla System HP, (unitary air, water or evaporatively cooled) exceeding IECC 2006 Table 503.2.3 (1)	Up to \$75 / Ton
	Ground Source Heat Pump - Non Profit	Replacement or new Grounnd Water & Source Heat Pumps < 135kBtuH, meeting CEE Tier 1 of >=15.SEER Cool & >=3.5 COP Heat	Up to \$75 / Ton
	PTAC - Non Profit	Replacement or new installation of unds meeting CEE Tier 1 of >= 11.6 EER Cool	Up to \$150 per Unit
	PTHP - Non Profit	Replacement or new installation of units meeting CEE Tier1 of >=11.2 Cool & >=3.4 COP Heat	Up to \$150 per Unit
	Room Air Condaioner - Non Profa	Purchase and installation of Energy Star (>=9.4 EER) or CEE SHEA Tier 1 (>=9.8 EER) qualifying units	Up to \$45 per Und
	Efficient Water Heater - Non Profit	Replacement of existing electric storage tank type units heated by Resistive Elec, w/ EF >,93, HP w/ EF >2.0 & Solar w/ EF >1,84	Solar ± Up to \$\$00 Heat Pump = Up to \$300 EE Resistive ≠ Up to \$125
Governmental & Institutional	Reingerator Recycling - Non Profit	Removal of an existing mefficient unit generally older than 10 years from service prior to end of useful file thru recycling	Up to \$50 per Und
Program	Freezer Recycling - Non Profit	Removal of an existing meticient unit generally older than 10 years from service prior to end of useful life thru recycling	Up to \$50 per Und
	Room Air Conddioner Recycling - Non Profit	Removal of an existing inefficient und from service prior to end of useful life thru recycling	Up to \$50 per Und
	Refrigerator - Non Profit	Purchase and installation of a new una meeting either Energy Star or CEE Tier 2, >=20% or >=25% respectively lower energy consumption than the federal standard.	Up to \$78 per Unit
	Freezer - Non Profit	Purchase and installation of a new una meeting either Energy Star or CEE Tier 2, >=20% or >=25% respectively lower energy consumption than the federal standard.	Up to \$78 per Und
	EE Office Equipment - Non Profit	Purchase and installation of Energy Star qualifying units	N/A
	Audr - Multramily - Govi	In-Home Audit wt direct install measures. Also provides incentive for comprehensive measures including but not limited to: Windows, Duct Sealing, and Wall & Attic Insulation, etc., Eligible to customers wt electric water heating, and/or central electric HVAC systems.	Auds = \$250 + Recommendations up to \$,11/kWh
	Energy Efficiency Measures - Multifamily - Govi	Opt in K4 with energy efficiency measures including but not limited to: CFLs, Night Lights etc. mailed at customers request. Adoption of an energy efficiency school curriculum provided by teachers or districts which encourages efficient practices & installation of efficiency measures at home.	Up to \$100 in EE Measures
	Custern - Non Profd	Replacement or retrofit of existing equipment with greater efficient equipment or process changes, including motors.	Same as applicable measure in Small / Large C&I

# Appendix E: PUC Tables 1 - 7

RECEIVED

NOV **2 2** 2013
PA PUBLIC UTILITY COMMISSION
SECRETARY'S BUREAU

Appendix E

Table 1: Portfolio Summary of Lifetime Costs and Benefits

Portfolio	Portfolio S Discount Rate	Penn Pummary of Life Total Discounted Lifetime Costs (\$000)	÷- ্রইট <sup>ু</sup>	Total Discounted Net Lifetime Benefits (\$000)	Cost- Benefit Ratio (TRC)
Residential (exclusive of Low- Income)	11.14%	7,408,889	80.92,05	1,583,161	1.2
Residential Low-Income	11.14%	3,189,864	659,242	(2,530,622)	0.2
Commercial/ Industrial Small	11.14%	017,930	10,378,702	3,760,723	1.6
Commercial/ Industrial Large	1.14%	4,299,043	8,710,475	4,411,432	2.0
Governmental/ Educational/ Non-Profit	11.14%	317,689	311,877	(5,812)	1.0
Total	11.14%	21,833,465	29,052,347	7,218,882	1.3

This table does not reflect the commitments made through the Joint Settlement because further work with interested stakeholders is required before projections can be completed. Upon completion, the plans will be further redlined consistent with Commission requirements for changes to the plans.

Appendix E

Table 1: Portfolio Summary of Lifetime Costs and Benefits

ETTO TO THE STATE OF THE STATE	Portfolio S	Penn F ummary of Life	ower time Costs and	Benefits		
Portfolio	Discount Rate	Total Discounted Lifetime Costs (\$000)	Total Discounted Lifetime Benefits (\$000)	Total Discounted Net Lifetime Benefits (\$000)	Cost- Benefit Ratio (TRC)	
Residential (exclusive of Low- Income)	11.14%	7,350,604	8,904,592	1,553,988	1.2	
Residential Low- Income <sup>1</sup>	11.14%	3,303,719	826,795	(2,476,924)	0.3	
Commercial/ Industrial Small	11.14%	6,617,979	10,378,702	3,760,723	1.6	
Commercial/ Industrial Large	11.14%	4,299,043	8,710,475	4,411,432	2.0	
Governmental/ Educational/ Non-Profit	11.14%	317,689	311,877	(5,812)	1.0	
Total	11.14%	21,889,034	29,132,442	7,243,407	1.3	

<sup>1.</sup> Includes Human Services and Home Performance Sub-Programs

Table 2: Summary of Portfolio Energy and Demand Savings

Summer			r nd Demand S	Cavinas				
Summa	ry or Portioi Program '		Program		Program '	Year 2015	Tot	tal
	MWh		MWh	. kW	MWh	kW	MWh	kW
MWh and kW Saved for Consumption Reductions	Saved	Saved	Saved	Saved	Saved	Saved	Saved	Saved
Baseline <sup>1</sup>	4,772,937		4,772,937		4,772,937		4,772,937	
Residential Sector exclusive of Low-Income) - Cumulative Projected Portfolio Savings <sup>2</sup>	18,529	1,313	30,721	1,884		2,451	42,771	2,451
Residential Low-Income Sector - Cumulative Projected Portfolio Savings <sup>2 4</sup>	2,424	219	3,383	325	61	1 1	4,661	441
Commercial/Industrial Small Sector - Cumulative Projected Portfolio Savings <sup>2</sup>	7,198	734	15,134		23,78	2,439	23,078	2,439
Commercial/Industrial Large Sector - Cumulative Projected Portfolio Savings <sup>2</sup>	3,051	402	7310	047	11,534	1,486	11.534	1,486
Governmental/Educational/Non- Profit Sector - Cumulative Projected Portfolio Savings <sup>2 5</sup>	4,031			813	13,738	1,267	13,738	1,267
EE&C Plan Total - Cumulative Projected Savings Estimated Phase I Carryover	35,231		65,455	5,559	95,782	8,084	95,782	8,084
Savings Total Cumulative Projected Savings Phase II + Estimate Phase I Carryover Savings	35.734		65,455	5,559	95,782	8,084	95,782	8,084
EE&C Plan Total - Percentage of Target to be Met	37%		69%		100%		100%	
Percent Reduction From Baseline	<b>₩</b> 7/0		1.4%		2.0%		2.0%	
Commission Identified Goal					95,502		95,502	
Percent Savings Due to Portfolio Above or Below Commission Goat	12%		19%		0%		0%	

<sup>&</sup>lt;sup>1</sup> As defined in the August 2, 2012 Implementation Order, Docket No. M-2012-2289411.

<sup>&</sup>lt;sup>2</sup> Adjusted for weather and extraordinary load as applicable.

<sup>&</sup>lt;sup>3</sup> The August 2, 2012 Implementation Order directed that at least 25% of an EDC's target amount in each program year.

Includes Low Income participation allocated to Low Income sector from Residential Sector

<sup>\$</sup> Includes Multi Family participation allocated to Government sector from Small/Large C8I sector

<sup>&</sup>lt;sup>6</sup> This table does not reflect the commitments made through the Joint Settlement because further work with interested stakeholders is required before projections can be completed. Upon completion, the plans will be further redtined consistent with Commission requirements for changes to the plans.

#### Table 2: Summary of Portfolio Energy and Demand Savings

		Penn Powe						
Summ	ary of Portfol	lio Energy a Year 2013		Savings Year 2014	Program \	rear 2015	To	tel let
MWh and kW Saved for Consumption Reductions	MWh Saved	kW Saved	MWh ?	kW Saved	MWh Saved	kW Saved	MWh Saved	kW Saved
Baseline <sup>1</sup>	4,772,937		4,772,937		4,772,937		4,772,937	
Residential Sector (exclusive of Low- Income) - Cumulative Projected Portfolio Savings <sup>2</sup>	18,436	1,302	30,493	1,868	42,408	2,430	42,408	2,430
Residential Low-Income Sector - Cumulative Projected Portfolio Savings <sup>24</sup>	2,473	336	3,469	560	4,808	794	4,808	794
Commercial/Industrial Small Sector - Cumulative Projected Portfolio Savings <sup>2</sup>	7,198	734	15,154	1,590	23,078	2,439	23,078	2,439
Commercial/Industrial Large Sector - Cumulative Projected Portfolio Savings <sup>2</sup>	3,051	402	7,310	947	11,534	1,486	11,534	1,486
Governmental/Educational/Non- Profit Sector - Cumulative Projected Portfolio Savings <sup>2 5</sup>	4,031	358	8,886	813	13,738	1,267	13,738	1,267
EE&C Plan Total - Cumulative Projected Savings Estimated Phase I Carryover	35,188	3,132	65,312	5,778	95,565	8,417	95,565	8,417
Savings Total Cumulative Projected Savings Phase II + Estimated Phase I Carryover Savings	35,188	3,132	65,312	5,778	95,565	8,417	95,565	8,417
EE&C Plan Total - Percentage of Target to be Met <sup>1</sup>	37%		68%	:	100%		100%	
Percent Reduction From Baseline	0.7%		1.4%		2.0%		2.0% 95,502	
Commission Identified Goal Percent Savings Due to Portfolio Above or Below Commission Goal	12%		18%		95,502 0%		95,502	

<sup>&</sup>lt;sup>1</sup> As defined in the August 2, 2012 Implementation Order, Docket No. M-2012-2289411.

<sup>&</sup>lt;sup>2</sup> Adjusted for weather and extraordinary load as applicable.

<sup>3</sup> The August 2, 2012 Implementation Order directed that at least 25% of an EDC's target amount in each program year.

<sup>&</sup>lt;sup>4</sup> Includes Low Income participation allocated to Low Income sector from Residential Sector and targeted Energy Usage Reports

<sup>&</sup>lt;sup>5</sup> Includes Multi Family participation allocated to Government sector from Small/Large C&I sector

Appendix E

Table 3: Summary of Portfolio Costs

		Penn Powe ry of Portfo		. ·		
	Program Yea Portfolio Budget (\$)		Program Year Portfolio Budget (\$)		Program Yea Portfolio Budget (\$)	r 2015 % of Portfolio Budget
Residential Portfolio (exclusive of Low- Income) Annual Budget	3,109,681	48%	95	46%	3,002,025	44%
Residential Low-Income Portfolio Annual Budget	1,218,584		031,629	16%	1,258,243	18%
Commercial/Industrial Small Portfolio Annual Budget	1,386,948	23%	1,517,174	23%	1,530,748	22%
Commercial/Industrial Large Portfolio Annual Budget	653,9,0	10%	868,713	13%	873,485	13%
Governmental/Educational/Non- Profit Portfolio Annual Budget	166,082	3%	165,830	3%	167,433	2%
Total Portfolio Annual Budget	6,535,229	100%	6,612,297	100%	6,831,934	100%

<sup>1.</sup> This table does not reflect the commitments made through the Joint Settlement because further work with interested stakeholders is required before projections can be completed. Upon completion, the plans will be further redlined consistent with Commission requirements for changes to the plans.

Appendix E
Table 3: Summary of Portfolio Costs
o Program Year is June 1 - May 31

	Summa	÷.				
1일 개의 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	Program Yea	r 2013	Program Yea		Program Yea	г 2015
Andrew Services	Portfolio Budget (\$)	% of Portfolio Budget	Portfolio Budget (\$)	% of Portfolio Budget	Portfolio Budget (\$)	% of Portfolio Budget
Residential Portfolio (exclusive of Low- Income) Annual Budget	3,083,740	47%	2,974,395	45%	2,947,532	43%
Residential Low-Income Portfolio Annual Budget <sup>1</sup>	1,261,013	19%	1,071,146	16%	1,302,549	19%
Commercial/Industrial Small Portfolio Annual Budget	1,386,913	21%	1,517,174	23%	1,530,748	22%
Commercial/Industrial Large Portfolio Annual Budget	653,970	10%	868,713	13%	873,485	13%
Governmental/Educational/Non- Profit Portfolio Annual Budget	166,082	3%	165,830	3%	167,433	2%
Total Portfolio Annual Budget	6,551,718	100%	6,597,259	100%	6,821,748	100%

<sup>1.</sup> Includes Human Services and Home Performance Sub-Programs

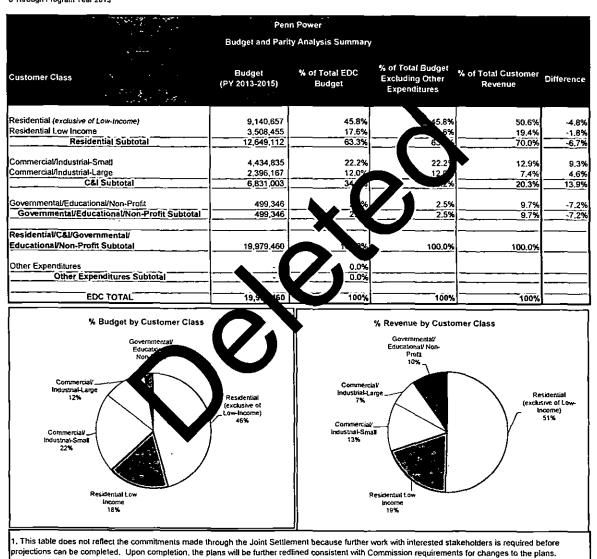
Appendix E Table 4: Program Summaries

	Program Name	Program Market	Program Two Sentence Summary	Program Years Operated	Net Lifetime MWh Savings	Net Peak Demand kW Savings	Percentage of Portfolio MWh savings %	Percentage Total Lifetin MWh saving:
Residential	Appliance Turn-In Program	RES	This program provides rebates to consumers for turning an working refrigerator, freezer, or room air-conditioner.	4	21,601	3,253	4.5%	3.1%
	Energy Efficient Products Program	RES	This program provides rebates to consumers and financial incentives and support to retailers and magnetic these the energy efficient products, such as HVAC full metal appliances, lighting, home electronics and other modura.	4	42,601	3,458	17.3%	6.0%
	Home Performance Program	RES	This program provides energy efficiency education and awareness along with mer creas and resolutions for customers to conserve energy in their home.	4	132,077	11,244	25.5%	18.7%
	Totals for Residential Sector				196,279	17,955	47.4%	27.8%
Residential Low- Income Sector Programs	Low Income Program	LI RES	This premise provides basic to comprehensive whole house medicles, stough one mail or direct installation, and estimates discours about their home's energy use and ways to save diergy to ownicome households.	4	13,465	2,580	2.2%	1.9%
	Totals for Low-Income Sector	14	further work with interested stakeholders is required before		13,465	2,580	2.2%	1.9%

Appendix E Table 4: Program Summaries

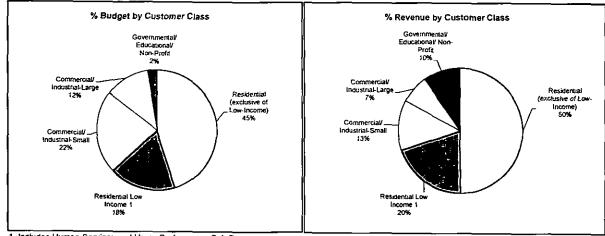
			Penn Power Program Summaries					
	Program Name Program Market		Program Two Sentence Summary	Program Years Operated	Net Lifetime MWh Savings	Net Peak Demand kW Savings	Percentage of Portfolio MWh savings %	
Residential	Appliance Turn-In Program	RES	This program provides rebates to consumers for turning in a working refrigerator, freezer, or room air-conditioner.	4	21,601	3,253	4.6%	3.1%
	Energy Efficient Products Program	RES	This program provides rebates to consumers and financial incentives and support to retailers and manufacturers that sell energy efficient products, such as HVAC equipment, appliances, lighting, home electronics and other products.	4	42,601	3,458	17.3%	6.0%
	Home Performance Program	RES	This program provides energy efficiency education and awareness along with measures and incentives for customers to conserve energy in their homes.	4	130,143	11,128	25.2%	18.4%
	Totals for Residential Sector				194,345	17,839	47.1%	27.5%
Residential Low- Income Sector Programs	Low Income Program 1.	LIRES	This program provides basic to comprehensive whole house measures, through direct mail or direct installation, and educates customers about their home's energy use and ways to save energy to low-income households.	4	14,615	5,609	2.3%	2.1%
	Totals for Low-Income Sector	<del> </del>		<del> </del>	14,615	5,609	2.3%	2.1%

Appendix E
Table 5: Budget and Parity Analysis Summary
o Through Program Year 2015



Appendix E
Table 5: Budget and Parity Analysis Summary
o Through Program Year 2015

	Pen	n Power				
	Budget and Parit	y Analysis Summary				
Customer Class	Budget (PY 2013-2015)	% of Total EDC Budget	% of Total Budget Excluding Other Expenditures	% of Total Customer Revenue	Difference	
Residential (exclusive of Low-Income)	9,005,667	45.1%	45.1%	49.9%	-4,8%	
Residential Low Income 1	3,634,708	18.2%	18.2%			
Residential Subtotal	12,640,375	63.3%	63.3%		-6.7%	
Commercial/Industrial-Small	4,434,835	22.2%	22.2%	12.9%	9.39	
Commercial/Industrial-Large	2,396,167	12.0%	12.0%	7.4%	4.69	
C&I Subtotal	6,831,003	34.2%	34,2%	20.3%	13.9%	
Governmental/Educational/Non-Profit	499,346	2.5%	2.5%	9.7%	-7.29	
Governmental/Educational/Non-Profit Subtotal	499,346	2.5%	2.5%	9.7%	-7.29	
Residential/C&I/Governmental/		————	<del></del>		- <del></del>	
Educational/Non-Profit Subtotal	19,970,724	100.0%	100.0%	100.0%		
Other Expenditures	_	0.0%		ļ		
Other Expenditures Subtotal		0.0%				
EDC TOTAL	19,970,724	100%	100%	100%	[ <del></del> -	



<sup>1.</sup> Includes Human Services and Home Performance Sub-Programs

Appendix E
Table 6A: Portfolio-Specific Assignment of EE&C Costs

Penn Power  Residential Portfolio (excluding Low-Income)											
	Cost Elements (\$)										
EE&C Program	Total Incentives	Operation Costs	Total Budget (2013-2015)								
Appliance Turn-In Program	326,625	811 055	1,138,680								
Energy Efficient Products Program	1,301,865	783), 75	2,085,240								
Home Performance Program	3,084,750	2 560 232	5,644,982								
Totals	4,71, 30	4,15, 662	8,868,902								

Residential Lov. '		Cost Elements (\$	5)
EE&C Program	. '1. al Incentives	Operations Costs	Total Budget (2013-2015)
Low Income Program	0	2,973,454	2,973,454
Totals	0	2,973,454	2,973,454

Appendix E
Table 6A: Portfolio-Specific Assignment of EE&C Costs

Penn Residential Portfolio	Power  O (excluding Low-Inco	ome)					
	• • • • • • • • • • • • • • • • • • • •	Cost Elements (\$)					
EE&C Program	Total Incentives	Operations Costs	Total Budget (2013-2015)				
Appliance Turn-In Program	326,625	812,055	1,138,680				
Energy Efficient Products Program	1,290,645	773,043	2,063,688				
Home Performance Program	2,999,910	2.531,634	5,531 <u>,</u> 54 <u>4</u>				
Totals	4,617,180	4,116,732	8,733,912				

2	Penn Pow Residential Low-Inco					
		Cost Elements (\$)				
	EE&C Program	Total Incentives	Operations Costs	Total Budget (2013-2015)		
Low Income Program	m <sup>1</sup>	0	3,099,707	3,099,707		
L	Totals	0	3,099,707	3,099,707		

<sup>1.</sup> Includes Human Services and Home Performance Sub-Programs

## Appendix E Table 6C: Summary of Portfolio EE&C Costs

Penn Power	Total Sector Portfolio-specific Costs	Total Common Costs	Total of All Costs
Residential (including Low-Income)	\$11,842,355	\$806,757	12,645,112
Commercial/ Industrial-Small	\$4,321,720	\$63.1	\$4,434,835
Commercial/ Industrial-Large	\$2,358498	\$3,4970	\$2,396,167
Governmental/Educational/ Non-Profit	\$485,565	\$13,781	\$499,346
Totals	19107,838	\$971,622	\$19,979,460

Appendix E

Table 6C: Summary of Portfolio EE&C Costs

Penn Power		Total Common Costs	Total of All Costs
Residential (including Low-Income)	\$11,833,619	\$806,757_	<b>\$12,640,375</b>
Commercial/ Industrial-Small	\$4,321,720	\$113,115	\$4,434,835
Commercial/ Industrial-Large	\$2,358,198	\$37,970_	\$2, <u>396,1</u> 67
Governmental/Educational/ Non-Profit	\$485,565	\$13,781	\$499 <u>,34</u> 6
Totals	\$18,999,101	\$971,622	\$19,970,724

Table 7A: TRC Benefits Table

Residential Portfolio				The state of the s	-र्वन्य अस्तिक	9.64%	Penn Power	Same Sanding	स्कृति हैं।	* # · · ·		. `	
exclusive of Low-Income)		TRC Benefits By Program Per Year (\$000)											
	Program		Program Costs	Program Benefits	Capa Ann			ergy nual	Load Redu	ctions in kW	MWh	Saved	
· Program	Year	TRC	(\$000)	(\$000)	Benefits	Gen/T&D	Benefits 1	On/Off Peak	Annual	Lifetime	Annual	Lifetime	
Appliance Turn-In Program	2013		283	65	14,658	See footnote 1	50,401	See footnote 2	151		1,451		
	2014		288	121	18,013		103,357		301		2,902		
	2015		293	194	32,451		161,286	12	452	}	4.354	j	
	Total	1.3	779	1,005	135,195		869,677			3,253	1,004	21,601	
	2013	_	566	118	13,470		104,859		138	<del>                                     </del>	5,475	27,007	
Energy Efficient	2014		574	233	16,650	l	215,875		278	1 1	10,993	}	
Products Program	2015		583	368	30,170		358295		420		16,554	1	
	Total	1.2	1,555	_ 1,859	134,967		23.7			3.458	.0,034	42,601	
	2013		1,934	809	110,127	<b>A</b>	\$698.910	1	1,131		13,001		
Home Performance	2014		1,851	1,087	85,326	<b>1</b>	148		1,427		18,831	1	
Program	2015		1,822	1,455	123,234		1,391900	17	1,715	1	24.458	ļ	
	Total	1.2	5,075	6,128	489,620		5,638,851	ł		11,244	2 ,, 100	132,077	
Total		1.2	7,409	8,992	759,782		232,269			17,955		196,279	

<sup>1:</sup> Generation, Transmission and Distribution Capacity costs are combined in a sure of availed capacity costs. These costs are then NPV back to the year the measure unit was installed. The combined avoided capacity costs cannot be use finited by component; therefore, the total avoided capacity costs for Generation, Transmission, and Distribution are displayed here.

<sup>2:</sup> The on and off peak energy costs are combined in a sum of avaides 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 thereone, the total avoided energy costs for on and off peak energy costs are displayed here.

<sup>3.</sup> This table does not reflect the commitment goade through the tons stillement because further work with interested stakeholders is required before projections can be completed. Upon completion, the plans will be further redlined consistent with Commission requirements for changes to the plans.

Appendix E

#### Table 7A: TRC Benefits Table

Residential Portfolio (exclusive of Low-Income)	, S (4000)											
	Program		Program Costs	Program Benefits		Capacity Annual		Energy Annual		ctions in kW	MWh Saved	
Program	Year 1	TRC	(\$000)	(\$000)	Benefits	Gen/T&D	Benefits	On/Off Peak	Annual	Lifetime	Annual	Lifetime
	2013	ĺ	283	65	14,658	See footnote 1	50,401	See footnote 2	151	1	1,451	2.110 (1)110
Appliance Turn-In	2014	1	288	121	18,013		103,357		301	1	2,902	
Program	2015		293	194	32,451		161,286	1	452		4,354	
	Total	1.3	779	1,005	135,195	[	869,677	ĺ		3,253	1,001	21,601
	2013	_	566	118	13,470		104,859	ì	138	1,=1,	5,475	21,001
Energy Efficient	2014	ł	569	233	16,650		215,875		278	J	10,993	
Products Program	2015		578	368	30,170		338,295		420	1	16,554	
	Total	1.2	1,546	1,859	134,967		1,723,741			3,458	10,004	42,601
	2013	_	1,925	802	108,924	[	692,762	1	1,119	1	12,897	72,001
Home Performance	2014	ľ	1,828	1,073	84,270		989,102		1,409		18,592	
Program	2015		1,799	1,432	121,585	l )	1,310,812	]	1,692		24,083	
	Total	1.2	5,025	6,041	484,069		5,556,942		-,,,,,,	11,128	2 1,505	130,143
Total		1.2	7,351	8,905	754,232	_	8,150,360			17,839		194,34

<sup>1:</sup> 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.

<sup>2:</sup> 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.

Table 7B: TRC Benefits Table

Residential Low- Income Portfolio					TI		Penn Power By Program I	Per Year (\$00	0)			
		Program Costs	Program Benefits	•	pacity mual		ergy nual	Load Redu	ctions in kW	MWh	Saved	
Program	Year 🚜	TRC	(\$000)	(\$000)	Benefits	Gen/T&D	Benefits	On/Off Peak	Annual	Lifetime	Annual	Lifetime
	2013		1,228	57	10,858	See footnote 1	46,420	e footnote 2	112		1,025	
Low Income	2014		1,041	81	12,156		68,422	Se footnote 2	203		1,378	
Program	2015	<u> </u>	1,267	129	21,899		106,790		305		2,067	
<u></u>	Total	0.2	3,190	_659	103,626	<u></u>	555,616		}	2,580		13,465
Total		0.2	3,190	659	103,626		555,616			2,580		13,465

- 1: Generation, Transmission and Distribution Capacity costs are combined in a sum of avoided anacity 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 cases 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 long avoided energy costs for on and off peak energy costs are displayed here.
- 3. This table does not reflect the commitments made through the Joint Settlement scarse further work with interested stakeholders is required before projections can be completed. Upon completion, the plans will be larger redifficult on significant with Commission requirements for changes to the plans.

Table 7B: TRC Benefits Table o Program Year is June 1 - May 31

Residential Low- Income Portfolio		Penn Power TRC Benefits By Program Per Year (\$000)										:	
Program			Program Costs					ergy Load Reductions in kW mual		MWh Saved			
Program	Year	TRC	(\$000)	(\$000)	Benefits	Gen/T&D	. Benefits	On/Off Peak	Annual	Lifetime	Annual	Lifetime	
	2013		1,270	72	22,413	See footnote 1	49,517	See footnote 2	230		1,086		
Low Income	2014		1,080	100	26,312		73,789		440		1,475		
Program	2015		1,312	163	47,427		115,677		660		2,225		
	Total	0.3	3,304	827	224,385		602,410		<u> </u>	5,609		14,615	
Total		0.3	3,304	827	224,385		602,410			5,609		14,615	

- 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.
- 3: Includes Human Services and Home Performance Sub-Programs

Penn Power - Exhibit B - TRC Impact Assessment

Program	Approved TRC Costs (\$000)	Approved TRC Benefits	Approved TRC	Proposed TRC Cost!	Proposed TRC Benefit (000)	Proposed iTRC/rg
Energy Efficient Products Program	1,555	1,859	1,2	1,546	1,859	1.2
Home Performance Program	5,075	6,128	1.2	5,024	6,041	1.2
Low Income Program	3,190	659	0.2	3,304	827	0.3
Plan Total	21,833,465	29,052,347	1,3	21,889,034	29,132,442	1.3

Note:
1. TRC Costs, Benefits and Ratio per Appendix E, Table 7A & B, and Appendix E, Table 1

#### PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Power Company's Request for Expedited Approval of Proposed Minor Act 129 EE&C Plan Changes Pursuant to the June 10, 2011 Final Order in Docket No. M-2008-2069887

Docket No. M-2012-2334395

:

#### **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).

November 22, 2013

Kathy J. Kolich, Esquire

Service via overnight, as follows:

Rosemary Chiavetta, Secretary Pennsylvania Public Utility Commission Commonwealth Keystone Building 400 North Street, 2<sup>nd</sup> Floor Harrisburg, PA 17120 RECEIVED

NOV 2 2 2013
PA PUBLIC UTILITY COMMISSION
SECRETARY'S BUREAU

#### Service via First Class and Electronic Mail, as follows

Tanya McCloskey, Esquire Christy M. Appleby, Esquire Candis Tunilo' Office of Consumer Advocate 5<sup>th</sup> Floor, Forum Place 555 Walnut Street Harrisburg, PA 17101 tmmcloskey@paoca.org cappleby@paoca.org ctunilo@paoca.org Daniel Asmus, Esquire Office of Small Business Advocate 300 North Second Street, Suite 1102 Harrisburg, PA 17101 dasmus@pa.gov Charles Daniel Shields, Esquire
Carrie B. Wright, Esquire
Office of Trial Staff
Pennsylvania Public Utility Commission
Commonwealth Keystone Bldg., 2<sup>nd</sup> Fl. West
P.O. Box 3265
Harrisburg, PA 17105-3265
chshields@pa.gov
carwright@pa.gov

Harry S. Geller, Esquire
Patrick Cicero, Esquire
Pennsylvania Utility Law Project
118 Locust Street
Harrisburg, PA 17101
hgellerpulp@palegalaid.net
pciceropulp@palegalaid.net

Thomas J. Sniscak, Esquire
Julie A. Conover, EsquireHawke McKeon
&Sniscak LLP
100 North 10<sup>th</sup> Street
PO Box 1778
Harrisburg, PA 17105
tjsniscak@hmslegal.com
jaconover@hmslegal.com

Teresa Schmittberger
McNees Wallace & Nurick LLC
100 Pine Street
PO Box 1166
Harrisburg, PA 17108-1166
tschmittberger@mwn.com

Derrick Price Williamson, Esquire Barry A. Naum, Esquire Spilman, Thomas & Battle, PLLC 1100 Bent Creek Boulevard, Suite 101 Mechanicsburg, PA 17050 dwilliamson@spilmanlaw.com bnaum@spilmanlaw.com Jeffrey Norton, Esquire Carl R. Shultz, Esquire Eckert Seamans Cherin & Mellott 213 Market Street, 8<sup>th</sup> Floor Harrisburg, PA 17101 dclearfield@eckertseamans.com cshultz@eckertseamans.com

Mark C. Morrow, Esquire Chief Regulatory Counsel UGI Corporation 460 North Gulph Road King of Prussia, PA 19406 morrowm@ugicorp.com Joseph L. Vullo, Esquire Burke Vullo Reilly Roberts 1460 Wyoming Avenue Forty Fort, PA 18704 jlvullo@aol.com

Heather M. Langeland, Esquire PennFuture 200 First Avenue, Suite 200 Pittsburgh, PA 15222 langeland@pennfuture.com From: (330) 384-5801 Ori KATHY GRANT FIRSTENERGY CORP LEGAL DEPARTMENT - 15TH FLOOR 76 SOUTH MAIN STREET

Origin ID: CAKA **Fed** 



Ship Date: 22NOV13 ActWgt: 1.0 LB CAD: 4458302/INET3430

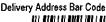
.....

SHIP TO: (717) 772-7777

**AKRON, OH 44398** 

**BILL SENDER** 

Rosemary Chiavetta, Secretary Pennsylvania Public Utility Commiss Commonwealth Keystone Bldg. 400 North Street, 2nd Floor Harrisburg, PA 17120





Ref# Invoice#

ef# 503001 503001 560

PO # Dept #

TRK#

0201

MON - 25 NOV 10:30A PRIORITY OVERNIGHT

ASR

17120 PA-US

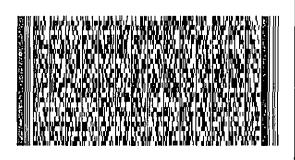
**MDT** 

**XH MDTA** 

7972 2661 9469



51AG1/05E6/1A9E



After printing this label:

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.

Fold the printed page along the horizontal line.

3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of \$100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of \$100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is \$1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.