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November 22, 2013

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

NOV 22 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*

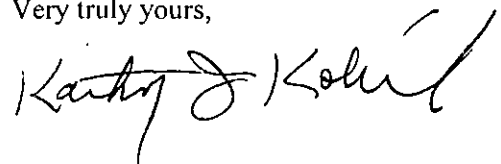
*Metropolitan Edison Company Docket No. M-2012-2334387
Pennsylvania Electric Company Docket No. M-2012-2334392
Pennsylvania Power Company Docket No. M-2012-2334395
West Penn Power Company Docket No. M-2012-2334398*

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,



kag

Enclosures

cc: Parties of record

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**West Penn 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-2012-2334398

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PA PUBLIC UTILITY COMMISSION
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**WEST PENN 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**

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**Counsel for:
West Penn 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”), West Penn Power Company (“West Penn” 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-2012-2334398. Specifically, through this request, West Penn is proposing to shift to its Low Income Program budgeted funds of \$170,593, a portion of which will come from both the Company’s Residential Home Performance Program (“RHP”) and its Residential Energy Efficient Products Program (“EEP”). West Penn is also proposing to add a measure to its Government and Institutional Program.

A redline/revised version of the relevant portions of West Penn’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, West Penn 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, West Penn offers the following:

BACKGROUND

A. Procedural History

1. On November 13, 2012, West Penn, along with its sister utilities, Metropolitan Edison Company, Pennsylvania Electric Company and Pennsylvania 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.¹
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, West Penn 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.

¹ 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 West Penn 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 West Penn'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.
13. West Penn 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, West Penn proposes to increase the budget for the Residential Low Income Program by \$170,593 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. West Penn 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 2,138 MWh in savings.

14. To support the increase in budget for the Residential Low Income Program, West Penn proposes to decrease the budgets for the Residential Home Performance Program and the Residential Energy Efficient Products Program by \$93,958 and \$108,229, 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 555 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. West Penn 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.

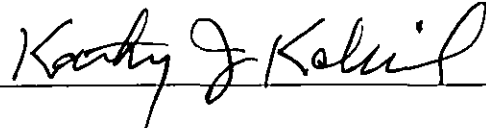
16. These changes will best position West Penn to increase the energy savings expected to be achieved through its direct low income programs as contemplated in the Settlement, and should support West Penn in its attempt to achieve its Commission-adopted goal of 4.5% reduction from the low income sector 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 West Penn'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.²
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:

² 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, West Penn 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,



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Dated: November 22, 2013

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West Penn
Exhibits
Case No. M-2012-2334398

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

| Program | Approved Plan Units | Proposed Plan Units | Total Unit Impact | Approved Plan Savings (MWh) | Proposed Plan Savings (MWh) | Total Savings Impact | Approved Plan Budget | Proposed Plan Budget | Total Budget Impact |
|-----------------------------------|---------------------|---------------------|-------------------|-----------------------------|-----------------------------|----------------------|----------------------|----------------------|---------------------|
| Energy Efficient Products Program | 1,981,525 | 1,981,525 | 0 | 70,040 | 70,040 | 0 | \$11,176,801 | \$11,068,572 | (\$108,229) |
| Home Performance Program | 272,250 | 270,250 | (2,000) | 65,799 | 65,244 | (555) | \$13,730,390 | \$13,636,432 | (\$93,958) |
| Low Income Program | 7,600 | 24,270 | 16,670 | 3,684 | 5,822 | 2,138 | \$5,826,527 | \$5,997,120 | \$170,593 |
| Totals | 2,261,375 | 2,276,045 | 14,670 | 139,523 | 141,106 | 1,583 | \$30,733,718 | \$30,702,124 | (\$31,594) |

Notes:

1. Plan Units per Appendix D-3
2. 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)
3. Plan Budget per Appendix E, Table 8A



West Penn Power Company

Energy Efficiency & Conservation Plan

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

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

Docket No. M-2012-2334398

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implementation of this Plan is projected to generate Total Discounted Lifetime Benefits of approximately \$116 million, as shown in Table 1 located in Appendix E which results in a score on the Total Resource Cost ("TRC") test of 1.5.⁵

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)

West Penn 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].

West Penn 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

⁵ See Section 8.0 for a discussion on the TRC test.

additional opportunities. West Penn proposes to increase the budget for the Residential Low Income Program by \$170,593 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. West Penn also proposes to provide customized Energy Usage Reports to identified low income customers. The Company projects that these changes will generate approximately 2,138 MWh in savings.

To support the increase in budget for the Residential Low Income Program, West Penn proposes to decrease the budgets for the Residential Home Performance Program ("RHP") and the Residential Energy Efficient Products Program ("EEP") by \$93,958 and \$108,229, 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 555 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.

West Penn 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 West Penn to increase the energy savings expected to be achieved through its direct low income programs as contemplated in the Settlement, and should support West Penn 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 1 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.

1.2. Summary description of process used to develop the EE&C plan and key assumptions used in preparing the plan.

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

| Existing Program | Phase II Program | Program Description |
|---------------------------------------|---------------------------------------|--|
| Governmental & Institutional Programs | Governmental & Institutional Programs | This program provides financial incentives and support to Governmental & Institutional customers for the installation of energy efficient equipment and products |

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

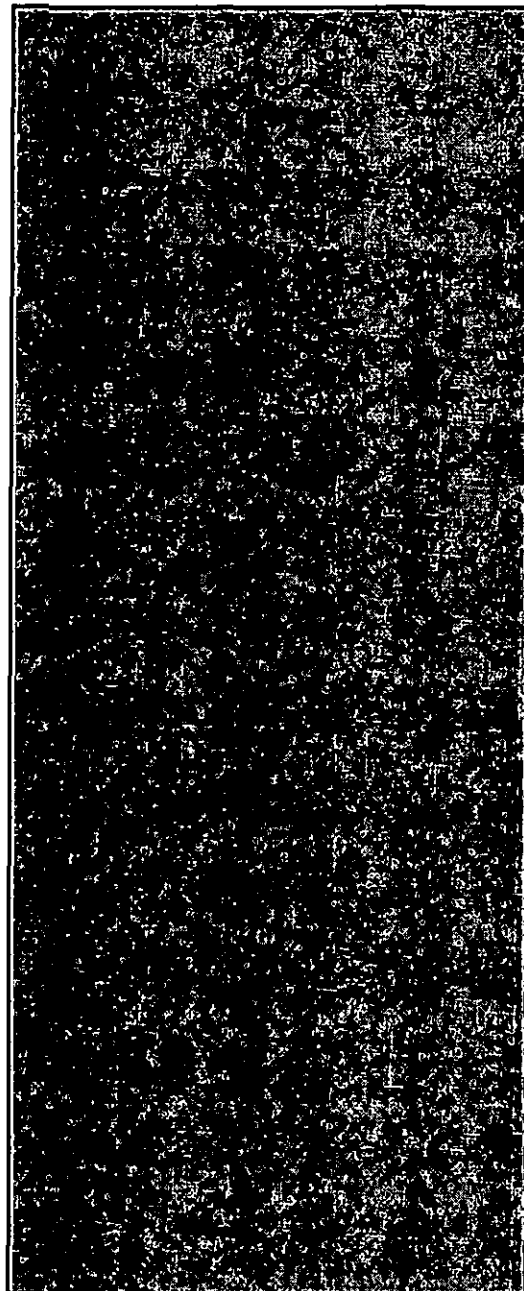
| Proposed Government Portfolio | | | |
|--------------------------------------|----------------------|---|----------------|
| Program | Sub Program | Measure | Measure Status |
| Governmental & Institutional Program | Outdoor Lighting | LED Traffic Signals | Existing |
| | | Energy Efficient Street & Area Lighting (Tanf / Util Owned) | Existing |
| | Lighting | Energy Efficient Exterior Lighting (Tanf / Cust Owned) | Existing |
| | | Energy Efficient Exterior Lighting - Non Profit | Existing |
| | | Linear Fluorescent Retrofits (Stdnd & Non Stdnd) - Non Profit | Existing |
| | | Energy Efficient Lighting Products - Non Profit | Existing |
| | | LED Exit Sign (Retrofit Only) - Non Profit | Existing |
| | | Lighting Controls (Occupancy & Daylight) - Non Profit | Existing |
| | Audits | Audit - Govt | Existing |
| | | Audits w/ Direct Install Measures - Govt | Existing |
| | HVAC & Water Heating | Air Conditioning - Non Profit | New |
| | | Heat Pump - Non Profit | New |
| | | Ground Source Heat Pump - Non Profit | New |
| | | PTAC - Non Profit | New |
| | | PTHP - Non Profit | New |
| | | Room Air Conditioner - Non Profit | New |
| | | Efficient Water Heater - Non Profit | New |
| | | Refrigerator Recycling - Non Profit | New |
| | | Freezer Recycling - Non Profit | New |
| | | Room Air Conditioner Recycling - Non Profit | New |
| | Appliances | Refrigerator - Non Profit | New |
| | | Freezer - Non Profit | New |
| | | EE Office Equipment - Non Profit | New |
| | | EE Office Equipment - Non Profit | New |
| | Multi Family | Audit - Multifamily - Govt | Existing |
| | | Energy Efficiency Measures - Multifamily - Govt | Existing |

¹³ Additional measures may be incorporated, as appropriate, as new measures are approved for inclusion in the TRM.

| Proposed Government Portfolio | | | |
|--------------------------------------|----------------------|---|----------------|
| Program | Sub Program | Measure | Measure Status |
| Governmental & Institutional Program | Outdoor Lighting | LED Traffic Signals | Existing |
| | | Energy Efficient Street & Area Lighting (Tariff / Util Owned) | Existing |
| | | Energy Efficient Exterior Lighting (Tariff / Cust Owned) | Existing |
| | Lighting | Energy Efficient Exterior Lighting - Non Profit | Existing |
| | | Linear Fluorescent Retrofits (Stdnd & Non Stdnd) - Non Profit | Existing |
| | | Energy Efficient Lighting Products - Non Profit | Existing |
| | | LED Exit Sign (Retrofit Only) - Non Profit | Existing |
| | | Lighting Controls (Occupancy & Daylight) - Non Profit | Existing |
| | Audits | Audit - Govt | Existing |
| | | Audits w/ Direct Install Measures - Govt | Existing |
| | | Air Conditioning - Non Profit | New |
| | HVAC & Water Heating | Heat Pump - Non Profit | New |
| | | Ground Source Heat Pump - Non Profit | New |
| | | PTAC - Non Profit | New |
| | | PTHP - Non Profit | New |
| | | Room Air Conditioner - Non Profit | New |
| | | Efficient Water Heater - Non Profit | New |
| | | Refrigerator Recycling - Non Profit | New |
| | | Freezer Recycling - Non Profit | New |
| | Appliances | Room Air Conditioner Recycling - Non Profit | New |
| | | Refrigerator - Non Profit | New |
| | | Freezer - Non Profit | New |
| | | EE Office Equipment - Non Profit | New |
| | | Audit - Multifamily - Govt | Existing |
| | Multi Family | Energy Efficiency Measures - Multifamily - Govt | Existing |
| | | Custom | New |

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

| | |
|--|--|
| <p>Program Title and Program years during which program will be implemented</p> | <p>Government & Institutional Program June 2013 - May 2016</p> |
| <p>Objective(s)</p> | <p>This is an expansion of the existing Government & Institutional 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:</p> <ul style="list-style-type: none"> • Outdoor Lighting • HVAC & Water Heating • Appliances • Lighting • Audits • <u>Multi Family</u> • <u>Custom</u> <p>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.</p> <p>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.</p> |
| <p>Target market</p> | <p>Commercial, industrial, and municipal customers of the 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 Program targets Government customers on the Company's</p> |



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.

Implementation strategy (including expected changes that may occur in different program years)

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

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.¹⁵

¹⁴ 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.

¹⁵ 2012 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.¹⁶

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%).

¹⁶ Targets provided in an October 10, 2012 memo from the SWE follow:

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% |
| Mct-Ed | 8.787% |
| Penelec | 10.231% |
| Penn Power | 10.639% |
| West Penn Power | 8.794% |

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 | West Penn Power |
|--|-----------------|
| Low Income Human Services & Home Performance | 4,278 |
| Low Income Dedicated Energy Usage Reports | 1,544 |
| Low Income Programs Sub-Total | 5,822 |
| Low Income participation in Residential Programs | 11,656 |
| Total | 17,478 |
| 4.5% Target | 15,189 |

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.*

Appendix C-
Program Costs and Savings by Program Year

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

| Sector | Program | Sub Program | Direct Costs | | | | Administrative Costs | | | | Total 2013 Administrative Costs | 2013 Total Costs |
|------------------------|--|---------------------------------|-----------------------------|----------------|-----------|-----------------|-------------------------|------------|---------------------------|------------|---------------------------------|------------------|
| | | | 2013 Program Administration | 2013 Marketing | 2013 M&V | 2013 Incentives | Total 2013 Direct Costs | 2013 Labor | 2013 Tracking & Reporting | 2013 Other | | |
| Residential | Appliance Turn-In Program | Appliance Turn-In | \$725,029 | \$261,000 | \$28,866 | \$425,500 | \$1,440,346 | \$36,637 | \$36,298 | \$7,762 | \$70,697 | \$1,511,091 |
| | Energy Efficient Products Program | Appliances | \$144,675 | \$2,506 | \$2,435 | \$697,600 | \$846,616 | \$727 | \$522 | \$154 | \$1,403 | \$848,219 |
| | | Consumer Electronics | \$76,500 | \$0 | \$1,835 | \$142,650 | \$220,985 | \$548 | \$393 | \$116 | \$1,057 | \$222,043 |
| | | HVAC & Water Heating | \$314,108 | \$43,381 | \$1,589 | \$782,225 | \$1,121,322 | \$477 | \$342 | \$101 | \$820 | \$1,122,242 |
| | | Lighting | \$410,286 | \$156,520 | \$152,079 | \$639,600 | \$1,358,484 | \$45,398 | \$32,587 | \$9,618 | \$87,604 | \$1,446,088 |
| | Home Performance Program | Audits | \$563,122 | \$55,301 | \$2,449 | \$611,250 | \$1,232,123 | \$4,222 | \$3,030 | \$684 | \$8,147 | \$1,240,269 |
| Behavioral | | \$2,156,550 | \$0 | \$68,450 | \$0 | \$2,224,950 | \$118,002 | \$84,702 | \$25,001 | \$227,704 | \$2,452,654 | |
| Via | | \$158,780 | \$22,773 | \$2,282 | \$405,000 | \$588,834 | \$3,933 | \$2,623 | \$833 | \$7,590 | \$596,424 | |
| Residential Low-Income | Low Income Program | New Homes | \$232,555 | \$22,854 | \$61 | \$150,000 | \$405,499 | \$105 | \$75 | \$22 | \$202 | \$405,702 |
| | | Home Performance Human Services | \$208,783 | \$6,693 | \$64 | \$0 | \$215,542 | \$110 | \$79 | \$23 | \$213 | \$215,755 |
| Small C&I | C&I Energy Efficient Equipment Program - Small | Appliances | \$1,698,140 | \$29,573 | \$77,100 | \$0 | \$1,804,813 | \$133,000 | \$46,766 | \$221,804 | \$401,570 | \$2,206,383 |
| | | Custom Equipment | \$235,896 | \$37,505 | \$17,284 | \$448,951 | \$739,636 | \$8,621 | \$13,366 | \$3,945 | \$33,933 | \$775,548 |
| | | Food Service | \$1,356,183 | \$488 | \$418 | \$386,810 | \$1,753,877 | \$51 | \$324 | \$66 | \$871 | \$1,754,750 |
| | | Lighting | \$3,683 | \$1,485 | \$1,282 | \$574,039 | \$580,489 | \$992 | \$293 | \$268 | \$2,668 | \$583,187 |
| | C&I Energy Efficient Buildings Program - Small | Custom Buildings | \$4,615 | \$1,873 | \$1,606 | \$187,328 | \$205,422 | \$1,243 | \$367 | \$342 | \$3,342 | \$208,765 |
| | | Lighting | \$121,219 | \$49,199 | \$42,178 | \$611,558 | \$824,154 | \$42,656 | \$32,656 | \$9,636 | \$87,788 | \$911,942 |
| Large C&I | C&I Energy Efficient Equipment Program - Large | Audits | \$124,317 | \$37,366 | \$493 | \$565,200 | \$727,375 | \$48 | \$328 | \$97 | \$883 | \$728,253 |
| | | Lighting | \$139,036 | \$86,558 | \$264 | \$152,043 | \$377,901 | \$45 | \$176 | \$52 | \$474 | \$378,800 |
| | | HVAC | \$224,156 | \$92,325 | \$27,891 | \$359,450 | \$703,821 | \$5,918 | \$18,603 | \$5,491 | \$50,010 | \$753,902 |
| | C&I Energy Efficient Buildings Program - Large | New Buildings | \$21,712 | \$3,598 | \$14 | \$5,023 | \$30,347 | \$13 | \$10 | \$3 | \$26 | \$31,378 |
| | | Custom Equipment | \$291,113 | \$105,568 | \$68 | \$1,165,443 | \$1,562,192 | \$41 | \$29 | \$5 | \$75 | \$1,486,825 |
| | | Lighting | \$106,960 | \$43,412 | \$28,325 | \$40,100 | \$218,797 | \$16,827 | \$12,078 | \$3,565 | \$32,471 | \$251,268 |
| Government | Governmental & Institutional Program | HVAC | \$1,014 | \$411 | \$258 | \$10,233 | \$187,297 | \$156 | \$114 | \$34 | \$308 | \$187,604 |
| | | Custom Buildings | \$82,003 | \$29,681 | \$27,509 | \$32,410 | \$181,603 | \$4,308 | \$3,091 | \$912 | \$8,710 | \$186,013 |
| Grand Total | | Audits | \$78,912 | \$37,776 | \$35,139 | \$29,219 | \$182,046 | \$5,481 | \$3,934 | \$1,161 | \$10,578 | \$192,624 |
| | | Multi-family | \$338,273 | \$22,854 | \$12,289 | \$12,289 | \$385,705 | \$2,874 | \$2,083 | \$605 | \$5,545 | \$391,244 |
| Grand Total | | | \$9,799,390 | \$1,036,524 | \$557,621 | \$10,451,535 | \$21,875,514 | \$480,221 | \$296,002 | \$295,368 | \$1,071,592 | \$22,947,108 |

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

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

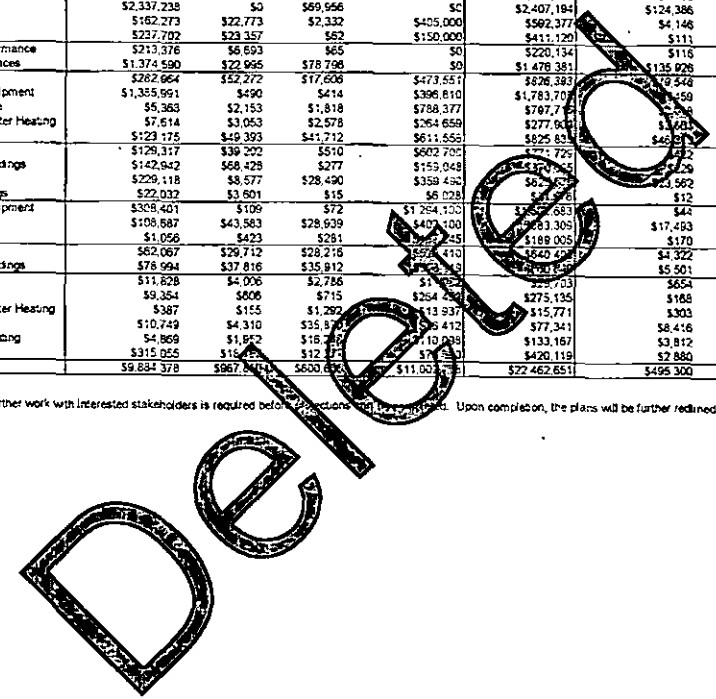
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Appendix C: Program costs and savings by program year
 o Program Year is June 1 - May 31

| West Penn | | | | | | | | | | | | |
|--------------------|--|----------------------|-----------------------------|----------------|-----------|-----------------|-------------------------|------------|---------------------------|------------|------------------|---------------------------------|
| Sector | Program | Sub Program | Direct Costs | | | | Administrative Costs | | | | 2014 Total Costs | |
| | | | 2014 Program Administration | 2014 Marketing | 2014 MAU | 2014 Incentives | Total 2014 Direct Costs | 2014 Labor | 2014 Tracking & Reporting | 2014 Other | | Total 2014 Administrative Costs |
| Residential | Appliance Turn-In Program | Appliance Turn-In | \$740,978 | \$261,000 | \$29,501 | \$425,500 | \$1,456,980 | \$37,156 | \$27,245 | \$3,227 | \$67,628 | \$1,524,608 |
| | Energy Efficient Products Program | Appliances | \$148,062 | \$2,562 | \$2,481 | \$697,000 | \$850,104 | \$766 | \$561 | \$67 | \$1,394 | \$851,498 |
| | | Consumer Electronics | \$89,425 | \$0 | \$2,139 | \$162,350 | \$253,914 | \$680 | \$484 | \$57 | \$1,201 | \$255,115 |
| | | HVAC & Water Heating | \$357,912 | \$44,345 | \$1,884 | \$844,275 | \$1,248,417 | \$582 | \$426 | \$51 | \$1,059 | \$1,249,475 |
| | | Lighting | \$419,312 | \$159,963 | \$154,918 | \$639,906 | \$1,373,784 | \$47,811 | \$35,058 | \$4,153 | \$87,023 | \$1,460,817 |
| | Home Performance Program | Audits | \$563,541 | \$56,132 | \$2,503 | \$611,250 | \$1,233,426 | \$4,450 | \$3,263 | \$367 | \$8,100 | \$1,241,526 |
| | | Behavioral | \$2,337,238 | \$0 | \$69,566 | \$0 | \$2,407,194 | \$124,366 | \$91,208 | \$10,867 | \$226,399 | \$2,633,594 |
| | | IGAs | \$162,273 | \$22,773 | \$7,332 | \$405,000 | \$597,377 | \$4,148 | \$3,040 | \$360 | \$7,547 | \$599,924 |
| | | New Homes | \$237,702 | \$23,357 | \$62 | \$150,000 | \$411,120 | \$111 | \$81 | \$10 | \$201 | \$411,322 |
| | Residential Low-Income | Low Income Program | Home Performance | \$213,376 | \$6,693 | \$65 | \$0 | \$220,134 | \$116 | \$85 | \$10 | \$211 |
| Human Services | | | \$1,374,590 | \$22,965 | \$78,798 | \$0 | \$1,476,353 | \$135,926 | \$38,907 | \$217,108 | \$302,118 | \$1,808,500 |
| Small C&I | C&I Energy Efficient Equipment Program - Small | Appliances | \$262,664 | \$52,272 | \$17,606 | \$473,657 | \$826,383 | \$9,544 | \$14,334 | \$1,666 | \$35,520 | \$861,973 |
| | | Custom Equipment | \$1,355,991 | \$490 | \$414 | \$396,810 | \$1,783,707 | \$59 | \$337 | \$40 | \$836 | \$1,784,541 |
| | | Food Service | \$5,363 | \$2,153 | \$1,818 | \$788,377 | \$797,711 | \$0 | \$1,480 | \$175 | \$3,674 | \$801,369 |
| | | HVAC & Water Heating | \$7,614 | \$3,053 | \$2,578 | \$264,659 | \$277,904 | \$1,001 | \$2,069 | \$249 | \$5,210 | \$283,114 |
| | | Lighting | \$129,175 | \$49,393 | \$41,712 | \$611,555 | \$829,835 | \$48,917 | \$33,960 | \$4,023 | \$84,295 | \$910,134 |
| | C&I Energy Efficient Buildings Program - Small | Audits | \$126,317 | \$39,292 | \$510 | \$602,705 | \$769,824 | \$12 | \$310 | \$37 | \$788 | \$772,497 |
| | | Custom Buildings | \$142,942 | \$68,428 | \$277 | \$155,048 | \$306,695 | \$29 | \$168 | \$20 | \$417 | \$311,112 |
| | | IGAs | \$229,118 | \$8,577 | \$28,490 | \$359,452 | \$625,637 | \$2,562 | \$17,277 | \$2,047 | \$42,886 | \$668,561 |
| | | New Buildings | \$22,032 | \$3,601 | \$15 | \$6,028 | \$31,676 | \$12 | \$9 | \$1 | \$22 | \$31,686 |
| | | Custom Equipment | \$308,401 | \$109 | \$72 | \$1,264,100 | \$1,572,683 | \$44 | \$32 | \$4 | \$80 | \$1,602,762 |
| Large C&I | C&I Energy Efficient Equipment Program - Large | Lighting | \$108,687 | \$43,583 | \$28,939 | \$407,100 | \$587,309 | \$17,483 | \$12,827 | \$1,519 | \$31,840 | \$615,148 |
| | | HVAC | \$1,056 | \$423 | \$281 | \$25 | \$1,805 | \$170 | \$125 | \$15 | \$309 | \$1,891,114 |
| | C&I Energy Efficient Buildings Program - Large | Audits | \$62,067 | \$29,712 | \$28,216 | \$69,410 | \$189,405 | \$4,322 | \$3,170 | \$375 | \$7,887 | \$191,237 |
| | | Custom Buildings | \$78,994 | \$37,816 | \$35,912 | \$1,000,000 | \$1,152,722 | \$5,501 | \$4,034 | \$478 | \$10,013 | \$1,167,748 |
| Government | Governmental & Institutional Program | Appliances | \$11,828 | \$4,036 | \$2,786 | \$1,000,000 | \$1,121,650 | \$654 | \$479 | \$57 | \$1,190 | \$1,123,976 |
| | | Audits | \$9,354 | \$606 | \$715 | \$254,450 | \$273,125 | \$188 | \$123 | \$15 | \$355 | \$273,643 |
| | | HVAC & Water Heating | \$387 | \$155 | \$1,282 | \$13,937 | \$15,761 | \$303 | \$222 | \$26 | \$552 | \$16,323 |
| | | Lighting | \$10,749 | \$4,310 | \$35,874 | \$9,412 | \$50,345 | \$8,416 | \$6,171 | \$731 | \$15,116 | \$66,656 |
| | | Outdoor Lighting | \$4,869 | \$1,852 | \$18,277 | \$10,299 | \$35,397 | \$3,812 | \$2,795 | \$331 | \$6,939 | \$41,465 |
| | | Multi-family | \$315,055 | \$15,000 | \$12,777 | \$0 | \$342,832 | \$2,880 | \$2,112 | \$258 | \$5,243 | \$348,223 |
| Grand Total | | | \$9,884,378 | \$867,844 | \$600,606 | \$11,000,000 | \$22,462,651 | \$495,300 | \$302,514 | \$248,412 | \$1,046,226 | \$23,508,877 |

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

1. This table does not reflect the commitments made through the Joint Settlement because further work with interested stakeholders is required before the plans will be further refined consistent with Commission requirements for changes to the plans.



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

| Sector | Program | Sub Program | Direct Costs | | | | | Administrative Costs | | | | 2015 Total Costs |
|------------------------|--|----------------------|-----------------------------|-----------|----------------|----------------|-------------------------|----------------------|---------------------------|-----------|---------------------------------|------------------|
| | | | 2015 Program Administration | | 2015 Incidents | | Total 2015 Direct Costs | 2015 Labor | 2015 Tracking & Reporting | | Total 2015 Administrative Costs | |
| | | | 2015 | 2016 | 2015 MAY | 2015 Incidents | | | 2015 | 2015 | | |
| Residential | Appliance Turn-In Program | Appliance Turn-In | \$757,281 | \$261,000 | \$30,150 | \$425,900 | \$1,473,971 | \$36,409 | \$20,527 | \$3,190 | \$60,126 | \$1,534,097 |
| | Energy Efficient Products Program | Appliances | \$151,319 | \$2,618 | \$2,526 | \$697,000 | \$653,454 | \$321 | \$576 | \$68 | \$1,465 | \$654,929 |
| | | Consumer Electronics | \$104,971 | \$0 | \$2,502 | \$184,050 | \$291,522 | \$813 | \$570 | \$68 | \$1,451 | \$292,973 |
| | | HVAC & Water Heating | \$402,564 | \$45,321 | \$2,174 | \$918,500 | \$1,368,539 | \$707 | \$495 | \$59 | \$1,261 | \$1,369,800 |
| | | Lighting | \$428,537 | \$163,483 | \$157,771 | \$639,600 | \$1,389,391 | \$51,285 | \$35,954 | \$4,289 | \$91,498 | \$1,480,889 |
| | Home Performance Program | Audits | \$575,939 | \$56,982 | \$2,558 | \$611,250 | \$1,246,729 | \$4,520 | \$3,169 | \$375 | \$8,065 | \$1,254,794 |
| | | Behavioral | \$2,303,780 | \$0 | \$71,495 | \$0 | \$2,375,275 | \$126,345 | \$85,578 | \$10,493 | \$225,414 | \$2,600,689 |
| | | Kits | \$165,843 | \$22,773 | \$2,363 | \$405,000 | \$595,969 | \$4,212 | \$2,953 | \$350 | \$7,514 | \$603,513 |
| | | New Homes | \$242,891 | \$23,870 | \$54 | \$150,000 | \$416,865 | \$112 | \$78 | \$9 | \$200 | \$417,065 |
| Residential Low-Income | Low Income Program | Home Performance | \$218,070 | \$6,693 | \$67 | \$0 | \$224,830 | \$118 | \$53 | \$10 | \$210 | \$225,040 |
| | | Human Services | \$1,773,681 | \$30,618 | \$80,530 | \$0 | \$1,884,829 | \$138,916 | \$43,408 | \$222,967 | \$410,312 | \$2,295,140 |
| Small C&I | C&I Energy Efficient Equipment Program - Small | Appliances | \$289,189 | \$52,308 | \$17,993 | \$473,551 | \$833,041 | \$0 | \$14,307 | \$14,307 | \$1,636 | \$844,677 |
| | | Custom Equipment | \$1,416,483 | \$501 | \$423 | \$396,810 | \$1,814,217 | \$77 | \$335 | \$40 | \$36,229 | \$1,850,772 |
| | | Food Service | \$5,486 | \$2,200 | \$1,858 | \$788,377 | \$797,921 | \$1,470 | \$1,470 | \$174 | \$3,741 | \$801,661 |
| | | HVAC & Water Heating | \$7,781 | \$3,120 | \$2,635 | \$264,659 | \$278,195 | \$5,285 | \$2,085 | \$247 | \$5,309 | \$283,501 |
| | | Lighting | \$125,885 | \$50,480 | \$42,630 | \$611,558 | \$830,553 | \$48,111 | \$33,728 | \$3,965 | \$85,833 | \$916,386 |
| | C&I Energy Efficient Buildings Program - Small | Audits | \$131,770 | \$39,806 | \$522 | \$602,700 | \$774,798 | \$3 | \$307 | \$36 | \$781 | \$775,578 |
| | | Custom Buildings | \$145,341 | \$69,577 | \$263 | \$159,045 | \$314,226 | \$36 | \$167 | \$20 | \$424 | \$314,673 |
| | | Kits | \$234,159 | \$8,766 | \$29,117 | \$359,480 | \$631,522 | \$24,425 | \$17,124 | \$2,028 | \$43,577 | \$675,109 |
| | | New Buildings | \$32,478 | \$3,662 | \$15 | \$6,025 | \$42,176 | \$13 | \$9 | \$1 | \$22 | \$42,206 |
| Large C&I | C&I Energy Efficient Equipment Program - Large | Custom Equipment | \$315,186 | \$111 | \$74 | \$1,294,103 | \$1,609,474 | \$45 | \$32 | \$4 | \$81 | \$1,609,555 |
| | | Lighting | \$111,078 | \$44,542 | \$29,575 | \$409,003 | \$594,198 | \$18,182 | \$12,747 | \$1,510 | \$32,436 | \$626,734 |
| | | HVAC | \$1,079 | \$433 | \$287 | \$7,415 | \$18,204 | \$177 | \$124 | \$15 | \$315 | \$18,648 |
| | C&I Energy Efficient Buildings Program - Large | Audits | \$65,021 | \$31,126 | \$29,320 | \$154,154 | \$279,621 | \$4,366 | \$3,222 | \$382 | \$8,970 | \$280,973 |
| | | Custom Buildings | \$80,320 | \$38,450 | \$36,219 | \$254,400 | \$409,409 | \$5,678 | \$3,981 | \$472 | \$10,130 | \$420,038 |
| Government | Governmental & Institutional Program | Appliances | \$12,088 | \$4,009 | \$2,648 | \$11,288 | \$30,027 | \$679 | \$476 | \$56 | \$1,211 | \$31,238 |
| | | Audits | \$9,560 | \$607 | \$731 | \$254,438 | \$275,357 | \$174 | \$122 | \$14 | \$314 | \$275,665 |
| | | HVAC & Water Heating | \$396 | \$159 | \$1,322 | \$13,937 | \$15,811 | \$315 | \$221 | \$26 | \$311 | \$16,373 |
| | | Lighting | \$10,893 | \$4,405 | \$36,633 | \$76,412 | \$78,461 | \$8,738 | \$6,126 | \$726 | \$15,590 | \$94,051 |
| | | Outdoor Lighting | \$4,976 | \$1,905 | \$10,459 | \$7,412 | \$133,675 | \$3,958 | \$2,775 | \$329 | \$7,062 | \$140,737 |
| | | Multifamily | \$321,988 | \$12,425 | \$12,425 | \$7,412 | \$427,335 | \$2,991 | \$2,097 | \$248 | \$5,336 | \$432,671 |
| Grand Total | | | \$10,436,192 | \$557,618 | \$613,541 | \$11,122,281 | \$23,159,343 | \$510,868 | \$309,169 | \$253,677 | \$1,073,915 | \$24,233,258 |

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

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

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

| Sector | Program | Sub Program | Direct Costs | | | | | Administrative Costs | | | | | 2013-2015 Total Costs |
|------------------------|--|----------------------|-------------------|-------------|-------------|--------------|------------------------------|----------------------|---------------------------|-----------------|--------------------------------|--------------|-----------------------|
| | | | 2013-2015 Program | | 2013-2015 | | 2013-2015 Total Direct Costs | 2013-2015 Tracking | | 2013-2015 Other | 2013-2015 Administrative Costs | | |
| | | | Administration | Marketing | MAV | Incentives | | 2013-2015 Labor | 2013-2015 C&S & Reporting | | | | |
| Residential | Appliance Turn-In Program | Appliance Turn-In | \$2,223,289 | \$783,000 | \$88,516 | \$1,276,500 | \$4,371,305 | \$112,201 | \$80,470 | \$14,179 | \$206,851 | \$4,578,156 | |
| | Energy Efficient Products Program | Appliances | \$444,256 | \$7,686 | \$7,443 | \$2,091,000 | \$2,560,384 | \$2,314 | \$1,659 | \$239 | \$4,262 | \$2,554,646 | |
| | | Consumer Electronics | \$270,896 | \$0 | \$6,476 | \$489,050 | \$766,421 | \$2,021 | \$1,447 | \$241 | \$3,709 | \$770,131 | |
| | | HVAC & Water Heating | \$1,074,614 | \$133,057 | \$5,657 | \$2,525,000 | \$3,738,328 | \$1,765 | \$1,264 | \$210 | \$3,240 | \$3,741,568 | |
| | | Lighting | \$1,258,134 | \$479,966 | \$464,769 | \$1,918,800 | \$4,121,668 | \$144,495 | \$103,599 | \$18,031 | \$266,124 | \$4,387,793 | |
| | Home Performance Program | Audits | \$1,702,602 | \$168,415 | \$7,510 | \$1,833,750 | \$3,712,278 | \$13,192 | \$9,463 | \$1,656 | \$24,312 | \$3,736,589 | |
| | | Behavioral | \$6,197,518 | \$0 | \$209,901 | \$0 | \$7,007,419 | \$380,733 | \$264,486 | \$46,298 | \$679,517 | \$7,686,936 | |
| | | Kits | \$486,895 | \$68,318 | \$6,997 | \$1,215,000 | \$1,777,295 | \$12,291 | \$8,816 | \$1,543 | \$22,651 | \$1,799,860 | |
| | | New Homes | \$713,218 | \$70,031 | \$187 | \$450,000 | \$1,233,455 | \$328 | \$235 | \$41 | \$604 | \$1,234,089 | |
| Residential Low-Income | Low Income Program | Home Performance | \$640,230 | \$20,078 | \$166 | \$0 | \$660,504 | \$344 | \$247 | \$43 | \$634 | \$661,138 | |
| | | Human Services | \$4,846,411 | \$83,186 | \$236,426 | \$0 | \$5,166,023 | \$7,842 | \$134,171 | \$661,986 | \$1,204,000 | \$6,370,022 | |
| Small C&I | C&I Energy Efficient Equipment Program - Small | Appliances | \$808,049 | \$142,086 | \$52,863 | \$1,396,053 | \$2,399,051 | \$4,176 | \$41,830 | \$7,330 | \$107,742 | \$2,506,793 | |
| | | Custom Equipment | \$4,158,636 | \$1,479 | \$1,255 | \$1,180,430 | \$5,351,850 | \$996 | \$175 | \$0 | \$2,559 | \$5,354,350 | |
| | | Food Service | \$14,537 | \$5,847 | \$4,957 | \$2,150,793 | \$2,176,134 | \$3,272 | \$3,942 | \$642 | \$10,882 | \$2,186,217 | |
| | | HVAC & Water Heating | \$20,010 | \$8,047 | \$6,819 | \$726,648 | \$761,524 | \$7,334 | \$5,427 | \$863 | \$13,588 | \$775,380 | |
| | | Lighting | \$370,278 | \$149,072 | \$126,520 | \$1,834,674 | \$3,479,544 | \$13,617 | \$100,343 | \$17,657 | \$257,818 | \$3,737,462 | |
| | C&I Energy Efficient Buildings Program - Small | Audits | \$385,403 | \$118,374 | \$1,524 | \$1,850,500 | \$2,255,801 | \$917 | \$945 | \$170 | \$2,432 | \$2,308,334 | |
| | | Custom Buildings | \$427,318 | \$204,583 | \$824 | \$470,144 | \$1,102,869 | \$712 | \$511 | \$92 | \$1,314 | \$1,104,184 | |
| | | Kits | \$887,463 | \$109,669 | \$85,498 | \$1,078,470 | \$1,971,029 | \$73,903 | \$53,003 | \$9,566 | \$136,472 | \$2,097,572 | |
| | | New Buildings | \$66,222 | \$10,961 | \$44 | \$18,084 | \$85,211 | \$32 | \$27 | \$5 | \$65 | \$85,281 | |
| Large C&I | C&I Energy Efficient Equipment Program - Large | Custom Equipment | \$614,701 | \$325 | \$215 | \$1,755,640 | \$2,366,881 | \$130 | \$93 | \$16 | \$235 | \$4,669,120 | |
| | | Lighting | \$326,725 | \$131,537 | \$86,839 | \$1,100,000 | \$1,645,101 | \$52,502 | \$37,652 | \$6,565 | \$96,748 | \$1,848,150 | |
| | | HVAC | \$3,148 | \$1,267 | \$637 | \$55,093 | \$59,145 | \$506 | \$363 | \$63 | \$932 | \$59,678 | |
| | C&I Energy Efficient Buildings Program - Large | Audits | \$189,090 | \$90,520 | \$85,145 | \$1,841,000 | \$2,105,755 | \$13,225 | \$9,483 | \$1,670 | \$24,378 | \$1,966,134 | |
| | | Custom Buildings | \$238,226 | \$114,042 | \$107,269 | \$1,528,000 | \$1,987,537 | \$18,660 | \$11,849 | \$2,111 | \$30,719 | \$2,014,814 | |
| Government | Governmental & Institutional Program | Appliances | \$30,644 | \$10,272 | \$7,470 | \$28,630 | \$77,229 | \$1,765 | \$1,266 | \$205 | \$3,235 | \$80,464 | |
| | | Audits | \$28,068 | \$1,819 | \$2,154 | \$83,377 | \$113,422 | \$509 | \$365 | \$65 | \$936 | \$114,487 | |
| | | HVAC & Water Heating | \$1,113 | \$448 | \$3,777 | \$7,411 | \$12,749 | \$680 | \$631 | \$103 | \$1,414 | \$14,874 | |
| | | Lighting | \$32,312 | \$13,059 | \$108,889 | \$79,096 | \$222,355 | \$25,550 | \$13,924 | \$3,235 | \$47,709 | \$279,869 | |
| | | Outdoor Lighting | \$14,837 | \$6,688 | \$49,413 | \$33,034 | \$33,664 | \$1,573 | \$8,300 | \$1,466 | \$21,339 | \$42,173 | |
| | | Multifamily | \$545,314 | \$61,506 | \$37,088 | \$22,660 | \$666,568 | \$1,267,153 | \$8,745 | \$6,271 | \$1,107 | \$16,124 | \$1,283,278 |
| Grand Total | | | \$30,119,660 | \$7,661,822 | \$2,522,267 | \$32,555,951 | \$67,497,529 | \$1,486,380 | \$907,685 | \$797,657 | \$3,191,721 | \$70,689,241 | |

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

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

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

| Residential Portfolio (exclusive of Low Income) | | | West Penn TRC Benefits By Program Per Year (\$000) | | | | | | | | | |
|---|--------------|------------|---|--------------------------|------------------|------------------|-------------------|-------------------|-----------------------|---------------|---------------|----------------|
| Program | Program Year | TRC | Program Costs (\$000) | Program Benefits (\$000) | Capacity | | Energy | | Load Reductions in kW | | MWh Saved | |
| | | | | | Annual Benefits | Gen/T&D | Annual Benefits | On/Off Peak | Annual | Lifetime | Annual | Lifetime |
| Appliance Turn-In Program | 2013 | | 1,066 | 242 | 58,109 | See footnote 1 | 184,016 | See footnote 2 | 583 | | 5,567 | |
| | 2014 | | 1,099 | 449 | 71,436 | | 377,247 | | 1,166 | | 11,134 | |
| | 2015 | | 1,117 | 719 | 128,675 | | 590,510 | | 1,749 | | 16,701 | |
| | Total | | 1.3 | 3,030 | 3,992 | | 568,069 | | 3,424,431 | | 12,808 | |
| Energy Efficient Products Program | 2013 | | 2,921 | 492 | 75,880 | | 415,947 | | 761 | | 22,804 | |
| | 2014 | | 3,054 | 962 | 98,472 | | 863,098 | | 1,607 | | 46,139 | |
| | 2015 | | 3,193 | 1,555 | 186,828 | | 1,368,302 | | 2,539 | | 70,040 | |
| | Total | | 1.0 | 8,399 | 8,432 | | 868,714 | | 5,632,260 | | 20,791 | |
| Home Performance Program | 2013 | | 4,557 | 3,394 | 495,974 | | 2,997,967 | | 4,976 | | 53,133 | |
| | 2014 | | 4,748 | 3,563 | 325,730 | | 3,273,148 | | 5,316 | | 59,466 | |
| | 2015 | | 4,738 | 4,074 | 416,205 | | 3,657,303 | | 5,657 | | 65,799 | |
| | Total | | 1.0 | 12,883 | 13,495 | 1,421,094 | | 12,073,333 | | 25,542 | | 265,592 |
| Total | | 1.1 | 24,312 | 25,919 | 2,857,877 | | 23,051,221 | | | 59,141 | | 536,807 |

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.

| Residential Low Income Portfolio | | | West Penn TRC Benefits By Program Per Year (\$000) | | | | | | | | | |
|----------------------------------|--------------|------------|---|--------------------------|-----------------|----------------|------------------|------------------|-----------------------|--------------|---------------|---------------|
| Program | Program Year | TRC | Program Costs (\$000) | Program Benefits (\$000) | Capacity | | Energy | | Load Reductions in kW | | MWh Saved | |
| | | | | | Annual Benefits | Gen/T&D | Annual Benefits | On/Off Peak | Annual | Lifetime | Annual | Lifetime |
| Low Income Program | 2013 | | 2,476 | 86 | 20,956 | See footnote 1 | 65,470 | See footnote 2 | 205 | | 1,434 | |
| | 2014 | | 2,143 | 235 | 22,986 | | 110,857 | | 391 | | 2,251 | |
| | 2015 | | 2,574 | 423 | 43,874 | | 185,730 | | 596 | | 3,684 | |
| | Total | | 0.2 | 7,600 | 1,224 | 225,014 | | 1,059,133 | | 5,298 | | 26,002 |
| Total | | 0.2 | 7,600 | 1,224 | 225,014 | | 1,059,133 | | 5,298 | | 26,002 | |

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: 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 refined consistent with Commission requirements for changes to the plans.

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

| Sector | Program | Sub Program | Direct Costs | | | | | Administrative Costs | | | | 2013 Total Costs |
|------------------------|--|---------------------------------|-----------------------------|----------------|-------------|-----------------|-------------------------|----------------------|---------------------------|------------|---------------------------------|------------------|
| | | | 2013 Program Administration | 2013 Marketing | 2013 M&V | 2013 Incentives | Total 2013 Direct Costs | 2013 Labor | 2013 Tracking & Reporting | 2013 Other | Total 2013 Administrative Costs | |
| | | | | | | | | | | | | |
| Residential | Appliance Turn-In Program | Appliance Turn-In | \$725,029 | \$261,000 | \$28,866 | \$425,500 | \$1,440,393 | \$36,637 | \$26,298 | \$7,762 | \$70,697 | \$1,511,091 |
| | Energy Efficient Products Program | Appliances | \$144,876 | \$2,506 | \$2,435 | \$677,100 | \$826,916 | \$727 | \$522 | \$154 | \$1,403 | \$828,319 |
| | | Consumer Electronics | \$76,500 | \$0 | \$1,835 | \$142,650 | \$220,985 | \$548 | \$393 | \$116 | \$1,057 | \$222,043 |
| | | HVAC & Water Heating | \$314,108 | \$43,391 | \$1,598 | \$755,825 | \$1,118,922 | \$477 | \$342 | \$101 | \$920 | \$1,119,842 |
| | | Lighting | \$410,286 | \$156,520 | \$152,079 | \$638,600 | \$1,358,484 | \$45,398 | \$32,584 | \$9,818 | \$87,800 | \$1,446,284 |
| | Home Performance Program | Audits | \$563,122 | \$55,301 | \$2,459 | \$611,250 | \$1,232,133 | \$4,222 | \$3,030 | \$894 | \$8,147 | \$1,240,280 |
| Behavioral | | \$2,148,816 | \$0 | \$68,430 | \$0 | \$2,215,945 | \$118,002 | \$64,702 | \$25,001 | \$227,704 | \$2,443,049 | |
| Refr | | \$158,780 | \$22,773 | \$2,781 | \$405,000 | \$588,343 | \$3,933 | \$2,823 | \$833 | \$7,590 | \$596,433 | |
| Residential Low-Income | Low Income Program | New Homes | \$232,585 | \$22,854 | \$61 | \$150,000 | \$405,500 | \$105 | \$75 | \$22 | \$202 | \$405,702 |
| | | Home Performance Human Services | \$208,783 | \$6,893 | \$64 | \$0 | \$215,540 | \$110 | \$79 | \$23 | \$213 | \$215,753 |
| Small C&I | C&I Energy Efficient Equipment Program - Small | Appliances | \$235,856 | \$37,505 | \$17,264 | \$448,651 | \$739,615 | \$18,621 | \$13,366 | \$3,945 | \$35,933 | \$775,548 |
| | | Custom Equipment | \$1,356,163 | \$488 | \$418 | \$396,810 | \$1,753,879 | \$451 | \$324 | \$96 | \$871 | \$1,754,750 |
| | | Food Service | \$3,683 | \$1,495 | \$1,282 | \$574,039 | \$580,499 | \$1,382 | \$992 | \$293 | \$2,667 | \$583,167 |
| | | HVAC & Water Heating | \$4,615 | \$1,873 | \$1,608 | \$197,328 | \$205,422 | \$1,732 | \$1,243 | \$367 | \$3,342 | \$208,765 |
| | | Lighting | \$121,219 | \$49,199 | \$42,178 | \$611,558 | \$824,153 | \$45,494 | \$32,656 | \$9,639 | \$87,789 | \$911,842 |
| | C&I Energy Efficient Buildings Program - Small | Audits | \$124,317 | \$37,366 | \$493 | \$596,200 | \$757,375 | \$458 | \$328 | \$97 | \$883 | \$758,256 |
| | | Custom Buildings | \$139,036 | \$66,558 | \$264 | \$152,045 | \$357,906 | \$245 | \$176 | \$52 | \$474 | \$358,380 |
| | | Refr | \$224,186 | \$92,325 | \$27,691 | \$359,490 | \$703,692 | \$25,916 | \$18,803 | \$5,491 | \$50,210 | \$753,902 |
| | | New Buildings | \$21,712 | \$3,598 | \$14 | \$6,028 | \$31,352 | \$13 | \$10 | \$3 | \$26 | \$31,378 |
| | | Custom Equipment | \$291,113 | \$105 | \$68 | \$1,165,442 | \$1,456,727 | \$41 | \$29 | \$9 | \$78 | \$1,456,805 |
| Large C&I | C&I Energy Efficient Equipment Program - Large | Custom Equipment | \$108,960 | \$43,412 | \$28,325 | \$402,100 | \$580,797 | \$18,827 | \$12,078 | \$3,565 | \$32,471 | \$613,268 |
| | | Lighting | \$1,014 | \$411 | \$268 | \$185,603 | \$187,297 | \$159 | \$114 | \$34 | \$308 | \$187,604 |
| | | HVAC | \$62,003 | \$29,681 | \$27,609 | \$520,410 | \$639,703 | \$4,306 | \$3,091 | \$912 | \$8,310 | \$648,013 |
| | C&I Energy Efficient Buildings Program - Large | Custom Buildings | \$78,912 | \$37,776 | \$35,139 | \$508,119 | \$659,945 | \$5,481 | \$3,934 | \$1,161 | \$10,576 | \$670,521 |
| Audits | | \$8,727 | \$2,256 | \$1,837 | \$6,879 | \$17,499 | \$432 | \$310 | \$92 | \$834 | \$18,333 | |
| Government | Governmental & Institutional Program | Appliances | \$8,154 | \$606 | \$711 | \$264,459 | \$274,930 | \$167 | \$120 | \$35 | \$323 | \$275,253 |
| | | Custom Buildings | \$331 | \$134 | \$1,115 | \$13,537 | \$15,118 | \$282 | \$188 | \$56 | \$526 | \$15,629 |
| | | HVAC & Water Heating | \$10,578 | \$4,293 | \$35,670 | \$26,412 | \$76,953 | \$8,396 | \$6,026 | \$1,779 | \$16,201 | \$93,154 |
| | | Lighting | \$4,792 | \$1,845 | \$16,458 | \$110,988 | \$132,992 | \$3,803 | \$2,730 | \$806 | \$7,339 | \$140,331 |
| | | Outdoor Lighting | \$308,273 | \$24,617 | \$12,208 | \$74,600 | \$419,698 | \$2,874 | \$2,083 | \$609 | \$5,545 | \$425,244 |
| | | Multimetry | | | | | | | | | | |
| | | Grand Total | | | \$9,846,788 | \$1,036,558 | \$587,736 | \$10,429,834 | \$21,900,918 | \$460,221 | \$298,002 | \$295,358 |

* 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

| | | Direct Costs | | | | | Administrative Costs | | | | | |
|------------------------|--|----------------------|------------------------|-----------|-----------|--------------|-------------------------|-------------|----------------------|-----------|---------------------------------|------------------|
| Sector | Program | Sub Program | 2014 | | | | Total 2014 Direct Costs | 2014 | | | Total 2014 Administrative Costs | 2014 Total Costs |
| | | | Program Administration | Marketing | MSV | Incentives | | Labor | Tracking & Reporting | Other | | |
| Residential | Appliance Turn-In Program | Appliance Turn-In | \$720,979 | \$261,000 | \$29,501 | \$425,500 | \$1,456,980 | \$37,156 | \$27,245 | \$3,227 | \$67,629 | \$1,524,609 |
| | Energy Efficient Products Program | Appliances | \$147,408 | \$2,562 | \$2,481 | \$677,100 | \$829,551 | \$766 | \$581 | \$67 | \$1,394 | \$830,944 |
| | | Consumer Electronics | \$89,425 | \$0 | \$2,139 | \$182,350 | \$253,914 | \$660 | \$184 | \$57 | \$1,201 | \$255,115 |
| | | HVAC & Water Heating | \$346,375 | \$44,345 | \$1,884 | \$841,875 | \$1,234,479 | \$582 | \$426 | \$51 | \$1,059 | \$1,235,538 |
| | | Lighting | \$376,500 | \$158,983 | \$154,818 | \$639,600 | \$1,332,985 | \$47,911 | \$36,058 | \$4,153 | \$87,023 | \$1,420,007 |
| | Home Performance Program | Audits | \$667,420 | \$56,132 | \$2,519 | \$611,250 | \$1,237,321 | \$4,450 | \$3,263 | \$367 | \$8,100 | \$1,245,421 |
| Behavioral | | \$2,326,851 | \$0 | \$70,881 | \$0 | \$2,397,732 | \$124,356 | \$91,208 | \$10,865 | \$226,399 | \$2,624,331 | |
| Kits | | \$155,075 | \$21,254 | \$2,190 | \$378,000 | \$556,520 | \$4,146 | \$3,040 | \$385 | \$7,547 | \$564,068 | |
| | New Homes | \$237,702 | \$23,357 | \$63 | \$150,000 | \$411,121 | \$111 | \$81 | \$10 | \$201 | \$411,322 | |
| Residential Low-Income | Low Income Program | Home Performance | \$213,376 | \$6,693 | \$66 | \$0 | \$220,135 | \$116 | \$85 | \$10 | \$211 | \$220,326 |
| | | Human Services | \$1,428,075 | \$22,995 | \$78,796 | \$0 | \$1,529,866 | \$135,026 | \$38,997 | \$217,196 | \$392,118 | \$1,921,984 |
| Small C&I | C&I Energy Efficient Equipment Program - Small | Appliances | \$282,964 | \$52,272 | \$17,606 | \$473,551 | \$826,363 | \$19,548 | \$14,334 | \$1,698 | \$35,580 | \$861,973 |
| | | Custom Equipment | \$1,385,991 | \$490 | \$414 | \$396,810 | \$1,783,705 | \$458 | \$337 | \$40 | \$836 | \$1,784,541 |
| | | Food Service | \$5,368 | \$2,153 | \$1,818 | \$788,377 | \$797,715 | \$2,018 | \$1,480 | \$175 | \$3,674 | \$801,389 |
| | | HVAC & Water Heating | \$7,814 | \$3,053 | \$2,578 | \$264,659 | \$277,904 | \$2,863 | \$2,099 | \$249 | \$5,214 | \$283,114 |
| | | Lighting | \$123,175 | \$49,393 | \$41,712 | \$611,568 | \$826,838 | \$46,313 | \$33,960 | \$4,023 | \$84,295 | \$910,134 |
| | C&I Energy Efficient Buildings Program - Small | Audits | \$129,317 | \$36,202 | \$510 | \$602,700 | \$771,729 | \$422 | \$310 | \$37 | \$768 | \$772,497 |
| Custom Buildings | | \$142,942 | \$68,428 | \$277 | \$159,048 | \$370,695 | \$229 | \$168 | \$20 | \$417 | \$371,112 | |
| Kits | | \$229,118 | \$8,577 | \$28,490 | \$359,490 | \$625,676 | \$23,562 | \$17,277 | \$2,047 | \$42,866 | \$668,581 | |
| | New Buildings | \$22,032 | \$3,601 | \$15 | \$6,028 | \$31,676 | \$12 | \$9 | \$1 | \$22 | \$31,698 | |
| Large C&I | C&I Energy Efficient Equipment Program - Large | Custom Equipment | \$308,401 | \$109 | \$72 | \$1,284,100 | \$1,692,683 | \$44 | \$32 | \$4 | \$80 | \$1,802,762 |
| | | Lighting | \$108,687 | \$43,583 | \$28,939 | \$402,100 | \$583,309 | \$17,483 | \$12,827 | \$1,519 | \$31,840 | \$615,148 |
| | | HVAC | \$1,056 | \$423 | \$281 | \$187,245 | \$189,005 | \$170 | \$125 | \$15 | \$309 | \$189,314 |
| | C&I Energy Efficient Buildings Program - Large | Audits | \$62,067 | \$29,712 | \$26,216 | \$520,410 | \$640,405 | \$4,322 | \$3,170 | \$375 | \$7,867 | \$648,273 |
| | Custom Buildings | \$78,994 | \$37,816 | \$35,912 | \$508,119 | \$660,842 | \$5,501 | \$4,034 | \$478 | \$10,013 | \$670,853 | |
| Government | Governmental & Institutional Program | Appliances | \$11,828 | \$4,006 | \$2,766 | \$11,082 | \$29,703 | \$654 | \$479 | \$57 | \$1,190 | \$30,893 |
| | | Audits | \$9,354 | \$606 | \$715 | \$264,459 | \$275,135 | \$168 | \$123 | \$15 | \$305 | \$275,440 |
| | | HVAC & Water Heating | \$387 | \$155 | \$1,292 | \$13,937 | \$15,771 | \$303 | \$222 | \$26 | \$552 | \$16,323 |
| | | Lighting | \$10,749 | \$4,310 | \$35,670 | \$28,412 | \$77,341 | \$8,418 | \$6,171 | \$731 | \$15,318 | \$82,659 |
| | | Outdoor Lighting | \$4,869 | \$1,952 | \$18,248 | \$110,098 | \$135,167 | \$3,812 | \$2,796 | \$331 | \$8,039 | \$140,106 |
| | | Multifamily | \$315,056 | \$18,187 | \$12,277 | \$74,600 | \$420,115 | \$2,880 | \$2,112 | \$250 | \$5,243 | \$425,362 |
| Grand Total | | | \$9,871,156 | \$968,331 | \$600,656 | \$10,960,458 | \$22,398,672 | \$1,465,300 | \$302,514 | \$248,412 | \$1,046,226 | \$23,444,838 |

* 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

| Sector | Program | Sub Program | Direct Costs | | | | Administrative Costs | | | | 2015 Total Costs | | |
|------------------|--|-----------------------------------|---------------------------------|----------------|-----------|-----------------|-------------------------|--------------|---------------------------|------------|------------------|---------------------------------|--------------|
| | | | 2015 Program Administration | 2015 Marketing | 2015 M&E | 2015 Incentives | Total 2015 Direct Costs | 2015 Labor | 2015 Tracking & Reporting | 2015 Other | | Total 2015 Administrative Costs | |
| | | | | | | | | | | | | | |
| Residential | Appliance Turn-In Program | Appliances | \$757,281 | \$261,000 | \$30,150 | \$425,500 | \$1,473,631 | \$36,406 | \$28,927 | \$3,190 | \$68,523 | \$1,542,450 | |
| | | Energy Efficient Products Program | \$150,888 | \$2,618 | \$2,526 | \$677,100 | \$833,132 | \$821 | \$576 | \$68 | \$1,465 | \$834,597 | |
| | Home Performance Program | Consumer Electronics | \$104,971 | \$0 | \$2,502 | \$184,050 | \$291,522 | \$813 | \$570 | \$68 | \$1,451 | \$292,973 | |
| | | HVAC & Water Heating | \$394,975 | \$45,321 | \$2,174 | \$916,100 | \$1,358,570 | \$707 | \$495 | \$50 | \$1,252 | \$1,359,822 | |
| | | Lighting | \$401,587 | \$183,483 | \$157,771 | \$639,600 | \$1,382,441 | \$51,285 | \$35,954 | \$4,259 | \$91,498 | \$1,473,939 | |
| | | Audits | \$578,904 | \$56,962 | \$2,574 | \$611,250 | \$1,250,709 | \$4,520 | \$3,159 | \$375 | \$8,054 | \$1,258,774 | |
| | | Behavioral | \$2,293,541 | \$0 | \$71,623 | \$0 | \$2,365,164 | \$126,345 | \$68,578 | \$10,493 | \$225,414 | \$2,590,578 | |
| | | Kits | \$158,487 | \$21,254 | \$2,238 | \$378,000 | \$559,979 | \$4,212 | \$2,953 | \$350 | \$7,514 | \$567,493 | |
| | Residential Low-Income | Low Income Program | New Homes | \$242,931 | \$23,870 | \$64 | \$150,000 | \$418,865 | \$112 | \$79 | \$9 | \$200 | \$419,066 |
| | | | Home Performance Human Services | \$218,070 | \$6,893 | \$67 | \$0 | \$224,930 | \$118 | \$83 | \$10 | \$210 | \$225,041 |
| Small C&I | C&I Energy Efficient Equipment Program - Small | Appliances | \$289,188 | \$52,308 | \$17,963 | \$473,551 | \$833,043 | \$20,307 | \$14,236 | \$1,686 | \$36,229 | \$869,272 | |
| | | Custom Equipment | \$1,416,483 | \$501 | \$423 | \$398,810 | \$1,814,217 | \$477 | \$335 | \$40 | \$552 | \$1,814,804 | |
| | | Food Service | \$5,488 | \$2,200 | \$1,858 | \$788,377 | \$797,921 | \$2,067 | \$1,470 | \$174 | \$3,241 | \$801,681 | |
| | | HVAC & Water Heating | \$7,781 | \$3,120 | \$2,825 | \$284,659 | \$298,385 | \$2,974 | \$2,085 | \$247 | \$5,306 | \$299,501 | |
| | | Lighting | \$125,885 | \$50,480 | \$42,630 | \$611,558 | \$830,553 | \$48,110 | \$33,728 | \$3,865 | \$85,633 | \$916,386 | |
| | C&I Energy Efficient Buildings Program - Small | Audits | \$131,770 | \$39,806 | \$522 | \$602,700 | \$774,798 | \$438 | \$307 | \$36 | \$781 | \$775,578 | |
| | | Custom Buildings | \$145,341 | \$69,577 | \$233 | \$159,048 | \$374,249 | \$238 | \$167 | \$20 | \$424 | \$374,673 | |
| | | Kits | \$234,158 | \$8,766 | \$29,117 | \$359,490 | \$631,532 | \$24,425 | \$17,124 | \$2,028 | \$43,577 | \$675,106 | |
| | | New Buildings | \$22,478 | \$3,662 | \$15 | \$6,028 | \$32,182 | \$13 | \$9 | \$1 | \$22 | \$32,205 | |
| | | Custom Buildings | \$15,186 | \$111 | \$74 | \$1,294,100 | \$1,409,471 | \$45 | \$32 | \$4 | \$81 | \$1,409,583 | |
| Large C&I | C&I Energy Efficient Equipment Program - Large | Custom Equipment | \$111,078 | \$44,842 | \$28,575 | \$402,100 | \$586,595 | \$18,182 | \$12,747 | \$1,510 | \$32,438 | \$619,034 | |
| | | Lighting | \$1,078 | \$433 | \$287 | \$187,245 | \$199,044 | \$177 | \$124 | \$15 | \$315 | \$199,359 | |
| | | HVAC | \$1,078 | \$433 | \$287 | \$187,245 | \$199,044 | \$177 | \$124 | \$15 | \$315 | \$199,359 | |
| | C&I Energy Efficient Buildings Program - Large | Audits | \$85,021 | \$31,126 | \$29,320 | \$536,180 | \$681,647 | \$4,596 | \$3,222 | \$389 | \$8,201 | \$689,848 | |
| Custom Buildings | \$80,320 | \$38,450 | \$36,215 | \$508,119 | \$663,104 | \$5,678 | \$3,881 | \$472 | \$10,130 | \$673,238 | | | |
| Government | Governmental & Institutional Program | Appliances | \$12,088 | \$4,009 | \$2,848 | \$11,082 | \$30,077 | \$679 | \$476 | \$58 | \$1,211 | \$31,281 | |
| | | Audits | \$6,560 | \$807 | \$731 | \$264,459 | \$272,557 | \$174 | \$122 | \$14 | \$311 | \$272,884 | |
| | | HVAC & Water Heating | \$396 | \$159 | \$1,320 | \$13,937 | \$15,811 | \$315 | \$221 | \$26 | \$561 | \$16,373 | |
| | | Lighting | \$10,985 | \$4,405 | \$38,659 | \$26,412 | \$78,461 | \$8,738 | \$6,126 | \$726 | \$15,590 | \$94,051 | |
| | | Outdoor Lighting | \$4,978 | \$1,995 | \$16,606 | \$110,098 | \$133,677 | \$3,958 | \$2,775 | \$329 | \$7,062 | \$140,737 | |
| | | Multifamily | \$321,866 | \$18,202 | \$12,547 | \$74,600 | \$427,215 | \$2,991 | \$2,087 | \$248 | \$5,326 | \$432,671 | |
| | | Grand Total | | \$10,447,079 | \$986,604 | \$613,681 | \$11,072,153 | \$23,119,716 | \$510,869 | \$309,169 | \$253,877 | \$1,073,915 | \$24,193,631 |

* 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

| Sector | Program | Sub Program | Direct Costs | | | | | Administrative Costs | | | | |
|------------------------|--|----------------------|-------------------|-------------|-------------|--------------|--------------|----------------------|-----------|-----------|-------------|--------------|
| | | | 2013-2015 Program | | 2013-2015 | | Total | 2013-2015 Tracking | | 2013-2015 | | Total |
| | | | Admin | Marketing | Admin | Marketing | | Admin | Reporting | Admin | Other | |
| Residential | Appliance Turn-In Program | Appliance Turn-In | \$2,223,289 | \$783,000 | \$38,516 | \$1,278,500 | \$4,371,306 | \$112,201 | \$80,470 | \$14,178 | \$206,851 | \$4,578,156 |
| | Energy Efficient Products Program | Appliances | \$443,604 | \$7,686 | \$7,443 | \$2,031,300 | \$2,490,033 | \$2,314 | \$1,659 | \$289 | \$4,262 | \$2,494,294 |
| | | Consumer Electronics | \$270,886 | \$0 | \$6,476 | \$469,050 | \$786,421 | \$2,021 | \$1,447 | \$241 | \$3,709 | \$770,131 |
| | | HVAC & Water Heating | \$1,074,814 | \$133,057 | \$5,657 | \$2,517,800 | \$3,731,128 | \$1,765 | \$1,264 | \$210 | \$3,240 | \$3,734,368 |
| | | Lighting | \$1,217,458 | \$479,988 | \$484,769 | \$1,918,800 | \$4,060,990 | \$144,495 | \$103,599 | \$18,031 | \$266,124 | \$4,347,114 |
| | Home Performance Program | Audits | \$1,710,448 | \$168,415 | \$7,552 | \$1,833,750 | \$3,720,163 | \$13,192 | \$9,463 | \$1,656 | \$24,312 | \$3,744,475 |
| | | Behavioral | \$6,787,307 | \$0 | \$210,134 | \$0 | \$6,977,441 | \$368,733 | \$264,486 | \$48,298 | \$679,517 | \$7,656,958 |
| | | Kits | \$472,341 | \$85,281 | \$8,719 | \$1,161,000 | \$1,705,342 | \$12,291 | \$8,818 | \$1,543 | \$22,651 | \$1,727,993 |
| | | New Homes | \$713,218 | \$70,081 | \$188 | \$250,000 | \$1,233,486 | \$328 | \$235 | \$41 | \$604 | \$1,234,090 |
| Residential Low-Income | Low Income Program | Home Performance | \$840,230 | \$20,078 | \$197 | \$0 | \$660,509 | \$344 | \$247 | \$43 | \$634 | \$661,139 |
| | | Human Services | \$5,016,396 | \$83,793 | \$236,426 | \$0 | \$5,336,615 | \$407,842 | \$134,171 | \$661,986 | \$1,204,000 | \$6,540,614 |
| Small C&I | C&I Energy Efficient Equipment Program - Small | Appliances | \$808,049 | \$142,086 | \$52,863 | \$1,396,053 | \$2,399,051 | \$58,476 | \$41,936 | \$7,330 | \$107,742 | \$2,506,793 |
| | | Custom Equipment | \$4,158,636 | \$1,479 | \$1,255 | \$1,190,430 | \$5,351,801 | \$1,388 | \$966 | \$175 | \$2,559 | \$5,354,950 |
| | | Food Service | \$14,537 | \$5,847 | \$4,957 | \$2,150,793 | \$2,176,135 | \$5,497 | \$3,942 | \$642 | \$10,082 | \$2,186,217 |
| | | HVAC & Water Heating | \$20,010 | \$8,047 | \$6,818 | \$726,646 | \$761,522 | \$7,589 | \$5,427 | \$863 | \$13,858 | \$775,380 |
| | | Lighting | \$378,279 | \$149,072 | \$126,520 | \$1,834,674 | \$2,480,544 | \$139,917 | \$100,343 | \$17,657 | \$257,918 | \$2,738,462 |
| | C&I Energy Efficient Buildings Program - Small | Audits | \$385,403 | \$118,374 | \$1,324 | \$1,800,600 | \$2,303,802 | \$1,317 | \$945 | \$170 | \$2,312 | \$2,306,114 |
| | | Custom Buildings | \$427,318 | \$204,563 | \$824 | \$470,144 | \$1,102,850 | \$712 | \$511 | \$92 | \$1,314 | \$1,104,164 |
| | | Kits | \$587,483 | \$109,669 | \$85,498 | \$1,078,470 | \$1,961,106 | \$73,903 | \$53,003 | \$9,506 | \$136,472 | \$2,097,572 |
| | | New Buildings | \$66,222 | \$10,881 | \$44 | \$18,084 | \$95,211 | \$38 | \$27 | \$5 | \$70 | \$96,281 |
| Large C&I | C&I Energy Efficient Equipment Program - Large | Custom Equipment | \$914,701 | \$325 | \$215 | \$3,753,642 | \$4,668,881 | \$190 | \$99 | \$16 | \$298 | \$4,669,179 |
| | | Lighting | \$326,725 | \$131,537 | \$88,839 | \$1,206,300 | \$1,751,401 | \$52,502 | \$37,652 | \$6,595 | \$96,748 | \$1,848,150 |
| | | HVAC | \$3,148 | \$1,267 | \$837 | \$560,093 | \$565,348 | \$506 | \$363 | \$63 | \$932 | \$566,278 |
| | C&I Energy Efficient Buildings Program - Large | Audits | \$159,090 | \$90,520 | \$85,145 | \$1,577,000 | \$1,941,756 | \$13,225 | \$9,493 | \$1,670 | \$24,378 | \$1,966,134 |
| | | Custom Buildings | \$738,226 | \$114,042 | \$107,789 | \$1,524,357 | \$1,983,855 | \$16,660 | \$11,949 | \$2,111 | \$30,719 | \$2,014,614 |
| Government | Governmental & Institutional Program | Appliances | \$30,644 | \$10,272 | \$7,470 | \$28,643 | \$77,229 | \$1,765 | \$1,266 | \$206 | \$3,235 | \$80,464 |
| | | Audits | \$28,068 | \$1,819 | \$2,158 | \$793,377 | \$825,422 | \$509 | \$365 | \$65 | \$939 | \$826,361 |
| | | HVAC & Water Heating | \$1,113 | \$448 | \$3,727 | \$41,411 | \$48,699 | \$880 | \$631 | \$108 | \$1,618 | \$48,318 |
| | | Lighting | \$32,312 | \$13,009 | \$108,198 | \$79,236 | \$232,756 | \$25,550 | \$18,324 | \$3,235 | \$47,109 | \$275,863 |
| | | Outdoor Lighting | \$14,837 | \$5,893 | \$49,011 | \$330,294 | \$399,834 | \$11,573 | \$8,300 | \$1,488 | \$21,338 | \$421,173 |
| | | Multifamily | \$245,314 | \$81,008 | \$37,092 | \$229,500 | \$1,267,153 | \$8,745 | \$6,271 | \$1,107 | \$16,124 | \$1,283,278 |
| Grand Total | | | \$30,711,694 | \$2,989,493 | \$1,802,282 | \$32,482,445 | \$67,485,914 | \$1,456,390 | \$907,665 | \$797,657 | \$3,161,732 | \$70,657,647 |

* 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

| Residential Portfolio (exclusive of Low Income) | | West Penn TRC Benefits By Program Per Year (\$000) | | | | | | | | | | | |
|---|--------------|--|-----------------------|--------------------------|------------------|------------------|-------------------|-------------------|-------------|-----------------------|---------------|----------------|----------------|
| Program | Program Year | TRC | Program Costs (\$000) | Program Benefits (\$000) | Capacity | | | Energy | | Load Reductions in kW | | MWh Saved | |
| | | | | | Annual | Gen/T&D | Benefits | Annual | On/Off Peak | Annual | Lifetime | Annual | Lifetime |
| Appliance Turn-In Program | 2013 | | 1,086 | 242 | 58,109 | See footnote 1 | 184,016 | See footnote 2 | 583 | | 5,567 | | |
| | 2014 | | 1,099 | 449 | 71,436 | | 377,247 | | 1,166 | | 11,134 | | |
| | 2015 | | 1,117 | 719 | 128,675 | | 590,510 | | 1,749 | | 16,701 | | |
| | Total | | 1.3 | 3,030 | 3,992 | 568,069 | | 3,424,431 | | | 12,808 | | 84,549 |
| Energy Efficient Products Program | 2013 | | 2,921 | 492 | 75,880 | | 415,947 | | 761 | | 22,804 | | |
| | 2014 | | 3,034 | 962 | 98,472 | | 863,098 | | 1,607 | | 45,139 | | |
| | 2015 | | 3,172 | 1,555 | 186,828 | | 1,368,302 | | 2,539 | | 70,040 | | |
| | Total | | 1.0 | 8,363 | 8,432 | 868,714 | | 7,563,260 | | | 20,791 | | 186,665 |
| Home Performance Program | 2013 | | 4,547 | 3,380 | 493,920 | | 2,686,245 | | 4,955 | | 52,925 | | |
| | 2014 | | 4,715 | 3,541 | 324,052 | | 3,217,211 | | 5,289 | | 59,084 | | |
| | 2015 | | 4,705 | 4,041 | 413,690 | | 3,627,596 | | 5,622 | | 65,244 | | |
| | Total | | 1.0 | 12,816 | 13,367 | 1,412,413 | | 11,954,444 | | | 25,373 | | 262,801 |
| Total | | 1.1 | 24,209 | 25,791 | 2,849,196 | | 22,942,135 | | | 58,972 | | 534,015 | |

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.

| Residential Low Income Portfolio | | West Penn TRC Benefits By Program Per Year (\$000) | | | | | | | | | | | |
|----------------------------------|--------------|--|-----------------------|--------------------------|--------------|----------------|----------|------------------|-------------|-----------------------|--------------|-----------|---------------|
| Program | Program Year | TRC | Program Costs (\$000) | Program Benefits (\$000) | Capacity | | | Energy | | Load Reductions in kW | | MWh Saved | |
| | | | | | Annual | Gen/T&D | Benefits | Annual | On/Off Peak | Annual | Lifetime | Annual | Lifetime |
| Low Income Program | 2013 | | 2,533 | 114 | 37,480 | See footnote 1 | 76,598 | See footnote 2 | 376 | | 1,642 | | |
| | 2014 | | 2,196 | 177 | 44,881 | | 132,499 | | 732 | | 2,636 | | |
| | 2015 | | 2,634 | 302 | 81,546 | | 220,215 | | 1,108 | | 4,278 | | |
| | Total | | 0.2 | 6,757 | 1,675 | 415,974 | | 1,259,353 | | | 9,764 | | 30,933 |

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

**Appendix D:
Calculation Methods and Assumptions**

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SECRETARY'S BUREAU

Appendix D-2: Measure Assumptions

| West Penn | | | | | | | | | | | | | | | |
|------------------------|-----------------------------------|----------------------|---|------------------------------------|----------------------|---------------------|------------|------------------|----------------|-------------|--------------------|----------------------------|-------------------------------|--------------------|------------------------------|
| Sector | Program | Sub Program | Measure | Measure Life | Verified kWh Savings | Verified kW Savings | NTG | Incremental Cost | Modeled Rebate | O&M Benefit | Source of Savings | Source of Incremental Cost | | | |
| Residential | Appliance Turn-In Program | Appliance Turn-In | Freezer Recycling | 8.0 | 863 | 0.1069 | 0.59 | \$0.00 | \$50.00 | | \$0.00 | 2012 PA TRM | Energy Efficiency Consultant | | |
| | | | Refrigerator Recycling | 8.0 | 629 | 0.0779 | 0.59 | \$0.00 | \$50.00 | | \$0.00 | 2012 PA TRM | Energy Efficiency Consultants | | |
| | | | Room Air Conditioner Recycling | 4.5 | 264 | 0.6390 | 0.59 | \$0.00 | \$91.30 | | \$0.00 | 2012 PA TRM | Energy Efficiency Consultant | | |
| | Energy Efficient Products Program | Appliances | Clothes Washer | 11.0 | 143 | 0.0146 | 0.32 | \$250.00 | \$94.00 | | \$0.00 | 2012 PA TRM | Mid-Atlantic TRM | | |
| | | | Dehumidifier | 12.0 | 152 | 0.0097 | 0.32 | \$45.00 | \$13.00 | | \$0.00 | 2012 PA TRM | Ohio TRM | | |
| | | | Refrigerator | 13.0 | 113 | 0.0129 | 0.32 | \$104.00 | \$63.00 | | \$0.00 | 2012 PA TRM | Mid-Atlantic TRM | | |
| | | | Freezer | 12.0 | 73 | 0.0084 | 0.32 | \$104.00 | \$31.00 | | \$0.00 | 2012 PA TRM | Mid-Atlantic TRM | | |
| | | | Pool Pump Motor | 10.0 | 525 | 0.2776 | 0.32 | \$290.00 | \$63.00 | | \$0.00 | 2012 PA TRM | Mid-Atlantic TRM | | |
| | | | Smart Strip | 5.0 | 182 | 0.0129 | 0.32 | \$21.00 | \$13.00 | | \$0.00 | 2012 PA TRM | Mid-Atlantic TRM | | |
| | | | Television | 15.0 | 249 | 0.0380 | 0.32 | \$1.00 | \$10.00 | | \$0.00 | 2012 PA TRM | Energy Efficiency Consultant | | |
| | | | EE Office Equipment | 5.0 | 175 | 0.0296 | 0.32 | \$1.00 | \$25.00 | | \$0.00 | 2012 PA TRM | Energy Efficiency Consultant | | |
| | | | Central Air Conditioner | 14.0 | 120 | 0.1167 | 0.32 | \$357.00 | \$150.00 | | \$0.00 | 2012 PA TRM | 2008 DEER | | |
| | | | Furnace Fan | 15.0 | 480 | 0.1228 | 0.32 | \$200.00 | \$100.00 | | \$0.00 | 2012 PA TRM | Mid-Atlantic TRM | | |
| | | HVAC & Water Heating | Ground Source Heat Pump | 15.0 | 2,543 | 0.0619 | 0.32 | \$10,000.00 | \$600.00 | | \$0.00 | 2012 PA TRM | Company Assumption | | |
| | | | Heat Pump | 12.0 | 589 | 0.1167 | 0.32 | \$411.00 | \$313.30 | | \$0.00 | 2012 PA TRM | 2008 DEER | | |
| | | | HVAC Maintenance | 5.0 | 283 | 0.2602 | 0.32 | \$85.00 | \$60.00 | | \$0.00 | 2012 PA TRM | Historic Actuals | | |
| | | | Room Air Conditioner | 9.0 | 24 | 0.0635 | 0.32 | \$60.00 | \$31.00 | | \$0.00 | 2012 PA TRM | Mid-Atlantic TRM | | |
| | | | Whole House Fan | 15.0 | 223 | 0.0007 | 0.32 | \$300.00 | \$125.00 | | \$0.00 | 2012 PA TRM | Energy Efficiency Consultant | | |
| | | | Ductless Mini-Split | 15.0 | 147 | 0.2071 | 0.32 | \$1,200.00 | \$375.00 | | \$0.00 | 2012 PA TRM | Energy Efficiency Consultant | | |
| | | | Efficient Water Heater | 12.2 | 958 | 0.0875 | 0.32 | \$250.00 | \$245.00 | | \$0.00 | 2012 PA TRM | 2008 DEER & Ohio TRM | | |
| | | | Lighting | Energy Efficient Lighting Products | 6.8 | 28 | 0.0013 | 0.32 | \$22.47 | \$1.00 | | \$0.00 | 2012 PA TRM | 2008 DEER | |
| | | | | Touchpad Floor Lamp | 10.0 | 97 | 0.0019 | 0.32 | \$5.06 | \$10.00 | | \$0.00 | 2012 PA TRM | 2008 DEER | |
| | | | | LED Holiday Lighting | 10.0 | 10 | 0.0010 | 0.32 | \$4.86 | \$4.00 | | \$0.00 | 2012 PA TRM | Company Assumption | |
| | | | Home Performance Program | Audits | On-Line Audit | 6.9 | 47 | 0.0023 | 0.65 | \$42.82 | \$54.00 | | \$0.00 | 2012 PA TRM | Historic Actuals |
| | | | | | Audit | 18.5 | 372 | 0.0289 | 0.65 | \$554.40 | \$375.00 | | \$0.00 | 2012 PA TRM | Energy Efficiency Consultant |
| Behavioral Kits | Energy Usage Reports | 8.0 | | 329 | 0.0206 | 1.00 | \$0.00 | \$0.00 | | \$0.00 | Company Assumption | N/A | | | |
| | Energy Efficiency Measures | 8.0 | | 34 | 0.0167 | 0.81 | \$42.82 | \$54.00 | | \$0.00 | 2012 PA TRM | Historic Actuals | | | |
| | New Homes | 15.0 | | 1,552 | 0.4327 | 0.80 | \$2,249.00 | \$750.00 | | \$0.00 | Historic Actuals | Historic Actuals | | | |
| Residential Low-Income | Low Income Program | Home Performance | Appliance Replacement | 7.0 | 1,176 | 0.1456 | 0.65 | \$0.00 | \$0.00 | | \$0.00 | 2012 PA TRM | No Upfront Cost to Customer | | |
| | | | Audit - Multi-Family | 8.0 | 115 | 0.2069 | 0.65 | \$554.40 | \$0.00 | | \$0.00 | 2012 PA TRM | No Upfront Cost to Customer | | |
| | | Human Services | Comprehensive | 8.0 | 1,400 | 0.4881 | 1.00 | \$0.00 | \$0.00 | | \$0.00 | Historic Actuals | No Upfront Cost to Customer | | |
| | | | Extra Measures | 8.0 | 292 | 0.0206 | 1.00 | \$0.00 | \$0.00 | | \$0.00 | Historic Actuals | No Upfront Cost to Customer | | |
| | | | Energy Efficiency Measures - Low Income | 8.0 | 308 | 0.0141 | 0.65 | \$0.00 | \$0.00 | | \$0.00 | 2012 PA TRM | No Upfront Cost to Customer | | |

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Appendix D-2: Measure Assumptions

| West Penn | | | | | | | | | | | | | | | | |
|---|-----------------------------------|-------------------------|--------------------------------|----------------------|----------------------------|---------------------|-------------------------|------------------------------------|---------------|-------------|-------------------|------------------------------|------------------------------|------------------------------|-----------------------------|------------------|
| Sector | Program | Sub Program | Measure | Measure Life | Verified kWh Savings | Verified kW Savings | NTG | Incremental Net Cost | Netted Rebate | OSM Benefit | Source of Savings | Source of Incremental Cost | | | | |
| Residential | Appliance Turn-In Program | Appliance Turn-In | Freezer Recycling | 8.0 | 863 | 0.1069 | 0.59 | \$0.00 | \$50.00 | \$0.00 | 2012 PA TRM | Energy Efficiency Consultant | | | | |
| | | | Refrigerator Recycling | 8.0 | 629 | 0.0779 | 0.59 | \$0.00 | \$50.00 | \$0.00 | 2012 PA TRM | Energy Efficiency Consultant | | | | |
| | | | Room Air Conditioner Recycling | 4.0 | 264 | 0.6390 | 0.59 | \$0.00 | \$31.00 | \$0.00 | 2012 PA TRM | Energy Efficiency Consultant | | | | |
| | Energy Efficient Products Program | Appliances | | Clothes Washer | 11.0 | 143 | 0.0146 | 0.32 | \$250.00 | \$92.00 | \$0.00 | 2012 PA TRM | Mid-Atlantic TRM | | | |
| | | | | Dehumidifier | 12.0 | 152 | 0.0097 | 0.32 | \$45.00 | \$11.00 | \$0.00 | 2012 PA TRM | Ohio TRM | | | |
| | | | | Refrigerator | 13.0 | 113 | 0.0129 | 0.32 | \$104.00 | \$61.00 | \$0.00 | 2012 PA TRM | Mid-Atlantic TRM | | | |
| | | | | Freezer | 12.0 | 73 | 0.0084 | 0.32 | \$104.00 | \$29.00 | \$0.00 | 2012 PA TRM | Mid-Atlantic TRM | | | |
| | | | | Pool Pump Motor | 10.0 | 525 | 0.2776 | 0.32 | \$290.00 | \$63.00 | \$0.00 | 2012 PA TRM | Mid-Atlantic TRM | | | |
| | | | | Smart Strip | 5.0 | 182 | 0.0129 | 0.32 | \$21.00 | \$13.00 | \$0.00 | 2012 PA TRM | Mid-Atlantic TRM | | | |
| | | | | Television | 15.0 | 249 | 0.0380 | 0.32 | \$1.00 | \$10.00 | \$0.00 | 2012 PA TRM | Energy Efficiency Consultant | | | |
| | | | | EE Office Equipment | 5.0 | 172 | 0.0236 | 0.32 | \$1.00 | \$25.00 | \$0.00 | 2012 PA TRM | Energy Efficiency Consultant | | | |
| | | | | HVAC & Water Heating | | | Central Air Conditioner | 14.0 | 120 | 0.1187 | 0.32 | \$357.00 | \$150.00 | \$0.00 | 2012 PA TRM | 2008 DEER |
| | | | | | | | Furnace Fan | 15.0 | 450 | 0.1222 | 0.32 | \$200.00 | \$100.00 | \$0.00 | 2012 PA TRM | Mid-Atlantic TRM |
| | | Ground Source Heat Pump | 15.0 | | | | 2,643 | 0.6319 | 0.32 | \$19,000.00 | \$600.00 | \$0.00 | 2012 PA TRM | Company Assumptior | | |
| | | Heat Pump | 12.0 | | | | 589 | 0.1187 | 0.32 | \$411.00 | \$313.00 | \$0.00 | 2012 PA TRM | 2008 DEER | | |
| | | HVAC Maintenance | 5.0 | | | | 263 | 0.2802 | 0.32 | \$85.00 | \$60.00 | \$0.00 | 2012 PA TRM | Histone Actuals | | |
| | | Room Air Conditioner | 9.0 | | | | 24 | 0.0635 | 0.32 | \$60.00 | \$29.00 | \$0.00 | 2012 PA TRM | Mid-Atlantic TRM | | |
| | | Whole House Fan | 15.0 | | | | 223 | 0.0000 | 0.32 | \$400.00 | \$125.00 | \$0.00 | 2012 PA TRM | Energy Efficiency Consultant | | |
| | | Ductless Mini-Split | 15.0 | | | | 147 | 0.2070 | 0.32 | \$1,200.00 | \$375.00 | \$0.00 | 2012 PA TRM | Energy Efficiency Consultant | | |
| | | Efficient Water Heater | 12.2 | | | | 859 | 0.0879 | 0.32 | \$635.00 | \$245.00 | \$0.00 | 2012 PA TRM | 2008 DEER & Ohio TRM | | |
| | | Lighting | | | | | | Energy Efficient Lighting Products | 6.8 | 28 | 0.0013 | 0.32 | \$2,471 | \$1.00 | \$0.00 | 2012 PA TRM |
| | | | | Touchless Floor Lamp | 10.0 | 57 | | 0.0048 | 0.32 | \$5.00 | \$10.00 | \$0.00 | 2012 PA TRM | 2008 DEER | | |
| | | | | LED Holiday Lighting | 10.0 | 11 | | 0.0000 | 0.32 | \$4.66 | \$4.00 | \$0.00 | 2012 PA TRM | Company Assumptior | | |
| | Home Performance Program | Audits | | On-Line Audit | 6.9 | 407 | 0.0196 | 0.65 | \$42.87 | \$54.00 | \$0.00 | 2012 PA TRM | Histone Actuals | | | |
| | | | | Audit | 10.5 | 672 | 0.2089 | 0.65 | \$54.40 | \$375.00 | \$0.00 | 2012 PA TRM | Energy Efficiency Consultant | | | |
| | | | | Behavioral | 1.0 | 208 | 0.0206 | 1.00 | \$0.00 | \$0.00 | \$0.00 | 2012 PA TRM | Company Assumptior | | | |
| | | New Homes | | | Kits | 6.9 | 347 | 0.0167 | 0.81 | \$42.82 | \$54.00 | \$0.00 | 2012 PA TRM | Histone Actuals | | |
| | | | | | Energy Efficiency Measures | 15.0 | 1,552 | 0.4312 | 0.80 | \$2,249.00 | \$750.00 | \$0.00 | Histone Actuals | Histone Actuals | | |
| | | | | | Appliance Replacement | 7.0 | 1,176 | 0.1458 | 0.65 | \$0.00 | \$0.00 | \$0.00 | 2012 PA TRM | No Upfront Cost to Customer | | |
| | Residential Low-Income | Low Income Program | Home Performance | Audit - Multifamily | 10.5 | 672 | 0.2089 | 0.65 | \$54.40 | \$0.00 | \$0.00 | 2012 PA TRM | No Upfront Cost to Customer | | | |
| | | | | Human Services | 8.0 | 1,480 | 0.4881 | 1.00 | \$0.00 | \$0.00 | \$0.00 | Histone Actuals | No Upfront Cost to Customer | | | |
| | | | | | | Extra Measures | 8.0 | 292 | 0.0206 | 1.00 | \$0.00 | \$0.00 | \$0.00 | Histone Actuals | No Upfront Cost to Customer | |
| Energy Efficiency Measures - Low Income | | | | | | 6.6 | 308 | 0.0141 | 0.65 | \$0.00 | \$0.00 | \$0.00 | 2012 PA TRM | No Upfront Cost to Customer | | |

Appendix D-3: Number of Units

o Program Year is June 1 - May 31

| West Penn | | | | | |
|-----------------------------------|----------------------|---|------------|------------|------------|
| Program Name | Sub Program | Measure Name | 2013 Units | 2014 Units | 2015 Units |
| Appliance Turn-In Program | Appliance Turn-In | Refrigerator Recycling | 7,000 | 7,000 | 7,000 |
| | | Freezer Recycling | 1,200 | 1,200 | 1,200 |
| | | Room Air Conditioner Recycling | 500 | 500 | 500 |
| Home Performance Program | Audits | On-Line Audit | 7,500 | 7,500 | 7,500 |
| | | Audit | 550 | 550 | 550 |
| | Behavioral | Energy Usage Reports | 225,000 | 225,000 | 225,000 |
| | Kits | Energy Efficiency Measures | 7,500 | 7,500 | 7,500 |
| Energy Efficient Products Program | New Homes | New Construction | 200 | 200 | 200 |
| | | Appliances | | | |
| | | Clothes Washer | 4,250 | 4,250 | 4,250 |
| | | Dehumidifier | 1,100 | 1,100 | 1,100 |
| | | Refrigerator | 4,000 | 4,000 | 4,000 |
| | | Freezer | 600 | 600 | 600 |
| | | Pool Pump Motor | 200 | 200 | 200 |
| | | Consumer Electronics | | | |
| | | Smart Strip | 800 | 1,200 | 1,600 |
| | | Television | 2,600 | 2,800 | 3,200 |
| | | EE Office Equipment | 4,250 | 4,750 | 5,250 |
| | | HVAC & Water Heating | | | |
| | | HVAC Maintenance | 3,200 | 4,000 | 4,800 |
| | | Central Air Conditioning | 275 | 275 | 275 |
| | | Ground Source Heat Pump | 110 | 110 | 110 |
| | | Whole House Fan | 100 | 125 | 150 |
| | | Room Air Conditioner | 1,200 | 1,200 | 1,200 |
| | | Furnace | 500 | 700 | 900 |
| | | Heat Pump | 175 | 150 | 100 |
| | | Ductless Mini-Split | 300 | 350 | 400 |
| | | Efficient Water Heater | 800 | 800 | 800 |
| | | Lighting | | | |
| | | Energy Efficient Lighting Products | 632,000 | 632,000 | 632,000 |
| | Tortoise Floor Lamp | 40 | 40 | 40 | |
| | LED Holiday Lighting | 1,800 | 1,800 | 1,800 | |
| Low Income Program | Home Performance | Appliance Replacement | 60 | 60 | 60 |
| | | Audits - Multifamily | 150 | 150 | 150 |
| | Human Services | Comprehensive | 300 | 300 | 300 |
| | | Energy Efficiency Measures - Low Income | 690 | 690 | 690 |
| | | Energy Efficiency Measures - Low Income | 2,000 | - | 2,000 |

Appendix D-3: Number of Units

o Program Year is June 1 - May 31

| West Penn | | | | | |
|-----------------------------------|-------------------------|---|------------|------------|------------|
| Program Name | Sub Program | Measure Name | 2013 Units | 2014 Units | 2015 Units |
| Appliance Turn-In Program | Appliance Turn-In | Refrigerator Recycling | 7,000 | 7,000 | 7,000 |
| | | Freezer Recycling | 1,200 | 1,200 | 1,200 |
| | | Room Air Conditioner Recycling | 500 | 500 | 500 |
| Home Performance Program | Audits | On-Line Audit | 7,500 | 7,500 | 7,500 |
| | | Audit | 550 | 550 | 550 |
| | Behavioral ¹ | Energy Usage Reports | 224,000 | 224,000 | 224,000 |
| | Kits | Energy Efficiency Measures | 7,500 | 7,000 | 7,000 |
| | New Homes | New Construction | 200 | 200 | 200 |
| Energy Efficient Products Program | Appliances | Clothes Washer | 4,250 | 4,250 | 4,250 |
| | | Dehumidifier | 1,100 | 1,100 | 1,100 |
| | | Refrigerator | 4,000 | 4,000 | 4,000 |
| | | Freezer | 600 | 600 | 600 |
| | | Pool Pump Motor | 200 | 200 | 200 |
| | Consumer Electronics | Smart Strip | 800 | 1,200 | 1,600 |
| | | Television | 2,600 | 2,800 | 3,200 |
| | | EE Office Equipment | 4,250 | 4,750 | 5,250 |
| | HVAC & Water Heating | HVAC Maintenance | 3,200 | 4,000 | 4,800 |
| | | Central Air Conditioner | 275 | 275 | 275 |
| | | Ground Source Heat Pump | 110 | 110 | 110 |
| | | Whole House Fan | 100 | 125 | 150 |
| | | Room Air Conditioner | 1,200 | 1,200 | 1,200 |
| | | Furnace Fan | 500 | 700 | 900 |
| | | Heat Pump | 175 | 150 | 100 |
| | | Ductless Mini-Split | 300 | 350 | 400 |
| | | Efficient Water Heater | 800 | 800 | 800 |
| | Lighting | Energy Efficient Lighting Products | 632,000 | 632,000 | 632,000 |
| | | Torchiere Floor Lamp | 40 | 40 | 40 |
| | | LED Holiday Lighting | 1,800 | 1,800 | 1,800 |
| Low Income Program | Home Performance | Appliance Replacement | 60 | 60 | 60 |
| | | Audit - Multifamily | 150 | 150 | 150 |
| | Human Services | Comprehensive | 423 | 423 | 423 |
| | | Extra Measures | 6,057 | 6,057 | 6,057 |
| | | Energy Efficiency Measures - Low Income | 2,100 | - | 2,100 |

1. Includes Low Income

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

| Program | Measure Name | Eligibility / Description | Rebate Strategy |
|---|--|--|--|
| Governmental & Institutional Program | Air Conditioning - 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 / Ton |
| | Ground Source Heat Pump - Non Profit | Replacement or new Ground 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 Cool | Up to \$150 per Unit |
| | PTHP - Non Profit | Replacement or new installation of units meeting CEE Tier 1 of >=11.2 Cool & >=3.5 COP Heat | Up to \$150 per Unit |
| | Room Air Conditioner - Non Profit | Purchase and installation of Energy Star (>=9.4 EER) or CEE SHEA Tier 1 (>=8.4 EER) qualifying units | Up to \$45 per Unit |
| | Efficient Water Heater - Non Profit | Replacement of existing electric storage tank type units heated by Resistance Element w/ EF >.93, HP w/ EF >2.0 & Solar w/ EF >1.64 | Solar = Up to \$500 Heat Pump = Up to \$300 EE Resistive = Up to \$125 |
| | Refrigerator Recycling - Non Profit | Removal of an existing inefficient unit generally older than 10 years from service prior to end of useful life thru recycling | Up to \$50 per Unit |
| | Freezer Recycling - Non Profit | Removal of an existing inefficient unit generally older than 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 existing inefficient unit from service prior to end of useful life thru recycling | Up to \$50 per Unit |
| | Refrigerator - Non Profit | Purchase and installation of a new unit 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 unit meeting either Energy Star or CEE Tier 2, >=20% or >=25% respectively lower energy consumption than the federal standard. | Up to \$78 per Unit |
| | EE Office Equipment - Non Profit | Purchase and installation of Energy Star qualifying units | N/A |
| | Audit - Multifamily - Govt | Energy 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. | Audit = \$250 + Recommendations up to \$.11/AWh |
| Energy Efficiency Measures - Multifamily - Govt | 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

| Program | Measure Name | Eligibility / Description | Rebate Strategy |
|--------------------------------------|--|--|--|
| Governmental & Institutional Program | Air Conditioning - 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 / Ton |
| | Ground Source Heat Pump - Non Profit | Replacement or new Ground 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 Cool | Up to \$150 per Unit |
| | PTHP - Non Profit | Replacement or new installation of units meeting CEE Tier 1 of >=11.2 Cool & >=3.4 COP Heat | Up to \$150 per Unit |
| | Room Air Conditioner - Non Profit | Purchase and installation of Energy Star (>=9.4 EER) or CEE SHEA Tier 1 (>=9.8 EER) qualifying units | Up to \$45 per Unit |
| | 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 \$500 Heat Pump = Up to \$300 EE Resistive = Up to \$125 |
| | Refrigerator Recycling - Non Profit | Removal of an existing inefficient unit generally older than 10 years from service prior to end of useful life thru recycling | Up to \$50 per Unit |
| | Freezer Recycling - Non Profit | Removal of an existing inefficient unit generally older than 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 existing inefficient unit from service prior to end of useful life thru recycling | Up to \$50 per Unit |
| | Refrigerator - Non Profit | Purchase and installation of a new unit 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 unit meeting either Energy Star or CEE Tier 2, >=20% or >=25% respectively lower energy consumption than the federal standard. | Up to \$78 per Unit |
| | EE Office Equipment - Non Profit | Purchase and installation of Energy Star qualifying units | N/A |
| | Audit - Multifamily - Govt | In-Home 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. | Audit = \$250 - Recommendations up to \$.11/kWh |
| | Energy Efficiency Measures - Multifamily - Govt | 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 |
| Custom - Non Profit | 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**

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Appendix E

Table 1: Portfolio Summary of Lifetime Costs and Benefits

| West Penn | | | | | |
|--|---------------|---|--|--|--------------------------|
| Portfolio Summary of Lifetime 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 <i>(exclusive of Low-Income)</i> | 9.15% | 24,312,234 | 25,919,100 | 1,606,867 | 1.1 |
| Residential Low-Income | 9.15% | 6,600,880 | 1,284,146 | (5,316,034) | 0.2 |
| Commercial/Industrial Small | 9.15% | 28,998,794 | 34,047,674 | 7,148,880 | 1.3 |
| Commercial/Industrial Large | 9.15% | 18,854,915 | 52,132,639 | 33,277,724 | 2.8 |
| Governmental/Educational/Non-Profit | 9.15% | 2,336,170 | 2,362,874 | 26,704 | 1.0 |
| Total | 9.15% | 79,002,293 | 115,746,433 | 36,744,140 | 1.5 |

1. 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

| West Penn | | | | | |
|--|---------------|---|--|--|--------------------------|
| Portfolio Summary of Lifetime 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 <i>(exclusive of Low-Income)</i> | 9.15% | 24,209,174 | 25,791,330 | 1,582,156 | 1.1 |
| Residential Low-Income ¹ | 9.15% | 6,756,681 | 1,675,327 | (5,081,354) | 0.2 |
| Commercial/ Industrial Small | 9.15% | 26,898,794 | 34,047,674 | 7,148,880 | 1.3 |
| Commercial/ Industrial Large | 9.15% | 18,854,915 | 52,132,639 | 33,277,724 | 2.8 |
| Governmental/ Educational/ Non-Profit | 9.15% | 2,336,170 | 2,362,874 | 26,704 | 1.0 |
| Total | 9.15% | 79,055,734 | 116,009,844 | 36,954,110 | 1.5 |

1. Includes Human Services and Home Performance Sub-Programs

Appendix E

Table 2: Summary of Portfolio Energy and Demand Savings

o Program Year is June 1 - May 31

| West Penn | | | | | | | | |
|---|-------------------|----------|-------------------|----------|-------------------|----------|------------|----------|
| Summary of Portfolio Energy and Demand Savings | | | | | | | | |
| MWh and kW Saved for Consumption Reductions | Program Year 2013 | | Program Year 2014 | | Program Year 2015 | | Total | |
| | MWh Saved | kW Saved | MWh Saved | kW Saved | MWh Saved | kW Saved | MWh Saved | kW Saved |
| Baseline ¹ | 20,938,650 | | 20,938,650 | | 20,938,650 | | 20,938,650 | |
| Residential Sector (exclusive of Low-Income) - Cumulative Projected Portfolio Savings ² | 73,682 | 5,723 | 106,244 | 7,402 | 139,317 | 9,159 | 139,317 | 9,159 |
| Residential Low-Income Sector - Cumulative Projected Portfolio Savings ^{2,4} | 9,256 | 801 | 12,746 | 1,078 | 16,907 | 1,382 | 16,907 | 1,382 |
| Commercial/Industrial Small Sector - Cumulative Projected Portfolio Savings ² | 24,287 | 3,143 | 50,101 | 6,507 | 75,914 | 9,851 | 75,914 | 9,851 |
| Commercial/Industrial Large Sector - Cumulative Projected Portfolio Savings ² | 19,986 | 2,618 | 41,131 | 5,372 | 62,135 | 8,103 | 62,135 | 8,103 |
| Governmental/Educational/Non- Profit Sector - Cumulative Projected Portfolio Savings ^{2,5} | 17,044 | 2,115 | 35,506 | 3,808 | 53,927 | 5,794 | 53,927 | 5,794 |
| EE&C Plan Total - Cumulative Projected Savings Estimated Phase I Carryover Savings | 144,255 | 14,901 | 245,788 | 24,169 | 348,200 | 34,289 | 348,200 | 34,289 |
| Total Cumulative Projected Savings Phase II + Estimated Phase I Carryover Savings | 144,255 | 14,901 | 245,788 | 24,169 | 348,200 | 34,289 | 348,200 | 34,289 |
| EE&C Plan Total - Percentage of Target to be Met ¹ | 43% | | 73% | | 103% | | 103% | |
| Percent Reduction From Baseline Commission Identified Goal | 0.7% | | 1.2% | | 1.7% | | 1.7% | |
| Percent Savings Due to Portfolio Above or Below Commission Goal | 18% | | 23% | | 3% | | 3% | |

¹ As defined in the August 2, 2012 Implementation Order, Docket No. M-2012-2289411.

² Adjusted for weather and extraordinary load as applicable.

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

⁴ Includes Low Income participation allocated to Low Income sector from Residential Sector

⁵ Includes Multi Family participation allocated to Government sector from Small/Large C&I sector

⁶ 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 2: Summary of Portfolio Energy and Demand Savings

o Program Year is June 1 - May 31

| West Penn | | | | | | | | |
|---|-------------------|----------|-------------------|----------|-------------------|----------|------------|----------|
| Summary of Portfolio Energy and Demand Savings | | | | | | | | |
| MWh and kW Saved for Consumption Reductions | Program Year 2013 | | Program Year 2014 | | Program Year 2015 | | Total | |
| | MWh Saved | kW Saved | MWh Saved | kW Saved | MWh Saved | kW Saved | MWh Saved | kW Saved |
| Baseline ¹ | 20,938,650 | | 20,938,650 | | 20,938,650 | | 20,938,650 | |
| Residential Sector (exclusive of Low-Income) - Cumulative Projected Portfolio Savings ² | 73,497 | 5,705 | 105,885 | 7,377 | 138,785 | 9,127 | 138,785 | 9,127 |
| Residential Low-Income Sector - Cumulative Projected Portfolio Savings ^{2,4} | 9,441 | 970 | 13,108 | 1,417 | 17,478 | 1,891 | 17,478 | 1,891 |
| Commercial/Industrial Small Sector - Cumulative Projected Portfolio Savings ² | 24,287 | 3,143 | 50,161 | 6,507 | 75,914 | 9,851 | 75,914 | 9,851 |
| Commercial/Industrial Large Sector - Cumulative Projected Portfolio Savings ² | 19,986 | 2,618 | 41,131 | 5,372 | 62,135 | 8,103 | 62,135 | 8,103 |
| Governmental/Educational/Non- Profit Sector - Cumulative Projected Portfolio Savings ^{2,5} | 17,044 | 1,815 | 35,506 | 3,808 | 53,927 | 5,794 | 53,927 | 5,794 |
| EE&C Plan Total - Cumulative Projected Savings | 144,255 | 14,251 | 245,792 | 24,482 | 348,239 | 34,767 | 348,239 | 34,767 |
| Estimated Phase I Carryover Savings | | | | | | | | |
| Total Cumulative Projected Savings Phase II + Estimated Phase I Carryover Savings | 144,255 | 14,251 | 245,792 | 24,482 | 348,239 | 34,767 | 348,239 | 34,767 |
| EE&C Plan Total - Percentage of Target to be Met ¹ | 43% | | 73% | | 103% | | 103% | |
| Percent Reduction From Baseline | 0.7% | | 1.2% | | 1.7% | | 1.7% | |
| Commission Identified Goal | | | | | 337,533 | | 337,533 | |
| Percent Savings Due to Portfolio Above or Below Commission Goal | 18% | | 23% | | 3% | | 3% | |

¹ As defined in the August 2, 2012 Implementation Order, Docket No. M-2012-2289411.

² Adjusted for weather and extraordinary load as applicable.

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

⁴ Includes Low Income participation allocated to Low Income sector from Residential Sector and targeted Energy Usage Reports

⁵ Includes Multi Family participation allocated to Government sector from Small/Large C&I sector

Appendix E

Table 3: Summary of Portfolio Costs

o Program Year is June 1 - May 31

| West Penn Summary of Portfolio Costs | | | | | | |
|---|--------------------------|-----------------------------|--------------------------|-----------------------------|--------------------------|-----------------------------|
| | Program Year 2013 | | Program Year 2014 | | Program Year 2015 | |
| | Portfolio Budget (\$) | % of Portfolio Budget | Portfolio Budget (\$) | % of Portfolio Budget | Portfolio Budget (\$) | % of Portfolio Budget |
| Residential Portfolio (exclusive of Low-Income) Annual Budget | 9,844,732 | 43% | 10,227,879 | 44% | 10,417,156 | 43% |
| Residential Low-Income Portfolio Annual Budget | 2,422,135 | 11% | 2,088,845 | 9% | 2,520,180 | 10% |
| Commercial/Industrial Small Portfolio Annual Budget | 6,136,090 | 27% | 6,485,019 | 28% | 6,543,453 | 27% |
| Commercial/Industrial Large Portfolio Annual Budget | 3,576,212 | 16% | 3,726,351 | 16% | 3,761,732 | 16% |
| Governmental/Educational/Non-Profit Portfolio Annual Budget | 967,937 | 4% | 980,782 | 4% | 990,737 | 4% |
| Total Portfolio Annual Budget | 22,947,106 | 100% | 23,508,877 | 100% | 24,233,258 | 100% |
| 1. 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

| West Penn Summary of Portfolio Costs | | | | | | |
|--|--------------------------|-----------------------------|--------------------------|-----------------------------|--------------------------|-----------------------------|
| | Program Year 2013 | | Program Year 2014 | | Program Year 2015 | |
| | Portfolio Budget (\$) | % of Portfolio Budget | Portfolio Budget (\$) | % of Portfolio Budget | Portfolio Budget (\$) | % of Portfolio Budget |
| Residential Portfolio (exclusive of Low-Income) Annual Budget | 9,812,848 | 43% | 10,142,914 | 43% | 10,331,817 | 43% |
| Residential Low-Income Portfolio Annual Budget ¹ | 2,479,422 | 11% | 2,142,330 | 9% | 2,580,002 | 11% |
| Commercial/Industrial Small Portfolio Annual Budget | 6,136,090 | 27% | 6,485,019 | 28% | 6,543,453 | 27% |
| Commercial/Industrial Large Portfolio Annual Budget | 3,576,212 | 16% | 3,726,351 | 16% | 3,761,732 | 16% |
| Governmental/Educational/Non-Profit Portfolio Annual Budget | 967,937 | 4% | 980,782 | 4% | 990,737 | 4% |
| Total Portfolio Annual Budget | 22,972,508 | 100% | 23,477,398 | 100% | 24,207,741 | 100% |

1. Includes Human Services and Home Performance Sub-Programs

Appendix E
Table 4: Program Summaries

| West Penn 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 of Total Lifetime MWh savings % | |
| Residential Portfolio Programs (exclusive of Low Income) | Appliance Turn-In Program | RES | This program provides rebates to consumers for turning in a working refrigerator, freezer, or room air-conditioner. | 4 | 84,549 | 12,808 | 4.8% | 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 | 186,665 | 20,791 | 20.1% | 6.9% |
| | 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 | 265,592 | 25,542 | 18.9% | 9.8% |
| | Totals for Residential Sector | | | | | 536,807 | 59,141 | 43.8% |
| Residential Low-Income Sector Programs | Low Income Program | LI RES | 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 in low-income households. | 4 | 26,002 | 5,298 | 1.1% | 1.0% |
| | Totals for Low-Income Sector | | | | 26,002 | 5,298 | 1.1% | 1.0% |

1. 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.

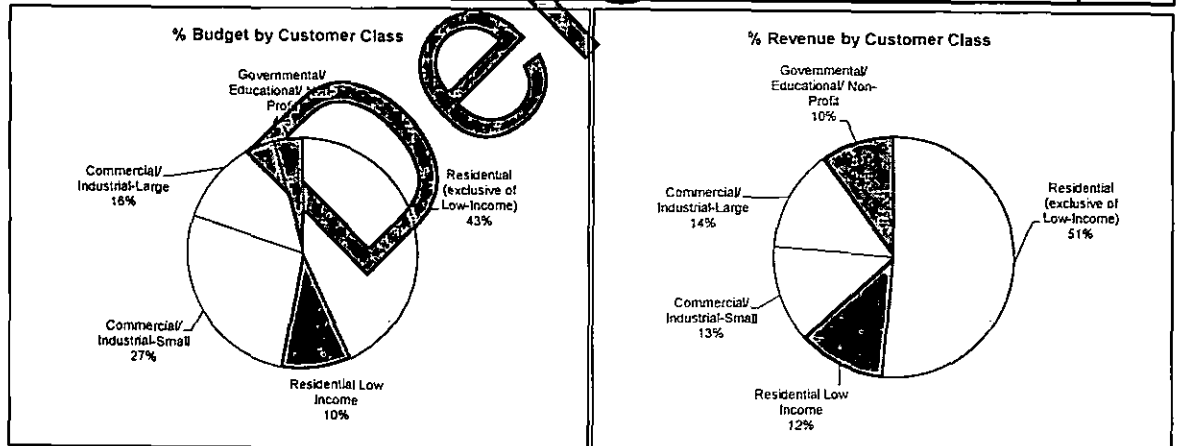
Appendix E

Table 4: Program Summaries

| West Penn 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 of Total Lifetime MWh savings % |
| Residential Portfolio Programs (exclusive of Low Income) | Appliance Turn-In Program | RES | This program provides rebates to consumers for turning in a working refrigerator, freezer, or room air-conditioner. | 4 | 84,549 | 12,808 | 4.8% | 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 | 186,665 | 20,791 | 20.1% | 6.9% |
| | 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 | 262,801 | 25,373 | 18.7% | 9.7% |
| | Totals for Residential Sector | | | | | 534,015 | 58,972 | 43.6% |
| Residential Low-Income Sector Programs | Low Income Program ¹ | LI RES | 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 | 30,933 | 9,764 | 1.2% | 1.1% |
| | Totals for Low-Income Sector | | | | | 30,933 | 9,764 | 1.2% |
| 1. Includes Human Services and Home Performance Sub-Programs | | | | | | | | |

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

| West Penn | | | | | |
|--|--------------------------|--------------------------|--|--------------------------------|------------|
| Budget and Parity 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) | 30,489,767 | 43.1% | 43.1% | 51.4% | -8.3% |
| Residential Low Income | 7,031,160 | 9.9% | 9.9% | 11.9% | -1.9% |
| Residential Subtotal | 37,520,927 | 53.1% | 53.1% | 63.3% | -10.2% |
| Commercial/Industrial-Small | 19,164,562 | 27.1% | 27.1% | 13.0% | 14.1% |
| Commercial/Industrial-Large | 11,064,295 | 15.7% | 15.7% | 13.6% | 2.0% |
| C&I Subtotal | 30,228,857 | 42.8% | 42.8% | 26.6% | 16.1% |
| Governmental/Educational/Non-Profit | 2,939,457 | 4.2% | 4.2% | 10.1% | -5.9% |
| Governmental/Educational/Non-Profit Subtotal | 2,939,457 | 4.2% | 4.2% | 10.1% | -5.9% |
| Residential/C&I/Governmental/ Educational/Non-Profit Subtotal | 70,689,241 | 100.0% | 100.0% | 100.0% | |
| Other Expenditures | - | 0.0% | - | - | - |
| Other Expenditures Subtotal | - | 0.0% | - | - | - |
| EDC TOTAL | 70,689,241 | 100.0% | 100.0% | 100.0% | |

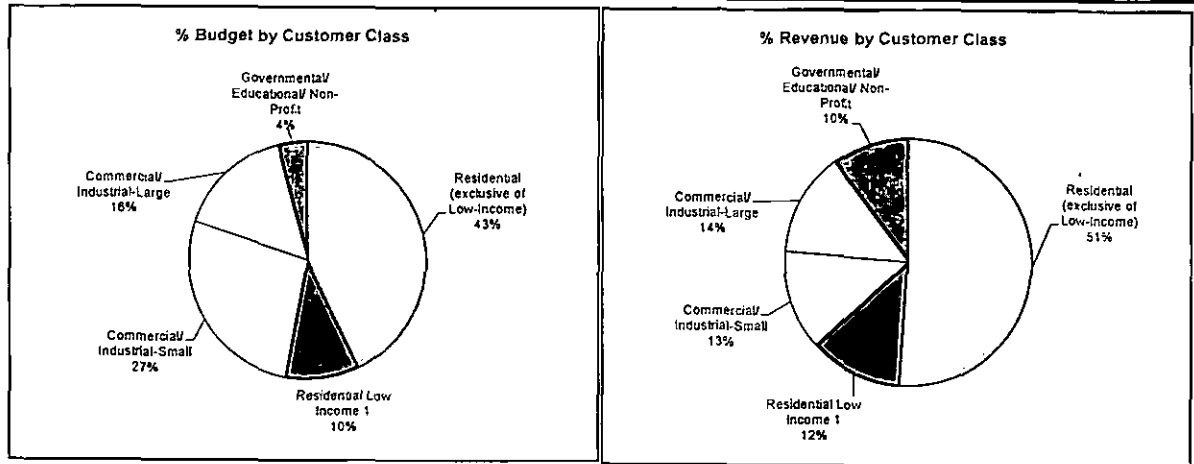


1. This table does not reflect the commitments made through the Joint Settlement because further work with interested stakeholders is required before projections can be completed. Upon completion, the plans will be further redlined consistent with Commission requirements for changes to the plans.

Appendix E

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

| West Penn | | | | | |
|--|--------------------------|--------------------------|--|--------------------------------|---------------|
| Budget and Parity 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) | 30,287,579 | 42.9% | 42.9% | 51.2% | -8.3% |
| Residential Low Income ¹ | 7,201,754 | 10.2% | 10.2% | 12.2% | -2.0% |
| Residential Subtotal | 37,489,333 | 53.1% | 53.1% | 63.3% | -10.3% |
| Commercial/Industrial-Small | 19,164,562 | 27.1% | 27.1% | 13.0% | 14.1% |
| Commercial/Industrial-Large | 11,064,295 | 15.7% | 15.7% | 13.6% | 2.0% |
| C&I Subtotal | 30,228,857 | 42.8% | 42.8% | 26.6% | 16.2% |
| Governmental/Educational/Non-Profit | 2,939,457 | 4.2% | 4.2% | 10.1% | -5.9% |
| Governmental/Educational/Non-Profit Subtotal | 2,939,457 | 4.2% | 4.2% | 10.1% | -5.9% |
| Residential/C&I/Governmental/ Educational/Non-Profit Subtotal | 70,657,647 | 100.0% | 100.0% | 100.0% | |
| Other Expenditures | - | 0.0% | | | |
| Other Expenditures Subtotal | - | 0.0% | | | |
| EDC TOTAL | 70,657,647 | 100.0% | 100.0% | 100.0% | |



1. Includes Human Services and Home Performance Sub-Programs

Appendix E

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

| West Penn | | | |
|--|--------------------|-------------------|--------------------------|
| Residential Portfolio (excluding Low Income) | | | |
| EE&C Program | Cost Elements (\$) | | |
| | Total Incentives | Operations Costs | Total Budget (2013-2015) |
| Appliance Turn-In Program | 1,276,500 | 3,094,806 | 4,371,306 |
| Energy Efficient Products Program | 7,023,850 | 4,152,951 | 11,176,801 |
| Home Performance Program | 3,498,750 | 10,231,640 | 13,730,390 |
| Totals | 11,799,100 | 17,479,397 | 29,278,497 |

| West Penn | | | |
|----------------------------------|--------------------|------------------|--------------------------|
| Residential Low Income Portfolio | | | |
| EE&C Program | Cost Elements (\$) | | |
| | Total Incentives | Operations Costs | Total Budget (2013-2015) |
| Low Income Program | 0 | 5,826,527 | 5,826,527 |
| Totals | 0 | 5,826,527 | 5,826,527 |

1. 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 6A: Portfolio-Specific Assignment of EE&C Costs

| West Penn | | | |
|--|--------------------|-------------------|--------------------------|
| Residential Portfolio (excluding Low-Income) | | | |
| EE&C Program | Cost Elements (\$) | | |
| | Total Incentives | Operations Costs | Total Budget (2013-2015) |
| Appliance Turn-In Program | 1,276,500 | 3,094,806 | 4,371,306 |
| Energy Efficient Products Program | 6,956,950 | 4,111,622 | 11,068,572 |
| Home Performance Program | 3,444,750 | 10,191,682 | 13,636,432 |
| Totals | 11,678,200 | 17,398,110 | 29,076,310 |

| West Penn | | | |
|----------------------------------|--------------------|------------------|--------------------------|
| Residential Low-Income Portfolio | | | |
| EE&C Program | Cost Elements (\$) | | |
| | Total Incentives | Operations Costs | Total Budget (2013-2015) |
| Low Income Program ¹ | 0 | 5,997,120 | 5,997,120 |
| Totals | 0 | 5,997,120 | 5,997,120 |

1. Includes Human Services and Home Performance Sub-Programs

Appendix E

Table 6C: Summary of Portfolio EE&C Costs

| West Penn | Total Sector Portfolio-specific Costs | Total Common Costs | Total of All Costs |
|-------------------------------------|---------------------------------------|--------------------|---------------------|
| Residential (including Low-Income) | \$35,105,024 | \$2,415,903 | \$37,520,927 |
| Commercial/Industrial-Small | \$18,632,115 | \$532,447 | \$19,164,562 |
| Commercial/Industrial-Large | \$10,911,278 | \$153,017 | \$11,064,295 |
| Governmental/Educational/Non-Profit | \$2,850,091 | \$90,365 | \$2,939,457 |
| Totals | \$67,497,509 | \$3,191,732 | \$70,689,241 |

Appendix E

Table 6C: Summary of Portfolio EE&C Costs

| West Penn | Total Sector Portfolio-specific Costs | Total Common Costs | Total of All Costs |
|---|---|-----------------------|-----------------------|
| Residential (including Low-Income) | \$35,073,429 | \$2,415,903 | \$37,489,333 |
| Commercial/ Industrial-Small | \$18,632,115 | \$532,447 | \$19,164,562 |
| Commercial/ Industrial-Large | \$10,911,278 | \$153,017 | \$11,064,295 |
| Governmental/Educational/ Non-Profit | \$2,849,091 | \$90,365 | \$2,939,457 |
| Totals | \$67,465,914 | \$3,191,732 | \$70,657,647 |

Appendix E

Table 7A: TRC Benefits Table

o Program Year is June 1 - May 31

| Residential Portfolio (exclusive of Low-Income) | | West Penn TRC Benefits By Program Per Year (\$000) | | | | | | | | | | |
|--|-------|---|-----------------------|--------------------------|------------------|----------------|-------------------|----------------|-----------------------|---------------|-----------|----------------|
| Program | Year | TRC | Program Costs (\$000) | Program Benefits (\$000) | Capacity/Annual | | Energy/Annual | | Load Reductions in kW | | MWh Saved | |
| | | | | | Benefits | Gen/T&D | Benefits | On/Off Peak | Annual | Lifetime | Annual | Lifetime |
| Appliance Turn-In Program | 2013 | | 1,086 | 242 | 58,109 | See footnote 1 | 184,016 | See footnote 2 | 583 | | 5,567 | |
| | 2014 | | 1,099 | 449 | 71,436 | | 377,247 | | 1,166 | | 11,134 | |
| | 2015 | | 1,117 | 719 | 128,675 | | 590,510 | | 1,749 | | 16,701 | |
| | Total | 1.3 | 3,030 | 3,992 | 568,069 | | 3,424,431 | | | 12,808 | | 84,549 |
| Energy Efficient Products Program | 2013 | | 2,921 | 492 | 75,880 | | 415,947 | | 761 | | 22,804 | |
| | 2014 | | 3,054 | 962 | 98,472 | | 863,098 | | 1,607 | | 46,139 | |
| | 2015 | | 3,193 | 1,555 | 186,828 | | 1,368,302 | | 2,539 | | 70,040 | |
| | Total | 1.0 | 8,399 | 8,432 | 868,714 | | 2,647,347 | | | 20,791 | | 186,665 |
| Home Performance Program | 2013 | | 4,557 | 3,394 | 495,974 | | 2,897,967 | | 4,976 | | 53,133 | |
| | 2014 | | 4,748 | 3,563 | 325,730 | | 2,257,448 | | 5,316 | | 59,466 | |
| | 2015 | | 4,738 | 4,074 | 416,205 | | 3,657,301 | | 5,657 | | 65,799 | |
| | Total | 1.0 | 12,883 | 13,495 | 1,421,094 | | 12,073,533 | | | 25,542 | | 265,592 |
| Total | | 1.1 | 24,312 | 25,919 | 2,857,877 | | 28,067,223 | | | 59,141 | | 536,807 |

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. 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 refined consistent with Commission requirements for changes to the plans.

Appendix E

Table 7A: TRC Benefits Table

o Program Year is June 1 - May 31

| Residential Portfolio (exclusive of Low-Income) | | West Penn TRC Benefits By Program Per Year, (\$000) | | | | | | | | | | |
|--|--------------|--|-----------------------|--------------------------|------------------|-------------------|-------------------|----------------|-----------------------|---------------|----------------|----------------|
| Program | Program Year | TRC | Program Costs (\$000) | Program Benefits (\$000) | Capacity | | Energy | | Load Reductions in kW | | MWh Saved | |
| | | | | | Annual | | Annual | | Annual | Lifetime | Annual | Lifetime |
| | | | | | Benefits | Gen/T&D | Benefits | On/Off Peak | | | | |
| Appliance Turn-In Program | 2013 | | 1,086 | 242 | 58,109 | See footnote 1 | 184,016 | See footnote 2 | 583 | | 5,567 | |
| | 2014 | | 1,099 | 449 | 71,436 | | 377,247 | | 1,166 | | 11,134 | |
| | 2015 | | 1,117 | 719 | 128,675 | | 590,510 | | 1,749 | | 16,701 | |
| | Total | 1.3 | 3,030 | 3,992 | 568,069 | | 3,424,431 | | | 12,808 | | 84,549 |
| Energy Efficient Products Program | 2013 | | 2,921 | 492 | 75,880 | | 415,947 | | 761 | | 22,804 | |
| | 2014 | | 3,034 | 962 | 98,472 | | 863,098 | | 1,607 | | 46,139 | |
| | 2015 | | 3,172 | 1,555 | 186,828 | | 1,368,302 | | 2,539 | | 70,040 | |
| | Total | 1.0 | 8,363 | 8,432 | 868,714 | | 7,563,260 | | | 20,791 | | 186,665 |
| Home Performance Program | 2013 | | 4,547 | 3,380 | 493,920 | | 2,886,245 | | 4,955 | | 52,925 | |
| | 2014 | | 4,715 | 3,541 | 324,052 | | 3,217,211 | | 5,289 | | 59,084 | |
| | 2015 | | 4,705 | 4,041 | 413,690 | | 3,627,596 | | 5,622 | | 65,244 | |
| | Total | 1.0 | 12,816 | 13,367 | 1,412,413 | | 11,954,444 | | | 25,373 | | 262,801 |
| Total | 1.1 | 24,209 | 25,791 | 2,849,196 | | 22,942,135 | | | 58,972 | | 534,015 | |

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.

Appendix E

Table 7B: TRC Benefits Table

o Program Year is June 1 - May 31

| Residential Low Income Portfolio | | West Penn TRC Benefits By Program Per Year (\$000) | | | | | | | | | | |
|----------------------------------|--------------|---|-----------------------|--------------------------|----------------|----------------|------------------|----------------|-----------------------|--------------|-----------|---------------|
| Program | Program Year | TRC | Program Costs (\$000) | Program Benefits (\$000) | Capacity | | Energy | | Load Reductions in kW | | MWh Saved | |
| | | | | | Annual | Gen/T&D | Annual | On/Off Peak | Annual | Lifetime | Annual | Lifetime |
| | | | | | Benefits | | Benefits | | | | | |
| Low Income Program | 2013 | | 2,476 | 86 | 20,418 | See footnote 1 | 65,470 | See footnote 2 | 205 | | 1,434 | |
| | 2014 | | 2,143 | 135 | 23,986 | | 110,857 | | 391 | | 2,251 | |
| | 2015 | | 2,574 | 230 | 43,874 | | 185,730 | | 596 | | 3,684 | |
| | Total | 0.2 | 6,600 | 1,284 | 225,014 | | 1,059,133 | | | 5,298 | | 26,002 |
| Total | | 0.2 | 6,600 | 1,284 | 225,014 | | 1,059,133 | | | 5,298 | | 26,002 |

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: 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.

Deleted

Appendix E

Table 7B: TRC Benefits Table

o Program Year is June 1 - May 31

| Residential Low Income Portfolio | | West Penn TRC Benefits By Program Per Year (\$000) | | | | | | | | | | |
|----------------------------------|--------------|---|-----------------------|--------------------------|-----------------|----------------|------------------|----------------|-----------------------|--------------|-----------|---------------|
| Program | Program Year | TRC | Program Costs (\$000) | Program Benefits (\$000) | Capacity Annual | | Energy Annual | | Load Reductions in kW | | MWh Saved | |
| | | | | | Benefits | Gen/T&D | Benefits | On/Off Peak | Annual | Lifetime | Annual | Lifetime |
| Low Income Program | 2013 | | 2,533 | 114 | 37,460 | See footnote 1 | 76,598 | See footnote 2 | 376 | | 1,642 | |
| | 2014 | | 2,196 | 177 | 44,881 | | 132,499 | | 732 | | 2,636 | |
| | 2015 | | 2,634 | 302 | 81,546 | | 220,215 | | 1,108 | | 4,278 | |
| | Total | 0.2 | 6,757 | 1,675 | 415,974 | | 1,259,353 | | | 9,764 | | 30,933 |
| Total | | 0.2 | 6,757 | 1,675 | 415,974 | | 1,259,353 | | | 9,764 | | 30,933 |

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

West Penn Power - Exhibit B - TRC Impact Assessment

| Program | Approved TRC Costs (\$000) | Approved TRC Benefits (\$000) | Approved TRC Ratio | Proposed TRC Cost (\$000) | Proposed TRC Benefit (\$000) | Proposed TRC Ratio |
|-----------------------------------|----------------------------|-------------------------------|--------------------|---------------------------|------------------------------|--------------------|
| Energy Efficient Products Program | 8,399 | 8,432 | 1.0 | 8,363 | 8,432 | 1.0 |
| Home Performance Program | 12,883 | 13,495 | 1.0 | 12,816 | 13,367 | 1.0 |
| Low Income Program | 6,600 | 1,284 | 0.2 | 6,757 | 1,675 | 0.2 |
| Plan Total | 79,002,293 | 115,746,433 | 1.5 | 79,055,734 | 116,009,844 | 1.5 |

Note:

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

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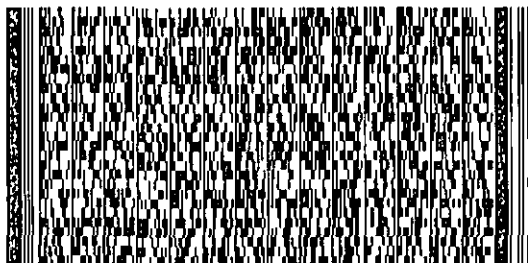
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