

**Pennsylvania Electric Company**

**Energy Efficiency and Conservation Plan**

Act 129 of 2008

Docket No. M-2009-2112952

**First Amended Plan**

**Proposed Minor EE&C Plan Changes dated May 3, 2013**



## Table of Contents

<b>1. OVERVIEW OF CURRENT APPROVED PLAN AND SUMMARY OF PROPOSED CHANGES.....</b>	<b>1</b>
1.1. Summary description of the currently approved plan.....	1
1.2. Summary description of process used to develop the EE&C plan and key assumptions used in preparing the plan .....	31
1.3. Proposed modifications to summary tables of program savings goals, budget & cost-effectiveness (PUC Tables 1, 2 and 3) are shown highlighted and are located in Appendix G. ...	34
1.4. Summary of program implementation schedule over four year plan period .....	35
1.5. Summary description of the EDC implementation strategy to manage EE&C portfolios and engage customers and trade allies. ....	38
1.6. Summary description of EDC’s data management, quality assurance and evaluation processes; include how EE&C plan, portfolios, and programs will be updated and refined based on evaluation results. ....	38
1.7. Summary description of cost recovery mechanism .....	39
<b>2. Energy Efficiency Portfolio/Program Summary Tables and Charts .....</b>	<b>40</b>
2.1. Proposed modifications to Residential, Commercial/Industrial Small, Commercial/Industrial Large and Governmental/Non-profit Portfolio Summaries ( PUC Table 4) are shown highlighted and are located in Appendix G.....	40
2.2. Proposed modifications to Plan data: Costs, Cost-effectiveness and Savings by program, sector and portfolio (PUC Tables 1-4) are shown highlighted and are located in Appendix G. ....	42
2.3. Proposed modifications to Budget and Parity Analysis (PUC Table 5) are shown highlighted and are located in Appendix G. ....	42
<b>3. Program Descriptions.....</b>	<b>43</b>
3.1. Discussion of criteria and process used for selection of programs:.....	43
3.2. Residential Sector (as defined by EDC Tariff) Programs - include formatted descriptions of each program organized under the following headings:.....	48
3.3. Commercial/Industrial Small Sector (as defined by EDC Tariff) Programs - include formatted descriptions of each program organized under the same headings as listed above for residential programs.....	75
3.4. Commercial/Industrial Large Sector (as defined by EDC Tariff) Programs - include formatted descriptions of each program organized under the same headings as listed above for residential programs.....	83
3.5. Governmental//Non-Profit Sector (as defined by 66 Pa. C.S. § 2806.1) Programs - include formatted descriptions of each program organized under the same headings as listed above for residential programs. As well, provide and detail all plans for achieving compliance with 66 Pa. C.S. § 2806.1.....	100

<b>4.</b>	<b>Program Management and Implementation Strategies .....</b>	<b>103</b>
4.1.	<i>Overview of EDC Management and Implementation Strategies: .....</i>	<i>103</i>
4.2.	<i>Executive Management Structure: .....</i>	<i>107</i>
4.3.	<i>Conservation Service Providers (CSPs): .....</i>	<i>112</i>
<b>5.</b>	<b>Reporting and Tracking Systems .....</b>	<b>116</b>
5.1.	<i>Reporting: .....</i>	<i>116</i>
5.2.	<i>Project Management Tracking Systems: .....</i>	<i>116</i>
<b>6.</b>	<b>Quality Assurance and Evaluation, Measurement and Verification.....</b>	<b>119</b>
6.1	<i>Quality Assurance/Quality Control: .....</i>	<i>119</i>
6.2	<i>Describe any planned market and process evaluations and how results will be used to improve programs.....</i>	<i>121</i>
6.3	<i>Describe strategy for coordinating with the statewide EE&amp;C Plan Evaluator (nature and type of data will be provided in a separate Commission Order).....</i>	<i>121</i>
<b>7.</b>	<b>Cost-Recovery Mechanism.....</b>	<b>123</b>
7.1	<i>Provide the amount of total annual revenues as of December 31, 2006, and provide a calculation of the total allowable EE&amp;C costs based on 2% of that annual revenue amount...123</i>	
7.2	<i>Description of plan in accordance with 66 Pa. C.S. §§ 1307 and 2806.1 to fund the energy efficiency and conservation measures, to include administrative costs. ....123</i>	
7.3	<i>Provide data tables (see PUC Tables 6A, 6B and 6C).....124</i>	
7.4	<i>Provide and describe tariffs and a Section 1307 cost recovery mechanism. Provide all calculations and supporting cost documentation.....125</i>	
7.5	<i>Describe how the cost recovery mechanism will ensure that measures approved are financed by the same customer class that will receive the direct energy and conservation benefits.....126</i>	
<b>8.</b>	<b>Cost Effectiveness.....</b>	<b>127</b>
8.1.	<i>Explain and demonstrate how the proposed plan will be cost effective as defined by the Total Resource Cost Test (TRC) specified by the Commission. ....127</i>	
8.2.	<i>Provide data tables (see Tables 7A thru 7E). ....128</i>	
<b>9.</b>	<b>Plan Compliance Information and Other Key Issues.....</b>	<b>134</b>
9.1.	<i>Plan Compliance Issues.....134</i>	
9.2.	<i>Other Key Issues: .....135</i>	
<b>10.</b>	<b>List of Appendices.....</b>	<b>137</b>

**LIST OF TABLES**

Penelec Table 1: FirstEnergy Energy Savings Targets per Act 129 .....3  
Penelec Table 2: FirstEnergy Peak Load Reduction Targets per Act 129.....3  
Penelec Table 3: FirstEnergy Goals and Spending Caps per Act 129.....3  
Penelec Table 4a: Penelec EE&C Programs - Residential .....15  
Penelec Table 4b: Penelec EE&C Programs – Commercial & Industrial .....18  
Penelec Table 4c: Penelec EE&C Programs – Governmental & Institutional .....19  
Penelec Table 5: Penelec EE&C Program Rebate Schedule .....20  
Penelec Table 6 – Allowable EE&C Revenue Calculation .....123

**TABLE OF FIGURES**

Figure 1: FirstEnergy EE&C Plan Development Process.....31  
Figure 2: Penelec EE&C Plan Proposed Timeline .....37  
Figure 3: Residential Sector Process.....45  
Figure 4: Non-Residential Sector Process .....45  
Figure 5: Model Process Diagram .....47  
Figure 6: Organization Chart .....109  
Figure 7: High Level Overview of M&V .....111

## **1. OVERVIEW OF CURRENT APPROVED PLAN AND SUMMARY OF PROPOSED CHANGES**

### ***1.1. Summary description of the currently approved plan..***

FirstEnergy Corp. (“FirstEnergy”) has coordinated energy efficiency and conservation (“EE&C”) development efforts across its three Pennsylvania operating companies: Metropolitan Edison Company (“Met-Ed”), Pennsylvania Electric Company (“Penelec” or “Company”), and Pennsylvania Power Company (“Penn Power”) (collectively “Companies”), to achieve cost efficiencies and offer a consistent set of EE&C programs to customers served by these three companies. In accordance with Act 129 of 2008<sup>1</sup> (“Act 129”) 66 Pa. C.S. §2806.1 et seq. Met-Ed, Penelec and Penn Power each submitted several iterations of their Energy Efficiency and Conservation Plan, the last of which was approved by the Pennsylvania Public Utility Commission (“Commission”) on February 26, 2010 (“Current Plan”).<sup>2</sup>

The Current Plan includes some of the suggestions made by other parties either through the Company’s stakeholder process, settlement negotiations or litigation in the Commission’s proceeding established to evaluate the Company’s EE&C Plan. The revisions were possible due to the availability of programmatic funding from both a reallocation of Direct Load Control (“DLC”) Operating and Maintenance (“O&M”) costs and an increase in the available budget due to a change in the budget calculation basis from 43 to 48 months.

Consistent with the Commission’s Orders affecting the Current Plan, the Companies have incorporated the following concepts into that plan:

- It attempts to develop greater statewide consistency with programs;
- It continues stakeholder meetings;
- It continues developing program evaluation processes and procedures;
- It tracks consumer education costs for appropriate allocation;
- It eliminates interest on start-up costs;
- It excludes EE&C costs (net of tax) recovered through the EEC-C Rider from distribution rate base as appropriate;
- It creates separate cost recovery groups for certain government and non-profit rates;
- It adopts a demand charge for the industrial customer class based on a customer’s PJM Peak Load Contribution (“PLC”);
- It increases budget amounts for Met-Ed residential direct load control;
- It increases budget amounts for certain low income measures;
- It supports HVAC tune-up and recommissioning measures;
- It bids residential direct load control programs for Met-Ed and Penelec into the applicable PJM RPM auctions; this provision will apply to Penn Power when Penn Power joins PJM;
- It tracks amounts received from PJM for curtailments;
- It eliminates credit requirements for demand reduction programs;
- It incorporates recovery of the approved EE&C costs through distribution rates for residential, non-profit, and street lighting customer classes;
- It collects approved EE&C costs through a separate line item on customers’ bills for commercial and industrial (but not residential, non-profit, and street lighting) customer classes;

---

<sup>1</sup> Act 129 of 2008 became effective on November 14, 2008, and imposed new requirements on Pennsylvania’s electric distribution companies (“EDCs”) in the areas of energy efficiency and conservation, smart meters, procurement and alternative energy sources. Act 129 requires an EDC with at least 100,000 customers to adopt and implement a plan, approved by the Commission, to reduce energy demand and consumption within its service territory. 66 Pa. C.S. §§ 2806.1 and 2806.2.

<sup>2</sup> Opinion and Order (Feb. 26, 2010). *See also* Opinion and Order (Oct. 28, 2009), Opinion and Order (Jan. 28, 2010).

- It removes from page 92 the reference to contingency funds<sup>3</sup> as required by the Updated Order;
- It removes the requests for retroactivity to July 1, 2009 for certain programs<sup>4</sup>;
- It increases budget amounts and provides updates regarding the tracking and reporting system;
- It tracks participation by low-income customers to support reporting and evaluation;
- It tracks data regarding the type of appliance or equipment being replaced, the availability of natural gas at the customer's location or immediate area, and whether electric appliances or equipment were installed in areas where natural gas is available;
- It provides more programmatic detail regarding the street lighting and non-profit rate classes and includes specific line items in the TRC calculations for Government/Non-profits (see PUC Table 7E) for: (a) programs aimed at the street lighting customer class, (b) programs aimed at the non-profit customer class, and (c) programs aimed at all remaining government/non-profit customers;
- It incorporates language to clarify that if the Company identifies the need to increase the cost of the EE&C Plan, the Company will obtain Commission approval before increasing the cost of their EE&C Plans' budget;
- It incorporates language to clarify that the Company cannot shift program funds within a customer class, or between customer classes, without prior Commission approval;
- It includes a revised cost recovery calculation and appropriate tariff changes consistent with the modifications directed in the Updated Order (see Appendix H)
- It removes energy savings from existing LIURP/WARM funds;
- It clarifies the costs for common costs (e.g., evaluation); and,
- It collects the cost of the statewide evaluator outside the 2% cap for Plan spending

The Current Plan balances near-term energy savings opportunities among all rate classes with longer-term programs that will create jobs and build capacity for delivering even greater energy and demand reduction impacts. As suggested in the Order, the Company will monitor and work with other EDCs in an attempt to develop greater statewide consistency in their Whole House and Rebate Programs to take advantage of efficiencies in marketing and shared vendors. In this regard, FirstEnergy has already coordinated its EE&C development efforts across its three Pennsylvania operating companies to achieve cost efficiencies and consistencies in the programs offered by its three companies. For appliance recycling and possibly other programs, cooperative efforts may go even further such that all the major Pennsylvania electric distribution companies ("EDCs") subject to Act 129 will offer coordinated statewide programs to their customers.

As a result of these efforts, a comprehensive set of programs was included in the Current Plan. Based upon information available at the time the Plan was filed, it was designed in a manner that would enable Penelec to achieve the goals established under Act 129 for energy savings by 2011 and for energy and peak demand reductions by 2013, all achieved within the spending caps as required under Act 129 and as prescribed by the Pennsylvania Public Utility Commission ("PUC" or "Commission"). Penelec's goals are highlighted in grey in Penelec Tables 1 and 2 below<sup>5</sup>:

---

<sup>3</sup> Although the total budget for the Plan is slightly less than 2% of 2006 revenues, the Company will seek Commission approval to spend up to the 2% cap should future plan modifications necessitate additional expenditures to achieve the savings and demand reduction targets set forth in Act 129.

<sup>4</sup> Consistent with the Commission's Updated Order entered January 28, 2010, the Company has removed all references in programs that requested retroactivity to July 1, 2009. The removal of the retroactivity request does not affect the data concerning the pertinent programs because the Modified Plan design of December 2, 2009 did not assume any participation in the proposed retroactivity time period.

<sup>5</sup> In addition to the tables required by the Commission (which are designated as "PUC Tables"), the Company developed additional Tables 1 – 6 which are designated as "Penelec Tables" and have been included as additional support.

**Penelec Table 1: FirstEnergy Energy Savings Targets per Act 129**

<b>Energy Consumption Forecasts and Act 129 Mandated Consumption Reductions as Measured in Megawatt-Hours</b>			
<b>EDC</b>	<b>Forecast</b>	<b>1% at 5/31/2011 Reduction</b>	<b>3% at 5/31/2013 Reduction</b>
Penelec	14,399,289	143,993	431,979
Penn Power	4,772,937	47,729	143,188
Met-Ed	14,865,036	148,650	445,951

Source: *Energy Consumption and Peak Demand Reduction Targets*, Docket No. M-2008-2069887 (Order entered March 30, 2009).

**Penelec Table 2: FirstEnergy Peak Load Reduction Targets per Act 129**

<b>Average Peak Loads Top 100 Hours and Act 129 Mandated Peak Demand Reductions as Measured in Megawatts</b>		
<b>EDC</b>	<b>Load</b>	<b>4.5% Reduction</b>
Penelec	2,395	108 MW
Penn Power	980	44
Met-Ed	2,644	119

Source: *Energy Consumption and Peak Demand Reduction Targets*, Docket No. M-2008-2069887 (Order entered March 30, 2009).

These targets are to be achieved for the expenditure levels noted below in Penelec Table 3, which represent the annual spending caps established by Act 129:

**Penelec Table 3: FirstEnergy Goals and Spending Caps per Act 129**

<b>Revenues 2006</b>	<b>Penelec</b>
<b>Total Revenues</b>	\$1,148,737,096
<b>2% of Revenues</b>	\$ 22,974,742

***1.1.1. Summary of Proposed Changes to the Current Plan***

The Company anticipates that it will meet its May 31, 2011 energy efficiency target. However, based on experience gained during the year in which the Current Plan was in effect, as well as known changes to underlying Plan assumptions, the Company's ability to meet its demand reduction target during the summer of 2012 as required by the Commission,<sup>6</sup> and its energy efficiency target by May 31, 2013 as required by Act 129 is jeopardized without the changes reflected in this First Amended Plan.

The need for these changes arises from several factors. First, a key underlying savings assumption was changed in the First Amended Plan. The Current Plan includes an 11% transmission and distribution ("T&D") loss factor that was used to gross up all EE&C program savings calculations so as to reflect savings at the system generation level. After the Current Plan was approved, the Statewide Evaluator ("SWE") and the Commission's Bureau of Conservation Economics and Energy Planning ("CEEP") clarified that EE&C savings projections should be calculated at the retail level for Act 129 compliance purposes, and at the system generation level for Total Resource Cost ("TRC") test purposes. As a result, all of the savings projections included in the Current Plan are overstated by approximately 11%. Therefore, this First Amended Plan recalculates projected savings, which, in turn, requires Plan modifications to make up this 11% deficit. Second, certain programs are performing at energy or demand savings levels below those originally anticipated, partly due to (i) the downturn in the economy; (ii) updates to the Technical Reference Manual ("TRM"); and (iii) customer participation levels in certain programs and measures different from those anticipated in the Current Plan. And third, some programs are exceeding expectations, even to the point where the funding for the Commercial/Industrial ("C/I") Equipment Program in the Large C/I Sector is fully committed, thus requiring its suspension until additional funding can be approved by the Commission.

In light of these factors, the Company must adjust its savings projections and customer participation levels and, as a result of these adjustments, make certain changes to the program portfolio included in the Current Plan (and reflected in the First Amended Plan) in order for the Company to meet its post-2011 Act 129 targets. Specifically, additional funding is needed for the large C/I programs and existing funds within the various customer sectors must be shifted from under-performing programs either (i) to add funding to more effective programs and measures within a sector; (ii) to fund new programs and measures within a sector; or (iii) to increase certain incentive levels.

In addition to these changes, the Company is also making some minor editorial changes to correct or clarify parts of the Current Plans, and streamlining program administration through several changes, including the consolidation of programs with similar characteristics and the expanded use of incentive ranges.

All of the aforementioned changes are explained in more detail below and are reflected throughout the First Amended Plan as either black-lines to the Current Plan or highlights in the various tables and charts. Company Witness George L. Fitzpatrick also summarizes the impacts from these changes in Exhibits GLF-1, GLF-2, GLF-3 and GLF-4, which are attached to his direct testimony (Met-Ed/Penelec/Penn Power Statement No. 1).

---

<sup>6</sup> Energy Efficiency and Conservation Program, PaPUC Case No. M2008-2069887 (Secretary Letter, Jan. 12, 2011). While the Company acknowledges the existence and content of this Secretarial Letter, nothing in this filing should be construed as a waiver of its right to challenge the Commission's interpretation of Act 129 as it pertains to this requirement.

**A. Modifications Arising From Changes in Assumptions**

1. *Projected EE&C Savings Results* – As described above, all of the EE&C savings calculations have been recalculated to reflect savings at the retail, rather than generation, level.

**Reason for the Change:** This change was made in order to be consistent with the SWE and CEEP’s clarification regarding line loss calculations.

**Location in Plan Where Changes Can be Found:** These changes are reflected throughout the Plan and are summarized in Appendices D, F and G.

**Impacts on Remainder of the Plan:** The revised assumptions result in savings projections that are approximately 11% less than those included in the Current Plan. Therefore program specific changes were necessary in order to make up this projected shortfall. The impacts from these program changes are discussed in Section B below. And as a result of these program changes, as well as other factors, program participation levels and budgets had to be adjusted as discussed in Section A(2) below.

2. *Participation Levels and Budgetary Changes* – The Company has modified customer participation levels and program budgets to reflect the modifications to the program portfolio included in this First Amended Plan.

**Reason for the Change:** These changes are necessary as a result of the 11% loss factor adjustment discussed in Section A(1) above, as well as updates to the TRM and general experience gained while the Current Plan was in effect.

**Location in Plan Where Changes Can be Found:** Program expectations, including savings, budgets, participation and incentive levels are reflected throughout the Plan and are summarized by respective program in Penelec Table 5, and Appendices D - G.

**Impacts on Remainder of the Plan:** As a result of the changes in participation and savings levels discussed above, modifications to the program portfolio are necessary, with specific impacts discussed in Section B below.

**B. Proposed Program Changes**

**Large C/I Customer Sector (Includes Large C/I Government & Institutional Program Components)**

1. *Increase the budget for the Large C/I demand response program by \$2.6 million.*

**Reason for the Change:** As a result of the events discussed above, the Company must make up a projected shortfall in its peak load reductions through an expansion of the target market and increased participation levels. Additional funds will be used to pay incentives for the additional MWs obtained through these efforts.

**Location in Plan Where Change Can be Found:** This change is generally reflected wherever the program is described in this First Amended Plan (most specifically section 3.4 and Penelec Table 4b), with the projected results arising from this change summarized in Appendix D, and G.

**Impacts on the Remainder of the Plan:** This change will increase the Large C/I rate reflected in Rider EEC-C. The rate impacts are reflected in Appendix H and are described in the direct testimony of Company Witness Charles V. Fullem (Penelec/Penelec/Penn Power Statement No. 2). Program impacts are also addressed in Mr. Fitzpatrick's direct testimony.

2. *Increase the budget for the Large C/I Equipment Program by \$1.4 million.*

**Reason for the Change:** This program has proven to be extremely popular and is fully committed based on currently approved budgets and incentive levels. These additional funds will be used to continue the program as described in this First Amended Plan, with certain modifications to the incentive structure as described in Sections B (3) and (4) below.

**Location in Plan Where Change Can be Found:** This change is generally reflected wherever the program is described in this First Amended Plan (generally Penelec Table 5, section 3.4 and Penelec Table 4b), with the projected results arising from this change summarized in Appendices D, F and G.

**Impacts on the Remainder of the Plan:** This change will increase the Large C/I rate reflected in Rider EEC-C. The rate impacts are reflected in Appendix H and are described in the direct testimony of Mr. Fullem. Program impacts are also addressed in Mr. Fitzpatrick's direct testimony.

3. *Modify the incentive structure for lighting in the Large C/I Equipment Program, changing it from a \$/Watt ("W") to a \$/kWh basis.*

**Reason for the Change:** The conversion of the lighting incentive ("\$.65/W Rebate based on TRM Table") to a \$/kWh basis provides a more predictable incentive structure to conserve funds and manage this program as cost effectively as possible within the approved budget. It will also provide a better correlation between the incentive paid and the energy savings contributed by the customer.

**Location in Plan Where Change Can be Found:** This change is generally reflected in Penelec Table 5, with the projected results arising from this change summarized in Appendices D, F and G.

**Impacts on the Remainder of the Plan:** This change, along with the change described in Section B(4) below will allow for more cost-effective management of the additional funding described in Section B(2) above. Also, because of this change, the Company set a \$/kWh incentive range, which is discussed in section B(4) below. Program impacts are also addressed in Mr. Fitzpatrick's direct testimony.

4. *Set the incentive for lighting in the Large C&I Equipment Program at a range not to exceed \$0.09/kWh, with an initial incentive level at \$0.05/kWh.*

**Reason for the Change:** The lighting incentive under the old \$/W incentive structure resulted in an equivalent incentive of between \$0.085/kWh for high energy use customers to \$0.15/kWh for low use customers. The Company believes that these incentive levels are too high and they are overpaying for this measure. The reduction to a maximum of \$0.09/kWh better reflects what the Companies believe will be necessary to capture savings from this measure, with the initial incentive at \$0.05/kWh reflecting what the Company believes is necessary under current conditions.

**Location in Plan Where Change Can be Found:** This change is generally reflected in Penelec Table 5, with the projected results arising from this change summarized in Appendices D, F and G.

**Impacts on the Remainder of the Plan:** This change, along with the change reflected in Section B(3) above will allow for more cost-effective management of the additional funding discussed in Section B(2) above. Program impacts are also addressed in Mr. Fitzpatrick's direct testimony.

5. *Consolidate the Industrial Motors and Variable Speed Drive ("IMVSD") Program with the C/I Equipment Program.*

**Reason for the Change:** Participation in the IMVSD Program is significantly lower than anticipated. The Company believes that the recent changes in codes for motor specifications will further reduce impacts and participation in this program in Years 3 and 4. The C/I Equipment Program provides incentives for a broad range of technologies, including custom applications, creating a natural fit for motor and drive technologies. Combining this program with the very popular C/I Equipment Program will raise awareness of the IMVSD offerings, increase administrative flexibility with regard to program budgets, and create marketing and accounting synergies.

**Location in Plan Where Change Can be Found:** This change is generally reflected wherever the program is described in this First Amended Plan (generally Penelec Table 5, section 3.4 and Penelec Table 4b), with the projected results arising from this change summarized in Appendices D - G.

**Impacts on the Remainder of the Plan:** Program impacts are addressed in Mr. Fitzpatrick's direct testimony.

#### **Small C/I Customer Sector (Includes Small C/I Government & Institutional Program Components)**

6. *Expand peak demand reduction target market to include Small C/I customers by allocating \$250,000 to fund sector participation.*

**Reason for the Change:** Consistent with B(1) above, as a result of the recalculation of EE&C savings levels at the retail level, the Company must increase results in its peak demand reduction program. The First Amended Plan expands the target market for potential participants to include funding and participation by small C/I customers.

**Location in Plan Where Change Can be Found:** This change is generally reflected wherever the program is described in this First Amended Plan (generally section 3.3 and Penelec Table 4b), with the projected results arising from this change summarized in Appendices D and G.

**Impacts on the Remainder of the Plan:** Generally this offering will be funded through a reduction in the budget for the Small C/I Equipment Program and Government and Institutional (Small C/I) Program discussed in section B(7) below. Program impacts are also addressed in Mr. Fitzpatrick's direct testimony.

7. *Reduce funding for Small C/I Equipment Program by a total of \$250,000*

**Reason for the Change:** In order to fund the expansion of the peak demand reduction program to small C/I customers as discussed in Section B(6) above, the First Amended Plan reduces funding to the Small C/I Equipment Program.

**Location in Plan Where Change Can be Found:** This change is reflected in Penelec Table 5, and Appendices D – G.

**Impacts on the Remainder of the Plan:** Modifications to the incentive structure and rebate levels offered through the Small C/I Equipment Program, which are discussed in Section B(8) and (9) below, are planned to mitigate the impact of the funding reduction. Program impacts are also addressed in Mr. Fitzpatrick's direct testimony.

8. *Modify the incentive structure for lighting in the Small C/I Equipment Program, changing it from a \$/W to a \$/kWh basis.*

**Reason for the Change:** The conversion of the lighting incentive to a \$/kWh basis provides a more predictable incentive structure to conserve funds and manage this program as cost effectively as possible within the approved budget. It will also provide a better correlation between the incentive paid and the energy savings contributed by the customer.

**Location in Plan Where Change Can be Found:** This change is generally reflected in Penelec Table 5, with the projected results arising from this change summarized in Appendices D - G.

**Impacts on the Remainder of the Plan:** This change, along with the change described in Section B(9) below will allow for more cost-effective management of the remaining program funds. Program impacts are also addressed in Mr. Fitzpatrick's direct testimony.

9. *Set the incentive for lighting in the Small C&I Equipment Program at a range not to exceed \$0.09/kWh.*

**Reason for the Change:** See explanation in Section B(4) above.

**Location in Plan Where Change Can be Found:** This change is generally reflected in Penelec Table 5, with the projected results arising from this change summarized in Appendices D-G.

**Impacts on the Remainder of the Plan:** This change, along with the change described in Section B(8) above, will allow for more cost-effective management of the program funds. Program impacts are also addressed in Mr. Fitzpatrick's direct testimony.

10. *Add a new direct install component to the Small C/I Equipment Program, targeting strip malls, small grocery stores, and fast-food and sit-down restaurants with appropriate measures.*

**Reason for the Change:** This target market is comprised of customers with relatively high energy use intensity, long operating hours and significant refrigeration needs. The Company believes that a direct install component with EE&C measures geared toward this target market<sup>7</sup> could improve overall results in the Small C/I Program.

**Location in Plan Where Change Can be Found:** This change is generally reflected wherever the program is described in this First Amended Plan (generally section 3.3 and Penelec Table 4b), with the projected results arising from this change summarized in Appendices D – G.

**Impacts on the Remainder of the Plan:** None.

11. *Consolidate the Energy Audit and Technical Assessment Program with the C/I Equipment Program.*

**Reason for the Change:** Because an energy audit is the customer's logical first step towards developing an energy efficiency plan, the Company believes that this combination will provide a more effective introduction to the C/I Equipment Program. It will also increase administrative flexibility with regard to program budgets, and create marketing and accounting synergies.

**Location in Plan Where Change Can be Found:** This change is generally reflected wherever the program is described in this First Amended Plan (generally section 3.3 and Penelec Table 4b), with the projected results arising from this change summarized in Appendices D – G.

**Impacts on the Remainder of the Plan:** Program impacts are addressed in Mr. Fitzpatrick's direct testimony.

12. *Add an Energy Conservation Kit Offering to the Newly Consolidated C/I Equipment Program*

**Reason for the Change:** The First Amended Plan includes a new Energy Conservation Kit that will be offered through an opt-in campaign marketed to Small C/I customers through various channels. The Company intends to test this new kit by initially offering only CFL bulbs. The current CFL program has proven to be popular

---

<sup>7</sup> Examples of such measures that may be offered to this target market include freezer curtains, condensation sensors, evaporator fan controllers for walk-in coolers and freezers, refrigeration line insulation and condenser coil cleaning for refrigeration systems, programmable thermostats, LED exit signs and business signage, CFLs, and beverage machine occupancy sensor controllers.

with residential customers and this new kit will further expand participation and increase CFL market adoption in the Small C/I sector. If the kit is accepted by the market, the Company may include other already approved measures or those to be adopted in the future, mixing and matching them as market conditions warrant. By offering this kit, the Company believes that it will generate customer interest in pursuing other energy efficiency measures and programs being offered by the Company.

**Location in Plan Where Change Can be Found:** This change is generally reflected in Penelec Table 5 and Penelec Table 4b, and wherever the program is described in this First Amended Plan (generally section 3.3), with the projected results arising from this change summarized in Appendices D – G.

**Impacts on the Remainder of the Plan:** Generally the funds for this new kit are being provided from undersubscribed measures such as HVAC and commercial refrigeration already budgeted to the C/I Equipment program. Program impacts are also addressed in Mr. Fitzpatrick’s direct testimony.

### **Residential Customer Sector**

13. *Consolidate the Home Energy Audit Program and Whole Building Comprehensive Programs*

**Reason for the Change:** Because these two programs both involve various levels of energy audits, the Company believes that the combination of the two provides additional flexibility in administering the program and better matches the needs of customers with the program offerings. It also will create synergies in marketing and accounting.

**Location in Plan Where Change Can be Found:** This change is generally reflected wherever the program is described in this First Amended Plan (generally sections 3.2 and Penelec Table 4a), with the projected results arising from this change summarized in Appendices D – G.

**Impacts on the Remainder of the Plan:** Program impacts are addressed in Mr. Fitzpatrick’s direct testimony.

14. *Shift funding among residential programs.*

**Description of the changes:** In the First Amended Plan, funding has been reduced in the New Construction Program, Appliance Turn-In Program, and the Energy Efficient HVAC Equipment Program, and shifted to the Home Energy Audit and Outreach Program, the Energy Efficient Products Program and the Multi-Family Building Program so as to fund expansion of the latter programs that have proven to be effective. Some of these funds support a new residential behavior modification program described in Section B(16) below, and provide for the incentive adjustments described in Section B(15) below. No changes were made to funding for the WARM Plus Program

**Reason for the Change:** With the downturn in the economy and the recent housing market crisis, participation in the Residential New Home Construction Program is less than assumed in the Current Plan. Operating costs under the Appliance Turn-In

Program are less than originally budgeted, thus providing additional funding for the more effective residential programs. A reduction in the Energy Efficient HVAC Equipment Program reflects the current lack of participation in this program. As explained above, these funds have been reallocated to programs and measures that the Company believes will be more effective.

**Location in Plan Where Change Can be Found:** These changes are generally reflected wherever the various programs are described in this First Amended Plan (generally section 3.2 and Penelec Table 4a), with the projected results arising from these changes summarized in Appendices D – G and Penelec Table 5.

**Impacts on the Remainder of the Plan:** The aforementioned program budgets have been revised, as have projected participation levels for these various programs. Program impacts are also addressed in Mr. Fitzpatrick’s direct testimony.

*15. Adjust various incentive levels and add several measures for residential programs.*

**Description of the Changes:** The following changes have been made to residential measures and programs:

- a. Incentives associated with different forms of residential audits have been added, and the maximum value of Energy Conservation Kits associated with on-line audits is increased.
- b. Incentives for residential HVAC tune-ups are set at a range not to exceed \$60 for central air conditioners and heat pumps.
- c. Upstream incentives for CFLs have been set at a range from \$0.75 to \$1.50/bulb, and at a level not to exceed \$2.50/bulb for specialty bulbs.
- d. A variable speed pool pump replaces the “Pump and Motor Single Speed” incentive and increases the incentive level to \$200 per pump in an effort to optimize results for this measure.
- e. Energy Conservation Kits for Multi-family residential and master-metered facilities have been added as additional measures in an effort to increase CFL market penetration.

**Reason for the Change:** The Company believes that these modifications are necessary in order to generate interest in these programs so that the Company can meet its post-2011 Act 129 targets.

**Location in Plan Where Change Can be Found:** This change is generally reflected wherever these programs are described in this First Amended Plan (generally Penelec Table 5, section 3.2 and Penelec Table 4a) with the projected results arising from this change summarized in Appendices D- G.

**Impacts on the Remainder of the Plan:** Program impacts are addressed in Mr. Fitzpatrick’s direct testimony.

*16. Add a New Residential Program - The Behavioral Modification and Education Program*

**Description of Program:** The program will target residential customers and will educate them on no- or low-cost measures and behaviors that can reduce energy consumption or energy demand and encourage customers to adopt a more energy

efficient lifestyle. This information will be conveyed through various means, such as (i) periodic reports to customers that compare their usage with other, comparable customers in the same geographical area; (ii) outreach programs that emphasize the importance of peak load reduction during peak periods and ways to shift energy use to these periods; (iii) informational materials that provide general conservation tips (such as turning down the thermostat, turning off lights, shortening showers); (iv) informational materials that provide low-cost energy efficiency tips (such as replacing incandescent lights with CFLs, installing weather stripping, and using power strips); and (v) informational materials that direct a customer to the FirstEnergy website where additional energy savings information and tools are available.

**Reason for the Change:** The Company believes that this new behavioral modification program will provide cost effective EE&C results and will make customers more aware of energy conservation in general and EE&C savings opportunities offered by the Company.

**Location in Plan Where Change Can be Found:** This change is generally reflected wherever the program is described in this First Amended Plan (generally section 3.2 and Penelec Table 4a), with the projected results arising from this change summarized in Appendices D – G.

**Impacts on the Remainder of the Plan:** The program will be funded through the reduction in funds earmarked for several lesser performing residential programs described in Section B (14) above. Program impacts are also addressed in Mr. Fitzpatrick’s direct testimony.

### **Government Customer Sector**

#### *17. Increase Government Equipment Incentive Levels to be consistent with those offered to Large and Small C/I Customers*

**Reason for the Change:** The Current Plan includes incentives that are lower for federal government entities than for large or small C/I customers, because it was assumed that the Federal American Reinvestment Recovery Act (“ARRA”) funds would further subsidize EE&C efforts in this customer sector. Because of limited funding, competition for the funds available to these entities and the expiration of ARRA grants, the Company believes that it must increase the incentive levels in order to generate or renew interest in this offering. The First Amended Plan increases incentive levels to be consistent with those that will be offered through the large and small C/I programs to other customer sectors.

**Location in Plan Where Change Can be Found:** This change is generally reflected wherever the program is described in this First Amended Plan (generally sections 3.5 and Penelec Table 4c), with the projected results arising from this change summarized in Appendices D – G and Penelec Table 5.

**Impacts on the Remainder of the Plan:** The funding to increase these incentives is provided from the increase in large C/I funds described in Section B(2) above. Program impacts are also addressed in Mr. Fitzpatrick’s direct testimony.

**C. Corrections, Clarifications and Modifications to the Current Plan.**

During the review of the Current Plan, the Company discovered several minor edits that were necessary in order to clarify or correct certain portions of the Current Plans. These are summarized below.

1. *Modify Penelec Table 5 to reflect minor edits.*

**Description of the Changes:**

- a. The Current Plan inadvertently omits for C/I central air conditioners and heat pumps an incentive for units with a range of 135,000 – 240,000 BTUs. This has been corrected with a rebate of up to \$300/unit added.
- b. All chiller incentives are now reflected on a \$ per ton, rather than a \$ per unit basis.
- c. The reference to “centrifugal chillers” has been made more generic with any references to “centrifugal chiller” incentives being changed to “chillers.”
- d. As a result of updates to the current TRM, the First Amended Plan has also been updated, to designate certain measures as “custom measures” instead of measures assumed at the time the Current Plan was being developed, to be “deemed measures.” (*See e.g.*, Demand Controlled Ventilation, Efficient Refrigeration Condenser, Refrigeration Commissioning).
- e. An additional incentive category, “Other Custom Measures” has been added with a value for Custom Measures of up to \$0.10/kWh savings to clarify that the Companies will offer incentives for custom projects beyond measures included in the TRM.
- f. Residential incentives, such as HVAC equipment incentives previously presented in the program description of the Current Plan, are consolidated in Table 5 and deleted from the program descriptions.

**Reason for the Changes:** These changes were made to better reflect the current status of the programs and the current TRM.

**Location in Plan Where Changes Can be Found:** Penelec Table 5.

**Impacts on the Remainder of the Plan:** None

2. *References to “PJM Capacity Programs” in the Commercial Industrial Demand Response Program have been removed.*

**Description of the Changes:**

The Current Plan includes a requirement that participants in the C/I demand response program register “for capacity in the PJM ILR or DR programs”. This requirement is removed, so the program only references PJM economic load response markets.

**Reason for the Changes:** This change reflects clarifications in a Secretarial Letter dated January 12, 2011 that “PJM M&V protocols for demand response capacity measures are disallowed as a basis for measurement and verification, unless the protocols are consistent with energy protocols.”

**Location in Plan Where Changes Can be Found:** Penelec Section 3.4.

**Impacts on the Remainder of the Plan:** None

3. *A footnote to program descriptions has been added to clarify that additional measures may be incorporated into programs as appropriate as they are approved for inclusion in the TRM.*

**Reason for the Change:** This change clarifies the intent of the Company to add measures as they are approved and incorporated into the TRM.

**Location in Plan Where Changes Can be Found:** Footnote to sections 3.2 – 3.5.

**Impacts on the Remainder of the Plan:** None

**D. Modifications to Streamline Program Administration**

As already discussed above, the Company has made several changes in the First Amended Plan that streamlines the administration of the programs for more cost-effective management of the plan. However, each of these changes was also incorporated into the First Amended Plan in order to provide the Company with additional flexibility in the management of various programs. These changes are discussed in more detail below.

1. *Consolidate Similar Programs* – As already discussed above, several of the lesser performing programs are being combined with programs with similar characteristics that have proven to be more effective. In so doing, the Company believes that it will better match customer needs with offerings and create marketing and accounting synergies that reduce overall costs to customers. It also creates a larger program with a larger budget, thus providing the Company with more latitude when allocating budgeted funds to various measures within a program.
2. *Expand the use of Incentive Level Ranges* – While incentive ranges were included in the Current Plan in some instances, the First Amended Plan expands the use of these ranges, incorporating them for all of the rebates and other incentives offered by the Company. Under this approach, the Company will have the ability to adjust rebate levels within the range as market conditions warrant, provided that these adjustments do not increase program costs beyond approved budgets. By developing these ranges, the Company can reduce incentives for the programs proving to be effective (as appears to be the case with lighting projects), and avoid overpaying for this measure. Conversely, if it is determined that an incentive is not sufficient (as appears to be the case for the

government sector offerings), the Company can increase these incentives without missing potential opportunities while waiting for resolution through the regulatory process.

3. *Additional and Replacement Measures* – The First Amended Plan also clarifies through a footnote that new measures may be added as appropriate as they are approved for inclusion in the TRM. Absent direction from the Commission to the contrary, the Company will add these new measures without seeking approval from the Commission prior to implementation, but instead will provide details, including revised TRC calculations, in their quarterly reports. This approach will minimize the risk of missing potential opportunities as they arise.

In line with the Commission’s Secretarial Letter dated September 1, 2010, changes proposed in the text of this First Amended Plan are shown by black-lining the pertinent text. In situations where copies of Appendix G tables were also shown in the body of the Current Plan, the tables in the body were replaced with the appropriate Appendix G reference. Additionally, Appendix G tables have been highlighted to show proposed changes from the Current Plan. Please note: display formats were standardized and highlighting only reflects changes to underlying data values.

Penelec Tables 4a-4c summarizes the programs that are included in this Plan, with the proposed changes described above being highlighted. Detailed descriptions of the programs are provided in Section 2 as required by the Commission template. It is the intention of the Company to attempt to coordinate with other EDCs on a statewide basis those programs marked with an asterisk (\*). Penelec Table 5 separately lists the rebate amounts per measure for those programs that involve customer incentives. Other programs were considered and analyzed, as were more energy efficiency technologies, but were eliminated from the EE&C Plan for various reasons, including cost effectiveness.

**Penelec Table 4a: Penelec EE&C Programs - Residential**

<b>Program</b>	<b>Description</b>	<b>Incentive Strategy<sup>8</sup></b>
<b>Home Energy Audits and Outreach</b>	Households will be able to identify energy saving opportunities through either an on-line or a professional walk through audit. Those who complete either audit will receive free CFLs and other measures.  Residential Whole Building -	The on-line audit is free to participating customers and the participating customers will be offered a kit containing energy efficiency measures. On-site audits, at a subsidized cost to the participating customer, include installation of CFLs and other basic energy saving measures.  Comprehensive On-site audits including blower door tests are at a subsidized cost to the

<sup>8</sup> Incentive amounts are listed in Penelec Table 5: Penelec EE&C Program Rebate Schedule

<sup>9</sup> A *project* is an activity or course of action involving one or multiple energy efficiency measures, at a single facility or site. A *program* is a generic offering (e.g. service and/or incentive) available to a group of projects with similar characteristics and installed in similar applications. Individual programs include those that involve encouraging and/or incenting the installation of equipment or practices associated with energy efficient retrofit, new-construction or solar energy projects. The *portfolio* consists of all the programs in the residential, commercial/industrial small,

<b>Program</b>	<b>Description</b>	<b>Incentive Strategy<sup>8</sup></b>
	Provides comprehensive diagnostic assessments followed by direct installation of selected low cost measures plus various incentives.	participating customer. This program provides discounted pricing for eligible measures ranging from free kitchen and bathroom faucet aerators to incentives toward the cost for duct sealing. Participating customers are encouraged to review available options for the balance of project <sup>9</sup> costs as needed.
<b>Behavioral Modification and Education</b>	Activities to educate customers about low cost/no cost-EE&C behavior and measures.	Provide basic energy conservation education, information and strategies that provide customers with opportunities to reduce energy costs.
<b>Residential Appliance Turn-In Program*</b>	Provides a small incentive to households for turning in older inefficient appliances that are in working order.	There are no costs to participating customers for this program. <ul style="list-style-type: none"> <li>▪</li> <li>▪</li> <li>▪</li> </ul>
<b>Residential HVAC*</b>	Provides incentives for contractor-installed HVAC systems in existing or new residential buildings.	Incentives are available for measures qualifying under the program.
<b>Residential Energy Efficiency Products Program*</b>	Provides incentives to participating customers and support to retailers that sell energy efficient products. In addition, the program will provide Community education and workshops.	Rebates and incentives are available for measures qualifying under the program. High efficiency and heat pump water heaters are included in this program.
<b>Residential New Construction*</b>	Encourages builders to achieve highly energy efficient homes through the implementation of contractor-installed HVAC, solar, or other eligible systems in existing or new residential buildings.	Participating customers receive a rebate based on calculation of the overall home's energy savings over standard options, and can participate in the prescriptive rebates offered under the other residential rebate programs.
<b>Multi-Family - Tenants</b>	Tenants in buildings covered under the Penn. Housing Finance Authority (PHFA) program may	Tenants will receive CFLs to replace incandescent bulbs in their units and/or other measures deemed appropriate.. Building owners will receive

commercial/industrial large, and governmental/non-profit sectors. Residential sector programs include low-income, single-family and some agricultural and/or multi-family housing projects. Commercial/Industrial Small sector programs include small commercial, industrial, some agricultural or multi-family housing, and public sector facility projects. Commercial/Industrial Large sector programs include large commercial, industrial, agricultural, and public sector facility projects. Governmental/Non-Profit includes Federal, State, Municipal, and Local Governments; as well as school districts, institutions of higher learning, multi-family housing and non-profit entities.

<b>Program</b>	<b>Description</b>	<b>Incentive Strategy<sup>8</sup></b>
	participate in lighting retrofits, plug strips or other measures deemed appropriate.	incentives toward common area lighting or other measures deemed appropriate. This program will target low-income communities. Costs associated with Residential accounts will be tracked through the Residential multifamily program. Costs associated with non-residential accounts will be tracked through a C/I multifamily program or Government Multifamily Program.
<b>Residential Direct Load Control</b>	Provides load controls for Residential Central Air Conditioning (“CAC”), as well as controls for electric water heaters and Pool Pumps for customers receiving CAC controls.	Provides installation of load control equipment, an enrollment incentive and a participation incentive for each summer month for each control installed. If participating customers also control either the water heater or pool pump the monthly participation incentive increases .
<b>Low-Income Residential</b>	This program provides additional electric energy savings measures to the existing WARM program and includes providing the program to additional customers <sup>10</sup> .	Current WARM participants will receive additional measures not provided under the current program. Low usage customers that don’t qualify for the WARM program will be provided measures and energy educational materials. Additional low-income customers will receive treatment under the “WARM Plus” Act 129 program.

<sup>10</sup> Low-income customers are also eligible to participate in other programs. Participation of low-income customers in other programs will be tracked and reported to support assessments of equitable treatment of low-income customers under Act 129.

**Penelec Table 4b: Penelec EE&C Programs – Commercial & Industrial**

<b>Program</b>	<b>Description</b>	<b>Incentive Strategy</b>
<p><b>C/I Equipment Program*</b></p>	<p>Provides for the implementation of cost effective, high efficiency standard and non-standard measures.</p> <p>Energy Audit and Technology Assessment - Provides a simple on-line or walk-through audit for small business with non-complex loads, and a more comprehensive assessment for medium to large non-residential customers. Fixed fee for small businesses and per square foot fee for larger buildings.</p> <p>Industrial Motors and Variable Speed Drives – Encourages commercial and industrial customers to 1) purchase energy efficient (EE) Motors and/or 2) Install variable speed drives on motors for eligible applications.</p>	<p>This program provides incentives for a portion of the incremental technology costs of high efficiency measures. In addition, it will provide technical support, rebates, and support access to project financing.</p> <p>Incentives will also be available to customers and through motors distributors.</p>
	<p>1.</p>	
<p><b>C/I Demand Response Program</b></p>	<p>This program is designed to address the 100 highest peak load hours in the year, as required under Act 129.</p>	<p>Through PJM and other Demand Markets First Energy will provide payments to companies that reduce load during peak times.</p>
<p><b>C/I Performance Contracting</b></p>	<p>Large commercial and industrial (including governmental facilities) customers may elect to secure DSM/EE services through an Energy Services Company that will identify opportunities, implement retrofits and be paid through the savings generated by the project over time.</p>	<p>Penelec will identify qualified Energy Services Companies and will pay a portion of the project costs based on measures installed, and associated kWh and kW savings delivered that also support savings goals.</p>

**Penelec Table 4c: Penelec EE&C Programs – Governmental & Institutional<sup>11</sup>**

<b>Program</b>	<b>Description</b>	<b>Incentive Strategy</b>
<b>Federal Facilities Program</b>	Provides for the implementation of cost effective, high efficiency standard and non-standard measures for federal buildings.	This program provides incentives for a portion of the incremental technology costs of high efficiency units. In addition, it will provide technical support, rebates, and support access to project financing.
<b>Municipal Street Lighting</b>	This program supports conversion of mercury vapor street lights to High Pressure Sodium technology.	Subsidizes the first cost of streetlight conversions normally charged to customers through distribution rates.
<b>Municipal Lighting</b>	This program retrofits traffic and pedestrian signals with LEDs	Provide a rebate of up to \$45 for three light signal retrofits (i.e. Green 8” 25, Red 8” 20) and a rebate of \$25 for a pedestrian signal.
<b>Local and County Government Audits</b>	Provides local and county buildings including schools, with a more comprehensive assessment.	Participating customers receive an energy audit. A limited number of audits will be offered free of charge and used as a marketing tool for other commercial programs. These Audits will increase the participation percentage of Government customers.
<b>Local County and State Government, Institutional, Non-Profit and Schools</b>	This program tailors the rebates offered to small and large C/I under the C/I programs by targeted outreach.	Offers the same rebate amounts as are provided under the C/I programs.

The following table lists the planned rebates and customer incentives associated with each of the programs above. Incentives to trade allies and other delivery agents are not included here. More detail is provided in the individual program descriptions in Section 3. It should be noted that for some measures, there will be limits as to the number of units that will be rebated to any one customer or through any one program in order to stay within the budgetary assumptions. In addition, all commercial and industrial rebates require pre-approval by the Company to enable process management and verification of existing equipment.

<sup>11</sup> If a multi-family facility is operated by a local, state or federal agency, savings as a result of measures for these multi-family facilities will qualify for Governmental and Institutional prescribed requirements.

**Penelec Table 5: Penelec EE&C Program Rebate Schedule<sup>12</sup>**

<b>Energy Efficiency Program</b>	<b>Technology</b>	<b>Rebate or Incentive Amount</b>
Direct Load Control	Direct Load Control - CAC	Up to \$50 per Year
Direct Load Control	Direct Load Control – Pool Pumps	Up to \$75 per Year
Direct Load Control	Direct Load Control – Water Heat	Up to \$75 per Year
Home Energy Audits and Outreach Program	On-line Energy Conservation Kit	Up to \$200 per Kit contents
Home Energy Audits and Outreach Program - Residential Whole Building	EE diagnostic assessments followed by direct installation of selected low cost measures	Up to \$400
Home Energy Audits and Outreach Program - Residential Whole Building	Installation of additional energy saving building measures	Up to \$900
Residential Appliance Turn-In Program	Refrigerator/Freezer Recycling	Up to \$50 Payment
Residential Appliance Turn-In Program	Room Air Conditioners	Up to \$50* Payment
Residential Energy Efficient HVAC and Solar Equipment Program	ASHP - SEER 14.5 / HSPF 8.5	Up to \$250**per Unit
Residential Energy Efficient HVAC and Solar Equipment Program	ASHP - SEER 15	Up to \$325** per Unit
Residential Energy Efficient HVAC and Solar Equipment Program	ASHP - SEER 16 / HSPF 8.5	Up to \$400**per Unit
Residential Energy Efficient HVAC and Solar Equipment Program	CAC – SEER 14.5 / EER 12	Up to \$150** per Unit
Residential Energy Efficient HVAC and Solar Equipment Program	CAC - SEER 15 / EER 12	Up to \$225** per Unit
Residential Energy Efficient HVAC and Solar Equipment Program	CAC - SEER 16 / EER 12	Up to \$300** per Unit

<sup>12</sup> All rebates proposed are subject to change based on program experience or other factors.

<b>Energy Efficiency Program</b>	<b>Technology</b>	<b>Rebate or Incentive Amount</b>
Residential Energy Efficient HVAC and Solar Equipment Program	CAC/ASHP - Maintenance/Tune-Up With Qualified Furnace Fan Replacement	Up to \$60 offered for Qualified Service  Add \$15
Residential Energy Efficient HVAC and Solar Equipment Program	EE Ground Source Heat Pump	Up to \$217 per ton
Residential Energy Efficient Products Program	Solar Water Heating	Up to \$500 per Unit
Residential Energy Efficient Products Program	HP Water Heater	Up to \$300 per Unit
Residential Energy Efficient Products Program	EE Water Heater	Up to \$50 per Unit
Residential Energy Efficient Products Program	Programmable Thermostat, if CAC	Up to \$25* per Unit
Residential Energy Efficient Products Program	CFL bulbs regular	\$Up to \$0.75 to \$1.50 off shelf price through retail store
Residential Energy Efficient Products Program	CFL specialty bulbs	\$Up to \$2.50 off shelf price through retail store
Residential Energy Efficient Products Program	Clothes Washer ENERGY STAR®, if home uses Electric Water heater	Up to \$75* per Unit
Residential Energy Efficient Products Program	Dehumidifiers	Up to \$10 per Unit
Residential Energy Efficient Products Program	Freezers ENERGY STAR® -Chest Freezer	Up to \$25* per Unit
Residential Energy Efficient Products Program	LED Holiday Light Sets	Up to \$20 Max for 6 Boxes \$3.33 per Box
Residential Energy Efficient Products Program	Variable Speed Pool Pump with timer control	Up to \$200 per Unit
Residential Energy Efficient Products Program	Refrigerators-Freezers ENERGY STAR® - Side by Side	Up to \$50* per Unit
Residential Energy Efficient Products Program	Refrigerators-Freezers ENERGY STAR® - Top Freezer	Up to \$50* per Unit
Residential Energy Efficient Products Program	Room Air Conditioners	Up to \$25 per Unit

<b>Energy Efficiency Program</b>	<b>Technology</b>	<b>Rebate or Incentive Amount</b>
Residential Energy Efficient Products Program	Smart Strip plug outlet	Up to \$10 per Unit
Residential Energy Efficient Products Program	Torchiere Floor Lamps	Up to \$10 per Unit
Residential New Construction	Residential New Construction - 15% better than energy code	Formula Based on Savings estimated at up to 70% of Incremental Costs*
Residential New Construction	Residential New Construction - 30% better than energy code	Formula Based on Savings estimated at up to 70% of Incremental Costs*
Multiple Family	Lighting and Lighting Control Upgrades in common areas	Up to \$0.09/kWh
Multiple Family	LED Exit Signs (Retrofit only)	Up to \$15 per Exit Sign
Multiple Family	Energy Conservation Kit (for tenant areas)	Up to \$25 per Kit contents
Governmental Programs	Lighting and Lighting Control Upgrades	Up to \$0.09/kWh
Governmental Programs	LED Auto Traffic Signals	Up to \$25 Green 8''**, \$20 Red 8''**
Governmental Programs	LED Exit Signs Electronic Fixtures (Retrofit Only)	Up to \$15 per Exit Sign
Governmental Programs	LED Pedestrian Signals	Up to \$25 per Unit
Governmental Programs	Street Lighting - 175 Mercury to 100 HPS	Up to \$200 Offset 1st cost plus initial O&M
Governmental Programs	Chillers less than 150	Up to \$25 per Ton
Governmental Programs	Chillers 150 tons and	Up to \$12.50 per Ton
Commercial and Industrial Equipment Program	AC <65,000 1 Ph	Up to \$150 per Unit*
Commercial and Industrial Equipment Program	AC 65,000 - <135,000	Up to \$250 per Unit*

<b>Energy Efficiency Program</b>	<b>Technology</b>	<b>Rebate or Incentive Amount</b>
Commercial and Industrial Equipment Program	AC 135,000 - <240,000	Up to \$300 per Unit*
Commercial and Industrial Equipment Program	AC 240,000 and above	Up to \$350 per Unit
Commercial and Industrial Equipment Program – Small C/I Customers	Commercial CFL Kits	CFL Kit - Up to \$200 per Kit contents
Commercial and Industrial Equipment Program	Clothes Washer CEE Tier1, if Electric Water heater	Up to \$50 per Unit
Commercial and Industrial Equipment Program	Demand-controlled ventilation (DCV)	Custom Measure: Up to \$0.10/kWh savings
Commercial and Industrial Equipment Program	Efficient Refrigeration Condenser	Custom Measure: Up to \$0.10/kWh savings
Commercial and Industrial Equipment Program	ENERGY STAR® Commercial Solid Door Freezers for food service	Up to \$50 per Unit
Commercial and Industrial Equipment Program	ENERGY STAR Commercial Solid Door Refrigerators for food service	Up to \$50 per Unit
Commercial and Industrial Equipment Program	ENERGY STAR® Ice Machines less than 500 lbs	Up to \$50 per Unit
Commercial and Industrial Equipment Program	ENERGY STAR® Ice Machines 500 to 1000 lbs	Up to \$150 per Unit
Commercial and Industrial Equipment Program	ENERGY STAR® Ice Machines more than 1000 lbs	Up to \$200 per Unit
Commercial and Industrial Equipment Program	ENERGY STAR® Steam Cookers or Other Cooking Equipment	Up to \$400 per Unit based on Equipment Savings
Commercial and Industrial Equipment Program	Lighting and Lighting Controls Upgrades	Up to \$0.09/kWh
Commercial and Industrial Equipment Program	EE Water Heater	Up to \$50 per Unit
Commercial and Industrial Equipment Program	HP Water Heater	Up to \$200 per 100 Gals

<b>Energy Efficiency Program</b>	<b>Technology</b>	<b>Rebate or Incentive Amount</b>
Commercial and Industrial Equipment Program	LED Exit Signs (Retrofit Only)	Up to \$15 per Exit Sign
Commercial and Industrial Equipment Program	Anti-Sweat heater Controllers	Up to \$0.10/kWh for coolers. Up to \$0.05/kWh for freezers
Commercial and Industrial Equipment Program	Commercial Smart Strip Plug Outlet	Up to \$10 per Unit
Commercial and Industrial Equipment Program	Pre Rinse Sprayers	Up to \$35 per Unit
Commercial and Industrial Equipment Program	CAC Refrigerant charging correction	Up to \$10 per Ton
Commercial and Industrial Equipment Program	Refrigeration Commissioning	Custom Measure: Up to \$0.10/kWh savings
Commercial and Industrial Equipment Program	Strip curtains for walk-ins - freezer or cooler	Up to \$50 per Door
Commercial and Industrial Equipment Program	Vending Equipment Controller	Up to \$25 per Unit
Commercial and Industrial Equipment Program	Window Film	Up to \$25 per 100 square foot
Commercial and Industrial Equipment Program	Setback/Setup	Custom Measure: Up to \$0.10/kWh savings
Commercial and Industrial Equipment Program	Chillers less than 150 tons	Up to \$25 per Ton
Commercial and Industrial Equipment Program	Chillers 150 tons and above	Up to \$12.50 per Ton
Commercial and Industrial Equipment Program - Industrial Motors and Variable Speed Drives	Motors 1 HP 1200	Up to \$20 for <=1 HP
Commercial and Industrial Equipment Program - Industrial Motors and Variable Speed Drives	Motors 5 HP 1200	Up to \$54 for >2 <=5 HP
Commercial and Industrial Equipment Program - Industrial Motors and Variable Speed Drives	Motors 10 HP 1200	Up to \$70 for >6 <=10 HP

<b>Energy Efficiency Program</b>	<b>Technology</b>	<b>Rebate or Incentive Amount</b>
Commercial and Industrial Equipment Program - Industrial Motors and Variable Speed Drives	Motors 20 HP 1200	Up to \$113 for >11 <=20 HP Over 20 Based on Formula
Commercial and Industrial Equipment Program - Industrial Motors and Variable Speed Drives	Motors 1 HP 3600	Up to \$20 for <=1 HP
Commercial and Industrial Equipment Program - Industrial Motors and Variable Speed Drives	Motors 5 HP 3600	Up to \$54 for >2 <=5 HP
Commercial and Industrial Equipment Program - Industrial Motors and Variable Speed Drives	Motors 10 HP 3600	Up to \$70 for >6 <=10 HP
Commercial and Industrial Equipment Program - Industrial Motors and Variable Speed Drives	Motors 20 HP 3600	Up to \$113 for >11 <=20 HP Over 20 Based on Formula
Commercial and Industrial Equipment Program - Industrial Motors and Variable Speed Drives	HVAC Water Pumps with VFD's	Up to \$30 per HP
Commercial and Industrial Equipment Program - Industrial Motors and Variable Speed Drives	HVAC or Cooling Tower Fans with VFD's	Up to \$30 per HP
Commercial and Industrial Equipment Program - Industrial Motors and Variable Speed Drives	Other Custom Measures	Up to \$0.10kWh savings

\* Program will be subject to a quota for budgetary reasons

\*\* Program will have other rebates based on equipment size and may be subject to quotas for budgetary reasons

The program designs presented in this filing cover each of the four market segments: residential, small non-residential, large non-residential, and government (which includes federal, state, and local government or municipalities/school districts/institutions of higher learning and non-profit entities). The Plan uses a mix of expanded and new services that take maximum advantage of leveraging opportunities, volume cost efficiencies and a variety of delivery channels that are estimated to result in significant levels of customer participation, and allow for the measurement of implementation and behavioral changes.

**Residential Sector Programs** – Residential programs were designed with a progression from general to specific. Home energy audits are expected to serve as a “portal” (but not a requirement) for the other programs, because they serve a dual purpose of providing customers with information upon which they can act, as well as providing the Company with important baseline information for future impact evaluation. The programs then address a range of first-cost and financing barriers, and tap a variety of delivery channels and vendors. To address the higher first cost of energy efficient appliances and products, rebates are provided. To address the balance of costs associated with projects, households are encouraged to participate in the Keystone Home Loan Program. Appliances that can contribute demand reductions at the highest 100 hours of system peak demand will be signed up for a direct load control program that provides a customer incentive for participation. The programs will incorporate monitoring protocols into the implementation process as much as possible so that the measurement and verification (“M&V”) activities for each program are credible but not burdensome.

**Small and Large Non-Residential Sector Programs** – Small and large commercial businesses and industrial customers are similarly addressed by offering targeted information on ways to save energy followed by a choice of prescriptive rebates on selected measures, or a calculated rebate or financing package offered through a third-party vendor. Custom equipment can be addressed either through performance contracts or calculated rebates based upon the estimated amount of energy savings and demand reductions associated with the project. Conservation Service Providers (CSPs), who will act as demand response aggregators, will also be contracted to deliver kW of load reduction during the top 100 load hours of system peak demand.

The Commission identified two special groups for specific targeting through the Act 129 EE&C programs: Government Facilities and Low-Income Households.

**Governmental Sector Programs** –The Plan has program services for three groups -- federal government facilities, local government facilities, schools and facilities operated by non-profit organizations -- all within the Company's service territory. While all non-residential buildings are eligible for the prescriptive and custom energy efficiency programs, special efforts are targeted at this segment in recognition of their unique decision-making and financing processes for making capital improvements to facilities. To get projects completed, the programs will leverage existing company Area Manager relationships and employ experienced vendors who specialize in working with governmental accounts. Penelec will also offer a limited number of free audits of county and local buildings in order to increase the adoption rates and identify savings potentials.

**Low Income Customer Sector Programs** – Within the residential sector programs is a special category of Low Income Customer Sector Programs. Energy affordability is an increasing concern in Pennsylvania as Penelec transitions to market-based rates. The low income customer programs outlined in this Plan will serve a dual purpose of contributing to Act 129 goal attainment and minimizing the percentage of household income that is devoted to energy costs. Enhanced measures and education will be offered in the low income portfolio to give households more control over their energy spending. Maximum effort will be made to capture cost effective electric energy savings as part of the delivery of the existing Low Income Usage Reduction Program ("LIURP"), known as WARM services, by tapping the considerable expertise and existing infrastructure of WARM contractors (Community Based Organizations ("CBOs") and private contractors). If it is determined that capacity has been reached for these organizations to meet the increased demand and achieve the goals, the Company will enhance the delivery system with additional contractors.

In the low income sector, the existing WARM program has offered comprehensive energy efficiency services to eligible Pennsylvania households for years. The approach being taken in this area of the Plan is to enhance and accelerate the deployment of services to WARM-eligible households by providing additional measures and by adding resources to achieve more savings in each visit. The Company also plans to deliver WARM services to additional low-income customers through the Act 129 "WARM-Plus" program. Also at the time of the home visits for all WARM participants, additional Act 129 energy saving equipment will be identified and installed. The Company estimates providing services to 25% additional Penelec homes through the WARM Plus program.

Households with elderly customers and other low use customers sometimes do not qualify for the WARM program even if these customers are within the 150 percent of Federal poverty income guidelines. For these households, the Company will provide energy efficient measures and educational materials on behavioral changes that can be made to reduce electricity costs. Additional programs (e.g., appliance recycling, energy efficient products, and load control programs) will also increase availability of subsidized energy efficiency services that, where applicable, will also be offered. The Company will track or estimate participation of low-income customers in other programs to support assessments of equitable treatment of low-income customers under Act 129. The Company estimates that income-qualified low-use customers represent an additional 11,000 households in Penelec's service territory.

The Commission determined in its Order that the energy savings from existing WARM services are not derived from Act 129 programs and should not be attributed to the Companies' low-income energy efficiency and demand reduction obligations under Act 129. The Company has revised this Plan to exclude the energy savings from the existing LIURP program from Act 129 energy savings.

In this Plan, the Company is proposing to increase its Low Income budget to include higher than anticipated costs for the purchase, installation and customer education surrounding the use of the smart strip power plugs. This matter has been addressed in Section 1.1 above.

Also, the Company notes that it looks forward to having a representative participate in the Commission convened working group that will be charged with developing implementation standards for compliance with Section 2806.1(b)(1)(i)(G). To assist the Commission in determining the best way to evaluate the Plan's compliance, the Company will review the methods used to calculate the low-income customer energy usage share for reasonableness and any census or other demographic data used in the calculation for relevance and reliability. The Company representative on the working group will assist in identifying the standardized data to be used to determine the proper proportion for low-income households and any other matters that require clarification before the annual reconciliation process. The Company will participate in the working group so that the working group's recommendations may be provided to the Commission no later than February 16, 2010.

Furthermore, the Company agrees that full implementation of Section 2806.1(b)(1)(i)(G) will take some time. To conduct the low income calculations, the number of energy efficiency measures that must be dedicated to low-income customers is calculated by first determining the percentage of total energy usage that is attributable to the low-income customer group. This number is the percentage of the Plan's total energy efficiency measures that must be dedicated to low-income customers. Unfortunately, the usage data referred to in Act 129 is not readily available to the Company. The Company does not maintain information on energy usage by customer income level; as a result, the Company used estimates in order to achieve the goals of Act 129.

The Company's Plan proposes that low-income customers are eligible to participate in other residential programs and their participation will be tracked and reported to support assessment of equitable treatment of low-income customers. To aid the Commission in ensuring compliance with Act 129, the Company will track instances in which low-income customers participate in residential and other programs that are not specifically directed toward low-income customers. The Company will include this information in the Company's annual report to the Commission. The Company will track and report direct participation by low-income customers in the following residential programs: Appliance Turn-In Program, Direct Load Control Programs, In-Home and On-line Energy Audits.

Estimates of low-income customer participation by zip code and census will be used to determine participation in school programs, multi-family and energy efficient products programs.

In short, the EE&C plan will aggressively, yet sensitively, pursue the energy savings available to this special needs groups as an important part of achieving the Company's Act 129 goals, but more importantly, as a way to help these households mitigate the coming effects of the transition to market-based rates.

The Plan also includes:

**Customer Awareness and Education** – Essential to the success of these programs will be a concurrent marketing and educational campaign. Once Commission approval is obtained, Penelec will immediately launch an outreach effort that (i) builds awareness and interest in the programs; (ii)

communicates ways that customers may participate; and (iii) explains expected benefits and reasons for participating. Included in each program's budget is a share of a first year marketing campaign for that sector with a smaller amount of sustaining marketing resources included for the four year period of the Plan so as to ensure adequate outreach for achieving program goals. A forthcoming RFP for a Program Management Contractor will include a section requesting a team member with educational expertise in social marketing and consumer behavior change. The Company will track consumer education expenses to determine the portion attributable to the transition to market-based rates and the portion attributable to the implementation of Act 129 Plans, only the portion which educates consumers about the availability of EE&C programs will be recovered through the EEC-C Rider and subject to the 2% cap.

**Adherence to the TRC test and the TRM** – Throughout the planning process FirstEnergy has adhered to the requirements of Act 129, beginning with the selection process and timing related to obtaining a CSP for technical support in developing this Plan. The Company, through a competitive bidding selection process, selected Black & Veatch Corporation who has been fully engaged in reviewing and providing commentary on recently released Commission directives, including those related to the requirements and guidance of both the Total Resource Cost Test (May 28, 2009)<sup>13</sup> and Technical Reference Manual (June 1, 2009). As part of this process, the FirstEnergy team has met with Commission Staff, the Office of Consumer Advocate's ("OCA's") energy efficiency advisory expert, Mr. David Hill of Vermont Energy Investment Corporation, OCA staff and other stakeholders both individually and as a group, to discuss the intent and spirit of these directives and how they are being addressed in the Plan. Moreover, Penelec has supported the PUC's efforts to contract with a statewide evaluation consultant, and will work with PUC staff and the chosen consultant to develop, as appropriate, additional "custom" or other measures eligible for savings under the TRM. Appendix E lists the savings assumed for non-TRM measures and the public sources used to obtain them.

**Stakeholder Input** – As indicated above, the Company, in an effort to incorporate other points of view, has obtained the input from various stakeholders. This was accomplished in a variety of ways:

- 1) The Company issued a Request For Information (RFI) to CSPs, both registered and un-registered, and implementation vendors, asking detailed questions regarding effective program elements, average costs and recommendations for the Company's consideration in the design of the programs. Twenty-eight organizations responded with detailed information and constructive ideas.
- 2) Three Stakeholder Meetings were held in Harrisburg, Pennsylvania at the offices of the Commission to share the Plan's status and obtain input from attendees. More than 20 stakeholder representatives attended the first meeting, more than 30 stakeholder representatives attended the second meeting and more than 60 stakeholder representatives attended the third meeting. Positive discussions were held both at the meetings and in follow-up conference calls with the design team that resulted in significant improvements to the programs. Stakeholders were also invited via mass emails to provide additional input.

---

<sup>13</sup> The FirstEnergy EE&C plans are based upon the requirements and guidance of the Total Resource Cost ("TRC") Test (May 28, 2009), with some minor changes that were requested during the comment period. Notable changes were the use of marginal transmission and distribution costs instead of the full transmission and distribution rates. FirstEnergy, as stated in its Comments filed on June 5, 2009, at Docket No M-2009-2108601, did not have the ability to address all of the changes presented in the final TRC Order entered on June 23, 2009 before filing these plans on July 1, 2009; however, the resulting FirstEnergy plans are cost effective and compliant under the TRC test required by Act 129 and approved by the Commission in its June 23rd Order. The results of the TRC test, as applied to the FirstEnergy Companies' plans, are presented in PUC Table 1 and are expressed as both a net present value and a benefit-cost ratio.

- 3) Community Based Organizations represent and deliver services to the low income sector, an important group with separate Act 129 targets. The project team shared conceptual plans with CBOs and WARM contractors in Pennsylvania via a presentation made at one of their regularly scheduled advisory panel meetings.
- 4) FirstEnergy has communicated with other EDCs as they develop their plans, exchanging ideas and coordinating insights and initiatives where they deemed it practical and appropriate given the limited time available for development of plans.
- 5) The Company will continue their commitment to an ongoing stakeholder process. FirstEnergy will meet with interested parties as needed, but not less than twice annually until May 31, 2013. The Company agrees to explore Plan improvements as suggested by the Office of Consumer Advocate. The Company will utilize the stakeholder process to seek input regarding possible improvements including a program for new commercial/industrial construction, implementing measures geared toward agricultural customers, and initiatives targeted toward high-value market subsets such as supermarkets or data centers. Since the Company faces the risk of penalties in the event of non-compliance with the mandates of Act 129, the Company may not implement all Plan improvements as suggested by parties participating in collaborative discussions.

**Environmental Responsibility** – The Requests for Proposals (RFPs) to implement the Plan will require delivery vendors to take proper care, and include costs for the environmentally responsible disposal of any hazardous materials from old appliances and other energy consuming products. For example, the Company’s refrigerator pick up program analysis assumed relatively high disposal cost estimates because it includes costs for the proper disposal of refrigerant chemicals as part of the process. Quotes were obtained from current vendors for this purpose. And, while the company is not replacing CFLs *per se*, its programs relating to lighting will advise consumers of the increasing number of recycling sites available at participating retailers for the proper disposal of CFLs so that the small traces of mercury remains contained<sup>14</sup>.

**Fast Track Plans** – Penelec is cognizant of the need to obtain approval of the Plan before programs are launched. Yet, it is concerned that such a delay will lose certain synergies and cost savings opportunities that exist today. Moreover, the Company has communicated with customers that program incentives will be available with some level of retroactivity, pending the development of processes, procedures and/or infrastructure that, if not done in parallel with the approval process, will create delays in the launch of certain programs. As a result, the Company has developed a Fast Track program suite which allows the Company to perform critical path tasks during the approval process, and to take maximum advantage of existing delivery channels by adding electric energy savings measures and services to programs that are already in place, thus avoiding a duplication of efforts if second visits were necessary after the Plan is approved. The Company anticipates that it will submit the details of certain programs included in its Fast Track program suite for individual consideration by the Commission. Such programs may include:

- Approval of the Company’s selection of an on-line home energy audit service provider and system, along with related cost recovery, prior to Plan approval.
- Approval of the Company’s selection of an M&V/Tracking system service provider and systems, along with related cost recovery, prior to Plan approval.
- Approval of the Company’s selection of an appliance recycling service provider, along with related cost recovery, prior to Plan approval.

---

<sup>14</sup> For example, Home Depot and Lowe’s offer CFL recycling locations. Consumers can also find disposal sites via Recycleabulb.com. The Company will include such information in its lighting educational materials

- Approval of the Company's selection of Program Manager(s) and Energy Education/Communication consultants, along with related cost recovery, prior to Plan approval.

**Sensitivity to Federal Initiatives** – The Company is aware that certain Federal initiatives and funding opportunities are available and has incorporated such initiatives and opportunities into the Plan.<sup>15</sup> For example, in order to harness the significant energy savings identified through the Company's market assessment, the Plan accelerates the adoption of CFLs three years before such federal standards for lighting go into effect in 2013. Based upon primary research conducted as part of FirstEnergy's market assessment, a statistically valid sample of Penelec households reported that, on average (as measured by the sample median), residential customers generally have already obtained five to six CFLs for use in their homes. Penelec's plan supports retrofitting at least four additional bulbs per household. As more fully discussed in Section 2, such acceleration will to be accomplished through a variety of program elements that will reach all of the Company's significant target markets. The Plan also leverages stimulus and other Federal Energy Efficiency funding initiatives that are currently available to Penelec customers by assisting local governments within the Penelec service territory who are taking advantage of Energy Efficiency Block Grants. Penelec will work with these and other potential communities to enhance their prospects for success through free audits for local and county buildings.

### ***1.1.2. Summary of Proposed Minor Changes (filed February 13, 2013, approved March 14, 2013)***

Penelec proposes to increase the budget for the Residential Energy Efficiency HVAC Program by \$179,900 and the Large C&I Equipment Program by \$859,503. The Residential Energy Efficiency HVAC Program has exceeded the Company's projections and is projected to exhaust its approved program budget in March 2013. The Large C&I Equipment Program has proven to be extremely popular and the Company has identified additional customer projects that it can pursue under this program to achieve additional energy and demand savings. Additionally the Large C&I Equipment Program has nearly exhausted its approved program budget. These changes will allow Penelec to continue program operations through May 31, 2013.

Penelec proposes to decrease funding for the Residential Behavioral Modification & Education Program by \$179,900 and the PJM Demand Response Program – Large C&I by \$859,503. Critical program activity for the PJM Demand Response Program – Large C&I occurred during the summer of 2012 and the Company does not anticipate any further significant activity through this program prior to the expiration of the Company's EE&C Plan on May 31, 2013. These programs are projected to be under budget in excess of these amounts on May 31, 2013.

These changes will have no effect on the remainder of the Current Plan or the Company's Residential or Large C&I rates reflected in Rider EEC-C. These budget transfers are summarized in Appendices D-6.

### ***1.1.3. Summary of Proposed Minor Changes (filed May 3, 2013, approved May 29, 2013)***

Penelec proposes to increase the budget for the Small C&I Equipment Program by \$90,000 and the Large C&I Equipment Program by \$375,000. The Company has identified additional customer projects that it can pursue under these programs to achieve additional energy savings. These changes

---

<sup>15</sup> While the Company has incorporated the concept of Federal funding and initiatives into the Plan, the Plan assumes that such funding opportunities will exist only in the early years of this long term Plan. Thus, the portfolio of programs were developed to stand on their own, irrespective of such initiatives and funding.

will allow Penelec to continue program operations and support customer participation in these programs through May 31, 2013.

Penelec proposes to decrease funding for the PJM Demand Response Program – Small C&I by \$90,000 and the PJM Demand Response Program – Large C&I by \$375,000. Critical program activity for the PJM Demand Response Program occurred during the summer of 2012 and the Company does not anticipate any further significant activity through this program prior to the expiration of the Company’s EE&C Plan on May 31, 2013. These programs are projected to be under budget in excess of these amounts on May 31, 2013.

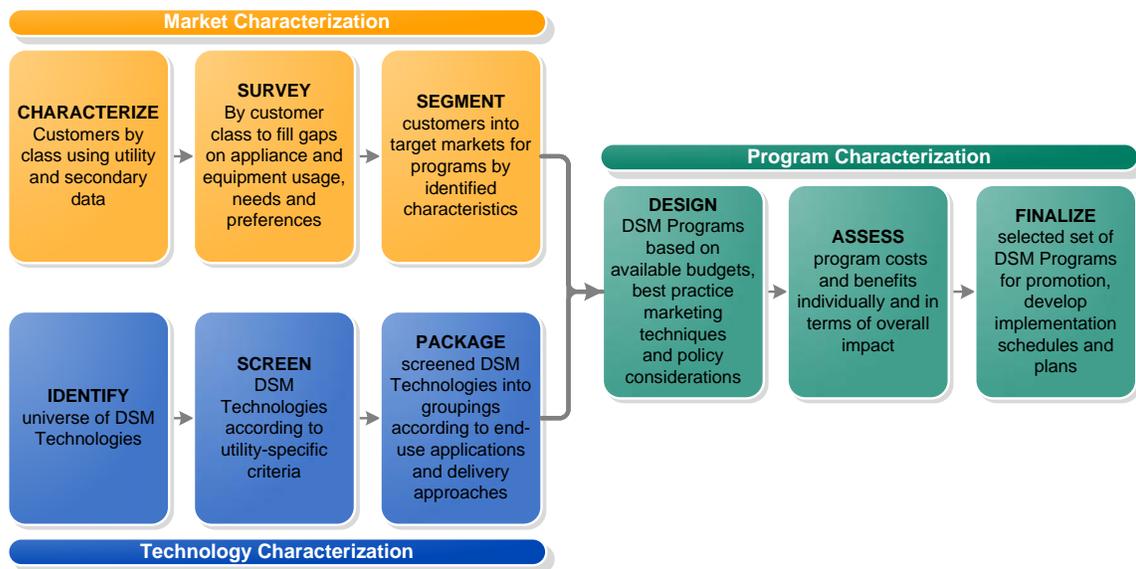
These changes will have no effect on the remainder of the Current Plan or the Company’s C&I rates reflected in Rider EEC-C. These budget transfers are summarized in Appendices D-6.

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

**Process**

Figure 1, below illustrates the process undertaken by the planning team to develop the EE&C Plan:

**Figure 1: FirstEnergy EE&C Plan Development Process**



The Company’s approach balances four key sources of information:

- External stakeholder experience and opinions captured in Stakeholder meetings;
- CSP and implementation vendor experience in delivering programs captured in a Request for Information survey;
- Industry experience as reflected in the literature and previous contractor evaluation studies; and
- Customer attitudes and preferences through mail and telephone surveys and interviews.

Stakeholder input was obtained through three Stakeholder meetings, followed by conference calls with interested organizations. In addition to the discussions that took place during the Stakeholder meetings, the Company met with individual stakeholders in separate meetings. Specifically, the FirstEnergy team, in response to a specific request, discussed program concepts with the Pennsylvania Housing Finance Authority in the development of the Multifamily Buildings program, discussed a variety of issues with the Office of Consumer Advocate, and discussed technologies and techniques for improving the efficiency of municipal water systems generally and pumping in particular with American Water Company. Further, written comments to the proposed portfolio of programs were received from organizations such as the Department of Environmental Protection, some Community Based Organizations and others.

To capture customer data, FirstEnergy commissioned primary research for three Pennsylvania affiliates, including 300 C/I phone surveys, and over 1200 residential mail surveys; with 100 completed surveys of commercial industrial customers, and just over 400 mail surveys of residential customers analyzed for this study. Interviews were held with Managed Account representatives, National Account representatives and Area Managers to capture needed information on the Company's largest customers and local governments.

On a parallel track, the team evaluated more than 100 EE&C measures, along with additional energy efficiency measures based upon consultant input. To support that modeling effort, FirstEnergy solicited direct input from CSPs and other energy efficiency program vendors through a Request for Information ("RFI") to gather recommendations relative to the nature of program offerings as well as the incentives and costs of various program elements to be used in program modeling. Program modeling was augmented with a significant amount of data obtained from 28 responses to the RFI. Other information was collected as part of the market research of retail stores in the Penelec services territory that sought product availability and pricing for selected energy efficient appliances.

Using all of the data collected, the team developed models to be utilized to assess costs and benefits utilizing the final TRM information that was issued on June 1, 2009.

### **Assumptions and Priorities**

There are both universal and program specific assumptions that must be made when modeling the EE&C programs, including discount rates and avoided costs, as well as program specific assumptions involving customer participating levels, forecasted budgets for tasks such as marketing and program administration, and other start up costs. Details surrounding these and other assumptions underlying this Plan are available upon request. In addition, when designing the Plan, the Company pursued the following priorities:

- Seek out near-term "shovel ready" opportunities;
- Focus on previously verified projects first (i.e., those with high confidence level related to the timing and quantity of results);
- Leverage other funding sources to stay within the funding cap;
- Build market share with lower reliability programs and those requiring more lead time; and
- Pursue savings that are easily proven.

While modeling assumptions yielded results that appear to support program success within budget, the Company notes the context within which these programs will be implemented over the next four to five years, all of which have material risks associated with them. Some of these risks include:

- The economic impact of continued high unemployment rates causes concern that business and government accounts may not support the pace of investment required to achieve the goals, and slow the pace of mass market penetration;

- With the exception of low-income programs, programs will be new with no historical basis for participation rates or experience which may cause installation rates to be lower than modeled, particularly in the early years;
- A project may require higher rebate subsidies or full financing, which may make some programs marginally cost effective or exceed program funding constraints; and
- Reliance on large projects that can leverage other funding.

- 1.3. *Proposed modifications to summary tables of program savings goals, budget & cost-effectiveness (PUC Tables 1, 2 and 3) are shown highlighted and are located in Appendix G.*

Table removed and relocated

***1.4. Summary of program implementation schedule over four year plan period***

The proposed time line for Plan implementation is set forth below. FirstEnergy anticipates that its Pennsylvania companies will use one or more Program Manager(s) to implement the various programs identified in its Plan. These Program Manager(s) will be responsible for the start-up of new programs, which will include at a minimum the identification of appropriate staffing skills and levels and the hiring of the same, and the development of website(s), promotional strategies, and processes ensuring quality and other controls supporting successful program implementation. The manager(s)' start-up phase will include communication and coordination with Company personnel so as to (i) present seamless processes for customers or allies that wish to participate in the programs' (ii) maximize process efficiency and controls; and (iii) leverage Company relationships and communications with customers.

The Company will contractually obligate the manager(s) to design a start-up phase that will be performed in an organized and efficient manner and that strives to maintain and strengthen constructive relationships with Company program management, customers, trade allies, contractors and other energy program partners when possible.

The start-up period will include a Program Set Up Period:

Program Set Up – Immediately following contract award and the kick-off meeting(s) as set forth in the proposed time line below, the Company and Program Manager(s) will work together to modify the Start-up Plan submitted with the successful bidders' bid proposals in order to develop the systems and procedures needed to operate the energy efficiency programs. The Start-up Plan will include, at a minimum:

- Determining the required information transfers between the Program Manager(s), the Company and the Company's other energy efficiency or tracking system contractors;
- Creating, installing and testing necessary data collection systems for program operation and evaluation;
- Establishing a toll-free number and processes for the Company to transfer calls it receives related to the programs;
- Developing detailed processes for managing rebate/incentive applications, rebate/incentive payment processes, reporting procedures, data collection and data recording processes, internal billing and related documentation to be sent to the Company for processing;
- Developing electronic payment between the Company and the Program Manager(s);
- Plans for development and launching promotional strategies, including creation of a website;
- Creating a check processing system (if deemed appropriate); and
- Ensuring all other preparations needed before the programs are launched.

During program set-up, the Program Manager(s) will meet with the Company, its consultant, and tracking system contractors as necessary and appropriate in order to properly introduce the applicable program into the Company's overall comprehensive Plan.

Program Manager(s) will submit a start-up plan with their bid proposal. It is anticipated that the plan submitted may be modified at the kick-off meeting. The start up plan will include, at a minimum:

- Organization chart and description of management roles and responsibilities;
- Description and dates of program launch milestones;

- Description of a plan for use of any subcontractors;
- Plan to detail a specific communications strategy; and
- Plan to facilitate or support program tracking systems and reporting.



***1.5. Summary description of the EDC implementation strategy to manage EE&C portfolios and engage customers and trade allies.***

Penelec intends to implement certain of the Plan's programs in a staged manner as follows:

- Launch customer awareness and educational campaign immediately after approval of the EE&C Plan in order to start building consumer interest.
- Solicit and secure CSPs and implementation vendors in August/September so as to enable a timely program launch once the Plan is approved. Contracts with selected vendors will be contingent upon Commission approval of the programs.
- Seek Commission pre-approval to recover start-up costs associated with the Fast Track suite of programs that were discussed above.

Penelec will oversee a range of contractors and vendors in the delivery of the programs. CSPs engaged by the Company to manage programs or deliver program services will have undergone a competitive bidding process through FirstEnergy or another EDC. Low income residential programs will be served by a mix of Community Based Organizations and private vendors under contract with the Company. The Company will seek a vendor or group of vendors to deliver services to existing residential homes and small commercial customers. Non-residential audits will most likely be performed by a mix of private auditing firms and specialized engineering firms that have the expertise to identify opportunities for specific industries. A performance contracting option will be available to both non-residential businesses and government facilities who wish to pursue comprehensive rather than equipment-specific retrofits. Vendors who hold current awards in the Energy Services Performance Contracting program will generally be responsible for Federal facilities.

***1.6. Summary description of EDC's data management, quality assurance and evaluation processes; include how EE&C plan, portfolios, and programs will be updated and refined based on evaluation results.***

FirstEnergy is committed to designing and implementing robust processes, organizations and systems that achieve the energy savings and demand reduction goals established in Act 129. The Company plans to use a two-fold approach to ensure the quality of its EE&C Plan program during the design and implementation:

- Developing processes to clearly detail the steps to meet EE&C goals while complying with applicable requirements; and,
- Devising and implementing control points at various stages of these processes to establish and maintain quality.

Section 6 of this report presents detailed plans regarding the data management quality assurance and evaluation processes for the EE&C Plan. Each program description in Section 2 provides a brief description of the planned evaluation monitoring and verification steps intended for each program. Further, the Company is committed to working with the statewide Evaluation Contractor to support their efforts at evaluating the programs. The Company will conduct process evaluations at the six to twelve month mark as a way to gauge progress toward the achievement of goals and identify issues requiring mid-course correction. All programs will benefit from periodic feedback from vendor-conducted customer satisfaction surveys. In addition to making interim adjustments to programs as suggested by these feedback activities, the Company will propose any major changes it feels are required in its annual reporting to the Commission, or propose a plan change

using the Commission's standard procedures for rescission and amendment of Commission orders.. The Company will not shift program funds within a customer class, or between customer classes, without prior Commission approval. Furthermore, if the Company identifies the need to increase the cost of this Final Plan, it will obtain Commission approval before increasing the cost of the budget for the same.

***1.7. Summary description of cost recovery mechanism***

The Company's proposed Energy Efficiency and Conservation Charge Rider ("EEC-C Rider") is included as Appendix H<sup>16</sup>. The EEC-C rates are expressed as a price per kilowatt-hour ("kWh"), except for the industrial customer class that is expressed on a kilowatt ("kW") basis, and will be billed on the same basis. The EEC-C rates will be calculated and stated separately for the residential, commercial, non-profit, street lighting and industrial customer classes. The Company is proposing that the EEC-C Rider would become effective with service rendered on or after June 1, 2011. The EEC-C rates are capped at the 2% limit by class based on 2006 revenue. The rates would remain in place for the length of the Company's Energy Efficiency and Conservation Plans. However, upon determination that the EEC-C rates would result in material over- or under-collections of recoverable costs incurred or expected to be incurred during the program period (July 1, 2009 through December 31, 2013), the Company may request that the Commission approve interim revisions to the EEC-C rates to be effective thirty days from the date of filing. An interim change in the EEC-C rates may address a re-allocation of program expenses between customer classes. The EEC-C rider meets the requirements of 66 Pa. C.S. § 1307 as required by the Commission's Implementation Order and Act 129.

---

<sup>16</sup> In accordance with the Commission's Order entered October 28, 2009, the Company is submitting a revised EEC-C Rider consistent with the modifications requested by the Commission.

**2. Energy Efficiency Portfolio/Program Summary Tables and Charts**

- 2.1. *Proposed modifications to Residential, Commercial/Industrial Small, Commercial/Industrial Large and Governmental/Non-profit Portfolio Summaries ( PUC Table 4) are shown highlighted and are located in Appendix G.***

Table removed and relocated

Table removed and relocated

- 2.2. Proposed modifications to Plan data: Costs, Cost-effectiveness and Savings by program, sector and portfolio (PUC Tables 1-4) are shown highlighted and are located in Appendix G.***
- 2.3. Proposed modifications to Budget and Parity Analysis (PUC Table 5) are shown highlighted and are located in Appendix G.***

### **3. Program Descriptions**

#### ***3.1. Discussion of criteria and process used for selection of programs:***

The process followed in selecting the programs in this Plan proceeded from examination of technologies and consideration of customer opportunities. Figure 1 in section 1.2 depicted the generic process followed. The steps followed in this process are described below:

1. A large list of DSM/EE technologies underwent an intuitive screening process carried out by a panel of DSM experts using criteria that included elimination of gas measures, elimination of fuel switching measures, ranking of commercial availability, meeting the utility's load reduction objectives. Technologies were ranked along these criteria and the top ones carried through for economic analysis.
2. Consumer research was conducted to identify likelihood of participation/technology adoption, barriers to adoption and potential interest in specific services for overcoming those barriers. Current conservation behavior was also measured.
3. Program characteristics were developed at the technology level, including for example (on the cost side) incentive amounts, marketing, administration, vendor costs, incremental measure costs, and the availability of tax incentives or other benefits. On the benefits side, values were taken from the TRM for those measures covered, and were calculated using formulas identified in the TRM for weather-sensitive measures.
4. Technologies were grouped by sector and the end uses addressed (lighting, HVAC, etc.) and considered in light of each of the program types in which the measures might be implemented. Thus CFLs appear in residential audits, low income and business programs and have specific rebate amounts and costs associated with each case.
5. The economic modeling then was carried out and TRC values determined for each grouping.
6. Program designs were then finalized taking into consideration whether each program:
  - Achieves the goals set for in Act 129 and approved by the Commission;
  - Promotes energy savings and demand reduction in a cost effective manner;
  - Passes the TRC as stipulated in the TRM;
  - Is an equitable Plan (i.e., offers technologies and services to all customer segments);
  - Meets the regulatory requirements of Act 129;
  - Simplicity (i.e., easy for customers, CSPs and trade allies to participate);
  - Uses proven delivery strategies;
  - Provides flexibility to address prescriptive as well as customer projects; and
  - Leverages existing delivery channels that are working well.
7. Once all programs were designed and evaluated, the Plan was examined to ensure that the Plan met these same criteria.

The EE&C Plan includes a suite of programs that move from the general to the specific, from providing customers with generic information about saving energy to customized information and services to help them make changes in their own specific homes and facilities. Upon Commission approval, the Company will launch an outreach effort to build customer awareness and interest in the programs and saving energy. This campaign will also make people aware of the transition that will be taking place in 2011 to market-based rates and the ability for customers to take advantage of the programs being offered to help mitigate the effects of any increases on consumer bills.

The next step is to encourage customers – residential and non-residential - to have an energy audit as a starting point in order to identify potential energy efficiency opportunities. These audits will serve a dual purpose, providing both important “as-found” characteristics of homes and equipment before the installation

of measures, as well as important information on the age and nature of equipment being replaced. Audits for the residential sector can be accessed on line, or through the use of a contractor who will conduct a walk-through assessment of the home. Different forms of audits, ranging from the on-line to a professional investment-grade audit are supported through a single program. In the commercial sector, smaller businesses will have access to a walk-through audit performed for a fixed fee, while larger or more complex businesses will be offered support for a technical assessment done by a certified contractor. These assessments are typically priced on a per square foot basis. Regardless of customer segment, the audit contractors will install lighting upgrades and (for residential) faucet aerators so that customers can immediately start to realize energy savings.

To facilitate implementation of recommended measures, Penelec will also offer a suite of programs that incorporate fixed rebates and calculated incentives, and performance contracts and arranged loans (initially only through the statewide Keystone Home Loan Program) to offset costs associated with the customer's actions. For eligible low income customers, most measures are provided free of charge. Customers are also given incentives for removing second refrigerators, freezers and old inefficient room air conditioners from the system, and for replacing old inefficient appliances (e.g. central air conditioners, room air conditioners) with newer, qualifying energy efficient models.

Finally, for selected appliances and equipment, such as central air conditioning, heat pumps and water heaters, Penelec will install communications devices that will enable customers to participate in demand response programs. It is critical that the Company builds the capacity for reducing peak load at the 100 hours of highest demand. To that aim, the Company has proposed a peak load reduction program that leverages the capabilities PJM curtailment service providers (PJM-CSPs) provide their customers. Penelec has a Residential Time of Use Rate in place and has proposed a voluntary real time pricing rate option for default service customers on rate schedules GS-Small and GS-Medium, as well as a real-time default service rate for customers on rates GS-Large, GP and TP in its pending Default Service Proceeding at Docket Nos. P-2009-2093053 and P-2009-2093054. Penelec will continue to encourage customers to take advantage of these load shifting initiatives as a way to fully benefit from these special rates.<sup>17</sup> Figure 3 summarizes this process for the residential sector programs, while Figure 4 does the same for the non-residential sector programs.

---

<sup>17</sup> Although rates are not described in this filing as programs, separate monitoring and verification protocols will be developed in order to assess the impacts associated with these rates so that the company may include their contributions toward the Act 129 targets.

Figure 3: Residential Sector Process

### Residential Sector Process

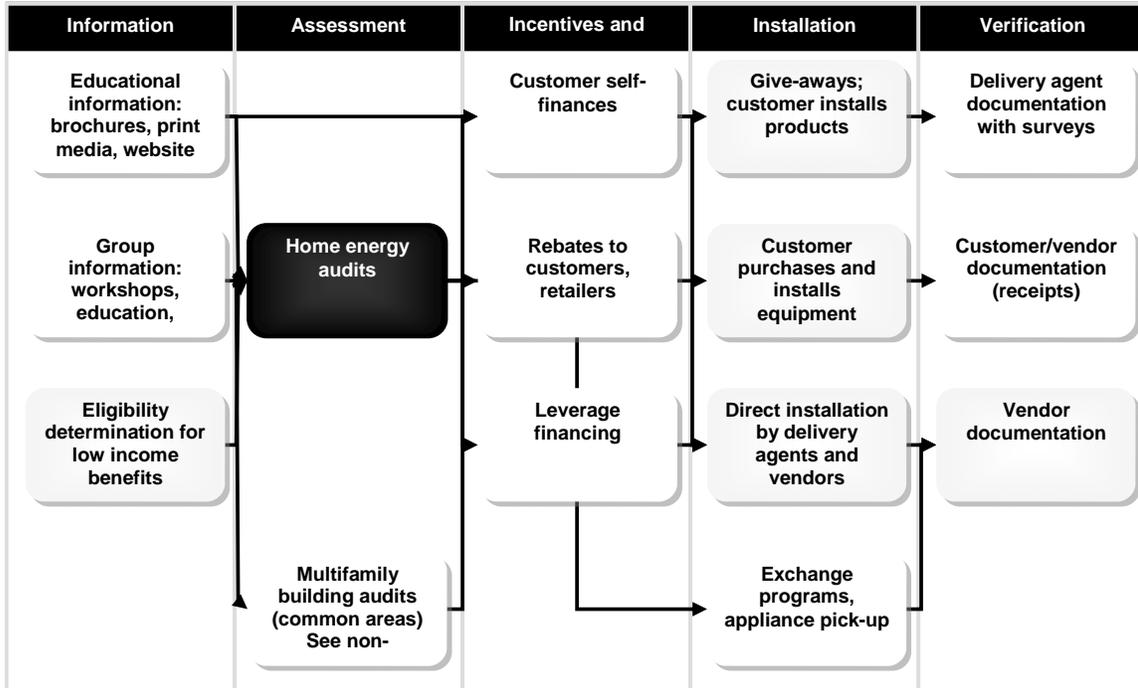
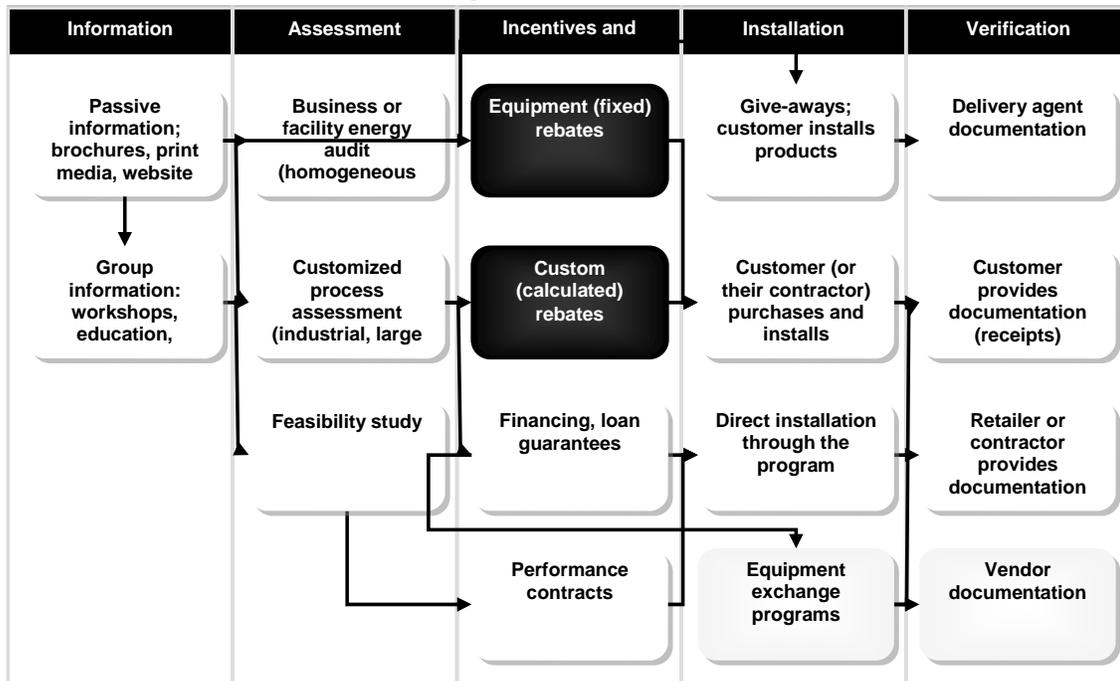


Figure 4: Non-Residential Sector Process

### Non-Residential Program Process



*3.1.1. Describe portfolio objectives and metrics that define program success (e.g., energy and demand savings, customers served, number of units installed)*

The following sections describe general metrics for each program sector. The individual program descriptions contain preliminary M&V protocols for each program.

**Residential**

Fundamental metrics for program performance include the number of participants, kWh savings, kW peak load reductions, dollars spent, dollars per kWh saved, and dollars per kW of peak load reduction. Additional program metrics for the residential portfolio will follow the designations common to logic modeling of Immediate (Near Term), Intermediate and Long Term metrics.

Immediate Metrics – (numeric, mostly counts) Numbers of customers having an audit, inquiring about a program, registering for a program, or attending an educational event; numbers of trade allies getting trained and certified (certified contractors; numbers of trade allies participating in EE equipment programs).

Intermediate Metrics – (measured via surveys, follow up calls, participation rates, documented kWh savings, application forms, etc.) Number of customers taking action via installing measure(s) and participating in programs, making behavioral changes; number of measures installed; amount of additional non-program measures installed (e.g., the extent to which customers purchase additional CFLs or other measures on their own beyond what is provided through a program).

Long-Term Metrics – (Calculated via TRM savings estimates and other deemed savings until Statewide Evaluator conducts third-party evaluation) kWh savings, kW reductions observed, customer satisfaction levels, self-reported behaviors, perceptions of non-energy benefits such as increased comfort, customer health, home safety, improved bill payment histories, other outcomes; \$/kWh and \$/kW.

**Non-Residential**

Fundamental metrics for program performance in this segment are the same as residential above, and include the number of participants, kWh savings, kW peak load reductions, dollars spent, dollars per kWh saved and dollars per kW of peak load reduction. Additional Program metrics for non-residential sector programs are similar to those for residential; however they will take into account the different levels of decision makers that commonly exist on the non-residential side.

Immediate Metrics – Number of customers participating in an audit, registering for other services; number of vendors making inquiries about the programs and seeking to participate in some way.

Intermediate Metrics – Number of customers that have had audits and/or installed some of the recommendations; satisfaction levels; self-reported additional actions taken; and behavioral changes made.

Long Term Metrics – Energy savings and peak load reductions.

**Demand Response**

Immediate Metrics – Number of customers signing up for the programs.

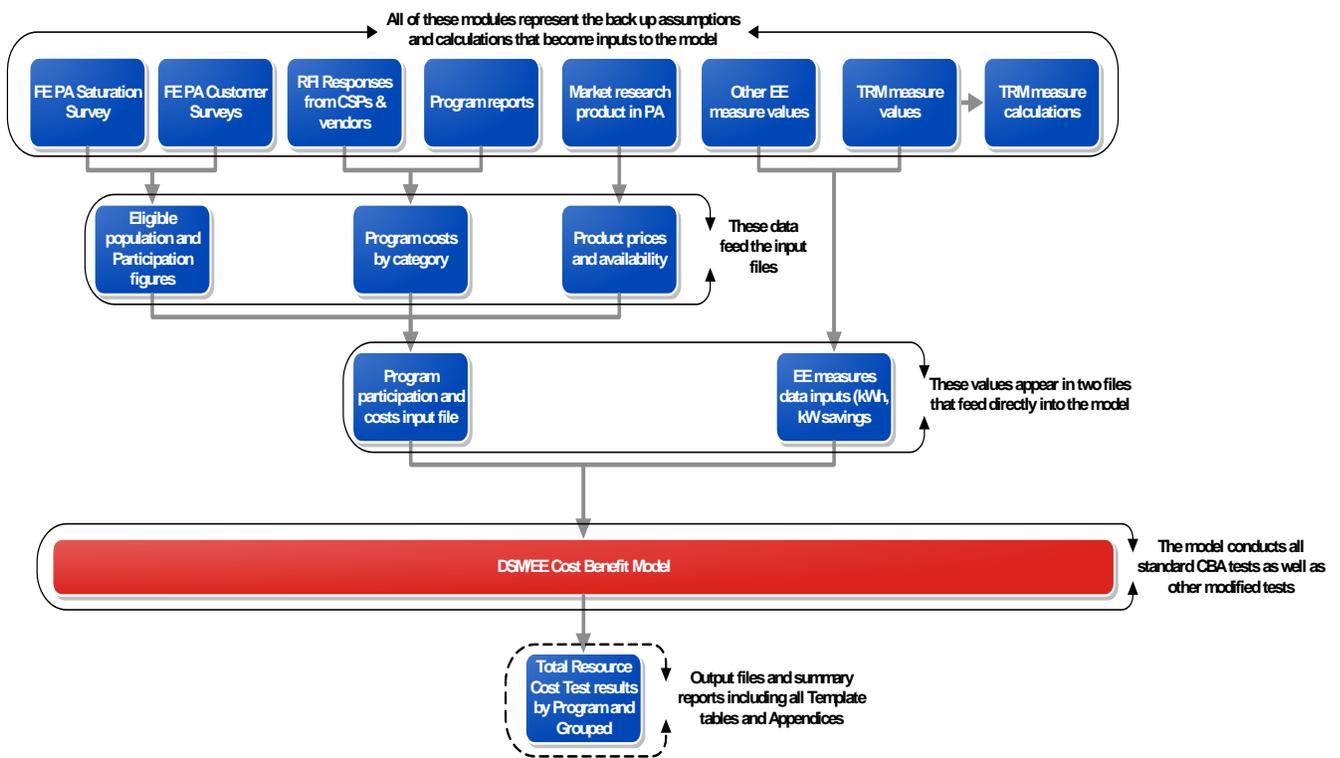
Intermediate Metrics – Actual metered/measured load over time.

Long Term Metrics – Actual peak load reduced during 100 highest peak hours of 2012 (June 1 – September 30)

3.1.2. Describe how programs were constructed for each portfolio to provide market coverage sufficient to reach overall energy and demand savings goals. Describe analyses and/or research that were performed (e.g., market, best-practices, market modeling).

Figure 5 presents a schematic diagram of the analyses used to develop programs. Generally, the approach taken by FirstEnergy is a “bottom-up” approach in that it relies upon detailed customer data to characterize the landscape for change and applies assumptions and participation figures to the eligible population in order to arrive at the potential that exists for energy efficiency and the likely rate of uptake. Starting with individual assumptions about energy efficiency technologies, these are grouped into logical program groupings, incentives are applied along with other program costs, participation levels are assumed and the figures multiplied.

**Figure 5: Model Process Diagram**



Checks are then made between the results from the “bottom-up” analysis and selected data points (such as number of customers by customer segments and number of kWh sales by class) to see how proportional the savings are to these baseline figures. Logical and intuitive feasibility about the program assumptions is examined next, and adjustments are made as necessary, rebalancing the portfolio as appropriate.

**3.1.3. Describe how energy efficiency, conservation, solar, solar photovoltaic systems, geothermal heating, and other measures are included in the portfolio of programs as applicable.**

The next section presents individual descriptions of the final program designs. See Penelec Table 5: Penelec EE&C Program Rebate Schedule for incentive and rebate amounts.

For solar and geothermal heating related equipment please refer to the Residential Energy Efficient Products Program and Residential Energy Efficient HVAC Equipment Program for rebates on solar water heating and geothermal heating system measures.

**3.2. Residential Sector (as defined by EDC Tariff) Programs - include formatted descriptions of each program organized under the following headings:<sup>18</sup>**

<b>Program Title and Program years during which program will be implemented</b>	<b>Residential Direct Load Control Program: 2010, 2011 and 2012</b>
<b>Objective(s)</b>	Reduce Residential Central Air Conditioning (CAC) Load over the highest 100 load hours
<b>Target market</b>	Residential Customers with CAC
<b>Program description</b>	This program will pay an incentive to participants who agree to have controls installed on their CAC systems that enable the Company to limit CAC operation during peak load periods. Once such devices are installed, the utility will have the ability to cycle air conditioning compressors or reset temperatures for the duration of the load control event. It is anticipated that this program will be activated over each operating company’s top 100 load hours, typically from noon – 7 pm on selected weekdays.
<b>Implementation strategy (including expected changes that may occur in different program years)</b>	It is anticipated that a third party CSP will be contracted to market the program to customers in 10 major load areas across the three FirstEnergy operating companies in Pennsylvania.
<b>Program issues and risks and risk management strategy</b>	Initial program targeting will be to customers located in major load areas to minimize the potential for poor pager signal strength limiting expected load reduction impacts. In order to gain more robust longer term program participation, direct load control switches will be chosen that will be both radio communication and ZigBee®-capable to facilitate the eventual migration of this program to an Advanced Metering Infrastructure environment.
<b>Anticipated costs to participating customers</b>	There will be no costs to participating customers

<sup>18</sup> Additional measures may be incorporated, as appropriate, as new measures are approved for inclusion in the TRM.

<p><b>Ramp up strategy</b></p>	<p>Program launch will begin in November 2009 and will progress in intensity in order to insure installation of the requisite number of switches by May 2012.</p>
<p><b>Marketing strategy</b></p>	<p>Print, web and mail advertising combined with a first year incentive; depending upon whether a customer is willing to add a pool pump or electric water heater to be controlled under the program</p>
<p><b>Eligible measures and incentive strategy, include tables for each year of program, as appropriate showing financial incentives &amp; rebate levels (e.g., \$ per measure, \$ per kWh or MW saved)</b></p>	<p>Customers will receive a first year as a sign up incentive. In each following year Customers may receive a monthly incentive each summer month for participation (as will be determined in consultation with the CSP).</p> <p>For rebate or incentive amounts see Penelec Table 5: Penelec EE&amp;C Program Rebate Schedule.</p>
<p><b>Program start date with key schedule milestones</b></p>	<p>Program launch will begin in 2010 and will progress in intensity in order to insure installation of the requisite number of switches by May 2012</p>
<p><b>Assumed Evaluation, Measurement, and Verification (EM&amp;V) requirements required to document savings by the Commission's statewide EE&amp;C Plan Evaluator</b></p>	<p>Following the adoption of enabling technologies, the Company will verify that demand reduction targets are being achieved using sampling. We will perform such verification for a representative sample of the customers that have adopted peak reduction enabling technologies.</p> <p>As part of the monitoring process, the company plans to use selected indicators to verify periodically that demand reduction is being realized as projected. A DSM tracking system is to be used for such monitoring. In the event that EE&amp;C program indicators show that projected EE&amp;C targets are not likely to be achieved on schedule or within budget, FE will take appropriate corrective actions.</p>
<p><b>Administrative requirements – include internal and external staffing levels</b></p>	<p>The Company will use a combination of internal and external resources to manage and implement the EE&amp;C programs. Penelec will monitor and adjust the allocation of resources to balance the needs of each program. See sections 4.2.1 and 4.2.2 of the EE&amp;C plan for more details.</p>
<p><b>Estimated participation – includes tables indicating metric(s) with target value(s) per year</b></p>	<p>See Appendix F</p>
<p><b>Estimated program budget (total) by year – include table with budget per year</b></p>	<p>See Appendix D</p>
<p><b>Savings targets – include tables with total MWh and MW goals per year and cumulative tables that document key assumptions of</b></p>	<p>See Appendix E</p>

<b>savings per measure or project</b>	
<b>Cost-effectiveness – include TRC for each program</b>	See PUC Table 7a
<b>Other information deemed appropriate</b>	<p>This program is targeted at customers with adequate signal reception capability. Opportunities for expansion will be examined as technology options improve over time. The Company will bid their Residential Direct Load Control programs into the PJM Reliability Pricing Model (RPM). The revenues received by the Company, if any, from bidding and clearing residential Direct Load Control programs into the applicable RPM auctions will be netted against the program costs, including but not limited to, administration, contracted services, credits provided to customers, and PJM penalties for underperformance.</p>

<p><b>Program Title and Program years during which program will be implemented</b></p>	<p><b>Home Energy Audits and Outreach Program</b></p> <ul style="list-style-type: none"> <li>a) On-Line Audit</li> <li>b) Walk Through Audit</li> <li>c) Residential Whole Building Comprehensive</li> </ul>
<p><b>Objective(s)</b></p>	<p>Assist households in identifying energy savings opportunities through self-administered and professional walk-through home audits. Support direct energy savings by providing those who complete the audit free CFLs and other measures. Improve customers' energy management practice through improved access to information and analysis of energy use history.</p> <p>To provide comprehensive EE diagnostic assessments followed by direct installation of selected low cost measures plus incentives to households for implementation of additional associated measures.</p>
<p><b>Target market</b></p>	<p>All residential customers, both renters and homeowners.</p> <p>The target market for the Residential Whole Building Comprehensive component of the program is residential single family homes with electric heat as the primary heating fuel.</p>
<p><b>Program description</b></p>	<p>Households will be able to identify energy saving opportunities through various levels of home energy audits: 1) a self-administered on-line audit that analyzes historic energy use, and calculates energy savings based on customer responses to a series of questions, 2) a walk-through on-site audit administered by a trained professional auditor, and 3) a Residential Whole Building Comprehensive audit. The purpose of the audits is to identify energy savings opportunities, to install basic low-cost measures, and to make customers aware of other programs offered by the PA Companies, such as whole house wellness programs or programs they support, such as the Keystone Home Loan Program, to help customers implement the recommendations. The on-line and walk-through on-site audits generate delivery of an efficiency measures kit.</p> <p>For customers interested in a comprehensive audit, the Residential Whole Building component provides comprehensive diagnostic assessments followed by direct installation of selected low cost measures plus incentives to households for implementation of measures addressing building shell, appliances and other energy consuming features. Customers can tap into prescriptive rebates.</p>
<p><b>Implementation strategy (including expected changes that may occur in different program years)</b></p>	<p>This program involves consumer education through generic energy savings tips combined with information customized to a specific dwelling based on either self-reported information or a trained auditor. This program serves as a portal to other program</p>

	<p>services. Customers are also referred to solutions, including participating retailers in the EE Products program, and the E-store and the Keystone Home Loan Program for financing the balance of project costs. Participation by low-income customers will be tracked or estimated to support reporting and evaluation.</p> <p>For the Residential Whole Building Comprehensive component, BPI-certified contractors, including CBOs delivering the WARM program would implement the program. Program services would most likely be coordinated by a national vendor who would develop a pool of local contractors to deliver services to customers.</p>
<p><b>Program issues and risks and risk management strategy</b></p>	<p>Challenges with the website, number of trained auditors, current economic environment may limit customers' ability to purchase energy efficient equipment, lack of program awareness among customers and trade allies, damage to a customer's home.</p> <p>There are a limited number of BPI certified contractors available for the Residential Whole Building Comprehensive component in Pennsylvania due to economic stimulus activities. Whole building initiatives (e.g. the Home Performance with Energy Star) in other jurisdictions have had difficulty attracting contractors to adopt the business model, and customers to invest in a comprehensive set of measures. If measures are installed then customers will qualify for the rebates under the EE products program.</p> <p>With respect to risk management, refer to Section 4.1.4 of the EE&amp;C plan. The Company provides further details on "early warning systems" as well as a description of contingency plans.</p>
<p><b>Anticipated costs to participating customers</b></p>	<p>The on-line audit is free, as well as the kit, once the audit is complete and uploaded. Customers pay a fee \$50 for the on-site audit, the kit is free.</p> <p>Customers would pay a fee for the Residential Whole Building Comprehensive Audit which includes a blower door test. Customers would pay the difference between the actual cost of the measures and the incentives provided.</p>
<p><b>Ramp up strategy</b></p>	<p>The on-line audit generates mailing of an energy conservation kit depending on a customer's electric equipment, containing measures selected by the customer (e.g., a four pack of CFLs and other low cost measures).</p>
<p><b>Marketing strategy</b></p>	<p>The marketing strategy will include: newspaper and radio advertising, Company bill inserts, Company website, employee communications, community presentations and direct mail campaigns as needed. The Company fully expects the Program Manager(s), who will be selected by competitive bid, to provide specific details on marketing for this program.</p>
<p><b>Eligible measures and incentive</b></p>	<p>All measures are included for potential recommendation. Two</p>

<p><b>strategy, include tables for each year of program, as appropriate showing financial incentives &amp; rebate levels (e.g., \$ per measure, \$ per kWh or MW saved)</b></p>	<p>audit packages are used – one for the on-line audit and a second more comprehensive audit tool for the site audits. Those completing the on-line audit will receive an energy conservation kit containing:</p> <ul style="list-style-type: none"> <li>• Choice of kits (kits will contain recognized measures and are subject to revision)</li> <li>• One bilingual (English and Spanish) instructional sheet</li> </ul> <p>The Residential Whole Building Comprehensive component is a full service program similar to the EPA’s Home Performance with Energy Star program that involves test-in test-out blower door procedures, identification and installation of energy savings opportunities and at the contractor’s discretion, environmental safety measures. It is a combination information and installation program. The same equipment offered to existing residential customers under the other programs are eligible for installation in new homes under this program. However, customers may not take rebates under both programs.</p> <p>For rebate or incentive amounts see Penelec Table 5: Penelec EE&amp;C Program Rebate Schedule.</p>
<p><b>Program start date with key schedule milestones</b></p>	<p>See Figure 2</p>
<p><b>Assumed Evaluation, Measurement, and Verification (EM&amp;V) requirements required to document savings by the Commission’s statewide EE&amp;C Plan Evaluator</b></p>	<p>Penelec is to verify that the planned number of each type of audits is performed on time and within budget. A sample of on-site audits will be reviewed to check that their actual costs do not exceed the contract cost, and that customers are satisfied with the service. The company will also verify that existing EE&amp;C opportunities are properly quantified to enable accurate tracking and documentation of energy efficiency and demand reduction.</p> <p>For the Residential Whole Building Comprehensive component, Penelec is to verify that the installed measures and comprehensive diagnostics are performed as supported on program applications. The Company will also verify that existing EE&amp;C opportunities are properly quantified to enable accurate tracking and documentation of energy efficiency and demand reduction.</p> <p>As part of the monitoring process, the company plans to use selected indicators to verify periodically that energy savings and demand reduction are being realized as projected. A DSM tracking system is to be used for such monitoring. In the event that EE&amp;C program indicators show that projected EE&amp;C targets are not likely to be achieved on schedule and within budget, Penelec will take appropriate corrective actions.</p>

<p><b>Administrative requirements – include internal and external staffing levels</b></p>	<p>The Company will use a combination of internal and external resources to manage and implement the EE&amp;C programs. Penelec will monitor and adjust the allocation of resources to balance the needs of each program. See sections 4.2.1 and 4.2.2 of the EE&amp;C plan for more details.</p>
<p><b>Estimated participation – includes tables indicating metric(s) with target value(s) per year</b></p>	<p>See Appendix F</p>
<p><b>Estimated program budget (total) by year – include table with budget per year</b></p>	<p>See Appendix D</p>
<p><b>Savings targets – include tables with total MWh and MW goals per year and cumulative tables that document key assumptions of savings per measure or project</b></p>	<p>See Appendix E</p>
<p><b>Cost-effectiveness – include TRC for each program</b></p>	<p>See PUC Table 7a</p>
<p><b>Other information deemed appropriate</b></p>	

<b>Program Title and Program years during which program will be implemented</b>	<b>Behavioral Modification and Education</b> <b>2011 – 2013</b>
<b>Objective(s)</b>	Educate customers about no-cost or low-cost measures and behaviors that can offer opportunities to reduce energy consumption or demand. Encourage customers to adopt more energy efficiency behaviors and install energy efficient measures in their homes by increasing their awareness of how their behavior and practices impact their energy usage.
<b>Target market</b>	All residential customers, both renters and homeowners.
<b>Program description</b>	The Behavioral Modification and Education Program is focused on ways customers can implement no-cost or low-cost measures and behaviors that offer opportunities to reduce energy consumption or demand. Such education and awareness is separate from the advertising and promotion of Penelec’s specific energy-efficiency and demand reduction programs. Awareness and education may include: <ul style="list-style-type: none"> <li>▪ Periodic reports to customers that compare their usage with other, comparable customers in the same geographical area.</li> <li>▪ Outreach emphasizing the importance of peak load reduction during the peak load season and ways to shift energy use to off-peak periods.</li> <li>▪ General conservation tips such as turning down the thermostat, turning off lights, shortening showers, etc.</li> <li>▪ Low-cost energy-efficiency tips, such as replacing incandescent lights with CFLs, installing weather stripping, and using power strips.</li> <li>▪ Information on tools and resources available through FirstEnergy’s Web site.</li> <li>▪ Customer specific actions with regards to seasonality and home profile characteristics</li> </ul>
<b>Implementation strategy (including expected changes that may occur in different program years)</b>	Program services would be coordinated by a national vendor who would support development and delivery of information and related services to customers.
<b>Program issues and risks and risk management strategy</b>	Lack of awareness by customers. With respect to risk management, refer to Section 4.1.4 of the EE&C plan. The Company provides further details on “early warning systems” as well as a description of contingency plans.
<b>Anticipated costs to participating customers</b>	There are no costs or very low costs incurred by customers for this program.
<b>Ramp up strategy</b>	Vendors exist that can start this program quickly. Initial ramp up period includes data analysis and management, branding and marketing, and

	customer service process development and implementation.
<b>Marketing strategy</b>	The marketing strategy will include: newspaper and radio advertising, Company bill inserts, Company website, employee communications, community presentations and direct mail campaigns as needed. The Company fully expects the Program Manager(s), who will be selected by competitive bid, to provide specific details on marketing for this program.
<b>Eligible measures and incentive strategy, include tables for each year of program, as appropriate showing financial incentives &amp; rebate levels (e.g., \$ per measure, \$ per kWh or MW saved)</b>	No specific incentives will be provided through this program. Rather, the opportunity for cost savings will be the incentive. Penelec will perform periodic reviews of its programs. Specific behavioral messages and educational approaches in this program are expected to evolve over time to correspond with seasonal conditions, and to respond to general customer inquiries, process evaluation results and other factors.
<b>Program start date with key schedule milestones</b>	Estimate start date within 6 months of approval.
<b>Assumed Evaluation, Measurement, and Verification (EM&amp;V) requirements required to document savings by the Commission’s statewide EE&amp;C Plan Evaluator</b>	An appropriate Custom Measure Protocol has been approved by the PA Statewide Evaluator. This protocol provides EM&V guidelines.
<b>Administrative requirements – include internal and external staffing levels</b>	The Company will use a combination of internal and external resources to manage and implement the EE&C programs. Penelec will monitor and adjust the allocation of resources to balance the needs of each program. See sections 4.2.1 and 4.2.2 of the EE&C plan for more details.
<b>Estimated participation – includes tables indicating metric(s) with target value(s) per year</b>	See Appendix F
<b>Estimated program budget (total) by year – include table with budget per year</b>	See Appendix D
<b>Savings targets – include tables with total MWh and MW goals per year and cumulative tables that document key assumptions of savings per measure or project</b>	See Appendix E
<b>Cost-effectiveness – include TRC for each program</b>	See PUC Table 7a
<b>Other information deemed appropriate</b>	None.

<b>Program Title and Program years during which program will be implemented</b>	<b>Appliance Turn-In Program</b> <b>2009 – 2013</b>
<b>Objective(s)</b>	To remove older inefficient appliances from the system by offering customers an incentive and free pick-up and disposal service for second refrigerators, freezers and room air conditioners.
<b>Target market</b>	The target market for this program is existing households, multifamily and single family, renters and home owners. Equipment is to be working at the time of pick up.
<b>Program description</b>	Provides a small incentive to households for turning in older inefficient appliances. Pick up of old second refrigerators involves a set dollar incentive to the customer. Large appliances will be picked up over an extended period where others may be turned in at periodic events. For customers purchasing new refrigerators, this program is coordinated with the Energy Efficient Products program.
<b>Implementation strategy (including expected changes that may occur in different program years)</b>	A vendor will be hired to deliver this program in coordination with other EDCs in Pennsylvania. Regional roll-out and community outreach will support efficiency. Participation by low-income customers will be tracked or estimated to support reporting and evaluation.
<b>Program issues and risks and risk management strategy</b>	The key risk is that appliances will be turned in that were either not being used or are non-functional. Vendors may be required to test appliances before issuing the incentive, or sample a percentage of appliances after pick up to determine what percent of units are not generating energy savings. Pre-testing may result in lower participation but better quality control. Certification/paperwork. Lack of customer awareness. With respect to risk management, refer to Section 4.1.4 of the EE&C plan. The Company provides further details on “early warning systems” as well as a description of contingency plans.
<b>Anticipated costs to participating customers</b>	There are no costs to participating customers for this program.
<b>Ramp up strategy</b>	Vendors exist that can start this program immediately, so we do not anticipate a material start up period before offering services to customers. Regional roll-out.
<b>Marketing strategy</b>	Customers will be alerted to this service through various media and marketing channels (to be determined) to facilitate targeted roll-out of the program, and efficient collection in targeted areas. A broad customer awareness campaign will include introduction

	of the program and the need for consumers to take energy efficiency actions.
<b>Eligible measures and incentive strategy, include tables for each year of program, as appropriate showing financial incentives &amp; rebate levels (e.g., \$ per measure, \$ per kWh or MW saved)</b>	<ul style="list-style-type: none"> <li>▪ Refrigerators</li> <li>▪ Freezers</li> <li>▪ Room Air Conditioners</li> </ul> <p>For rebate or incentive amounts see Penelec Table 5: Penelec EE&amp;C Program Rebate Schedule.</p>
<b>Program start date with key schedule milestones</b>	See Figure 2
<b>Assumed Evaluation, Measurement, and Verification (EM&amp;V) requirements required to document savings by the Commission’s statewide EE&amp;C Plan Evaluator</b>	<p>Penelec is to verify that the planned number of each type of targeted appliances is collected and disposed of within budget. The company plans to check that the calculations of kWh and kW savings from appliance retirement are accurate and compliant with applicable requirements including those contained in the TRM. This will in turn enable accurate tracking and documentation.</p> <p>As part of the monitoring process, the company plans to use selected indicators to verify periodically that energy savings and demand reduction are being realized as projected. A DSM tracking system is to be used for such monitoring. In the event that EE&amp;C program indicators show that projected EE&amp;C targets are not likely to be achieved on schedule and within budget, Penelec will take appropriate corrective actions.</p>
<b>Administrative requirements – include internal and external staffing levels</b>	The Company will use a combination of internal and external resources to manage and implement the EE&C programs. Penelec will monitor and adjust the allocation of resources to balance the needs of each program. See sections 4.2.1 and 4.2.2 of the EE&C plan for more details.
<b>Estimated participation – includes tables indicating metric(s) with target value(s) per year</b>	See Appendix F
<b>Estimated program budget (total) by year – include table with budget per year</b>	See Appendix D
<b>Savings targets – include tables with total MWh and MW goals per year and cumulative tables that document key assumptions of savings per measure or project</b>	See Appendix E
<b>Cost-effectiveness – include TRC</b>	See PUC Table 7a

<b>for each program</b>	
<b>Other information deemed appropriate</b>	One CSP has been selected to deliver this program based on a competitive bidding process held by one of the EDCs. The intent of selecting one CSP is to achieve consistency across the state among EDCs and to obtain lowest cost volume pricing from the vendor.

<b>Program Title and Program years during which program will be implemented</b>	<b>Residential Energy Efficient HVAC Equipment Program</b>
<b>Objective(s)</b>	Providing a rebate to participating customers or local contractors and dealers is expected to increase penetration of high efficiency HVAC systems. To qualify for this program, the equipment must exceed the efficiency standards as published by the Department of Energy under the ENERGY STAR® program.
<b>Target market</b>	The target market for this program is existing households, multifamily and single family, renters and home owners as well as new construction.
<b>Program description</b>	<p>Provides incentives supporting implementation of contractor-installed HVAC, or other eligible systems in existing or new residential buildings. This program involves promoting the sale of high-efficiency, ENERGY STAR® compliant equipment through installation contractors selling to residential customers who are replacing existing home HVAC equipment. The program will replace existing or standard HVAC equipment in residential applications with heating and cooling systems approved by the ENERGY STAR® program of the US EPA/DOE.</p> <p>The program also provides incentives for maintenance (tune-ups) of existing central air conditioners or heat pump equipment, and will offer an incentive toward replacement of furnace fans meeting Energy Star efficiency guidelines.</p>
<b>Implementation strategy (including expected changes that may occur in different program years)</b>	Program services would be delivered to customers by qualified local contractors identified by an implementation vendor or manufacturer of such equipment. Contractors will certify the proper sizing and installation of high efficiency equipment.
<b>Program issues and risks and risk management strategy</b>	Challenges with vendors or manufacturers, cost of energy efficient equipment, changing technology impact lifecycle cost, current economic environment may limit customer’s ability to purchase energy efficient equipment and technology, customer choosing to buy less efficient equipment. With respect to risk management, refer to Section 4.1.4 of the EE&C plan. The Company provides further details on “early warning systems” as well as a description of contingency plans.
<b>Anticipated costs to participating customers</b>	The end user would have the shared rebate as a benefit and also will benefit from lower bills.
<b>Ramp up strategy</b>	Qualifying Service Providers for Maintenance Program.

<p><b>Marketing strategy</b></p>	<p>The program envisions that the suppliers and dealers will share, as a competitive marketing tool, the rebate with the end user, positioning the supplier or dealer as a lower cost provider.</p>
<p><b>Eligible measures and incentive strategy, include tables for each year of program, as appropriate showing financial incentives &amp; rebate levels (e.g., \$ per measure, \$ per kWh or MW saved)</b></p>	<p>Qualifying equipment must meet or exceed ENERGY STAR® standards. Qualified HVAC equipment will include:</p> <ul style="list-style-type: none"> <li>• High-efficiency central air conditioning units (CAC)</li> <li>• High-efficiency air source heat pumps (ASHP)</li> <li>• High-efficiency ground source heat pumps (GSHP)</li> <li>• Central air conditioning maintenance and furnace fan motor replacement meeting Energy Star guidelines.</li> </ul> <p>Customers would receive rebates for the high efficiency HVAC equipment that they install, or can assign rebates to their contractor.</p> <p style="padding-left: 40px;">➤ For Rebate Amounts See Penelec Table 5</p>
<p><b>Program start date with key schedule milestones</b></p>	<p>See Figure 2</p>
<p><b>Assumed Evaluation, Measurement, and Verification (EM&amp;V) requirements required to document savings by the Commission’s statewide EE&amp;C Plan Evaluator</b></p>	<p>Verify that inefficient HVAC equipment is installed and working on customers’ premises. Check sample calculations of projected savings for accuracy and for compliance with TRM guidelines.</p> <p>Document and record measure data using specified data transmission protocols, processes and technology.</p> <p>As part of the monitoring process, the company plans to use selected indicators to verify periodically that energy savings and demand reduction are being realized as projected. A DSM tracking system is to be used for such monitoring.</p>
<p><b>Administrative requirements – include internal and external staffing levels</b></p>	<p>The Company will use a combination of internal and external resources to manage and implement the EE&amp;C programs. Penelec will monitor and adjust the allocation of resources to balance the needs of each program. See sections 4.2.1 and 4.2.2 of the EE&amp;C plan for more details.</p>
<p><b>Estimated participation – includes tables indicating metric(s) with target value(s) per year</b></p>	<p>See Appendix F</p>
<p><b>Estimated program budget (total) by year – include table with budget per year</b></p>	<p>See Appendix D</p>
<p><b>Savings targets – include tables with total MWh and MW goals per year and cumulative tables that</b></p>	<p>See Appendix E</p>

<b>document key assumptions of savings per measure or project</b>	
<b>Cost-effectiveness – include TRC for each program</b>	See PUC Table 7a
<b>Other information deemed appropriate</b>	For additional Residential Efficient Equipment Incentives see Penelec Table 5: Penelec EE&C Program Rebate Schedule.

<p><b>Program Title and Program years during which program will be implemented</b></p>	<p><b>Residential Energy Efficient Products Program 2009-2013</b></p>
<p><b>Objective(s)</b></p>	<p>To accelerate the adoption of high efficiency appliances and equipment that meets ENERGY STAR® label guidelines under the EPA program.</p>
<p><b>Target market</b></p>	<p>Customers that purchase appliances from retailers, including all residential low income and small commercial customers (replacement of existing units, end-of-life units and new); homeowners and renters in one to four family dwellings. Multifamily renters in low-income projects may also qualify for selected products. Low-income participation will be tracked and/or estimated as appropriate. For customers purchasing new refrigerators, this program is coordinated with the Appliance Turn-in Program.</p>
<p><b>Program description</b></p>	<p>The Energy Efficient Products Program provides financial incentives and support to retailers that sell energy efficient products, such as ENERGY STAR® qualified appliances or compact fluorescent light bulbs. The program includes promotional support, point-of-sale materials, training, promotional events and “up-stream product buy-down” rebates to retailers, distributors or manufacturers for select appliances. Also includes existing catalogue sales channel, and support for community-based initiatives, or other distribution channels that can reliably document effective distribution of energy efficient products.</p>
<p><b>Implementation strategy (including expected changes that may occur in different program years)</b></p>	<p>The message delivered to customers can be accomplished by using a variety of mass marketing tools including utility bill inserts, local newspaper circulars, direct mail, point of sale displays at retailers and the utility web site and on-line store. Retailers and manufactures will also be involved cross promoting product offers in conjunction with national campaigns like Earth Day and Change a Light, Change the World programs.</p> <p>The program will encourage community-based initiatives that support documented distribution of EE products and energy saving results. Such community-based initiatives include outreach through in-school training, college students, faith-based organizations, and municipal initiatives. This program involves developing educational materials on the proper use and selection of high efficiency light bulbs along with product discounts, coupons and price buy-downs to incentivize customers to purchase CFLs, LEDs and other qualifying EE products. Low income participation will be encouraged and tracked as practicable.</p>
<p><b>Program issues and risks and risk management strategy</b></p>	<p>Challenges with vendors or manufacturers, cost of energy efficient equipment, changing technology impact lifecycle cost, current economic environment may limit customer’s ability to purchase energy efficient equipment and technology, customer choosing to buy less efficient equipment. Community outreach challenges include collecting reliable documentation related to measures installed and energy savings</p>

	<p>impacts. With respect to risk management, refer to Section 4.1.4 of the EE&amp;C plan. The Company provides further details on “early warning systems” as well as a description of contingency plans.</p>
<p><b>Anticipated costs to participating customers</b></p>	<p>Customers will have to pay the balance of appliance equipment and installation costs not covered by the rebate.</p>
<p><b>Ramp up strategy</b></p>	<p>Use dealer incentives and special promotional “events” to encourage sales of high efficiency products, and/or retirement of less efficient equipment (e.g. Torchiere lamps) through “buy down” first cost and/or promotion of eligible equipment to customers. Customer rebates available for selected appliances. Appliance and replacement product pick up and disposal services available. Exchange program events for lighting and room air conditioners may be employed at periodic events.</p>
<p><b>Marketing strategy</b></p>	<p>This program involves consumer education and dealer marketing and incentives for selling appliances with ENERGY STAR® brand labels. Statewide coordination among electric utilities is being discussed to provide consistency across the state.</p>
<p><b>Eligible measures and incentive strategy, include tables for each year of program, as appropriate showing financial incentives &amp; rebate levels (e.g., \$ per measure, \$ per kWh or MW saved)</b></p>	<p>For the proposed program, the minimum qualifying efficiency ratings are based on current ENERGY STAR® Qualified Appliances published by the US EPA.</p> <p style="padding-left: 40px;">➤ For Rebate Amounts See Penelec Table 5</p> <p>Customer incentives can be in many forms and all are paid by the utility. They can range from a percentage of, to the full purchase price of a light bulb plus an administrative fee paid to the manufactures and retailers in support of the campaign. One incentive could be a mark-down or buy-down program which is a shelf tag, display sticker or end cap sign giving credit for the reduced price to the utility. The discount is paid by the utility based off point of sale purchase data. A second can be coupons through print media or bill inserts. This is a manufacturer coupon offer paid by the utility and redeemed at any participating retailer. Coupons at retail are another method which includes providing a coupon at the point of sale such as a shelf coupon pad that is redeemed at the register. A third method can be rebate forms that are mailed to a clearing house with rebate checks sent direct to customers. A fourth method could be discounts prepaid at the utility’s on-line store, which allows customers to shop using the internet.</p>
<p><b>Program start date with key schedule milestones</b></p>	<p>See Figure 2</p>
<p><b>Assumed Evaluation, Measurement, and Verification (EM&amp;V) requirements required to document savings by the Commission’s statewide EE&amp;C Plan Evaluator</b></p>	<p>Verify that qualified appliances have been sold by dealers seeking payment of incentives by auditing a sample of their claims.</p> <p>Verify that new, more efficient appliances have been installed through review of documentation provided by retailers, as well as individual participant rebate applications. Document, store and send measure data to state using specified data transmission protocols, processes and technology.</p>

	<p>As part of the monitoring process, the company plans to use selected indicators to verify periodically that energy savings and demand reduction are being realized as projected. A DSM tracking system is to be used for such monitoring. In the event that EE&amp;C program indicators show that projected EE&amp;C targets are not likely to be achieved on schedule or within budget, Penelec will take appropriate corrective actions.</p>
<p><b>Administrative requirements – include internal and external staffing levels</b></p>	<p>The Company will use a combination of internal and external resources to manage and implement the EE&amp;C programs. Penelec will monitor and adjust the allocation of resources to balance the needs of each program. See sections 4.2.1 and 4.2.2 of the EE&amp;C plan for more details.</p>
<p><b>Estimated participation – includes tables indicating metric(s) with target value(s) per year</b></p>	<p>See Appendix F</p>
<p><b>Estimated program budget (total) by year – include table with budget per year</b></p>	<p>See Appendix D</p>
<p><b>Savings targets – include tables with total MWh and MW goals per year and cumulative tables that document key assumptions of savings per measure or project</b></p>	<p>See Appendix E</p>
<p><b>Cost-effectiveness – include TRC for each program</b></p>	<p>See PUC Table 7a</p>
<p><b>Other information deemed appropriate</b></p>	<p>The Company will continue to seek consistency in rebate amounts and approaches with other EDCs as appropriate.</p>

<b>Program Title and Program years during which program will be implemented</b>	<b>Residential New Construction Program</b>
<b>Objective(s)</b>	<p>Supports the construction of homes exceeding code requirements, and implementation of contractor-installed HVAC, solar, or other eligible systems, as well as high or energy efficient appliances in new or remodeled homes.</p> <p>Upgrade the energy efficiency of choices local builders make in new construction markets. To qualify for this program, the home must exceed the PA Energy Code requirements by at least 15% through a combination of building shell and appliance efficiency improvements.</p>
<b>Target market</b>	The target market for this program is builders of new residential construction.
<b>Program description</b>	<p>Provides incentives to builders for achieving ENERGY STAR® Homes status, or the Home Energy Rating System Program (HERS) associated with a highly energy efficient home. The program supports implementation of contractor-installed HVAC, solar, or other eligible systems in existing or new residential buildings, as well as measures addressing building shell, appliances and other energy consuming features. This program involves promoting the sale of high-efficiency, ENERGY STAR® compliant equipment through local builders. Participants can receive a rebate based on calculation of the energy savings related to the home’s construction over standard practice, and can participate in the prescriptive rebates offered under the other residential rebate programs.</p>
<b>Implementation strategy (including expected changes that may occur in different program years)</b>	Providing a rebate to local builders. To qualify for this program, the home must exceed the PA Energy Code requirements by at least 15%. Program services would be delivered to customers by qualified local builders and contractors who can demonstrate (through HERS, REM/Rate or other rating tool recognized in the TRM) that the house meets minimum performance energy savings criteria consistent with that of a highly energy efficient home.
<b>Program issues and risks and risk management strategy</b>	<p>Cost of energy efficient equipment, changing technology impact lifecycle cost, and current economic environment may limit customer’s ability to purchase energy efficient equipment and technology, customer choosing to buy less efficient equipment. Slow pace of new construction and costs associated with program marketing and communications may result in program transaction costs with minimal actual construction. With respect to risk management, refer to Section 4.1.4 of the EE&amp;C plan. The Company provides further details on “early warning</p>

	systems” as well as a description of contingency plans.
<b>Anticipated costs to participating customers</b>	<p>Participating contractors or builders would receive rebates for achieving high efficiency standards.</p> <p>Potentially a modest first cost increase for home owners</p>
<b>Ramp up strategy</b>	<p>New Construction may be introduced later, e.g., by Spring 2010 due to additional lead time required to launch. Contractor and realtor education will precede the availability of the program to consumers.</p>
<b>Marketing strategy</b>	<p>The marketing strategy will include: newspaper and radio advertising, Company bill inserts, Company website and employee communications. The Company fully expects the Program Manager(s), who will be selected by competitive bid, to provide specific details on marketing for this program.</p>
<b>Eligible measures and incentive strategy, include tables for each year of program, as appropriate showing financial incentives &amp; rebate levels (e.g., \$ per measure, \$ per kWh or MW saved)</b>	<p>The same equipment offered to existing residential customers under the other programs are eligible for installation in new homes under this program. The rebate is determined by formula, based on savings, estimated at up to 70% of incremental costs.</p> <p>For rebate or incentive amounts see Penelec Table 5: Penelec EE&amp;C Program Rebate Schedule.</p>
<b>Program start date with key schedule milestones</b>	<p>See Figure 2</p>
<b>Assumed Evaluation, Measurement, and Verification (EM&amp;V) requirements required to document savings by the Commission’s statewide EE&amp;C Plan Evaluator</b>	<p>The builder is responsible for building rating simulations and commissioning processes that form the basis for savings. For shell measures, the program manager will review modeling of new home designs to determine ratings and verify savings estimates, as well as review builder commissioning processes (including inspections as appropriate) to ensure quality construction meets design specifications.</p> <p>For equipment upgrades, verify that new, more efficient equipment and appliances have been installed in the new homes. Check calculation of kWh and kW savings to be achieved through use of more efficient equipment comparing energy consumption of such equipment to that of standard ones. Document, store and send measure data to state using specified data transmission protocols, processes and technology.</p> <p>As part of the monitoring process, the company plans to use selected indicators to verify periodically that kWh and kW savings are being realized as projected. A DSM tracking system is to be used for such monitoring. In the event that EE&amp;C program indicators show that projected EE&amp;C targets are not likely to be achieved on schedule or within budget, Penelec will take appropriate corrective actions.</p>
<b>Administrative requirements –</b>	<p>The Company will use a combination of internal and external</p>

<b>include internal and external staffing levels</b>	resources to manage and implement the EE&C programs. Penelec will monitor and adjust the allocation of resources to balance the needs of each program. See sections 4.2.1 and 4.2.2 of the EE&C plan for more details.
<b>Estimated participation – includes tables indicating metric(s) with target value(s) per year</b>	See Appendix F
<b>Estimated program budget (total) by year – include table with budget per year</b>	See Appendix D
<b>Savings targets – include tables with total MWh and MW goals per year and cumulative tables that document key assumptions of savings per measure or project</b>	See Appendix E
<b>Cost-effectiveness – include TRC for each program</b>	See PUC Table 7a
<b>Other information deemed appropriate</b>	None.

<p><b>Program Title and Program years during which program will be implemented<sup>19</sup></b></p>	<p><b>Residential Multifamily Building Program 2009-2013</b></p>
<p><b>Objective(s)</b></p>	<p>This program seeks to motivate the multifamily property tenant toward installing energy efficient products.</p>
<p><b>Target market</b></p>	<p>The target market for this program is multifamily buildings being served by the Pennsylvania Housing Financing Authority (PHFA) that are part of the Company’s service territory. Both master-metered and individually metered buildings are included. Savings and costs will be apportioned to the appropriate rate class.</p> <p>Most of the buildings served by PHFA are occupied by low income tenants. For those PHFA buildings that are considered public housing, the savings will be attributed to government sector goals. Other non-low income building and tenant savings will be attributed to residential program savings goals.</p>
<p><b>Program description</b></p>	<p>This program leverages audit services already being provided by PHFA by having auditors directly install common area lighting measures at the time of the audit, and providing a package of lighting measures to tenants. Those cost of the audits is being funded by other sources.</p>
<p><b>Implementation strategy (including expected changes that may occur in different program years)</b></p>	<p>Building upon the PHFA Audit (prerequisite), this program provides direct-install lighting retrofits for common areas of multifamily buildings and CFLs to tenants of treated buildings.</p>
<p><b>Program issues and risks and risk management strategy</b></p>	<p>PHFA is conducting energy audits of buildings that fall under their area of responsibility. The objective of this program is to immediately capture electric energy savings available in common area lighting (hallways, exit signs, laundry facilities, exterior lighting, etc.). In addition, electricity use in PHFA apartment units is not currently addressed by the PHFA program. Tenants who pay for utilities as part of their rent in multifamily buildings often have little motivation to save electricity since they do not benefit directly, unless landlords pass on the energy savings through reduced rent. Tenants who pay electricity</p>

<sup>19</sup> It is assumed that there are four program years, each starting June 1 and ending May 31<sup>st</sup>. The first program year (PY) is Program Year 2009 (although it is expected that programs will not start before late 2009 or early 2010), and the last program year is Program Year 2012.

	<p>directly have more motivation since they may experience lower electric bills. Regardless of whether a tenant in a PHFA building is master metered or a customer of record, they will be offered a conservation kit .</p>
<b>Anticipated costs to participating customers</b>	<p>There are no costs to tenants to participate in this program.</p>
<b>Ramp up strategy</b>	<p>Since PHFA has already identified their target buildings and is launching audits at this time, this program can be launched immediately upon securing the lighting equipment, which is expected to be in November 2009.</p>
<b>Marketing strategy</b>	<p>The marketing strategy is building specific and is conducted by PHFA. Tenants will be notified of the availability of kits through various normal communications via landlord notices, door knockers and other means.</p>
<b>Eligible measures and incentive strategy, include tables for each year of program, as appropriate showing financial incentives &amp; rebate levels (e.g., \$ per measure, \$ per kWh or MW saved)</b>	<p>This program provides incentives for common area interior and exterior lighting measures, and conservation kits for apartment units (kits will contain CFLs and other low-cost measures that are subject to revision).</p> <p>For rebate or incentive amounts see Penelec Table 5: Penelec EE&amp;C Program Rebate Schedule.</p>
<b>Program start date with key schedule milestones</b>	<p>See Figure 2</p>
<b>Assumed Evaluation, Measurement, and Verification (EM&amp;V) requirements required to document savings by the Commission’s statewide EE&amp;C Plan Evaluator</b>	<p>PHFA will verify installation of measures as part of their audit qualify control processes, reporting their findings to the Company as part of a memorandum of understanding. The Company will also conduct periodic site visits and follow up calls to tenants to assess proper installation of measures.</p> <p>As part of the monitoring process, the Company plans to use selected indicators to periodically verify that energy savings and demand reductions are being realized as projected. A DSM tracking system is to be used for such monitoring. In the event that EE&amp;C program indicators show that projected EE&amp;C targets are not likely to be achieved on schedule and within budget, the Company will take appropriate corrective actions through its periodic program reviews.</p>
<b>Administrative requirements – include internal and external staffing levels</b>	<p>The Company will have a contractual agreement with PHFA to conduct this program.</p>
<b>Estimated participation – includes tables indicating metric(s) with target value(s) per</b>	<p>See Appendix F</p>

<b>year</b>	
<b>Estimated program budget (total) by year – include table with budget per year</b>	See Appendix D
<b>Savings targets – include tables with total MWh and MW goals per year and cumulative tables that document key assumptions of savings per measure or project</b>	See Appendix E
<b>Cost-effectiveness – include TRC for each program</b>	See PUC Table 7a
<b>Other information deemed appropriate</b>	For those PHFA buildings that are considered public housing, the savings will be attributed to government sector goals.

3.2.1. *Low-Income Sector (as defined by 66 Pa. C.S. § 2806.1) Programs - include formatted descriptions of each program organized under the same headings as listed above for residential programs. As well, provide and detail all plans for achieving compliance with 66 Pa. C.S. § 2806.1.*

<b>Program Title and Program years during which program will be implemented</b>	<b>Low Income Sector Program (“WARM Plus”) 2009-2013</b>
<b>Objective(s)</b>	The provision of additional electric energy savings measures and whole house services to additional lower income households.
<b>Target market</b>	The target market for this program is households who are income-qualified for WARM services (up to 150% of poverty). The program will expand services with additional energy savings opportunities, and expand the services available to additional income-eligible households, and low use, low income customers not eligible for WARM.
<b>Program description</b>	This program is an expansion of and enhancement to the existing comprehensive Low-Income Usage Reduction Program, known as WARM that will provide additional electric energy savings measures and services to income-eligible customers. The WARM Plus program will support a 25% increase in the number of income-eligible homes receiving comprehensive treatments for Met-Ed and Penelec and an increase of 75 participants annually at Penn Power.
<b>Implementation strategy (including expected changes that may occur in different program years)</b>	<p>Program services would be delivered by existing WARM Community Based Organizations (“CBOs”) and private contractors, coordinated or augmented by additional private vendors as needed to enhance the capacity of existing agencies and contractors.</p> <p>The Company will give specific consideration for program coordination with the DCED Weatherization Assistance Program and NGDC LIURP Program.</p> <p>Participation by low-income customer in other programs will be tracked or estimated to support reporting and evaluation.</p>
<b>Program issues and risks and risk management strategy</b>	Challenges with adding and training contractors if needed and landlord reluctance to permit WARM services. Risk management strategy will include adding an option to provide services to the low-income sector as part of the Act 129 implementation RFPs and directly sending CFLs and aerators to tenants. With respect to risk management, refer to Section 4.1.4 of the EE&C plan. The Company provides further details on “early warning systems” as well as a description of contingency plans.
<b>Anticipated costs to participating</b>	Based on income qualification, measures are provided free of

<b>customers</b>	charge.
<b>Ramp up strategy</b>	Include Act 129 measures and services to existing WARM contracts.
<b>Marketing strategy</b>	The marketing strategy for this program will include Company bill inserts, Company website, direct mail campaigns, senior citizen and low-income information fairs and community presentations as needed. Marketing activities will be coordinated with other Act 129 programs, the Company's and other state low-income programs such as the Customer Assistance Program (CAP), Dept. of Public Welfare, PHFA, gas utilities, DCED Weatherization Assistance Program, the NGDC LIURP Program and CBO initiatives.
<b>Eligible measures and incentive strategy, include tables for each year of program, as appropriate showing financial incentives &amp; rebate levels (e.g., \$ per measure, \$ per kWh or MW saved)</b>	Whole house energy conservation services such as those provided by the WARM Program replacement lighting, smart power strips, energy education, other residential programs (e.g., appliance recycling, multi-family, energy efficient products, and load control programs) will also increase availability of subsidized energy efficiency services. All Measure are free to Customers
<b>Program start date with key schedule milestones</b>	See Figure 2.
<b>Assumed Evaluation, Measurement, and Verification (EM&amp;V) requirements required to document savings by the Commission's statewide EE&amp;C Plan Evaluator</b>	<p>Third-party Quality Assurance vendor will inspect a percentage of WARM and WARM-Plus completed homes. For the pre-installation phase, verify that inefficient lighting devices are installed and working on customers' premises. Determine current energy consumption and demand using billing/meter information. Check sample calculations of projected savings for accuracy and for compliance with TRM guidelines.</p> <p>For the post-installation phase, verify that new, more efficient lighting and other measures have been installed. Verify through billing, calculation or metering that expected energy savings or demand reduction goals are being achieved. Document, store and send measure data to state using specified data transmission protocols, processes and technology.</p> <p>As part of the monitoring process, the company plans to use selected indicators to verify periodically that energy savings and demand reduction are being realized as projected. A DSM tracking system is to be used for such monitoring. In the event that EE&amp;C program indicators show that projected EE&amp;C targets are not likely to be achieved on schedule or within budget, Penelec will take appropriate corrective actions.</p>
<b>Administrative requirements – include internal and external staffing levels</b>	The Company will use a combination of internal and external resources to manage and implement the EE&C programs. Penelec will monitor and adjust the allocation of resources to balance the needs of each program. See sections 4.2.1 and 4.2.2

	of the EE&C plan for more details.
<b>Estimated participation – includes tables indicating metric(s) with target value(s) per year</b>	See Appendix F
<b>Estimated program budget (total) by year – include table with budget per year</b>	See Appendix D
<b>Savings targets – include tables with total MWh and MW goals per year and cumulative tables that document key assumptions of savings per measure or project</b>	See Appendix E
<b>Cost-effectiveness – include TRC for each program</b>	See PUC Table 7b
<b>Other information deemed appropriate</b>	Contracts being renegotiated with CBOs in June 2009 are including language to address the strong potential for launching of this program in fall 2009. This will enable quick launch of these services upon Commission approval.

**3.3. Commercial/Industrial Small Sector (as defined by EDC Tariff) Programs - include formatted descriptions of each program organized under the same headings as listed above for residential programs.<sup>20</sup>**

<b>Program Title and Program years during which program will be implemented</b>	<b>C/I Equipment Program</b> a) C/I Equipment b) Energy Audit and Technical Assessment
<b>Objective(s)</b>	a) To reduce the first cost of high efficiency equipment thereby encouraging the adoption of this equipment in lieu of standard at the end of the useful life of measures, or as early replacement. b) To provide business customers with comprehensive information related to opportunities identified in the buildings.
<b>Target market</b>	All existing commercial, industrial, municipal and multifamily buildings that are customers of the PA Companies.
<b>Program description</b>	a) Provides support for the implementation of cost effective, high efficiency non-standard measures through the authorized contractor network for local, state and federal buildings, as well as for institutional customers. Rebates are intended to buy down the first cost of selected equipment or overall job scopes including but not limited to lighting, motors, variable speed drives, custom measures, and other energy efficiency technologies as well as delivery of energy efficiency kits requested by small C/I customers, and master metered multi-family customers. b) Supports two levels of energy audit services 1) a simple on-line or walk-through audit for small business with non-complex loads, and 2) a more comprehensive assessment for medium to large non-residential customers to help identify existing end uses of energy and find specific ways in which energy savings can be achieved. The audit supports obtaining rebates and other incentives through other Company programs.
<b>Implementation strategy (including expected changes that may occur in different program years)</b>	a) The program provides an incentive offsetting a portion of the incremental technology costs (“capital costs”) of high efficiency measures. In addition, it will provide technical support when needed. The Company currently supports HVAC tune-up and recommissioning measures targeting existing buildings with

<sup>20</sup> Additional measures may be incorporated, as appropriate, as new measures are approved for inclusion in the TRM.

	<p>packaged commercial HVAC systems for small commercial and industrial customers. Tenants in rental properties will be eligible with appropriate approvals from the property owner</p> <p>b) The program also supports energy audits and technical assistance delivered by a vendor for the small commercial customers, and by contractors of the choice of the customer for large C/I. In coordination with PHFA, the Company will support and track participation by low-income multi-family customers in the program.</p>
<p><b>Program issues and risks and risk management strategy</b></p>	<p>a) Availability of qualifying high efficiency equipment. The Company will negotiate with manufacturers to increase availability in the PA market for any items that are in demand but are in short supply.</p> <p>b) Business climate may require fees to be reduced or waived in order to encourage participation. Process evaluation will determine if this adjustment is necessary.</p> <p>With respect to risk management, refer to Section 4.1.4 of the EE&amp;C plan. The Company provides further details on “early warning systems” as well as a description of contingency plans.</p>
<p><b>Anticipated costs to participating customers</b></p>	<p>a) Balance of costs of equipment, plus installation costs as relevant.</p> <p>b) Initial values for audits are expected to be \$250 for small businesses and &lt;\$1 per sq. foot fee for large customers or those with custom or complex systems to be evaluated. Exact fees to be determined through RFP process.</p>
<p><b>Ramp up strategy</b></p>	<p>Program will launch upon selection of a vendor.</p>
<p><b>Marketing strategy</b></p>	<p>The Company fully expects the Program Manager(s), who will be selected by competitive bid, to provide specific details on marketing for this program.</p>
<p><b>Eligible measures and incentive strategy, include tables for each year of program, as appropriate showing financial incentives &amp; rebate levels (e.g., \$ per measure, \$ per kWh or MW saved)</b></p>	<p>➤ For Rebate Amounts See Penelec Table 5</p> <p>a) Incentives will be set at a schedule of payments per unit to address the incremental cost of commercially available energy efficient technology for each equipment category, when compared to the commonly available replacement.</p> <p>b) The audit component provides an energy audit/assessment conducted to document the building’s existing equipment and efficiency opportunities prior to installation of efficiency measures. For small business, audits are provided at a set cost which includes CFLs to replace existing incandescent lamps based on the audit and customer requirements. Registration will be encouraged in the EPA’s Benchmarking Tool that provides</p>

	<p>additional insights as to energy efficiency levels. Office equipment audits may be included for appropriate building types to ensure proper efficiency settings on equipment, and to identify savings potential for plug loads.</p>
<p><b>Program start date with key schedule milestones</b></p>	<p>See Figure 2</p>
<p><b>Assumed Evaluation, Measurement, and Verification (EM&amp;V) requirements required to document savings by the Commission’s statewide EE&amp;C Plan Evaluator</b></p>	<p>a) For the pre-installation phase, for a sample of participants, verify that inefficient HVAC, lighting, food services equipment and plug loads and controls are installed and working on customers’ premises. Determine current total energy consumption and demand using billing/meter information. Check sample calculations of projected savings and assumptions (e.g. EFLH) for accuracy and for compliance with TRM guidelines. Pre-approval and opportunity for pre-installation inspections is required, with the exception of emergency HVAC replacements.</p> <p>For the post-installation phase, verify through verification inspections that new, more efficient, equipment has been installed. Document, store and send measure data to state using specified data transmission protocols, processes and technology.</p> <p>b) Penelec is to verify that the planned number of each type of audits is performed on time and within budget</p> <p>As part of the monitoring process, the company plans to use selected indicators to verify periodically that energy savings and demand reduction are being realized as projected. A DSM tracking system is to be used for such monitoring. In the event that EE&amp;C program indicators show that projected EE&amp;C targets are not likely to be achieved on schedule and within budget, Penelec will take appropriate corrective actions.</p>
<p><b>Administrative requirements – include internal and external staffing levels</b></p>	<p>The Company will use a combination of internal and external resources to manage and implement the EE&amp;C programs. Penelec will monitor and adjust the allocation of resources to balance the needs of each program. See sections 4.2.1 and 4.2.2 of the EE&amp;C plan for more details.</p>
<p><b>Estimated participation – includes tables indicating metric(s) with target value(s) per year</b></p>	<p>See Appendix F</p>
<p><b>Estimated program budget (total) by year – include table with budget per year</b></p>	<p>See Appendix D</p>
<p><b>Savings targets – include tables with total MWh and MW goals per</b></p>	<p>See Appendix E</p>

<b>year and cumulative tables that document key assumptions of savings per measure or project</b>	
<b>Cost-effectiveness – include TRC for each program</b>	See PUC Table 7c
<b>Other information deemed appropriate</b>	Custom measures will be rebated based upon an analysis of potential energy savings on a case by case basis.

<p><b>Program Title and Program years during which program will be implemented<sup>21</sup></b></p>	<p><b>Multifamily Building Program</b> <b>2009-2013</b></p>
<p><b>Objective(s)</b></p>	<p>This program seeks to motivate the multifamily property owner/manager and landlords toward installing energy efficient products.</p>
<p><b>Target market</b></p>	<p>The target market for this program is multifamily buildings being served by the Pennsylvania Housing Financing Authority (PHFA) that are part of the Company’s service territory. Both master-metered and individually metered buildings are included. Savings and costs will be apportioned to the appropriate rate class.</p> <p>Most of the buildings served by PHFA are occupied by low income tenants. For those PHFA buildings that are considered public housing, the savings will be attributed to government sector goals. Other non-low income building and tenant savings will be attributed to residential program savings goals.</p>
<p><b>Program description</b></p>	<p>This program leverages audit services already being provided by PHFA by having auditors directly install common area lighting measures at the time of the audit, and providing a package of lighting measures to tenants. Those cost of the audits is being funded by other sources.</p>
<p><b>Implementation strategy (including expected changes that may occur in different program years)</b></p>	<p>Building upon the PHFA Audit (prerequisite), this program provides direct-install lighting retrofits for common areas of multifamily buildings and CFLs to tenants of treated buildings.</p>
<p><b>Program issues and risks and risk management strategy</b></p>	<p>PHFA is conducting energy audits of buildings that fall under their area of responsibility. The objective of this program is to immediately capture electric energy savings available in common area lighting (hallways, exit signs, laundry facilities, exterior lighting, etc.). In addition, electricity use in PHFA apartment units is not currently addressed by the PHFA program. Tenants who pay for utilities as part of their rent in multifamily buildings often have little motivation to save electricity since they do not benefit directly, unless landlords pass on the energy</p>

<sup>21</sup> It is assumed that there are four program years, each starting June 1 and ending May 31<sup>st</sup>. The first program year (PY) is Program Year 2009 (although it is expected that programs will not start before late 2009 or early 2010), and the last program year is Program Year 2012.

	savings through reduced rent. Tenants who pay electricity directly have more motivation since they may experience lower electric bills. Regardless of whether a tenant in a PHFA building is master metered or a customer of record, they will be offered a conservation kit consisting of four CFLs.
<b>Anticipated costs to participating customers</b>	There are no costs to tenants to participant in this program; it is assumed that landlords would pay the balance of costs of the lights after rebate.
<b>Ramp up strategy</b>	Since PHFA has already identified their target buildings and is launching audits at this time, this program can be launched immediately upon securing the lighting equipment which is expected to be in November 2009.
<b>Marketing strategy</b>	The marketing strategy is building specific and is conducted by PHFA. Tenants will be notified of the availability of kits through various normal communications via landlord notices, door knockers and other means.
<b>Eligible measures and incentive strategy, include tables for each year of program, as appropriate showing financial incentives &amp; rebate levels (e.g., \$ per measure, \$ per kWh or MW saved)</b>	<p>This program provides incentives for common area interior and exterior lighting measures, CFLs for apartment units and faucet aerators for apartments that have electric water heating (Measures included in the kits are subject to change based on market conditions).</p> <p>For rebate or incentive amounts see Penelec Table 5: Penelec EE&amp;C Program Rebate Schedule.</p>
<b>Program start date with key schedule milestones</b>	See Figure 2
<b>Assumed Evaluation, Measurement, and Verification (EM&amp;V) requirements required to document savings by the Commission’s statewide EE&amp;C Plan Evaluator</b>	<p>PHFA will verify installation of measures as part of their audit qualify control processes, reporting findings to the Company as part of a memorandum of understanding. The Company will also conduct periodic site visits and follow up calls to tenants to assess proper installation of measures.</p> <p>As part of the monitoring process, the Company plans to use selected indicators to periodically verify that energy savings and demand reduction are being realized as projected. A DSM tracking system is to be used for such monitoring. In the event that EE&amp;C program indicators show that projected EE&amp;C targets are not likely to be achieved on schedule and within budget, the Company will take appropriate corrective actions.</p>
<b>Administrative requirements – include internal and external staffing levels</b>	The Company will have a contractual agreement with PHFA to conduct this program.

<b>Estimated participation – includes tables indicating metric(s) with target value(s) per year</b>	See Appendix F
<b>Estimated program budget (total) by year – include table with budget per year</b>	See Appendix D
<b>Savings targets – include tables with total MWh and MW goals per year and cumulative tables that document key assumptions of savings per measure or project</b>	See Appendix E
<b>Cost-effectiveness – include TRC for each program</b>	See PUC Table 7a
<b>Other information deemed appropriate</b>	None.

<b>Program Title and Program years during which program will be implemented</b>	<b>2a. Commercial Industrial Demand Response Program – CSP<sup>22</sup> Mandatory and Voluntary Curtailment Program</b>
<b>Objective(s)</b>	Refer to Section 3.4, Program Description for 2 a. Commercial Industrial Demand Response Program – CSP <sup>23</sup> Mandatory and Voluntary Curtailment Program
<b>Target market</b>	
<b>Program description</b>	
<b>Implementation strategy (including expected changes that may occur in different program years)</b>	
<b>Program issues and risks and risk management strategy</b>	
<b>Anticipated costs to participating customers</b>	
<b>Ramp up strategy</b>	
<b>Marketing strategy</b>	
<b>Eligible measures and incentive strategy, include tables for each year of program, as appropriate showing financial incentives &amp; rebate levels (e.g., \$ per measure, \$ per kWh or MW saved)</b>	
<b>Voluntary Program details</b>	
<b>Program start date with key schedule milestones</b>	
<b>Assumed Evaluation, Measurement, and Verification (EM&amp;V) requirements required to document savings by the Commission’s statewide EE&amp;C</b>	

<sup>22</sup> It should be noted that a "Curtailment Service Provider (CSP)" under PJM demand response programs is different from a "Conservation Service Provider (CSP)" under Act 129.

<sup>23</sup> It should be noted that a "Curtailment Service Provider (CSP)" under PJM demand response programs is different from a "Conservation Service Provider (CSP)" under Act 129.

<b>Plan Evaluator</b>	
<b>Estimated participation – includes tables indicating metric(s) with target value(s) per year</b>	
<b>Estimated program budget (total) by year – include table with budget per year</b>	
<b>Savings targets – include tables with total MWh and MW goals per year and cumulative tables that document key assumptions of savings per measure or project</b>	

**3.4. Commercial/Industrial Large Sector (as defined by EDC Tariff) Programs - include formatted descriptions of each program organized under the same headings as listed above for residential programs.<sup>24</sup>**

<b>Program Title and Program years during which program will be implemented</b>	<b>C/I Equipment Program</b> a) C/I Equipment b) Energy Audit and Technical Assessment c) Industrial Motors and Variable Speed Drives
<b>Objective(s)</b>	a) To reduce the first cost of high efficiency equipment thereby encouraging the adoption of this equipment in lieu of standard at the end of the useful life of measures, or as early replacement. b) To provide business customers with comprehensive information related to opportunities identified in the buildings. c) To provide an incentive for the Company’s customers to recognize that energy savings and costs are possible when motors are upgraded to NEMA Premium <sup>®</sup> motors. The relatively low cost of electrical energy may have resulted in many customers not focusing on or considering upgrading their motors. The incentives offered by the Company are provided to help initiate momentum among its customers.
<b>Target market</b>	All existing commercial, industrial, municipal and multifamily buildings that are customers of the PA Companies.

<sup>24</sup> Additional measures may be incorporated, as appropriate, as new measures are approved for inclusion in the TRM.

**Program description**

a) Provides support for the implementation of cost effective, high efficiency non-standard measures through the authorized contractor network for local, state and federal buildings, as well as for institutional customers. Rebates are intended to buy down the first cost of selected equipment or overall job scopes including but not limited to lighting, motors, variable speed drives, custom measures, and other energy efficiency technologies.

b) Supports two levels of energy audit services 1) a simple on-line or walk-through audit for small business with non-complex loads, and 2) a more comprehensive assessment for medium to large non-residential customers to help identify existing end uses of energy and find specific ways in which energy savings can be achieved. The audit supports obtaining rebates and other incentives through other Company programs.

c) Encourages the Company's commercial and industrial customers to:

1. Upgrade their existing motors to NEMA Premium® motors when switching out old motors due to breakdowns and or programmed replacements
2. Install variable speed drives on motors that do not always operate at the same speed.

The variable speed drive program is designed for commercial and industrial energy customers whose motors are utilized for increased operating hours and have a higher variability of loads on the system (centrifugal pumps and fans) or the application of use includes mechanical throttling (valves, dampers, etc). This is because variable speed drives match the speed of the motor-driven equipment to the process requirement.

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

a) The program provides an incentive offsetting a portion of the incremental technology costs ("capital costs") of high efficiency measures. In addition, it will provide technical support when needed. The Company currently supports HVAC tune-up and recommissioning measures targeting existing buildings with packaged commercial HVAC systems for small commercial and industrial customers. Tenants in rental properties will be eligible with appropriate approvals from the property owner.

b) The program also supports energy audits and technical assistance delivered by a vendor for the small commercial customers, and by contractors of the choice of the customer for large C/I. In coordination with PHFA, the Company will support and track participation by low-income multi-family customers in the program.

c) This program would be administered through regional motor distributors. A dealer network would be built by a qualified vendor from the list of contractors that are registered in Pennsylvania as a CSP.

<p><b>Program issues and risks and risk management strategy</b></p>	<p>a) Availability of qualifying high efficiency equipment. The Company will negotiate with manufacturers to increase availability in the PA market for any items that are in demand but are in short supply.</p> <p>b) Business climate may require fees to be reduced or waived in order to encourage participation. Process evaluation will determine if this adjustment is necessary.</p> <p>c) Lack of participation from regional motor distributors.</p> <p>With respect to risk management, refer to Section 4.1.4 of the EE&amp;C plan. The Company provides further details on “early warning systems” as well as a description of contingency plans.</p>
<p><b>Anticipated costs to participating customers</b></p>	<p>a) Balance of costs of equipment, plus installation costs as relevant.</p> <p>b) Initial values for audits are expected to be \$250 for small businesses and &lt;\$1 per sq. foot fee for large customers or those with custom or complex systems to be evaluated. Exact fees to be determined through RFP process.</p> <p>c) Motor incentives will be available to customers and through motor distributors as a rebate per unit replaced on a first come first serve basis and will be limited to the Company’s motor upgrade budget.</p>
<p><b>Ramp up strategy</b></p>	<p>Program will launch upon selection of a vendor.</p>
<p><b>Marketing strategy</b></p>	<p>The Company fully expects the Program Manager(s), who will be selected by competitive bid, to provide specific details on marketing for this program.</p>
<p><b>Eligible measures and incentive strategy, include tables for each year of program, as appropriate showing financial incentives &amp; rebate levels (e.g., \$ per measure, \$ per kWh or MW saved)</b></p>	<p>a) Incentives will be set at a schedule of payments per unit to address the incremental cost of commercially available energy efficient technology for each equipment category, when compared to the commonly available replacement.</p> <p>b) The audit component provides an energy audit/assessment conducted to document the building’s existing equipment and efficiency opportunities prior to installation of efficiency measures. For small business, audits are provided at a set cost which includes CFLs to replace existing incandescent lamps based on the audit and customer requirements. Registration will be encouraged in the EPA’s Benchmarking Tool that provides additional insights as to energy efficiency levels. Office equipment audits may be included for appropriate building types to ensure proper efficiency settings on equipment, and to identify savings potential for plug loads.</p> <p>c) The motors component seeks to provide an incentive for the Company’s customers to recognize that energy savings are possible when motors are upgraded to meet program efficiency standards. The relatively low cost of electrical energy may have</p>

	<p>resulted in many customers not focusing on or considering upgrading their motors. The incentives offered by the Company are provided to help initiate momentum among its customers.</p> <p>For rebate or incentive amounts see Penelec Table 5: Penelec EE&amp;C Program Rebate Schedule.</p>
<p><b>Program start date with key schedule milestones</b></p>	<p>See Figure 2</p>
<p><b>Assumed Evaluation, Measurement, and Verification (EM&amp;V) requirements required to document savings by the Commission’s statewide EE&amp;C Plan Evaluator</b></p>	<p>a) &amp; c) For the pre-installation phase, for a sample of participants, verify that inefficient motors, HVAC, lighting, food services equipment and plug loads and controls are installed and working on customers’ premises. Determine current total energy consumption and demand using billing/meter information. Check sample calculations of projected savings and assumptions (e.g. EFLH) for accuracy and for compliance with TRM guidelines. Pre-approval and opportunity for pre-installation inspections is required, with the exception of emergency HVAC replacements.</p> <p>For the post-installation phase, verify through verification inspections that new, more efficient, equipment has been installed. Document, store and send measure data to state using specified data transmission protocols, processes and technology.</p> <p>b) Penelec is to verify that the planned number of each type of audits is performed on time and within budget</p> <p>As part of the monitoring process, the company plans to use selected indicators to verify periodically that energy savings and demand reduction are being realized as projected. A DSM tracking system is to be used for such monitoring. In the event that EE&amp;C program indicators show that projected EE&amp;C targets are not likely to be achieved on schedule and within budget, Penelec will take appropriate corrective actions.</p>
<p><b>Administrative requirements – include internal and external staffing levels</b></p>	<p>The Company will use a combination of internal and external resources to manage and implement the EE&amp;C programs. Penelec will monitor and adjust the allocation of resources to balance the needs of each program. See sections 4.2.1 and 4.2.2 of the EE&amp;C plan for more details.</p>
<p><b>Estimated participation – includes tables indicating metric(s) with target value(s) per year</b></p>	<p>See Appendix F</p>
<p><b>Estimated program budget (total) by year – include table with budget per year</b></p>	<p>See Appendix D</p>
<p><b>Savings targets – include tables with total MWh and MW goals per</b></p>	<p>See Appendix E</p>

<b>year and cumulative tables that document key assumptions of savings per measure or project</b>	
<b>Cost-effectiveness – include TRC for each program</b>	See PUC Table 7d
<b>Other information deemed appropriate</b>	Custom measures will be rebated based upon an analysis of potential energy savings on a case by case basis.

<p><b>Program Title and Program years during which program will be implemented</b></p>	<p><b>2a. Commercial Industrial Demand Response Program – CSP<sup>25</sup> Mandatory and Voluntary Curtailment Program</b></p>
<p><b>Objective(s)</b></p>	<p>To address the 100 highest peak load hours during the four months of June through September, as required under Act 129.</p>
<p><b>Target market</b></p>	<p>For Commercial and Industrial, as well as government sector customers, Met-Ed and Penelec (each referred to as Company) will solicit registration for curtailment service providers (“DR-CSPs”) registering load in PJM capacity programs, firm pricing for commitments for peak load reductions in at least 50 peak load hours based on Company notifications in accordance with the provisions outlined below.</p>
<p><b>Program description</b></p>	<p>To participate, DR-CSPs must register their customers for PJM economic load response program (ELRP) “events” that include specific days and hours defined through Company notifications on a day-of or day-ahead basis (Peak Load Reduction (“PLR”) Performance Periods).</p> <ul style="list-style-type: none"> <li>a. Notifications will be provided to the DR-CSPs at least three hours prior to the event.</li> <li>b. DR-CSP registration of PLR Performance Periods in PJM ELRP events is required to enable PJM processes for verification of actual peak load reductions. The days and hours for that define periods of performance.</li> <li>c. Performance Periods will be limited to week days between noon and 8 PM, with durations of a minimum of one hour up to the full 6 hours.</li> </ul>
<p><b>Implementation strategy (including expected changes that may occur in different program years)</b></p>	<p>The Company will enter into an agreement with qualified<sup>26</sup> DR-CSPs selected on a first come first serve basis up to the contracted MW of peak load reductions for annual performance periods. Annual performance periods will address the 2011/12, and 2012/13 PJM planning years.</p> <ul style="list-style-type: none"> <li>a. Estimated MW required from this program to meet Act 129 minimum requirements will depend on the MW achieved through energy efficiency (EE) programs.</li> </ul>

<sup>25</sup> It should be noted that a "Curtailment Service Provider (CSP)" under PJM demand response programs is different from a "Conservation Service Provider (CSP)" under Act 129.

<sup>26</sup> DR-CSPs selected.

	<p>Actual MW registered for the summer of 2012 will be subject to adjustment (up or down) based on actual EE program performance through 2011, as well as experience under this program in the first two years.</p>
<p><b>Program issues and risks and risk management strategy</b></p>	<p>Since this program is a mandatory curtailment program, there is a risk that the hours that the Company calls for curtailment will not be in the top 100 load hours.</p>
<p><b>Anticipated costs to participating customers</b></p>	<p>\$125 per month administrative cost</p>
<p><b>Ramp up strategy</b></p>	<p>Issue RFPs for qualified DR-CSPs and/or customers to participate starting in the summer of 2011.</p>
<p><b>Marketing strategy</b></p>	<p>Inform active and qualified CSPs about the new initiative and the details associated with the plan.</p>
<p><b>Eligible measures and incentive strategy, include tables for each year of program, as appropriate showing financial incentives &amp; rebate levels (e.g., \$ per measure, \$ per kWh or MW saved)</b></p>	<p>Payment will be based on proposed and accepted pricing from the Company and made on a quarterly basis starting in October.</p> <p>Pricing will be based on:</p> <ol style="list-style-type: none"> <li>a. Fixed payments per contracted kW of peak load reduction equal to \$9.50 per kW per quarter, and</li> <li>b. Decrements (or performance penalties) for peak load reductions below contracted levels for the season.</li> </ol> <p>Decrement pricing for average hourly underperformance relative to the contract load reduction during the season will be based on MWh pricing equivalent to 125% of the contract fixed payments divided by 50 hours.</p> <ol style="list-style-type: none"> <li>a. For example, a contract with fixed monthly pricing of \$9.50/contract kW-quarter for the period June through May, would have a decrement price equal to <math>\\$9.50/\text{kW quarter} \times 4 \text{ quarters} \times 125\% / 50 \text{ hours} = \\$0.950 / \text{kWh}</math> for average hourly performance below the contract kW for any event.</li> <li>b. Decrement will be based on the aggregated average hourly performance relative to the contract kW peak load reduction for the season. For example, if the contract kW is 1,000 in the example above, the DR-CSP would receive 4 quarterly payments <math>\times 1,000 \text{ kW} \times \\$9.50/\text{kW quarter} = \\$38,000/\text{year}</math> of contracted fixed payments. If the Company calls a 6 hour event, and</li> </ol>

	<p>the average aggregate peak load reduction for the group of customers under the agreement is 900 kW, the DR-CSP payment for that event would be decremented by <math>6 \text{ hours} \times 100 \text{ kW} \times \\$0.950/\text{kWh} = \\$570.00</math></p> <p>Decrements can be offset by average hourly over-performance relative to the contract load reduction during any daily event, based on a decrement offset price per MWh equivalent to the contract fixed payments divided by 50 hours.</p> <p>a. For example, a contract with fixed quarterly pricing of \$9.50/contract kW quarter for the period June through May would have a decrement offset price equal to <math>\\$9.50/\text{kW quarter} \times 4 \text{ quarters} / 50 \text{ hours} = \\$0.76 / \text{kWh}</math> for average hourly performance above the contract kW for any event.</p> <p>Decrements will be applied to offset payments starting in October.</p>
<p><b>Voluntary Program details</b></p>	<p>Company will pay CSPs an incentive for demand response in accordance with the provisions outlined below: (Note that this program will start in the summer of 2011)</p> <ol style="list-style-type: none"><li>1. It will be up to the CSP to aggregate and reduce load during the top 100 highest load hours. If the CSP drops load and it is not in the 100 highest load hours, then no payment will be made by the Company</li><li>2. This Company program is completely voluntary. After the end of September, Company will calculate and announce the dates and hours of the top 100 load hours for the four month period for its Company zone. Company will then examine the PJM demand response records and pay CSPs \$150.00 per MW hour (15 cents per kWh) for any load reductions that occurred during those 100 highest load hours – this payment will be made in addition to any and all payments made by PJM.</li><li>3. Performance verification will be based on PJM ELRP protocols for the aggregated hourly load reductions of the participants listed in the agreement</li></ol> <p>DR-CSP will provide Company summary of hourly peak load reductions for the aggregated group and for individual customers, with back-up data supporting hourly performance for each customer for Performance Periods using metering data accepted by PJM. Load reductions will be measured against the standard CBL if appropriate or a CBL nominated by the EDC or CSP/Customer and</p>

	accepted by PJM.		
<b>Program start date with key schedule milestones</b>	The program plan is designed to be fully implemented starting in the summer of 2011		
<b>Assumed Evaluation, Measurement, and Verification (EM&amp;V) requirements required to document savings by the Commission’s statewide EE&amp;C Plan Evaluator</b>	<p>Performance verification will be based on PJM ELRP protocols for the aggregated hourly load reductions of the participants listed in the agreement.</p> <p>DR-CSP will provide Company summary of hourly peak load reductions for the aggregated group and for individual customers, with back-up data supporting hourly performance for each customer for Performance Periods using metering data accepted by PJM. Load reductions will be measured against the standard CBL if appropriate or a CBL nominated by the EDC or CSP/Customer and accepted by PJM.</p>		
<b>Estimated participation – includes tables indicating metric(s) with target value(s) per year</b>		<b>Met-Ed</b>	<b>Penelec</b>
	MW participation – 2011	13 MW	10 MW
	MW participation – 2012	139 MW	133MW
	Hours	50	50
	Efficiency rate*	80%	80%
	*Amount of hours that will fall within the top 100 load hour requirement		
<b>Estimated program budget (total) by year – include table with budget per year</b>	\$2,000,000 per year for both Met-Ed and Penelec.		
<b>Savings targets – include tables with total MWh and MW goals per year and cumulative tables that document key assumptions of savings per measure or project</b>		<b>Met-Ed</b>	<b>Penelec</b>
	MW savings	56 MW	53 MW

<p><b>Program Title and Program years during which program will be implemented</b></p>	<p><b>2b. Met-Ed/Penelec Acting as a CSP<sup>27</sup> within PJM</b>                  Commercial Industrial Demand Response Program – Customer Mandatory Curtailment Program                  Target Market = total mw targeted less 50% of previous years voluntary participation in VLRP less amount committed by CSP registration.</p>
<p><b>Objective(s)</b></p>	<p>To address the 100 highest peak load hours during the four months of June through September, as required under Act 129 – for the MW not contracted for with CSPs.</p>
<p><b>Target market</b></p>	<ol style="list-style-type: none"> <li>1. Customers who elect to take generation service from an EGS shall include in contract language with EGS that would allow the Company to curtail based on the curtailable contract.</li> <li>2. If the Customer is currently shopping, the Customer must confirm that their existing EGS contract allows for a Company sponsored curtailment program. Customer must also confirm they have not committed to another CSP for participation in PJM programs</li> <li>3. The curtailable contract must be for a minimum of 1 year.</li> <li>4. The Curtailable load that will be eligible for the credits specified in this program shall be equal to the Customer’s average billing Curtailable kilowatt credit level measured based upon PJM ELRP Protocols.</li> <li>5. Before initiation of this program, the Company will enroll Customers in PJM’s Economic Load Response Program and Interruptible Load Response.</li> </ol>
<p><b>Calculation of Credit</b></p>	<ol style="list-style-type: none"> <li>1. A credit for each kilowatt of Curtailable load based upon PJM ELRP Protocols.</li> <li>2. If a Customer has a Curtailable load of 300 kilowatts or greater and agrees in a separate contract to curtail its load to a predetermined level equal to its non-Curtailable service requirements (such level to be determined in advance by the Customer subject to approval by Company), then the Company can curtail upon either a thirty-minute or a two-hour advance notice.</li> <li>3. The period of curtailment shall not exceed six (6) hours within any one (1) calendar day and will be between the hours of 12.00 PM and 8:00PM. The number of curtailments shall not exceed twenty (20)</li> </ol>

<sup>27</sup> It should be noted that a "Curtailment Service Provider (CSP)" under PJM demand response programs is different from a "Conservation Service Provider (CSP)" under Act 129.

	and the aggregate period of curtailment shall not exceed 50 hours per 4-month summer period.												
<b>Billing and Payment</b>	<ol style="list-style-type: none"> <li>1. Credits will be made to the Customer’s monthly bill over the eight month period of October through May in the amount of one eighth of the total value of the curtailment. If the amount of the credit is greater than the Customer’s monthly bill, then the Company will make a payment to the Customer for all amounts greater than zero.</li> <li>2. On or about the twentieth (20th) business day of each month, and in accordance with any requirements of the various programs, the Company shall prepare and forward to the Customer a comprehensive written statement describing the amount of Load Reduction for each hour of the previous month, along with a calculation of the total amount due the Customer on account of such Load Reduction or the amount to be paid the Company for any Load Reduction Pledges not fully satisfied.</li> </ol>												
<b>Program issues and risks and risk management strategy</b>	Since this program is a mandatory curtailment program, there is a risk that the hours that the Company calls for curtailment will not be in the top 100 load hours.												
<b>Anticipated costs to participating customers</b>	\$125 per month administrative cost												
<b>Marketing strategy</b>	Inform active and qualified Customers about the new initiative and the details associated with the plan.												
<b>Eligible measures and incentive strategy, include tables for each year of program, as appropriate showing financial incentives &amp; rebate levels (e.g., \$ per measure, \$ per kWh or MW saved)</b>	<p><u>Met-Ed</u></p> <p>The monthly credit to Customers for Curtailable load payable over 8 months shall be:</p> <p style="text-align: center;"><u>Fixed Portion:</u></p> <table border="1" data-bbox="711 1507 1409 1791"> <thead> <tr> <th></th> <th><u>½ Hour Notice</u></th> <th><u>2 Hour Notice</u></th> </tr> </thead> <tbody> <tr> <td>Rate GS and GST</td> <td>N/A</td> <td>\$5.14 per KW</td> </tr> <tr> <td>Rate GP</td> <td>\$5.11 per KW</td> <td>\$4.85 per KW</td> </tr> <tr> <td>Rate TP</td> <td>\$4.87 per KW</td> <td>\$4.63 per KW</td> </tr> </tbody> </table> <p style="text-align: center;">Plus</p> <p style="text-align: center;">An amount per kW equal to the RPM Auction Clearing Price as adjusted annually by PJM to reflect the</p>		<u>½ Hour Notice</u>	<u>2 Hour Notice</u>	Rate GS and GST	N/A	\$5.14 per KW	Rate GP	\$5.11 per KW	\$4.85 per KW	Rate TP	\$4.87 per KW	\$4.63 per KW
	<u>½ Hour Notice</u>	<u>2 Hour Notice</u>											
Rate GS and GST	N/A	\$5.14 per KW											
Rate GP	\$5.11 per KW	\$4.85 per KW											
Rate TP	\$4.87 per KW	\$4.63 per KW											

results of the most recent auction.

Plus

Payments made by PJM to the Company (acting as CSP) as part of PJM’s Economic Load Response Program (“ELRP”)

Penelec

The monthly credit to Customers for Curtailable load shall be:

Fixed Portion:

	<u>½ Hour Notice</u>	<u>2 Hour Notice</u>
Rate GS and GST	N/A	\$6.18 per KW
Rate GP	\$4.64 per KW	\$4.81 per KW
Rate LP	\$4.50 per KW	\$4.67 per KW

Plus

An amount per kW equal to the RPM Auction Clearing Price as adjusted annually by PJM to reflect the results of the most recent auction X 0.85.

Plus

Payments made by PJM to the Company (acting as CSP) as part of PJM’s Economic Load Response Program (“ELRP”)

Rate GP and TP/LP Prior Day Option:

1. Rate GP and TP/LP Customers may select a prior day notice option provided that the Customer curtails its load to a predetermined level equal to its non-Curtailable service requirements (such level to be determined in advance by the Customer subject to approval by Company).
2. The Company shall give notice of a curtailment before 12 o’clock noon of the prior day during the months of June through September.
3. The Customer must have a Curtailable load of 1,000 kilowatts or greater.
4. The period of curtailment shall not exceed six (6) hours within any one (1) calendar day, and will be

	<p>between the hours of 12:00PM and 8:00PM. The number of curtailments shall not exceed fifteen (15) and the aggregate period of curtailment shall not exceed 50 hours during the four (4) month summer period in any one (1) calendar year.</p> <p>The monthly credit to Customers for Curtailable load shall be:</p> <p><u>Credit With Prior Day Notice</u></p> <p><u>Met-Ed</u></p> <table data-bbox="738 604 1193 703"> <tr> <td>Rate GP</td> <td>\$2.43 per KW</td> </tr> <tr> <td>Rate TP</td> <td>\$2.32 per KW</td> </tr> </table> <p><u>Penelec</u></p> <table data-bbox="738 787 1193 886"> <tr> <td>Rate GP</td> <td>\$2.41 per KW</td> </tr> <tr> <td>Rate LP</td> <td>\$2.34 per KW</td> </tr> </table> <p>Plus</p> <p>An amount per kW based on the RPM Auction Clearing Price as adjusted annually by PJM to reflect the results of the most recent auction X 0.85.</p> <p>Plus</p> <p>Energy payments made as part of PJM’s Economic Load Response Program (“ELRP”)</p>	Rate GP	\$2.43 per KW	Rate TP	\$2.32 per KW	Rate GP	\$2.41 per KW	Rate LP	\$2.34 per KW
Rate GP	\$2.43 per KW								
Rate TP	\$2.32 per KW								
Rate GP	\$2.41 per KW								
Rate LP	\$2.34 per KW								
<p><b>Penalty for Customer failure to Curtail and termination rules</b></p>	<ol style="list-style-type: none"> <li>1. The penalty assessment will be based on the Customer’s performance over the entire Summer season.</li> <li>2. A Customer shall be deemed to have failed to curtail when the Customer’s maximum 15-minute integrated demand in each period of curtailment has not been reduced to not more than 101% of the “predetermined” level.</li> <li>3. If customer’s fail to curtail when the Company calls for a mandatory curtailment, the penalty payable to the Company will be equal to the following:             <p style="margin-left: 40px;">Non Compliance Penalty = Amount of Load not curtailed (MW) x RPM Auction Clearing Price (\$ MW Day) x 2</p> </li> </ol> <p><u>Termination Rules</u></p> <ol style="list-style-type: none"> <li>1. Either the Company or the Customer may terminate service under this program upon providing the other party at least one (1) year notice of termination.</li> </ol>								

	<p>2. However, during the period beginning when a Customer initially elects to take service under this program and ending on the following April 30, such a Customer may, upon thirty (30) days' notice to the Company, elect to terminate Curtailable service without the requirement of the one (1) year notice set forth above. Thereafter, the one (1) year notice requirement shall apply.</p>
<p><b>Program start date with key schedule milestones</b></p>	<p>The program plan is designed to be fully implemented starting in the summer of 2011</p>
<p><b>Assumed Evaluation, Measurement, and Verification (EM&amp;V) requirements required to document savings by the Commission's statewide EE&amp;C Plan Evaluator</b></p>	<p>Performance verification will be based on PJM ELRP protocols for the aggregated hourly load reductions of the participants listed in the agreement.</p> <p>The Company, acting as CSP, will provide a summary of hourly peak load reductions for the aggregated group and for individual customers, with back-up data supporting hourly performance for each customer for Performance Periods using metering data accepted by PJM. Load reductions will be measured against the standard CBL if appropriate or a CBL nominated by the EDC or CSP/Customer and accepted by PJM.</p>
<p><b>Other information deemed appropriate</b></p>	<p>The Company will track the amount it receives in payments from PJM, the amounts it retains for administrative and other costs, the amounts passed on to customers, and the actual administrative, marketing and credit costs associated with this program. This information will be included as part of the Company's annual filing.</p>

<b>Program Title and Program years during which program will be implemented</b>	<b>C/I Performance Contracting</b>
<b>Objective(s)</b>	To assist large commercial and industrial (and other non-residential) customers secure DSM/EE services through an Energy Services Company that will identify opportunities and implement retrofits.
<b>Target market</b>	All existing non-residential buildings.
<b>Program description</b>	<p>Large commercial and industrial (and other non-residential) customers may elect to secure DSM/EE services through an Energy Services Company that will identify opportunities, implement retrofits and be paid through the savings generated by the project over time. The PA Companies will identify qualified ESCOs and will pay a portion of the project costs for kWh and kW savings delivered.</p> <p>ESCOs may serve as aggregators of customers for providing contracted kWh and kW savings to the Companies.</p>
<b>Implementation strategy (including expected changes that may occur in different program years)</b>	This program would be delivered through qualified ESCO contractors that agree to terms for participation. Specific rules for documenting energy savings and demand reductions must be met prior to receipt of payments under this program.
<b>Program issues and risks and risk management strategy</b>	Challenges with customers meeting requirements for payment, lack of program awareness and “emergency replacement” scenario among target customers. There is potential for low dealer, customer, and trade ally awareness. Procurement policies that specify low first-cost instead of life-cycle cost and possible tenant/landlord issues may be concerns. With respect to risk management, refer to Section 4.1.4 of the EE&C plan. The Company provides further details on “early warning systems” as well as a description of contingency plans.
<b>Anticipated costs to participating customers</b>	The installation costs minus the incentives.
<b>Ramp up strategy</b>	The Company fully expects the Program Manager(s), who will be selected by competitive bid, to provide specific details on ramp up strategy for this program.
<b>Marketing strategy</b>	The Company fully expects the Program Manager(s), who will be selected by competitive bid, to provide specific details on marketing for this program.
<b>Eligible measures and incentive strategy, include tables for each</b>	The rebates for this program are the same as for the C/I Equipment program. The only difference is the delivery channel. For the rebates amount see Penelec Table 5 under C/I

<p><b>year of program, as appropriate showing financial incentives &amp; rebate levels (e.g., \$ per measure, \$ per kWh or MW saved)</b></p>	<p>Equipment rebates.</p>
<p><b>Program start date with key schedule milestones</b></p>	<p>See Figure 2</p>
<p><b>Assumed Evaluation, Measurement, and Verification (EM&amp;V) requirements required to document savings by the Commission’s statewide EE&amp;C Plan Evaluator</b></p>	<p>For the pre-installation phase, verify that inefficient HVAC, lighting, food services equipment as well plug loads and controls are installed and working on customers’ premises. Determine current energy consumption and demand using billing/meter information. Check sample calculations of projected savings for accuracy and for compliance with TRM guidelines.</p> <p>For the post-installation phase, verify that new, more efficient, equipment has been installed. Verify through billing, calculation or metering that expected energy savings or demand reduction goals are being achieved. Document, store and send measure data to state using specified data transmission protocols, processes and technology.</p> <p>As part of the monitoring process, the company plans to use selected indicators to verify periodically that kWh and kW savings are being realized as projected. A DSM tracking system is to be used for such monitoring. In the event that EE&amp;C program indicators show that projected EE&amp;C targets are not likely to be achieved on schedule and within budget, FirstEnergy will take appropriate corrective actions.</p>
<p><b>Administrative requirements – include internal and external staffing levels</b></p>	<p>The Company will use a combination of internal and external resources to manage and implement the EE&amp;C programs. Penelec will monitor and adjust the allocation of resources to balance the needs of each program. See sections 4.2.1 and 4.2.2 of the EE&amp;C plan for more details.</p>
<p><b>Estimated participation – includes tables indicating metric(s) with target value(s) per year</b></p>	<p>See Appendix F</p>
<p><b>Estimated program budget (total) by year – include table with budget per year</b></p>	<p>See Appendix D</p>
<p><b>Savings targets – include tables with total MWh and MW goals per year and cumulative tables that document key assumptions of savings per measure or project</b></p>	<p>See Appendix E</p>
<p><b>Cost-effectiveness – include TRC for each program</b></p>	<p>See PUC Table 7d</p>

**Other information deemed  
appropriate**

None.

**3.5. Governmental//Non-Profit Sector (as defined by 66 Pa. C.S. § 2806.1) Programs - include formatted descriptions of each program organized under the same headings as listed above for residential programs. As well, provide and detail all plans for achieving compliance with 66 Pa. C.S. § 2806.1.<sup>28</sup>**

<p><b>Program Title and Program years during which program will be implemented</b></p>	<p><b>Governmental and Institutional Programs:</b></p> <ul style="list-style-type: none"> <li>a. Federal Facilities, State, Local, Institutional and Non-Profit Building audits and plans for Stimulus Money</li> <li>b. Street lighting Program</li> <li>c. Traffic Signal Program</li> <li>d. State, Local, Institutional and Non-Profit Buildings</li> <li>e. County and Local Audit Program</li> <li>f. Multifamily Building Program<sup>29</sup></li> </ul>
<p><b>Objective(s)</b></p>	<p>The programs provide incentives of a percentage [TBD] of the incremental technology costs (“capital costs”) for energy efficient retrofit projects. In addition, they will provide technical support, rebates, and support for financing.</p>
<p><b>Target market</b></p>	<p>All existing governmental, institutional and non-profit buildings in the company’s service territory. Note that federal government customers may be eligible for payment of the retrofits by the Federal Energy Management Program (FEMP) upon review and approval by the federal program manager.</p>
<p><b>Program description</b></p>	<ul style="list-style-type: none"> <li>a. The Federal Facilities Program involves a feasibility study to identify energy savings opportunity to expedite the Federal and municipal agencies taking action. Provides for the implementation of cost effective, high efficiency standard and non-standard measures through a CSP for local, state and federal buildings, as well as for institutional customers. For federal facilities that qualify, costs for the implementation are covered under the Federal Energy Management Program; for others, rebates are intended to buy down selected equipment or overall job scopes.</li> <li>b. The Street lighting Program is offered to municipalities regardless of ownership of the street lights. This segment of the Government program will seek to convert street lights to high pressure sodium. The company will also pursue an LED street light demonstration project as part of this component to test this emerging technology.</li> <li>c. The Traffic Signal Program is another program targeted at</li> </ul>

<sup>28</sup> Additional measures may be incorporated, as appropriate, as new measures are approved for inclusion in the TRM.

<sup>29</sup> If a multifamily facility is operated by a local, state or federal agency, savings as a result of measures for these multifamily facilities will qualify for Governmental and Institutional prescribed requirements.

	<p>local governments. This component of the Gov't program will seek to convert traffic signals and pedestrian/cycling signals to LED technology.</p> <p>d. Governmental Buildings and Schools Program will help better identify energy savings opportunities and expedite their implementation. The CSP would provide diagnostic assistance, technical support and rebates necessary for school districts to install high-efficiency measures.</p> <p>e. County and Local Buildings including schools will be provided energy audits free of charge as a way to increase the proportional share of saving received from governmental customers.</p>
<p><b>Implementation strategy (including expected changes that may occur in different program years)</b></p>	<p>These programs will interface with each other so that program participants can obtain full energy audits as needed. They will also potentially leverage support from state-level initiatives.</p>
<p><b>Program issues and risks and risk management strategy</b></p>	<p>Inability of organizations to identify balance of funding for projects, in spite of incentives; competing priorities for capital improvements. Risk management includes assistance in helping identify federal Energy Efficiency Block Grant or American Public Power Association (as appropriate) funding or other sources for balance of costs. Also, with respect to risk management, refer to Section 4.1.4 of the EE&amp;C plan. The Company provides further details on “early warning systems” as well as a description of contingency plans.</p>
<p><b>Anticipated costs to participating customers</b></p>	<p>Balance of project costs.</p>
<p><b>Ramp up strategy</b></p>	<p>Program will launch upon selection of C/I vendor.</p>
<p><b>Marketing strategy</b></p>	<p>FirstEnergy Area Managers will be tapped to provide first line contacts to eligible customers within the target market segments. The C/I program vendor will be responsible for ultimate program marketing.</p>
<p><b>Eligible measures and incentive strategy, include tables for each year of program, as appropriate showing financial incentives &amp; rebate levels (e.g., \$ per measure, \$ per kWh or MW saved)</b></p>	<p>Federal Rebates to qualified federal buildings are listed separately in Table 5 due to the availability of Federal incentive money.</p> <p>All other Governmental rebates are the same as the C/I equipment program.</p> <p>The rebates are listed in Penelec Table 5 under the C/I Equipment program.</p> <p>The county and local governmental audits are estimated to be about \$2000 dollars.</p>

<b>Program start date with key schedule milestones</b>	See Figure 2.
<b>Assumed Evaluation, Measurement, and Verification (EM&amp;V) requirements required to document savings by the Commission's statewide EE&amp;C Plan Evaluator</b>	<p>FirstEnergy is to verify that the planned number of each type of governmental and institutional audits is performed on time and within budget. A sample of audits will be reviewed to check that their actual costs do not exceed the budgeted cost. The company will also verify that existing EE&amp;C opportunities are properly identified, validated and quantified to enable accurate tracking and documentation of energy efficiency and demand reduction.</p> <p>As part of the monitoring process, the company plans to use selected indicators to verify periodically that energy savings and demand reduction are being realized as projected. A DSM tracking system is to be used for such monitoring. In the event that EE&amp;C program indicators show that projected EE&amp;C targets are not likely to be achieved on schedule or within budget, FirstEnergy will take appropriate corrective actions.</p>
<b>Administrative requirements – include internal and external staffing levels</b>	The Company will use a combination of internal and external resources to manage and implement the EE&C programs. Penelec will monitor and adjust the allocation of resources to balance the needs of each program. See sections 4.2.1 and 4.2.2 of the EE&C plan for more details.
<b>Estimated participation – includes tables indicating metric(s) with target value(s) per year</b>	See Appendix F
<b>Estimated program budget (total) by year – include table with budget per year</b>	See Appendix D
<b>Savings targets – include tables with total MWh and MW goals per year and cumulative tables that document key assumptions of savings per measure or project</b>	See Appendix E
<b>Cost-effectiveness – include TRC for each program</b>	See PUC Table 7e
<b>Other information deemed appropriate</b>	None.

#### **4. Program Management and Implementation Strategies**

##### ***4.1. Overview of EDC Management and Implementation Strategies:***

*4.1.1. Describe the types of services to be provided by EDC as well as consultants, trade allies, and CSPs. Indicate which organizations will provide which services and the basis for such allocation. Reference reporting and EM&V information from Sections 5 and 6 below.*

Generally the Company will assume overall administration and oversight of the Plan with the following types of contractors performing the specific tasks associated with applicable programs.

##### **Residential**

- A. Online audit vendor, energy audit services firm, local energy auditors – residential home audits
- B. Environmentally responsible appliance recycler – residential appliance turn-in
- C. Local contractors with appropriate training and certification – Energy Efficient HVAC and solar program
- D. Statewide national vendor coordinated w/other Pennsylvania utilities – Energy efficiency products program
- E. Local builders – new construction program
- F. BPI certified contractors – residential whole building comprehensive plan

##### **Commercial**

- A. Qualified contractors who agree to participation terms, trade allies who have attended training – energy audit program
- B. Qualified vendors from list of eligible FEMP contractors that are also registered in Pennsylvania as a CSP – government and institutional program, C/I equipment rebate program
- C. Qualified ESCO contractors that agree to participation terms and meet specific rules – C/I performance contracting
- D. Regional motor distributors who would be incentivized to move the products – industrial motors and Variable Speed Drive program
- E. CSPs who will serve as load aggregators and participate in the PJM demand response programs – C/I DR program

4.1.2. *Describe how the risk categories of performance, technology, market and evaluation can affect the programs and any risk management strategies that will be employed to mitigate those risks.*

1. Performance risk is the risk that, due to design or implementation flaws, the program does not deliver expected savings.

The Company took a variety of steps to keep participation simple for both customers and trade allies. This is a crucial design principle for ensuring success. Eligibility guidelines, application forms, technical assistance guidelines and other program collateral materials will be: 1) easy to access via a website; 2) clear and concise; 3) require the minimum amount of information to confirm equipment and customer eligibility; and, 4) designed to enable tracking for measurement and verification purposes.

The Company has taken steps to identify and manage risks as well as to prepare for contingencies that may be necessary in its implementation activities over the Plan's implementation period. Those steps are as follows:

1. The Company will continue seeking input from the stakeholder process that the Company initiated during the plan development phase of this process. While the ultimate decision making and responsibility for meeting the targets will be the Company's, this process is expected to continue to yield benefits for the Company and its customers.
2. The Company intends to perform continual EM&V on all program offerings in order to ensure that all programs are on target in terms of dollars spent, participation rates achieved and kWh and kW savings realized.

Given the significant investment required to meet Act 129 kWh and kW savings targets, the Company now believes that it is both prudent and necessary to have a robust evaluation process in place from the date of each program's inception as well as the financial capability to make those changes that are either indicated by the program process evaluations and/or general economic conditions as they change over time. This ambitious EE&C undertaking is occurring at a time when economic conditions are in turmoil and it remains to be seen how customers will react to programmatic offerings with the rebate levels prescribed—rebate levels that have been based upon successful programs in more favorable economic conditions.

The Company believes that its Plan contains the right mixture of incentives and measure offerings to meet the prescribed targets. Further, the Company's risk management strategies, as designed, will now provide the flexibility necessary to maximize the potential for success.

2. Technology risk is the risk that technologies targeted by a program fail to deliver the savings expected.

The Company plans to begin with tested technologies with well-established energy savings performance and supplement them for market segments as appropriate. Simple programs will be launched first, and the design and delivery channels will evolve over time. Furthermore, comprehensive programs have been developed that will both have an immediate impact on energy use and in the long run will help transform the market into one where customers seek energy efficient options on a regular basis no matter the incentives. In addition, design flexibility will be retained to enable the adjustment of specific designs as dictated by customer response and evaluation results, as well as to rebalance the portfolio based on individual program performance and emerging opportunities.

3. Market risk is the risk that customers, or other key market players (e.g., contractors), choose not to participate in a program.

The Company will carefully evaluate various approaches to building awareness through communications in order to minimize market risk. It plans to raise customers' awareness of the benefits of energy efficiency and conservation, as well as the existence of its programs offered through this Plan through a company-wide educational campaign, community level outreach and program-specific marketing. The Company expects the Commonwealth (i.e., regulators, state agencies, etc.) to similarly conduct statewide educational and outreach initiatives. For example, Penelec can leverage the credibility of trade allies as channels to educate and influence audiences.

Market risk will be assessed through program tracking and periodic surveys to gauge awareness of the programs and for those not participating, barriers to participation. Market risk will also be assessed through process evaluations that will take place annually after each program is launched. This will enable Penelec to identify issues related to market risk and implement mid-course corrections to enable the programs to stay on track.

The Company will not shift program funds within a customer class, or between customer classes, without prior Commission approval. Furthermore, if the Company identifies the need to increase the cost of this Final Plan, it will obtain Commission approval before increasing the budget for the same.

4. Evaluation risk is the risk that independent EM&V will, based on different assumptions, conclude that savings fall short of what the implementers have estimated. The company minimized this risk by hiring as one of its CSPs, Black & Veatch, an industry leader and expert in EE&C program design and evaluation.

*4.1.3. Describe how EDC plans to address human resource and contractor resource constraints to ensure that adequate personnel and contractors are available to implement the EE&C plan successfully.*

The Company intends to use both in-house personnel and contractors to help implement the EE&C plan successfully. FirstEnergy has a centralized organization staffed with qualified and experienced personnel. Additionally, this organization has access to personnel from various departments including legal, finance, engineering, customer service and regulatory affairs on an as needed basis. During the design phase of the plan, this organization has retained the services of Black & Veatch who has assisted other electric utilities with the design of their EE&C plans. Black & Veatch has considerable expertise in the field of EE&C.

To confirm the availability of contractors to help with the implementation of the EE&C plan, the Company has surveyed several companies qualified to implement the EE&C plan. The results of the survey were used in program design and to ensure that there will be a sufficient number of adequately qualified contractors to implement the measures being selected or developed to reach the kWh and kW savings goals. These surveys also provided information on the cost of some EE&C measures, their implementation timeframe and likelihood of success in reducing energy consumption and demand.

The next step is to issue RFPs to selected contractors who will be responsible for some of the EE&C plans' implementation activities. The Company will issue the RFPs as soon as the EE&C plan is filed and the contractors have been qualified as CSPs.

4.1.4. Describe “early warning systems” that will be utilized to indicate progress towards the goals and whether they are likely to be met. Describe EDC’s approach and process for shifting goals and funds, as needed, between programs and adding new measures/programs.

The Company’s strategy for early warning system is to incorporate a three-pronged approach into the implementation of the programs: (1) tracking system, (2) energy audits, and (3) reporting. Program application forms will incorporate data requirements for tracking various customer characteristics and other data necessary for surveying participation levels and applicant specifics, as well as tracking the extent to which different types of customers are or are not participating. This information will be stored in the tracking system and summarized on a regular basis. By encouraging both residential and non-residential customers to undergo an energy audit, the Company will capture useful data on as-found characteristics of facilities and buildings that will help verify or confirm assumptions on energy savings potential and identify those remaining opportunities. Finally, by preparing summary reports of progress on a regular basis, the Company will have access to and make best use of status information. These reports will be closely monitored by Company management.

Common barriers/possible challenges to investments in energy efficiency include:

- Customer general attitudes toward EE&C and demand response in light of the necessary paradigm shift;
- First cost of energy efficiency investments;
- The length of investment payback periods, which generally must be relatively short;
- The limited supply of dedicated individuals with the expertise to identify energy efficiency opportunities and drive them through to implementation; and
- Today’s business environment has many companies operating in a survival mode compared to investing in future energy savings

These, as well as other issues, will be tracked through process evaluation and regular program monitoring to determine if they are having a measurable effect on the achievement of targets.

### **Contingency Plan**

FirstEnergy has developed a contingency plan in the unlikely event that any of the following four issues arise:

**What if the savings don’t materialize?** The Company anticipates a ramp up of programs starting in November 2009. Monthly program kW/kWh TRM-based impacts and costs incurred will be tracked from the conception of each program. To the extent that program/measure market penetration lags behind the expected kW/kWh-cost forecasts, so should the rate at which budgeted costs are incurred. If it is found that one or more programs are not meeting expectations, FirstEnergy will take one or all of the following actions:

1. Shift the focus of underperforming programs to measures that have a higher adoption rate. The FirstEnergy Companies’ plans utilize over 100 measures that are rolled up into programs. This large number of measures incorporated in the programs allows flexibility to shift emphasis to incorporate successful measures as needed to stay on track toward achieving energy savings goals.
2. Alter the program delivery processes utilized in order to enhance market penetration. Options here may include having vendors add field staff to handle more inquiries or shorten response times, eliminating or adjusting project requirements if bottlenecks appear to be stalling progress, or other

adjustments as dictated by process evaluations. However, any changes made will take care not to compromise data tracking for evaluation purposes.

3. Investigate, through further surveys, the issues that customers have with problem programs and modify delivery based upon the results of these surveys
4. Shift program delivery to more aggressively promoted and perhaps rebated versions
5. In extreme cases, abandon non-performing programs and replace them with other programs that are enjoying a greater success.
6. Shift resources to higher performing programs that may have been under funded, because the study assumes a low participation from industrial customers due to current economic conditions, the Plan may have to be rebalanced if there is a higher than expected response from the industrial class.
7. Add delivery channels. The on-line audit program could be enhanced to open more channels to deliver conservation kits.
8. Shift resources between sectors as needed to address demand.

The Company expects to have the ability to shift resources between programs and/or between customer sectors within the portfolio as needed to meet the goals.

***What mid-course corrections could be implemented?*** The Company believes that CFL programs, efficient electric water heating and residential/small commercial Demand Load Control programs are but three of the programs that could be ramped up through enhanced marketing efforts to achieve kWh and kW impacts greater than anticipated under the proposed EE&C Plans This may require a re-balancing of program goals and budgets. Notwithstanding, the EE&C program tracking system will provide near real-time intelligence for making such mid-course decisions and adjustments with enough time for such corrections to be effective.

***What would be communicated to regulators?*** Penelec will provide periodic updates to the Commission as required concerning the successes of its programs, issues encountered and updated trajectories of impacts achieved vs. costs incurred. With this level of communication, FirstEnergy's Pennsylvania's EE&C team hopes to provide the Commission, stakeholders, all of the FirstEnergy Companies, and other Pennsylvania EDCs with up to date intelligence, including identified issues and proposed solutions. It also hopes to learn from the experiences of other EDCs through intelligence sharing.

***How will the appropriate mid-course corrections be identified?*** The Company anticipates using a process evaluation for a 6-to-12 month check following each program launch to determine progress and identify any necessary corrective actions. At the 6 to 12 month mark for each program, a program-by-program process evaluation will be performed using a combination of participant satisfaction and key customer perception surveys -- all preformed using statistically significant samples along with a kWh/kW impact/cost analyses in which each program's targets are compared with Plan expectations.

The Company will not shift program funds within a customer class, or between customer classes, without prior Commission approval. Furthermore, if the Company identifies the need to increase the cost of this Final Plan, it will obtain Commission approval before increasing the budget for the same.

#### ***4.2. Executive Management Structure:***

4.2.1. Describe EDC structure for addressing portfolio strategy, planning, review of program metrics, internal and external communications, budgeting and financial management, program implementation, procurement, program tracking and reporting, and Quality Assurance/Quality Control (QA/QC). Include EDC organization chart for management team responsible for implementing EE&C plan.

The Company believes that during the initial stages of EE&C program implementation, it is particularly important that senior management be visible in its oversight role and actively support the changes and adjustments needed in organization structure, interdepartmental cooperation, staffing, and ensuring corporate-wide support of the new initiatives. As a result, the Company has created a steering committee that is comprised of senior management members from across the organization, including the President – FE Utilities, and Vice-Presidents representing Energy Efficiency & Customer Service, Energy Delivery, Legal, Rates and Regulatory Affairs, Information Technology, Business Development, Performance & Management, Communications, and Energy Policy. The steering committee’s primary purpose is to:

- Define strategies and provide governance over initiatives relating to energy efficiency (EE)/demand response (DR), and smart grid;
- Assure initiatives support corporate objectives integrating customer solutions with operational efficiencies; and
- Assure optimum deployment of EE/DR and smart grid resources for managing load growth in the FirstEnergy service territory.

To provide cross-functional support and coordination, the Company has also formed an Energy Efficiency Committee, comprised of mid-management level representatives from similar organizational elements. This group’s primary responsibilities include:

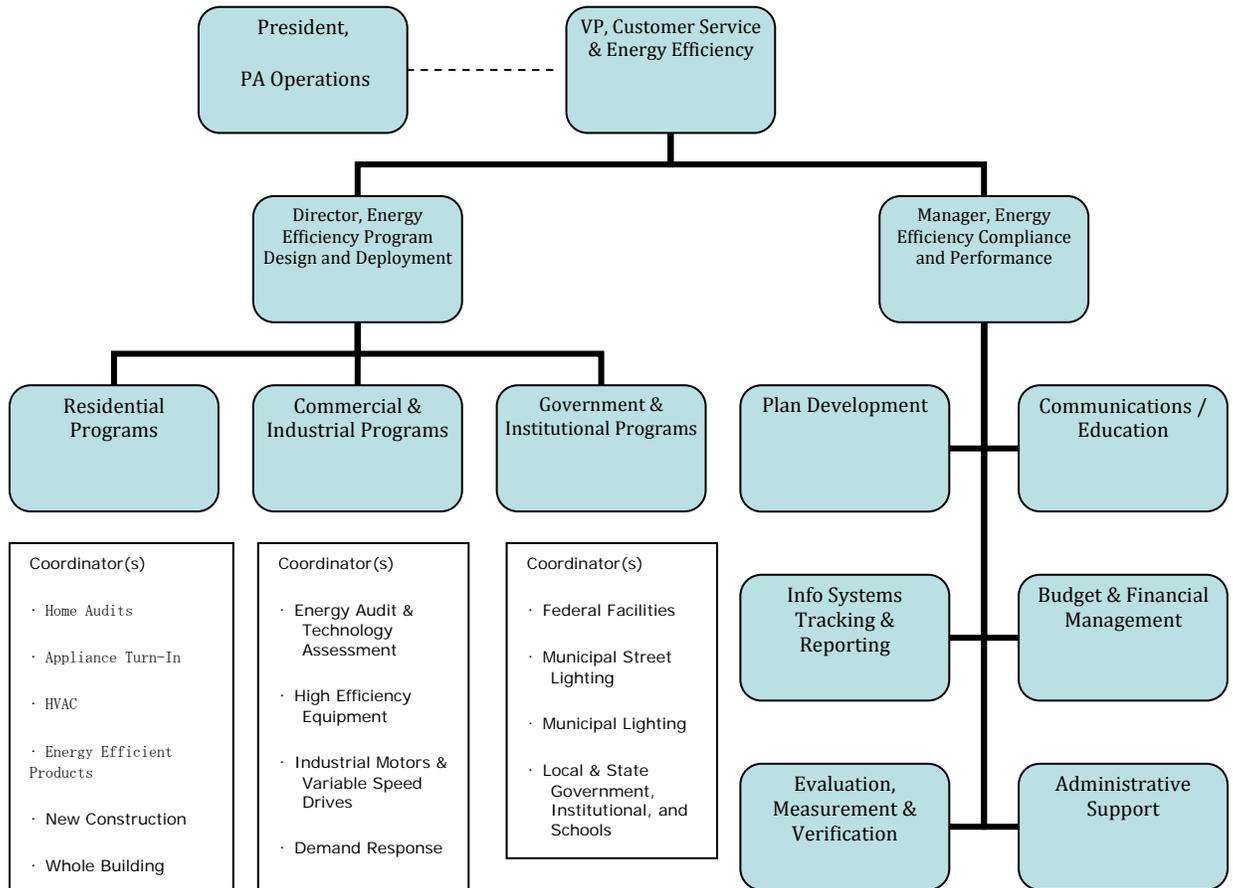
- Providing direction, coordination and cross-functional support, and
- Assuring program milestones and requirements are on target.

Recognizing that FirstEnergy’s seven utility companies, spanning Pennsylvania, New Jersey, and Ohio, are all undertaking new Energy Efficiency and Peak Demand Reduction initiatives to comply with state mandates passed in 2008, these committees will also help to promote consistency, where appropriate, and leverage best practices across the FirstEnergy system. Both committees also provide direction on Smart Meter and Renewable activities. Due to the developing nature of all of these initiatives, the committees meet monthly with subcommittees meeting on an *ad hoc* basis as specific issues arise.

The organization entrusted with implementation of the EE&C Plan is the Customer Service and Energy Efficiency Group, which reports to the President, FE Utilities, and has a working relationship with the President of Pennsylvania operations. This group also has responsibility for similar activities for FirstEnergy’s Ohio and New Jersey utilities.

The organization chart below depicts the EE&C Plan management team and their primary areas of responsibility. The Energy Efficiency Program Design and Deployment Department is organized based on program management responsibilities across customer classes. Key activities include planning and executing marketing campaigns, acquiring and managing implementation contractors, and ensuring quality control and assurance over programs. The Energy Efficiency Compliance and Performance Department is organized based on support functions that are common to all programs such as measurement and verification, tracking and reporting, communication and education, budgeting and financial management, and other administrative support.

**Figure 6: Organization Chart**



The above group also receives dedicated support from such areas as Rates and Regulatory Affairs, Legal, Human Services, Communications, and Business Analytics.

In addition to the group described above, the Company recently hired Black & Veatch, an industry recognized expert in the area of Energy Efficiency, to conduct market research, develop the Market Potential Study, assist in the design of cost effective energy efficiency and peak demand reduction programs, assist in the development of the overall Energy Efficiency & Conservation portfolio, and provide input on the development of the EE&C management plan and measurement and verification protocols for the Company. As part of the implementation plan, the Company will outsource program management to the extent practical, using CSPs for program implementation and management. This allows resources to be more effectively used by providing the CSPs with the flexibility necessary to shift resources from one client to another to handle shifting work loads. The Company’s EE&C organization, including program managers, marketing, technical and analytical personnel, will provide guidance and oversight to help ensure quality and cost effective management of the vendors. FirstEnergy’s EE&C organization’s experience across its seven utility operating companies in Pennsylvania, Ohio and New Jersey, coupled with the CSPs’ industry expertise, will enable the Company to leverage best practices, thus providing a greater likelihood of program success and minimizing missteps as typically found with new program development. The Company also intends to establish work processes which focus on efficient program delivery such as business process mapping and regular reviews to seek program delivery efficiency improvements. Finally, the Company plans to regularly report program

savings, expenses, participation levels, and milestones, as necessary, to the Commission and FirstEnergy management.

*4.2.2. Describe approach to overseeing the performance of sub-contractors and implementers of programs and how they can be managed to achieve results, within budget, and ensure customer satisfaction.*

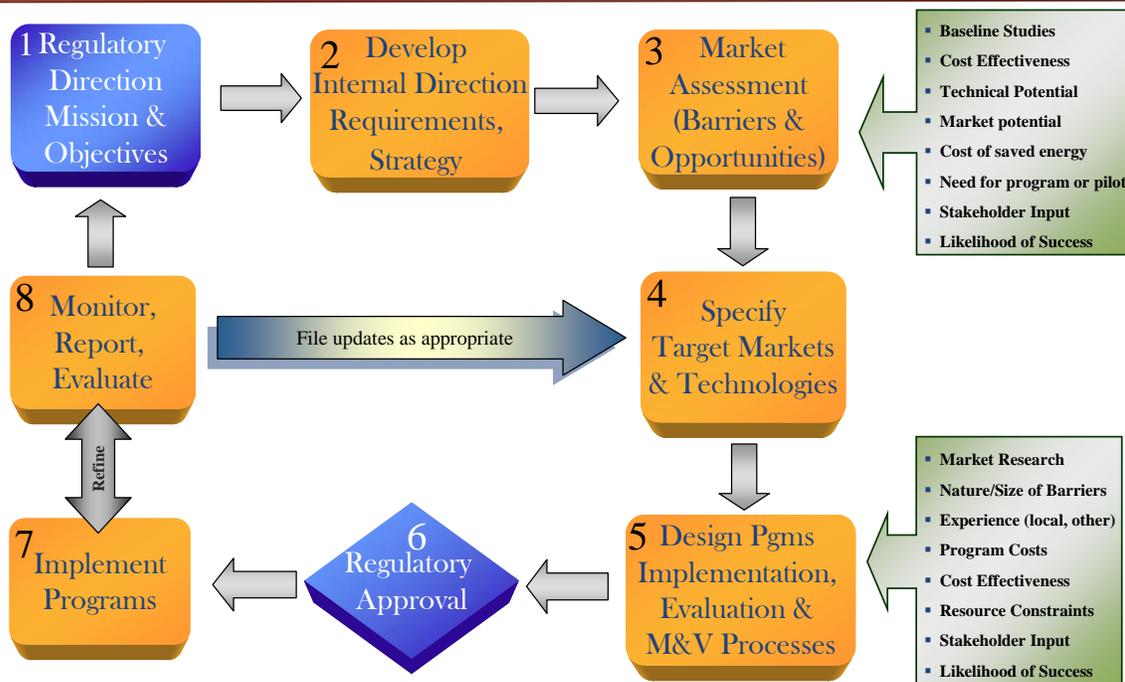
The Company will provide high-level administrative, contract management, program design and marketing oversight of the selected CSPs primarily through the Customer Service and Energy Efficiency Department staff who will be dedicated for this purpose. Not only will such monitoring be accomplished through the use of the tracking and reporting system described in Section 5, but this dedicated staff will also provide:

- High-level guidance and direction to the implementation contractors, including review and revision of proposed annual implementation plans and proposed milestones, and, additionally, engage with the contractor team on a daily basis when working through strategy and policy issues.
- Review and approval of implementation contractor invoices and ensure program activities are within investment and on schedule.
- Review of implementation contractor operational databases for accuracy, ensuring incorporation of data into the companies' comprehensive portfolio tracking database to be used for overall tracking and regulatory reporting.
- Review of measure saving estimates maintained by the implementation contractor.
- Oversight and coordination of evaluation, measurement, and verification contractors.
- Public education and outreach to community groups, trade allies and trade associations.
- Provide guidance and direction on new initiatives or strategies proposed by the implementation contractors.
- Communicate to implementation contractors other initiatives that may provide opportunities for cross-program promotion.
- Review and approve printed materials and advertising plans.
- Evaluate portfolio and program effectiveness and recommend modifications to programs and approach as needed.
- Perform periodic review of program metrics, conduct investment analysis, and review evolving program design.

In addition to the comprehensive oversight activities described above, the Company will follow the overall planning, implementation, monitoring and evaluation framework identified below to help guide our programs and contractors.

**Figure 7: High Level Overview of M&V**

## High Level Overview of EE / DR Plan Development, Implementation, Monitoring and Evaluation Processes



The Company believes that this framework will help ensure the success of its efforts to achieve the targets established by Act 129 in an efficient and cost-effective manner. Of significance, is the need to remain agile and flexible to make adjustments to program details, improve staff knowledge and effectiveness, and change course when conditions and opportunities warrant.

### 4.2.3. Describe basis for administrative budget.

The utility administrative budget consists of both indirect and direct program costs. Indirect program costs are the portion of administrative start-up costs currently incurred in connection with the development of the Company's EE&C Programs in accordance with Act 129 and the Commission's Orders and guidance at Docket No. M-2008-2069887, and are included in the cost recovery mechanism. These costs to design, create, and obtain Commission approval for the Company's programs include: consultant costs, legal fees, and other direct and indirect costs associated with the development and implementation of the EE&C Plan and programs in compliance with Commission directives.

The annual direct program budgets by year are presented by measure and by program in Appendix D 1- 6. The budgeting process for the utility costs, customer incentive costs, retail incentive costs and service provider costs were done using a bottom-up approach utilizing cost information from various sources, which include: the California Database for Energy Efficient Resources (DEER), DSMore Michigan Database, Energy Star Website and RFI survey data. Further, the incentives were estimated based on penetration estimates, estimates of payback timing, and the adherence to state-wide program information when available. For program reporting, costs that cannot be directly be charged to programs will be allocated across programs using the budgets presented in Appendix D-6.

The yearly budgets presented in Appendix D are broken down into the 126 individual measures. The total budget costs are derived from per unit estimates at this measure level. These per unit costs are presented as Appendix D-5 by measure and in Appendix D-6 by program. The individual per unit costs take into account the delivery system of each measure, whether it is a mail-in rebate, in-store rebate or through a service provider. The annual total direct utility budget is calculated by simply multiplying the per unit costs in Appendix D-5 by the assumed participation levels shown in Appendix F (Participation Levels) and then totaling all the measures.

The measures in Appendix D are labeled with the Program Name with which they are associated. The program budgets are calculated by totaling the individual measures by the Program Name.

The measures in Appendix D are also labeled with the Rate Class name for which they are associated. The rate class budgets are calculated by totaling the individual measures by the Rate Class name.

The total utility administrative budget consists of both the direct measure costs shown in Appendix D and the indirect measure costs shown in PUC Table 6B presented later in this report.

### ***4.3. Conservation Service Providers (CSPs):***

#### ***4.3.1. List any selected CSPs, describe their qualifications and basis for selection (include contracts in Appendix).***

In accordance with Act 129 and the Commission's Implementation Order, FirstEnergy hired Black & Veatch as lead consultant supporting development of all of the Companies' EE&C Plans. FirstEnergy used a PUC Staff approved competitive request for proposal ("RFP") to support the CSP selection process and to select a consultant who would assist in designing a portfolio of programs and provide original ideas. The RFP sought recommendations on the programs that should be proposed and did not limit the scope of suggestions. Black & Veatch was selected to help the Company develop the plan and the portfolio of programs. Black & Veatch is a leading global engineering, consulting and construction company with the mission of *Building a World of Difference*®. Black & Veatch provides their clients with reliable solutions to their most complex challenges. Founded in 1915, Black & Veatch specializes in infrastructure development in energy, water, telecommunications, federal initiatives, management consulting and environmental markets. They offer leading experience in the market segments they serve, understanding their clients' businesses and objectives, and having the financial resources sufficient to execute and sustain projects from the most basic to the very complex. Black & Veatch's experienced dedicated professionals have the technical expertise necessary to meet the Company's objectives. Black & Veatch is an employee-owned company with more than 100 offices worldwide. Black & Veatch is ranked on the Forbes "500 Largest Private Companies in the United States" listing.

On February 3, 2009, FirstEnergy filed its proposed RFP process and related documents for the purpose of contracting with CSP(s) in accordance with the Implementation Order. FirstEnergy submitted the following documents:

- Overview of the CSP competitive bidding process
- RFP process for EE&C consulting services along with exhibits
- Sample bidder evaluation matrix
- Standard form CSP contract

The Commission issued two Secretarial Letters. The first letter, dated March 18, 2009 (Docket No. A-2009-2092222), approved the RFP process as filed. The second letter, dated April 27, 2009 (Docket No. A-2009-2092222), acknowledged that the Commission staff reviewed and approved the revised standard form CSP

contract as filed. Commission staff review will be requested for any future CSP contracts that are materially different in form from the standard contract.

*4.3.2. Describe the work and measures being performed by CSPs*

Program Implementation Management Contractor - the Company will contract with one or more Program Manager CSPs to implement the portfolio of programs. The Program Manager(s) will be responsible for the start-up and ongoing management of new programs including staffing, development of website(s), promotional strategies, and processes ensuring quality and other controls supporting successful program implementation. The start-up phase should include communication and coordination with Company start-up processes, to present straightforward processes for customers or allies that wish to participate in the programs, maximize process efficiency and controls, as well as leverage Company relationships and communications with customers. The start-up period must be completed within ninety (90) days of the awarding of the contract.

The start-up phase will be performed in an organized and efficient manner. The contractor will be contractually obligated to strive to maintain and strengthen constructive relationships with the Company program management staff, customers, trade allies, contractors and other energy program partners.

During program set-up and for the duration of the program, the Program Manager(s) will meet with the Company, its consultant, tracking system contractors and the State Evaluator as necessary and appropriate.

Some fast track programs will launch immediately while other programs will launch when ready and agreed upon by the Company and Program Manager(s).

Program Manager(s) will submit a start-up plan with their bid proposal. It is anticipated that the start up plan submitted could be modified at the initial implementation meeting. The plan will include, at a minimum:

- a. Organization chart and description of management roles and responsibilities;
- b. Description of and dates of program launch milestones;
- c. Description of a plan for use of any subcontractors;
- d. Plan to detail specific communications strategy; and
- e. Plan to facilitate or support program tracking systems and reporting.

The Program Managers will support consumer education initiatives as a vital objective for the EE&C Plan. CSPs will provide consumer education and marketing that informs customers about available programs and how participation in such programs may allow them to better manage their energy costs.

The Company will host or contract for website services, linked through the Company's public internet domain, [www.firstenergycorp.com](http://www.firstenergycorp.com). Although FirstEnergy personnel will manage the overall content on the website, the CSPs will be responsible for generally managing their section of the site and updating it as necessary. Customers will be able to obtain information, contact the CSP, download program literature and application forms, or complete on-line forms and applications through the website.

Work to be performed by the Program Managers includes:

- Program Set Up – Immediately following contract award and the kick-off meeting(s) as set forth below, the Company and Program Manager(s) will work together to modify the Start-up Plan submitted with the successful bidders' bid proposals to develop the systems and procedures needed to operate the energy efficiency programs;

- Determining the required information transfers between the Program Manager(s) the Company and the Company's other energy efficiency or tracking system contractors;
- Creating, installing, testing and maintaining necessary data collection systems for program operation and evaluation;
- Establishing contact center processes, including one for the transfer of calls that the Company may receive through its call center, as well as a toll-free number that is properly staffed;
- Managing, advertising and marketing activities by the Company and CSP to promote its programs including:
  - Telemarketing, sales training, participation in and sponsorship of program/industry seminars and trade shows;
  - Special promotional "events" to encourage sales of high efficiency products, and/or retirement of less efficient equipment (e.g. Torchiere lamps) through "buy down" first cost and/or promotion of eligible equipment to customers;
  - Bill inserts, local newspaper ads, radio spots, direct mail, point-of-sale displays at retailers, FirstEnergy's website and on-line store. Retailers and manufacturers will also be involved in cross-promoting product offers in conjunction with national campaigns like Earth Day and ENERGY STAR® Change a Light, Change the World programs;
- Developing rebate application forms, and detailed processes for managing rebate/incentive applications, rebate/incentive payment processes, reporting procedures, data collection and data recording processes, internal billing and related documentation to be sent to the Company for processing;
- Performing energy savings calculations, collecting data and maintaining auditable records required to support program reporting, measurement and verification consistent with the TRM;
- Developing electronic payment between the Company and the Program Manager(s);
- Planning for development and launching promotional strategies, including creation of a website;
- Creating a check processing system (if deemed appropriate);
- Ensuring all other preparations needed before the programs are launched;
- Performing quality assurance and verification inspections;
- Conducting outreach, training, certification management, and coordination with trade allies;
- Performing outreach, communications, training and development of participation agreements with retailers and manufacturers for the Energy Efficient Products program, as appropriate;
- If applicable, performing energy audits; and
- Managing fulfillment of all requests for services or energy efficient products offered through the programs.

*4.3.3. Describe any pending RFPs to be issued for additional CSPs.*

It is anticipated that joint RFPs will be issued for CSPs to support implementation of programs, including but not limited to the following:

1. Residential sector program manager(s);
2. Residential on-line audit program;
3. Commercial and Industrial sector program manager(s) (includes governmental sector as well);
4. Appliance recycling;
5. Tracking/Reporting system; and,
6. EM&V services.

Actual contracts will be based on accepted proposals in response to Company solicitations and, when necessary, the Company will seek appropriate Commission approval.

## **5. Reporting and Tracking Systems**

### ***5.1. Reporting:***

As more fully discussed in Section 5.2, the Company is in the process of assessing potential reporting and tracking systems. Regardless of the system ultimately selected, it will have the ability to monitor the progress of the various programs being offered. Reports will be provided as required by the Commission.

#### *5.1.1. List reports that would be provided to the Commission, the schedule for their delivery, and the intended contents.*

Standard reports will be provided as necessary and required. The format and content will be consistent with that defined by the Commission. The Company currently anticipates that such reports will include at a minimum:

- The number of customer applications;
- Annualized rebates by program, utility, and operating company;
- Installed measures summary;
- Annualized impacts summary by measure type and by program;
- Program participation overview;
- Impacts versus goals; and
- Rebates versus budget.

Additionally the system will have the ability to perform ad-hoc reporting through a user friendly report writing tool, and more complex queries to be performed by system administrators. Dashboards, and other reporting tools will be used to monitor program performance on an on-going basis.

#### *5.1.2. Describe data that would be available (including format and time frame of availability) for Commission review and audit.*

As indicated in Section 5.1.1, the system will have the ability to provide reports as required by the Commission. A corporate Tracking and Reporting System will be implemented that will be able to provide the necessary reports and tracking tools across the FirstEnergy system.

As part of the EE&C plan, a model has been created that projects the amount of energy savings and demand reduction to be derived from the implementation of each measure. The model will be used to compare actual to projected energy savings and demand reduction goals. The Company is currently evaluating several “off-the-shelf” DSM tracking computer packages to track the EE&C savings arising from the various programs.

### ***5.2. Project Management Tracking Systems:***

*5.2.1. Provide brief overview of the data tracking system for managing and reporting measure, project, program and portfolio activities, status and performance as well as EDC and CSP performance and expenditures.*

The Company intends to utilize a comprehensive system to report and track activities and results associated with EE&C programs across the FirstEnergy system. The reporting and tracking system will have the ability to track a customer through program-specific milestones. The system will provide standard status reports for individual participants and overall programs. The system will be configured to provide any required reports for varying jurisdictions and service territories. On May 15, 2009, the Company issued a Request for Information ("RFI") to ten potential bidders, receiving a response from seven. The purpose of the RFI was to gather information on available "packaged" applications already in the marketplace and to validate the list of potential suppliers. Prior to issuing the RFI, the selection team held meetings to develop the functional requirements for such a tracking and reporting system. Upon completion of the evaluation of the RFI responses and the additional information gathered from the industry, this team developed a Request for Proposal ("RFP") with more defined requirements, and solicited proposals from the list of CSPs registered in the Commonwealth.

The Company received and evaluated 9 proposals and selected 5 CSPs for interviews and demonstrations. Based upon these interviews, the Company is evaluating the top potential CSPs to implement its tracking and reporting system. The Company anticipates making a final determination between the top candidates in February, 2010. Following execution of the contract, the Company will submit the contract to Commission Staff for review—consistent with the Commission's Implementation Order (Docket No. M-2008-2069887, entered January 16, 2009).<sup>30</sup>

*5.2.2. Describe the software format, data exchange format, and database structure you will use for tracking participant and savings data. Provide examples of data fields captured.*

The reporting and tracking system will be web-based, allowing for access from any internet connection. It will interface with existing systems wherever necessary to gather data, to insure data integrity and minimize duplicate data entry. The system will enable vendors to upload key metrics on a weekly or monthly basis. Not only will this reduce paperwork, but it should help maintain quality control over data entry and allow for quick status checks on, among other things, goal attainment and budget to actual costs. The selection team will recommend the structure of such a system. At present, the Company is currently considering data fields such as:

- Customer name;
- Customer contact info (address, e-mail, phone);
- Customer type;
- Customer ID number;
- Account number;
- Premise number;
- Project/Program name;
- Contractor/Retailer;
- Measure;
- Costs;

---

<sup>30</sup> This update is provided in accordance with the Commission's Updated Order directing the Company to provide updated information regarding its reporting and tracking system.

- Service address;
- Job status;
- Completion date;
- NAICS;
- Heating system type;
- Square footage;
- kWh savings;
- Incentive;
- Enrollment method;
- Transaction results;
- Channel used;
- Measures recommended;
- Measures implemented;
- Type of appliance or equipment being replaced for fuel switching (in accordance with Commission Orders entered October 28, 2009 and January 28, 2010);
- Availability of natural gas at the customer's location or immediate area (in accordance with Commission Orders entered October 28, 2009 and January 28, 2010); and,
- Whether electric appliances or equipment were installed in areas where natural gas is available (in accordance with Commission Orders entered October 28, 2009 and January 28, 2010).

*5.2.3. Describe access and mechanism for access for Commission and statewide EE&C Plan Evaluator.*

The reporting and tracking system will be web based, thus requiring an internet connection for access. The system will be designed to allow for varying levels of security-controlled access by Company staff, program contractors, trade allies, customers, and system administrators. Access for others, such as Commission staff and the state-wide EE&C Plan Evaluator, will be provided as required. Access to an internet connection would be necessary because the application would be web-based.

## **6. Quality Assurance and Evaluation, Measurement and Verification**

### **6.1 Quality Assurance/Quality Control:**

The Company is committed to designing and implementing robust processes, organizations and systems to achieve the energy savings and demand reduction goals established by Act 129. The Company plans to use a two-fold approach to ensure the quality of its EE&C program during the design and implementation phases:

- Developing processes to clearly detail the steps to document and verify installation of measures to meet EE&C goals while complying with applicable tracking and reporting requirements; and
- Devising and implementing control points at various stages of these processes to establish and maintain quality.

The Quality Assurance/Quality Control program will be implemented by requiring selected CSPs to document processes and retain appropriate records. The Company will retain EM&V contractor(s), as well as internal auditors, who will audit and verify those records. This will be in addition to any requirements of the PUC's statewide evaluation contractor acting in its oversight role.

#### *6.1.1 Describe overall approach to quality assurance and quality control.*

The following are examples of specific steps that the Company is taking toward quality assurance and quality control during the design phase of its EE&C program:

- Administering customer surveys and using the results to design or select EE&C measures;
- Validating EE&C program assumptions with stakeholders;
- Using adequately qualified and experienced personnel, including contactors, to assist with the design and implementation of EE&C programs;
- Selecting EE&C measures compliant with the requirements of the Technical Reference Manual (TRM) of May 2009;
- Using proven approaches to reach both the energy savings and demand reduction targets set for each of the FirstEnergy Companies;
- Communicating frequently and effectively with stakeholders on EE&C program design and objectives; and
- Verifying periodically and systematically that established EE&C program design procedures and approaches are being followed.

During the implementation phase of the EE&C Plan, the Company intends to acquire selected program managers (or CSPs) to present processes that accurately document and verify data used to support energy savings and peak load reductions – all of which will be subject to audit and review by the PUC's evaluation contractor. The Company will perform, directly or through contract auditors, its own quality assurance processes, including audits of CSP systems, in order to ensure the accuracy and reliability of the reported data and savings. Such audits will have the following key characteristics:

- Both deemed and custom measures will be included in the audit universe;
- The sample size may cover a subset or the entire population for a particular measure;
- The frequency and sample size of these audits will vary based on the significance of any findings; and
- The control points will target specific risks associated with the design or implementation of EE&C measures.

***6.1.2 Describe procedures for measure and project installation verification, quality assurance and control, and savings documentation.***

The procedures intended to be use for measure and project installation, verification, quality assurance and control, and savings documentation are described below.

During the pre-installation phase, verification will occur to ensure that equipment such as lighting or motors that are to be replaced with more energy efficient ones are operational on the customer's premises. Such equipment will be checked to ensure that it meets any TRM and other applicable requirements. Samples of installed pieces of equipment will be audited as part of the quality assurance and control process.

For custom and large installations where considerable investment or large savings are anticipated, the Company will work with the PUC's evaluation contractor and PUC staff, as appropriate, to review the algorithms proposed by customers or trade allies to calculate energy savings and demand reductions from implementing custom EE&C measures. These reviews will support the accuracy and acceptance of the calculations that will be required to comply with the May 2009 TRM, as amended from time to time. In certain instances, more detailed procedures on designing and implementing specific measures may also be necessary.

While measures addressed in the Plan are found to be cost effective, determining the cost-effectiveness of custom applications is also a part of the pre-installation process for custom applications. For example, the Company will verify whether the cost of a saved kWh is cost effective. A similar check will be performed with respect to any demand reduction to be derived from a particular measure.

With respect to savings documentation, periodic surveys will be conducted to verify the installation and continued use of measures as required. Installation of additional measures not rebated will be identified, as well as behavioral changes that may affect outcomes. For large and/or custom installations, site verification visits will be conducted for a sample of participants to verify the presence and proper installation of equipment.

As part of the EE&C Plan, the Company will track, report and project the amount of energy savings and demand reduction to be derived from the implementation of measures. The model will be used to compare actual energy savings and demand reductions calculated in accordance with the TRM with program goals. The Company has already performed an RFI, and is reviewing several off-the-shelf DSM tracking computer packages which will be secured using the approved RFP process.

***6.1.3 Describe process for collecting and addressing participating customer, contractor and trade ally feedback (e.g., suggestions and complaints).***

During the design phase of the programs, the Company sought and obtained feedback on proposed EE&C programs from customers, contractors, trade allies and other stakeholders through a variety of methods. Representatives from all customer segments were surveyed or interviewed to obtain their input into EE&C program design. CSPs were surveyed with respect to their capabilities to help the Company achieve the mandated EE&C targets. Stakeholder meetings on different aspects of the EE&C program design were also held. To the extent possible, responses from these stakeholders have been factored in to the various program designs.

During the implementation phase of the EE&C plan, the Company hopes to gain additional direct input from various sources, including CSPs that bid to perform program management and implementation services, stakeholders and other EDCs for relevant developments, the PUC and the PUC's evaluation contractor for

insights into the evolution of the process. Customers will be surveyed to measure satisfaction with the programs and related services, and the efficiency of the EE&C measures being implemented. Further, the Company is currently investigating the creation of a hot line to register and resolve program and measurement complaints and suggestions from customers, and intends to continue to participate in EE&C working groups as well as internal monitoring efforts at the local, state and federal level.

***6.2 Describe any planned market and process evaluations and how results will be used to improve programs.***

The Company intends to retain an EM&V contractor to conduct process evaluations on each program within 6 months to one year of launch in order to identify issues that may require mid-course correction, gauge progress toward goals and measure customer, trade ally and vendor satisfaction with various program features. As part of responsible program management, the Company will require its CSPs or vendors to incorporate periodic customer satisfaction surveys (post card type or calls) to a random sample of participants on a quarterly or monthly basis. The testing of market pricing of products and other factors that might affect program implementation through market research will occur, particularly to test those measures that represent significant parts of the Plan. A periodic review of new technologies or innovations being adopted around the country or the world will also be conducted. This will include systematic research on EE&C development as well as benchmarking currently utilized EE&C processes against those of other utilities.

The results of these monitoring activities will be factored into existing EE&C programs in a variety of ways including the following:

- Mid-course corrections to address issues identified in the process evaluations;
- Adoption of lessons learned or leading practices from our benchmarking efforts;
- Identifying and mitigating risks associated with new EE&C measures; and
- Taking corrective actions to ensure that EE&C objectives are being reached.

***6.3 Describe strategy for coordinating with the statewide EE&C Plan Evaluator (nature and type of data will be provided in a separate Commission Order).***

The Company will comply with the requirements of the EE&C Plan evaluator. Contracts with delivery vendors will require them to provide data upon request to support any evaluations, as well as develop new “custom measure” protocols for appropriate approvals and possible additions to the TRM. Specifically, the Company will link its EE&C savings aggregate to statewide projects by:

- Determining requirements for coordinating EE&C programs energy/demand savings and cost/benefit data with statewide data base;
- Obtaining data transmission protocols and access requirements for exchanging EE&C program data with the state;
- Testing to verify that data integrity is maintained through linkage with statewide EE&C data base(s); and
- Validating and finalizing linkage protocols, procedures and processes.

At the completion of the above tasks, the Company expects to have developed or selected processes, technology and personnel for linking its EE&C program data with the statewide data base(s). Cooperating with and supporting the EE&C Statewide Evaluator, up to and including annual audits of the Company’s reports, will ensure compliance with Commission directives. In addition, the Company will continue to work with the EE&C Statewide Evaluator to review the assumptions regarding penetration rates, rebate levels, and free ridership associated with compact fluorescent lamp (“CFL”) programs. The Company will provide an

updated TRC analysis as part of the annual reporting process. These annual TRC analyses will facilitate appropriate Plan modifications in a timely manner.

**7. Cost-Recovery Mechanism**

**7.1** *Provide the amount of total annual revenues as of December 31, 2006, and provide a calculation of the total allowable EE&C costs based on 2% of that annual revenue amount.*

**Penelec Table 6 – Allowable EE&C Revenue Calculation**

<b>December 31, 2006 Revenue divided by Twelve Months</b>	
<b>Monthly 2006 Revenue</b>	\$1,914,562
Dollars Available Total	Penelec
Total All Customers (48 mo budget)	\$91,898,968

**7.2** *Description of plan in accordance with 66 Pa. C.S. §§ 1307 and 2806.1 to fund the energy efficiency and conservation measures, to include administrative costs.*

See Section 4.2.3 for the budgeting process use to identify the funding for the energy efficiency and conservation measures. See Section 7.4 for a complete description of the cost recovery plan. Included within the cost recovery mechanism is an allocated portion of administrative start-up costs currently incurred by the Company in connection with the development of the Company's EE&C Programs in response to the Commission's orders and guidance at Docket No. M-2008-2069887. These costs to design, create, and obtain Commission approval for the Company's EE&C Programs include consultant costs, outside legal fees, and other direct and indirect costs associated with the development and implementation of the Company's EE&C Programs in compliance with Commission directives.

***7.3 Provide data tables (see PUC Tables 6A, 6B and 6C).***

Proposed modifications to PUC Table 6A are shown highlighted and are located in Appendix G, summarizing the results of the direct program budget process by class, referred to in Section 4.2.3. PUC Table 6A presents utility costs that were individually calculated by program based on the level of effort required due to program participation.

Proposed modifications PUC Table 6B are shown highlighted and are located in Appendix G summarizing the indirect program start-up costs, outside legal fees and consultant fees by class. Proposed modifications to PUC Table 6C presenting the sum of both PUC Tables 6A and 6B are shown highlighted and are located in Appendix G. PUC Table 6B provides the details of general non-program specific costs and allocates them into the three rate categories: Residential, Small Commercial and Industrial, and Large Commercial and Industrial.

The allocation of costs for consultant costs, employee expenses, M&V tracking system and outside legal fees are allocated using the results of the detailed budgeting process shown in Appendix D and presented in summary form PUC Table 6A. Audit Tool costs are only assigned to Residential customers since the system will be designed primarily for use by the Residential class.

**7.4 Provide and describe tariffs and a Section 1307 cost recovery mechanism. Provide all calculations and supporting cost documentation.**

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

The Company is submitting the following as Appendix H:

1. An Energy Efficiency and Conservation Charge Rider ("EEC-C Rider"). Pages 3 and 4 set forth the formula and description for calculating the EEC-C rates.
2. The calculation of EEC-C rates (shown on page 6 of Appendix H) based on the Company's First Amended Plan.

The filing includes the Company's tariff compliance filing with final EEC-C rates. In response to the Commission's Order, the Company has added two additional cost recovery groups for Non-Profit and Street Lighting rate schedules. Penelec's Non-Profit customer class includes Rate GS – Volunteer Fire Company, and Non-Profit Ambulance Service, Rescue Squad and Senior Center Service Rate and Rate H. Penelec's Street Lighting rate class includes High Pressure Sodium Vapor Street Lighting Service and Municipal Street Lighting Service.

The EEC-C rates are expressed as a price per kilowatt-hour ("kWh"), except for the industrial customer class that is expressed on a kilowatt ("kW") basis using customer PLC, and will be billed on that basis over the duration of the EE&C Plan. Appendix H shows rates to be effective June 1, 2011, after considering updated sales forecasts and modifications to the program costs. The EEC-C rates will be calculated and stated separately for the residential, commercial, non-profit, street lighting, and industrial customer classes. The rate schedules that comprise the residential, commercial, non-profit, street lighting, and industrial customer classes are identified on pages 1 and 2 of the rider.

The EEC-C rates to be billed to the residential, commercial, non-profit, street lighting, and industrial classes will consist of two principal components. The first is the EECC or "current cost" component, while the second is the reconciliation component, or "E" factor.

The EECC component represents the recovery of costs to be incurred during the 39-month period ending May 31, 2013 or "Computational Period" that the EEC-C rates will be in effect for each customer class. As shown on pages 3 and 4 of the rider, the EECC component is customer class specific. The costs to be included in development of each customer class' EEC-C rate are identified in the rider.  $EEC_{Exp1}$  represents customer class specific costs incurred through the customer class specific EEC Programs as approved by the Commission. These costs will also include an allocated portion of any indirect costs incurred through all of the Company's EE&C Programs.  $EEC_{Exp2}$  represents an allocated portion of administrative start-up costs currently incurred by the Company in connection with the development of each Company's EEC Programs in response to the Commission's orders and guidance at Docket No. M-2008-2069887. The start up costs were incurred to design the programs and create the plan and to assist in the preparation of this filing and include

consulting costs, outside legal fees, and other direct and indirect costs associated with the development and initial steps to implement the Plan as approved. EEC<sub>Exp2</sub> costs will be amortized over the 3-month period starting March 1, 2010 and ending May 31, 2010.

All Plan costs (net-of-tax) and revenues included in the Company's EE&C revenues will be excluded from distribution base rate treatment and subject to Commission review and audit. To the extent that the Company is reimbursed through the EEC-C Rider for Company-owned property, it will be treated as a contribution-in-aid-of-construction resulting in a net-of-tax reduction in amounts capitalized for those assets. As a result, these costs will be excluded from rate base in determining future distribution base rate case revenue requirements.

***7.5 Describe how the cost recovery mechanism will ensure that measures approved are financed by the same customer class that will receive the direct energy and conservation benefits***

Consistent with the Implementation Order and Act 129, the Company's proposed EEC-C Riders will permit it to bill annual, levelized EEC-C rates on a per kWh or kW, as applicable to all residential, commercial, non-profit, street lighting, and industrial customers. The rates will be calculated specifically for each customer class to recover the Company's EE&C Plan costs approved by the Commission in this proceeding and in compliance with 66 C.S. § 1307. Coupled with the reconciliation provisions by customer class included in the Company's proposed EEC-C Rider, the EEC-C rates will provide full, equitable and timely cost recovery of actual EE&C Program costs incurred by each Company for each customer class' available EE&C Programs as approved by the Commission in this proceeding.

## **8. Cost Effectiveness**

### ***8.1. Explain and demonstrate how the proposed plan will be cost effective as defined by the Total Resource Cost Test (TRC) specified by the Commission.***

The EE&C plan is based upon the requirements and guidance of the Total Resource Cost Test Manual (May 28, 2009), with some minor changes that were requested during the comment period. Notable changes were the use of a marginal transmission and distribution costs instead of the full transmission and distribution rates. As stated in the FirstEnergy Companies' Comments to the draft TRC test order, dated June 5, 2009, the Companies acknowledged that they would not have the ability to address changes at this late date but would review the final TRC Order and, if necessary, make any necessary changes in a filing by August 1, 2009.

The TRC method utilized by the Company takes into account the combined effects of the EE&C Plan on both participating and non-participating customers. The sum of costs incurred by both the Company and any participating customers was used to calculate the costs. The benefits calculated in the TRC test include the avoided supply costs, including generation, transmission and distribution capacity costs valued at marginal cost, and the avoided energy supply costs calculated using the Commission requested third stage approach.

On the benefits side the approach requires during the first five-year period that the avoided energy costs be calculated using the wholesale electric generation prices as reflected in the NYMEX PJM futures price, to reflect both on- and off-peak prices on a 50% on- and 50% off-peak basis. FirstEnergy assumes the 5 years as 2009 through 2013 as PJM West Hub forward contracts are not yet traded beyond 2013, and the 2009 data reflects actual settlement prices through May 22 and forward contracts thereafter. FirstEnergy chose a forward market data point of May 22, 2009, and applied an exponentially weighted moving average (EMA) method to the forward data to normalize for daily volatility. The EMA provides a balance between transmitting changes in market expectations as reflected by futures prices while dampening any possible influence of illiquidity (10 days of trades provides more available observations) and large swings due to few traders moving the market.

The Commission approach called for in the second five-year period has the avoided energy costs calculated using the NYMEX natural gas futures price. The natural gas futures price was then converted into an estimated wholesale energy price through the use of a standard spark spread calculation. The PJM West Hub price was derived based on the forward market price at Henry Hub and the relationship between PJM West Hub Power and Henry Hub Natural gas forwards in 2013. Specifically, heat rates for the Spark Spread calculation are based on the annual on peak and off peak forward market implied heat rate for 2013 (Off Peak On Peak) similar to the first 5 year period, this calculation used the natural gas forward market observation date of May 22, 2009 utilizing an averaging method to normalize for daily volatility.

The Commission approach in the third five-year period requires that the avoided energy costs use the EIA Annual Energy Outlook. The prices during this timeframe are based on the US Department of Energy's (DOE) Energy Information Administration's (EIA) Annual Energy Outlook (AEO) published in May 2009. The EIA AEO does not directly include price for PJM West Hub, rather, the AEO publishes national average retail "end user" prices. To derive wholesale prices for PJM West Hub, PJM on peak, off peak, and around the clock actual annual average PJM West Hub prices from 2006, 2007, and 2008 were compared to the EIA AEO national retail price averages in those years and a multiplier was calculated to convert EIA AEO Retail prices to PJM West Hub wholesale prices for these 5 forecast years.

For the avoided ancillary services cost, yield curves were created based on monthly average on peak and off peak ancillary service price / PJM West Hub day ahead price relationships for 2006 - 2008. These historic relationships were applied to the provided power prices to create the associated ancillary service prices.

For the avoided capacity cost the Company used a price forecast based on the FirstEnergy latest official and confidential long term price capacity price forecast. It reflects Regional Pricing Model Auction (RPM) assumptions from the second quarter of 2008.

The retail transmission and distribution rates for Penelec are based on the most recent distribution rate case approved by the Commission on January 11, 2007. The tariff rate schedules were rolled up into the rates classes in order to align with the Commission's Act 129 Implementation Orders. The distribution rates were escalated as defined by the Commission in the final TRC test Order entered on June 23, 2009. The distribution rates were escalated as defined by the Commission in the final TRC test Order entered on June 23, 2009. The escalator is the Producer Price Index Industry data as of July 14, 2009.

The inclusion of full retail distribution rates as avoided costs has changed the total plan TRC test results from 2.08 to 2.46 but this change has no effect on the budgetary program costs nor the stated kWh or kW savings presented in the July 1 filing.

The benefits were then calculated using the measure kWh and kW savings multiplied by the assumed number of measure units<sup>31</sup> and the avoided capacity and energy costs. This value per year was then discounted by taking a Net Present Value (NPV) over the measure life-time using the post-tax weighted average cost of capital (WACC).

On the costs side the TRC test includes the costs of the various programs incurred by the Company and the participating customers, including, equipment, installation, operation, and maintenance costs, cost of removal (less salvage value) for turn-in programs, and administrative costs. The costs are in 2009 dollars and are "as spent" due to the fact that each year's program is evaluated separately by measure and the budgeted number of measure units. Program costs are budgeted by year in 2009 dollars, but operation and maintenance costs are based on measure life and are discounted using NPV back to the program year installed.

As a result, the Company's EE&C Plan is cost-effective based on the TRC test as described above. The results of the TRC test are presented in PUC Table 1 and are expressed as both a net present value and a benefit-cost ratio.

## ***8.2. Provide data tables (see Tables 7A thru 7E).***

Proposed modifications to PUC Tables 7A thru 7E, presenting the summary TRC results by program, by year, in the five customer class segments outlined in the Commission Act 129 appendices, are shown highlighted and are located in Appendix G.

---

<sup>31</sup> Measure Unit refers to participants and/or number of items. The measure units, for example, can be a single customer participant (i.e. a customer get a new CAC system) or a count of lights bulbs as in the CFL rebate program.

Table removed and relocated

Residential Low-Income		TRC Benefits By Program Per Year (\$000)										
		Program Year	TRC	Program Costs (\$000)	Program Benefits (\$000)	Capacity	Capacity	Energy	Energy	Load Reductions in kW		MWh Saved
Annual Benefits	Annual Gen/T&D					Annual Benefits	Annual On/Off Peak	Annual	Lifetime	Annual	Lifetime	
<b>Warm Plus</b>	2010	0.80	569,614	454,889	39,022	See footnote 1	415,867	See footnote 2 on PUC	60	611	543	50,423
	2011	1.02	1,387,430	1,410,760	116,175	on PUC	1,294,585	Table 7A	238	611	2,263	50,423
	2012	1.04	1,447,965	1,506,285	129,126	Table 7A	1,377,159	Table 7A	422	611	4,028	50,423
	2013	1.06	1,505,977	1,599,415	138,672	Table 7A	1,460,743	Table 7A	611	611	5,835	50,423
<b>Residential Audits</b>	2010	0.59	416,827	246,042	15,226	See footnote 1	230,816	See footnote 2 on PUC	33	521	355	38,735
	2011	6.11	198,898	1,214,457	80,616	on PUC	1,133,841	Table 7A	196	521	2,027	38,735
	2012	6.35	198,898	1,263,658	88,065	Table 7A	1,175,592	Table 7A	358	521	3,699	38,735
	2013	6.57	198,898	1,307,519	92,375	Table 7A	1,215,143	Table 7A	521	521	5,370	38,735
<b>Appliance Turn-In</b>	2010	7.00	143,643	1,094,514	101,980	See footnote 1	992,535	See footnote 2 on PUC	40	645	293	33,385
	2011	7.62	143,643	1,141,601	111,255	on PUC	1,030,346	Table 7A	242	645	1,758	33,385
	2012	7.95	143,643	1,180,844	116,639	Table 7A	1,064,205	Table 7A	443	645	3,224	33,385
	2013	8.22	143,643	1,180,844	116,639	Table 7A	1,064,205	Table 7A	645	645	4,689	33,385
<b>Energy Efficient Products</b>	2010	7.09	35,633	252,753	8,170	See footnote 1	244,582	See footnote 2 on PUC	20	317	423	42,176
	2011	7.96	166,487	1,325,065	44,663	on PUC	1,280,402	Table 7A	119	317	2,539	42,176
	2012	8.27	166,487	1,377,258	49,109	Table 7A	1,328,149	Table 7A	218	317	4,654	42,176
	2013	8.59	166,487	1,429,744	51,643	Table 7A	1,378,101	Table 7A	317	317	6,770	42,176
<b>Total</b>		<b>2.35</b>	<b>7,227,648</b>	<b>17,013,804</b>	<b>1,201,555</b>		<b>15,812,249</b>		<b>2,093</b>	<b>2,093</b>	<b>22,664</b>	<b>164,719</b>

Table removed and relocated

Commercial/Industrial Small		TRC Benefits By Program Per Year (\$000)											
Program	Program Year	TRC	Program Costs (\$000)	Program Benefits (\$000)	Capacity	Capacity	Energy	Energy	Load Reductions in kW		MWh Saved		
					Annual	Annual	Annual	Annual	Annual	Lifetime	Annual	Lifetime	
					Benefits	Gen/T&D	Benefits	On/Off Peak					
Energy Audit	2010	4.19	328,223	1,375,343	275,525	See footnote 1 on PUC	1,099,818	See footnote 2 on PUC	667	10,678	2,363	235,522	
	2011	4.37	1,670,771	7,305,866	1,506,140	Table 7A	5,799,726	Table 7A	4,004	10,678	14,177	235,522	
	2012	4.61	1,670,771	7,696,948	1,656,092	Table 7A	6,040,856	Table 7A	7,341	10,678	25,991	235,522	
	2013	4.81	1,670,771	8,031,116	1,711,116	Table 7A	6,291,509	Table 7A	10,678	10,678	37,804	235,522	
Equipment Rebate	2010	2.02	2,718,864	5,501,037	1,348,116		4,152,921		2,126	30,779	5,941	961,866	
	2011	2.11	13,013,727	27,465,866	6,546,440		20,919,425		11,677	30,779	34,321	961,866	
	2012	2.20	13,013,727	28,581,252	7,016,081		21,565,172		21,228	30,779	62,702	961,866	
	2013	2.27	13,013,727	29,476,653	7,298,926		22,177,727		30,779	30,779	91,064	961,866	
<b>Total</b>		<b>2.45</b>	<b>47,100,582</b>	<b>115,436,021</b>	<b>27,388,854</b>		<b>88,047,166</b>		<b>41,457</b>	<b>41,457</b>	<b>128,869</b>	<b>1,197,388</b>	

Commercial/Industrial Large		TRC Benefits By Program Per Year (\$000)										
Program	Program Year	TRC	Program Costs (\$000)	Program Benefits (\$000)	Capacity	Capacity	Energy	Energy	Load Reductions in kW		MWh Saved	
					Annual Benefits	Annual Gen/T&D	Annual Benefits	Annual On/Off Peak	Annual	Lifetime	Annual	Lifetime
Equipment Rebate	2010	1.13	1,324,189	1,500,613	423,515	See footnote 1 on PUC Table 7A	1,077,098	See footnote 2 on PUC Table 7A	587	9,384	1,736	324,653
	2011	1.19	6,634,314	7,906,335	3,344,716		1,661,619		3,519	9,384	10,485	324,653
	2012	1.24	6,634,314	8,236,626	2,591,528		5,845,698		6,452	9,384	19,234	324,653
	2013	1.28	6,634,314	8,498,352	2,480,053		6,018,299		9,384	9,384	27,983	324,653
Industrial Motors and VSD	2010	1.82	267,470	487,445	15,790	471,655	21	329	688	146,970		
	2011	2.36	1,074,380	2,536,141	83,514	2,452,627	123	329	4,128	146,970		
	2012	2.44	1,074,380	2,619,779	88,717	2,531,061	226	329	7,569	146,970		
	2013	2.51	1,074,380	2,697,519	91,860	2,605,659	329	329	11,009	146,970		
<b>Total</b>		<b>1.40</b>	<b>24,717,741</b>	<b>34,482,811</b>	<b>7,819,694</b>		<b>26,663,117</b>		<b>9,712</b>	<b>9,712</b>	<b>38,992</b>	<b>471,623</b>

Governmental/Non-Profit		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	Annual Gen/T&D	Annual Benefits	Annual On/Off Peak	Annual	Lifetime	Annual	Lifetime
					<b>Streetlighting</b>	2010	1.16	179,042	208,108	0		208,108
	2011	1.26	861,178	1,087,425	0		1,087,425		0	0	1,976	46,900
	2012	1.30	861,178	1,121,418	0		1,121,418		0	0	3,623	46,900
	2013	1.34	861,178	1,153,736	0		1,153,736		0	0	5,270	46,900
<b>Non-Profit</b>	2010	1.96	74,241	145,873	27,563		118,310		45	674	185	26,061
	2011	2.14	368,967	789,350	150,247		639,103		274	674	1,141	26,061
	2012	2.23	367,233	819,347	160,422		658,925		502	674	2,095	26,061
	2013	2.13	251,528	515,238	121,500		493,738		674	674	2,664	26,061
<b>Remaining Government/Non-Profit</b>	2010	1.96	1,329,113	2,611,521	493,450	See footnote 1 on PUC Table 7A	2,118,071	See footnote 2 on PUC Table 7A	813	12,072	3,317	466,571
	2011	2.14	6,605,510	14,131,513	2,689,826		11,441,687		4,908	12,072	20,424	466,571
	2012	2.23	6,574,463	14,668,543	2,871,985		11,796,559		8,983	12,072	37,512	466,571
	2013	2.13	4,504,284	9,583,108	2,264,820		7,318,288		12,072	12,072	47,689	466,571
<b>Governmental/Non-Profit Total</b>	2010	1.87	1,582,395	2,965,502	521,012		2,444,490		859	12,747	3,832	539,532
	2011	2.04	7,835,654	16,008,288	2,840,072		13,168,216		5,182	12,747	23,541	539,532
	2012	2.13	7,802,874	16,609,308	3,032,406		13,576,902		9,485	12,747	43,230	539,532
	2013	2.01	5,617,059	11,272,132	2,391,327		8,880,805		12,746	12,747	55,623	539,532
<b>Total</b>		<b>2.05</b>	<b>22,837,983</b>	<b>46,855,230</b>	<b>8,784,818</b>		<b>38,070,412</b>		<b>12,746</b>	<b>12,747</b>	<b>55,623</b>	<b>539,532</b>

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

### **9.1. Plan Compliance Issues.<sup>32</sup>**

*9.1.1. Describe how the plan provides a variety of energy efficiency, conservation, and load management measures and will provide the measures equitably to all classes of customers in accordance with the January 15 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 (a variety of programs) and help overcome first cost barriers through incentives to customers and trade allies. Penelec Tables 4 and 5 in Section 1 present a summary description of the programs by sector and the incentives offered under those with rebates. Detailed descriptions of each program are provided in Section 2.

*9.1.2. Provide 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) & 2806.1(d).*

The Penelec EE&C Plan has been developed to incorporate a comprehensive set of programs that will enable Penelec to achieve the goals established under Act 129 for energy savings in 2011 and for energy and peak demand reductions in 2013, all achieved within the spending caps prescribed by the PUC Table 3

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

Less than 2% of program funds are devoted to experimental equipment or devices. This Plan focuses on encouraging the accelerated adoption of commercially available technologies for achieving the energy efficiency and demand response goals.

*9.1.4. Provide statement delineating the manner in which the EE&C plan will achieve the Government/Non-Profit requirements under 66 Pa. C.S. §§ 2806.1(b)(1)(i)(B).*

The plan will achieve Government/Non-Profit requirements through three groups of program services – federal government facilities located within the service territory, local government facilities, non-profits and schools. While all non-residential buildings are eligible for the prescriptive and custom energy efficiency 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. Penelec's programs will leverage existing company Area Manager relationships and experienced vendors who specialize in working with governmental accounts to get projects completed. (Section 1.1) Government programs are described in Section 3.5.

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

All programs are available to all Penelec Delivery Service Customers (with the exception of Borderline customers), and will be offered on a non-discriminating basis. Likewise, the Energy Efficiency Rider will collect the costs from all Delivery Service Customers; thereby assuring the plan is competitively neutral. The

---

<sup>32</sup> These sub-sections may reference other chapters of the plan as they may restate what was included elsewhere in the plan, and are collected here only for convenience of review.

Company notes that it cannot prohibit customers taking generation service from alternative electric generation suppliers from participating in certain programs.

**9.2. Other Key Issues:**

*9.2.1. Describe how this EE&C plan will lead to long-term, sustainable energy efficiency savings in the EDC's service territory and in Pennsylvania.*

The aim of this EE&C plan is to elucidate the connections between end-use energy technologies, energy demand, and, to better guide energy decisions. The amount of energy used in the future is a central determinant of environmental impacts both within the Companies' service territory and beyond. Energy use will depend on the demand for energy services and the technologies used to supply those services.

The Companies' plan is intended to make people become more conscious of their energy usage and establish lifelong energy saving habits. In addition, all measures installed and appliances retired and/or replaced, resulting from the execution of the Companies' plan including energy audits and technical assessments, have lengthy expected product lifetimes. They will save energy for years to come, easily bridging customers to even better technologies as they become available. So, the benefits of this plan will undoubtedly extend far beyond the length of specific programs.

*9.2.2. Describe how this EE&C plan, and the EDC, will avoid possible overlaps between programs offered in different Pennsylvania EDC service territories as well as possibly programs offered in neighboring states.*

Penelec's EE&C plan consistently considered the programs of other Pennsylvania EDCs and those offered in neighboring states to ensure that little overlap will occur during the duration of the EE&C plan. For example, all EDCs that are obligated to meet the requirements of Act 129 held a day long meeting at the offices of the Energy Association of Pennsylvania during May 2009. Moreover, a Penelec representative has been in contact with other EDCs regularly and will be part of the statewide working group.

*9.2.3. Describe how this EE&C plan will leverage and utilize other financial resources, including funds from other public and private sector energy efficiency and solar energy programs.*

Penelec's approach has been to prudently identify those programs that can be fast tracked for early implementation and which will require a more measured build up before targeted benefits are fully realized. Our Fast Track program suite takes maximum advantage of existing delivery channels by adding electric energy savings measures and services to programs that are already being implemented. This approach serves to keep costs down because visits are already being made to households and businesses, and it maximizes benefits because the additional funds and measures mean that opportunities will no longer be lost opportunities that would be more costly to go back and capture later. (Section 1.1)

*9.2.4. Describe how the EDC will address consumer education on energy efficiency, conservation, solar and solar photovoltaic systems, and geothermal heating, and other measures.*

Essential to the success of these programs will be a concurrent marketing and educational campaign. Once Commission approval is obtained, Penelec will immediately launch a major outreach effort to build awareness and interest in the programs, ways to participate, expected benefits and reasons for participating. Included in each program's budget is a share of a first year marketing campaign for that sector; smaller amount of sustaining marketing resources are included for the four year period of the Plan to ensure adequate outreach for achieving program goals. A forthcoming RFP for an Implementation Management Contractor will

include a section on the development and execution of a Marketing Plan that will include a requirement for a team member with educational expertise in social marketing and consumer behavior change. (Section 1.1)

*9.2.5. Indicate that the EDC will provide a list of all eligible federal and state funding programs available to ratepayers for energy efficiency and conservation.*

Penelec will provide a list of all eligible federal and state funding programs to ratepayers as part of its EE&C Plan implementation.

*9.2.6. Describe how the EDC will provide the public with information about the results from the programs.*

Penelec will make available summary reports to the Commission as part of its regular reporting responsibilities. Key findings will be summarized and posted on the Company website and other communications to the public that highlight the achievement of the EE&C programs.

**10. List of Appendices**

- A. Commission approved electricity consumption forecast for the period of June 1, 2009 through May 31, 2010.
- B. Average hourly demand in the EDC's 100 highest peak hours during the period of June 1, 2007 through September 30, 2007.
- C. Approved CSP contract(s) with Black & Veatch (consisting of three parts: 1) PUC Approved Standardized CSP Contract, 2) Purchase Order, and 3) CONFIDENTIAL Proposal.

*Note: The Proposal portion of the contract contains Confidential employee salary and fee information which will cause competitive harm to the CSP if publicly disseminated. The Company respectfully requests full confidential treatment of the Proposal portion of the Approved CSP Contract, in accordance with the approved Commission Template and the Commission's Act 129 Implementation Order. The Proposal portion of the Approved CSP Contract is being marked with a "CONFIDENTIAL" stamp and is being submitted under seal to the Secretary's Office in an envelope separate from the EE&C Plan"*

- D. All measure budgeted costs by year, sum to programs, including administrative, marketing, and incentives costs.
- E. Measure savings for programs included, including key assumptions
- F. Annual measure participation numbers
- G. PUC Appendix A Tables 1-7
- H. Tariff Rider - Energy Efficiency and Conservation Charge Rider

**Appendix A**

Commission approved electricity consumption forecast for the period of  
June 1, 2009 through May 31, 2010.

Metropolitan Edison Company  
 Pennsylvania Electric Company  
 Pennsylvania Power Company

Retail Energy Forecast (in MWh's)  
 For the Period June1, 2009 through May 31, 2010

		<b>Retail Energy (in MWh)</b>		
		<u>Met-Ed</u>	<u>Penelec (A)</u>	<u>Penn Power</u>
June	2009	1,224,184	1,158,582	366,734
July	2009	1,343,026	1,246,775	415,287
August	2009	1,331,732	1,266,171	419,370
September	2009	1,165,164	1,123,299	390,407
October	2009	1,160,500	1,133,396	387,107
Novemeber	2009	1,174,181	1,153,195	381,241
December	2009	1,337,318	1,299,238	427,293
January	2010	1,346,992	1,309,249	437,822
February	2010	1,263,630	1,202,447	399,162
March	2010	1,263,464	1,239,565	418,209
April	2010	1,113,128	1,121,267	373,603
May	2010	<u>1,141,717</u>	<u>1,146,105</u>	<u>356,702</u>
Total		14,865,036	14,399,289	4,772,937

(A) - Excludes Waverly, NY service territory

**Appendix B**

Average hourly demand in the EDC's 100 highest peak hours during the period of  
June 1, 2007 through September 30, 2007.

**Pennsylvania Electric Company**  
**100 Hours of Highest Load (A)**  
**For the Periods 6/1/07 through 6/31/08 and 6/1/07 through 9/30/07**

	Highest 100 Loads in Year 6/1/07 - 5/31/08			Highest 100 Loads in Summer 6/1/07 - 9/30/07		
	EST		MW	EST		MW
	Date	Hour		Date	Hour	
1	06/27/07	13	2,514	06/27/07	13	2,514
2	06/27/07	12	2,509	06/27/07	12	2,509
3	08/08/07	14	2,504	08/08/07	14	2,504
4	08/02/07	14	2,504	08/02/07	14	2,504
5	08/08/07	13	2,491	08/08/07	13	2,491
6	08/02/07	13	2,489	08/02/07	13	2,489
7	08/02/07	15	2,478	08/02/07	15	2,478
8	08/08/07	15	2,477	08/08/07	15	2,477
9	06/27/07	11	2,460	06/27/07	11	2,460
10	06/27/07	14	2,459	06/27/07	14	2,459
11	08/08/07	16	2,453	08/08/07	16	2,453
12	07/10/07	15	2,450	07/10/07	15	2,450
13	07/09/07	13	2,445	07/09/07	13	2,445
14	07/09/07	14	2,440	07/09/07	14	2,440
15	08/02/07	12	2,438	08/02/07	12	2,438
16	07/10/07	13	2,438	07/10/07	13	2,438
17	08/08/07	11	2,436	08/08/07	11	2,436
18	09/07/07	14	2,432	09/07/07	14	2,432
19	09/07/07	13	2,430	09/07/07	13	2,430
20	07/09/07	15	2,430	07/09/07	15	2,430
21	07/10/07	14	2,430	07/10/07	14	2,430
22	08/08/07	12	2,429	08/08/07	12	2,429
23	07/09/07	16	2,428	07/09/07	16	2,428
24	08/02/07	16	2,424	08/02/07	16	2,424
25	07/09/07	12	2,424	07/09/07	12	2,424
26	08/24/07	14	2,422	08/24/07	14	2,422
27	07/10/07	16	2,422	07/10/07	16	2,422
28	07/10/07	12	2,421	07/10/07	12	2,421
29	08/08/07	17	2,421	08/08/07	17	2,421
30	06/27/07	10	2,420	06/27/07	10	2,420
31	02/11/08	21	2,419	07/10/07	11	2,417
32	07/10/07	11	2,417	06/27/07	15	2,416
33	06/27/07	15	2,416	06/26/07	15	2,415
34	06/26/07	15	2,415	08/01/07	14	2,415
35	08/01/07	14	2,415	08/01/07	15	2,414
36	08/01/07	15	2,414	08/03/07	13	2,414
37	08/03/07	13	2,414	08/24/07	15	2,412
38	08/24/07	15	2,412	08/01/07	16	2,412
39	08/01/07	16	2,412	08/24/07	16	2,407
40	08/24/07	16	2,407	08/01/07	13	2,405
41	08/01/07	13	2,405	06/26/07	16	2,404
42	06/26/07	16	2,404	08/24/07	13	2,401
43	08/24/07	13	2,401	06/26/07	12	2,401

44	06/26/07	12	2,401	08/02/07	11	2,399
45	02/11/08	20	2,401	06/26/07	13	2,399
46	08/02/07	11	2,399	07/09/07	17	2,398
47	06/26/07	13	2,399	06/27/07	16	2,397
48	02/12/08	19	2,399	08/03/07	14	2,395
49	07/09/07	17	2,398	08/08/07	18	2,393
50	06/27/07	16	2,397	09/07/07	15	2,393
51	08/03/07	14	2,395	08/03/07	12	2,391
52	08/08/07	18	2,393	06/26/07	14	2,389
53	09/07/07	15	2,393	08/02/07	17	2,386
54	02/12/08	11	2,392	06/19/07	13	2,384
55	08/03/07	12	2,391	08/01/07	17	2,382
56	02/11/08	19	2,391	08/24/07	17	2,381
57	06/26/07	14	2,389	08/29/07	14	2,381
58	12/17/07	18	2,387	09/06/07	16	2,374
59	02/12/08	14	2,387	07/10/07	17	2,374
60	08/02/07	17	2,386	06/26/07	17	2,374
61	06/19/07	13	2,384	08/08/07	10	2,373
62	08/01/07	17	2,382	08/29/07	16	2,373
63	08/24/07	17	2,381	08/01/07	12	2,373
64	08/29/07	14	2,381	09/07/07	16	2,370
65	12/17/07	21	2,381	09/06/07	15	2,369
66	12/17/07	19	2,379	08/29/07	15	2,369
67	02/12/08	13	2,379	08/29/07	17	2,368
68	01/23/08	19	2,379	07/09/07	11	2,366
69	02/11/08	9	2,378	08/16/07	14	2,364
70	02/12/08	10	2,375	07/10/07	10	2,364
71	09/06/07	16	2,374	09/07/07	12	2,363
72	07/10/07	17	2,374	07/10/07	18	2,363
73	06/26/07	17	2,374	08/03/07	15	2,363
74	08/08/07	10	2,373	06/26/07	11	2,361
75	08/29/07	16	2,373	08/29/07	13	2,360
76	08/01/07	12	2,373	08/03/07	11	2,360
77	02/12/08	12	2,372	09/06/07	14	2,359
78	02/11/08	10	2,371	08/16/07	15	2,357
79	02/11/08	11	2,371	09/06/07	20	2,355
80	09/07/07	16	2,370	07/09/07	18	2,353
81	09/06/07	15	2,369	08/24/07	18	2,351
82	08/29/07	15	2,369	09/06/07	17	2,349
83	08/29/07	17	2,368	08/03/07	16	2,348
84	07/09/07	11	2,366	09/07/07	17	2,347
85	02/12/08	18	2,365	08/07/07	11	2,345
86	08/16/07	14	2,364	07/10/07	21	2,345
87	07/10/07	10	2,364	06/08/07	14	2,342
88	09/07/07	12	2,363	08/29/07	20	2,341
89	07/10/07	18	2,363	08/16/07	13	2,340
90	02/28/08	20	2,363	08/29/07	18	2,340
91	08/03/07	15	2,363	09/06/07	13	2,340
92	06/26/07	11	2,361	08/08/07	19	2,338
93	02/12/08	20	2,361	08/24/07	12	2,337
94	02/28/08	21	2,361	08/01/07	18	2,336
95	02/12/08	21	2,361	08/08/07	20	2,334

96	02/12/08	9	2,360	07/09/07	21	2,333
97	08/29/07	13	2,360	08/16/07	16	2,330
98	08/03/07	11	2,360	06/26/07	18	2,328
99	09/06/07	14	2,359	08/07/07	13	2,326
100	08/16/07	15	2,357	06/19/07	14	2,324

**Average 100 Highest** **2,403** **2,395**

(A) - Excludes Waverly, NY service territory

**Appendix C**  
Approved CSP contract(s).

## Appendix C

Approved CSP contract(s) with Black & Veatch (consisting of three parts: 1) PUC Approved Standardized CSP Contract, 2) Purchase Order, and 3) CONFIDENTIAL Proposal.

Note: The Proposal portion of the contract contains Confidential employee salary and fee information which will cause competitive harm to the CSP if publicly disseminated. The Company has requested full confidential treatment of the Proposal portion of the Approved CSP Contract, in accordance with the approved Commission Template and the Commission's Act 129 Implementation Order. The Proposal portion of the Approved CSP Contract is being marked with a "CONFIDENTIAL" stamp and is being submitted under seal to the Secretary's Office in an envelope separate from the EE&C Plan"

**FIRSTENERGY SERVICE COMPANY – GENERAL TERMS AND CONDITIONS  
FOR PURCHASE OF CONSULTING SERVICES**

**ARTICLE I - DEFINITIONS**

The following terms, when used in this Agreement with initial capitalization, shall have the meanings given below unless in any particular instance the context clearly indicates otherwise:

- A. "Consultant," the party to be engaged in performing consulting services under the terms of this Agreement, is in the business of providing such consulting services, products, deliverables, outcomes and results.
- B. "Data" - Material that includes documentation, manuals, maps, plans, schedules, programs, specifications, software, reports, drawings, designs and other relevant information;
- C. "Purchaser" means FirstEnergy Service Company for itself and/or as an authorized agent of the affiliate company or companies set forth on the face of the Request for Proposal and/or Purchase Order attached hereto for which the services as specified elsewhere herein shall be performed hereunder. If more than one company is identified as the Purchaser, the liability of each company named shall be several and not joint and shall be limited to such company's interest in this Agreement, as identified on the Request for Proposal and/or Purchase Order.
- D. "Purchaser's Site" includes generating stations, steam plants, substations, transmission and distribution lines, towers, poles, buildings, or other locations owned or leased by Purchaser, for which the Work is intended, to which the Work is to be delivered or where the Work is to be carried out (if it is not to be performed at the facility of Consultant or others).
- E. "Specifications" means the portion of this Agreement that describes the products and services to be delivered by Consultant under this Agreement, including dimensions, components, attachments, technical and non-technical requirements and characteristics, standards, performance requirements, and tolerances. Should any conflict occur between portions of the Specifications and these terms and conditions, the Specifications shall take precedence only when and to the extent that such does not result in any way in the dilution or diminution of the rights or benefits of the Purchaser under these terms and conditions.
- F. "Work" means all services, labor, materials, equipment, Data, and other obligations covered by or intended for Consultant to perform or supply under this Agreement, as specified in the Purchase Order, together with miscellaneous expendable job supplies, installation related equipment and/or tools, transportation, facilities and/or services for the complete execution of the Agreement.

**ARTICLE II – TERMS OF AGREEMENT**

- A. Agreement. The terms and conditions set forth in this document, together with the Request for Proposal and/or Purchase Order and all attachments, exhibits, revisions, and supplements thereof, shall constitute the agreement between Purchaser and Consultant (the "Agreement"). In case of any error, inconsistency or omission in the various documents of the Agreement, the matter will be submitted immediately to Purchaser, without whose decision said discrepancy shall not be adjusted by Consultant.
- B. Offer and Acceptance. Consultant's acknowledgement, commencement of performance to furnish the materials, equipment, or services which are the subject of this Agreement, or any conduct by Consultant which recognizes the existence of a contract pertaining to the subject matter hereof shall constitute acceptance by Consultant of this Agreement and all of its terms and conditions. Acceptance of this Agreement is expressly limited to Consultant's assent to all of the terms and conditions of this Agreement. Additional or different terms provided in Consultant's acceptance of Purchaser's offer which vary in any degree from any of the terms herein or expressly referenced on the face of the Request for Proposal and/or Purchase Order herewith shall be deemed material and are hereby objected to and rejected. If this Agreement shall be deemed an acceptance by Purchaser in response to an offer by Consultant and if any terms herein are additional to or different from any terms of such offer, then the issuance of this Agreement by Purchaser shall constitute an acceptance expressly conditioned upon Consultant's assent to all of the terms and conditions of this Agreement. Additional or different terms in any acknowledgement, invoice, or communication submitted by Consultant, or any attempt by Consultant to vary in any degree any of the terms of this Agreement, unless expressly agreed to by Purchaser, shall be deemed material and are hereby objected to and rejected. Any such terms proposed by Consultant, whether by offer or acceptance, shall be void unless expressly agreed to in writing by Purchaser.
- C. Integration; Modification. This Agreement sets forth the entire agreement of Purchaser and Consultant concerning the subject matter hereof. No other agreements or understandings, whether written or oral, whether express or implied, shall be binding on Purchaser and Consultant. No amendment, modification, or rescission of this Agreement shall be enforceable unless the same is in writing and signed by the party against whom the terms of such amendment, modification, or rescission are sought to be enforced.
- D. Non-Exclusivity. This Agreement is not exclusive, and Purchaser may at its sole discretion contract with others to perform such work as is herein contemplated, or may perform such work with its own forces.
- E. Audit. Purchaser shall have the right to audit books and records of Supplier upon reasonable notice for the purpose of confirming the amount due Supplier under this Agreement.

**ARTICLE III - CONSULTANT'S PERSONNEL**

- A. Relationship of Parties. In performing the Work, Consultant shall operate as and have the status of an independent Consultant and shall not act as or be an agent or employee of Purchaser. Nothing in this Agreement or in the performance of the Work shall be construed to create a partnership, joint venture or other joint business arrangement between Purchaser and Consultant.
- B. Employees. Consultant shall employ for the Work only persons known to it to be experienced, qualified, reliable and trustworthy. At Purchaser's request, the credentials of any of Consultant's employees assigned to perform the Work shall be submitted to Purchaser in advance of such assignment. During the performance of the Work, Purchaser may object to any Consultant employee who, in Purchaser's opinion, does not meet these criteria. In such case, Consultant shall, at its expense and risk, immediately replace or remove such employee.
- C. Background Checks. Consultant shall make best efforts to ensure that Consultant's employees assigned to Purchaser do not have criminal records and are not involved in criminal activity which could create a risk to Purchaser's Site, customers, and/or employees. Upon actual knowledge of a criminal record or involvement in criminal activity, Consultant shall immediately remove said employee or employees from the Work. Purchaser, at any time, may request Consultant to verify that an employee or employees does not possess a criminal record. Consultant shall provide certification for each of Consultant's employees, who are authorized as part of the Work to have electronic or unescorted physical access to Critical Cyber Assets (as the same are identified by Purchaser from time to time), that such employee: (i) has submitted to a Background Check within the past seven years whereby no evidence of a criminal record or criminal activity was discovered; (ii) is subject to a seven-year cycle re-check of the Background Check; and (iii) has received the Purchaser-sponsored Security Awareness training or will receive such training prior to accessing Critical Cyber Assets. These requirements are subject to audit and certification by Consultant upon request by Purchaser.
- D. Substance Abuse. Consultant agrees to comply with all applicable state and federal laws regarding drug-free workplace. Consultant shall make a good faith effort to ensure that all Consultant's employees, while working on Purchaser's property, will not be under the influence, purchase, transfer, use or possess illegal drugs or alcohol or abuse prescription drugs in any way.
- E. Gifts and Gratuities/Conflicts of Interest. Purchaser ("FirstEnergy") enforces policies governing the conduct of its employees in carrying out its business activities, including contact with third-party business partners. The conflicts of interest & gifts and gratuities policies generally prohibit FirstEnergy employees and/or their family members from giving or receiving gifts, favors, services, or privileges (including travel or entertainment) from existing or potential customers, suppliers, or contractors that are more than a nominal value, or that exceed the level of standard business courtesies, and the acceptance of cash, gift certificates, or loans in any amount. The conflicts of interest policy generally prohibits FirstEnergy employees and/or their family members from serving as an officer, director, employee, consultant, agent, or Buyer of a beneficial interest in an

organization which has a business relationship with FirstEnergy as a supplier or contractor, if the FirstEnergy employee is in a position to influence decisions concerning the relationship. The entire text of these policies may be found within the Supply Chain Section at [www.firstenergycorp.com](http://www.firstenergycorp.com).

Suppliers and prospective suppliers to FirstEnergy are expected to be aware of and comply with these policies in their dealings with FirstEnergy employees and their family members. *Any suspected or actual violations of these policies should be reported; and, may be reported anonymously and confidentially by a customer, supplier, contractor, or employee by calling the Employee Concerns Line (1-800-683-3625), 24 hours a day, 7 days a week.*

#### **ARTICLE IV – SCOPE OF WORK**

Consultant agrees to provide Purchaser with professional consulting services (the "Work") as defined in the Request for Proposal/Purchase Order. The Work shall include providing all data, technical information, reports, deliverables, products, outcomes, results, information, new discoveries, inventions, improvements, technical consulting or other technical services (including but not limited to design services, analytical services, quality assurance, and the like), direction of any work or performance of any labor, and all other facilities and services which are necessary for the performance of this Agreement by the Consultant.

#### **ARTICLE V – COMPENSATION AND TERMS OF PAYMENT**

- A. Compensation for the Work performed, as well as the terms of payment thereof, shall be as described on the face of the Request for Proposal/Purchase Order.
- B. For Work specified by Purchaser to be performed on a time and materials basis, each invoice must: (a) detail by activity the man-hours worked by Consultant; (b) detail by activity the labor cost; (c) detail the direct reimbursable costs in connection with the Work; (d) indicate the cumulative cost to date for all activities; (e) indicate the total monthly cost of the Work; and (f) include other information reasonably required by Purchaser.
- C. Each invoice shall, after approval by the Purchaser, be processed for payment in accordance with the terms of payment as set forth on the face of the Request for Proposal/Purchase Order, for the amount of each approved invoice less any monies retained per the terms of payment or under Section D below.
1. Unless otherwise set forth herein, payment terms are 2%10 Net 45 Days. Payment dates shall be calculated from the date of receipt of invoice or acceptance of the Work by Purchaser, whichever is later. Payments by Purchaser shall not be deemed evidence of acceptance by Purchaser of the services or goods called for hereunder.
  2. Electronic Invoices. If it is reasonably able, Supplier shall utilize the Purchaser's then current Electronic Invoice Presentment and Payment Program to submit invoices and receive payment electronically from Purchaser.
- D. Withholding.
1. If Purchaser has a claim under this Agreement, regardless of when it is discovered, including a claim that: (a) Consultant's invoice is erroneous; (b) the Work is deficient, defective or incomplete; (c) a third party claim has been asserted or there is reasonable evidence indicating the possibility of a claim; (d) Consultant fails to make a payment as and when due to a subcontractor or supplier for materials, labor or equipment; (e) Purchaser, another Consultant, subcontractor, or other party suffers damage or injury which is attributable to Consultant; or (f) Consultant has failed to supply any affidavit, release or waiver of lien which Purchaser may require pursuant to law; then Purchaser may withhold payment of, or set off the amount of its claim, costs, and/or losses against, any amount invoiced to it. If any monies are so withheld, they shall be paid only when, without cost to the Purchaser, the cause of such withholding has been eliminated. Moreover, if any monies are so withheld, Purchaser shall not be responsible for any interest payment to Consultant.
  2. New Jersey Withholding. If applicable, in accordance with New Jersey law, we shall withhold a portion of payments made to you (Supplier, Contractor, Consultant, or similar party) for services to construct, improve, alter, or repair a building, structure, or improvement to real property unless you provide written documentation that you are a corporation or registered with the State of New Jersey.
- E. Consultant is deemed to be self-employed; and accordingly, no sums are contemplated to be withheld from Consultant's compensation to cover the payment of income taxes, FICA (social security), FUTA (unemployment compensation) or other taxes. Consultant agrees to file all required federal, state and local income tax and other tax returns (including, without limitation, all required declarations of estimated tax) covering Consultant's compensation hereunder. Consultant agrees to pay all such taxes and contributions when due; and Consultant hereby indemnifies Purchaser and holds it harmless from and against any and all loss, cost and liability whatsoever incurred by or claimed against Purchaser for any failure of Consultant to comply herewith.

#### **ARTICLE VI - STANDARD OF PERFORMANCE**

- A. Consultant warrants that it shall perform and supply the Work with the care, skill, and diligence set forth by the applicable professional standards, if any, currently recognized by such profession. Consultant warrants that it shall be responsible for the quality, technical accuracy, completeness, delivery, and implementation of the Work. Consultant warrants that the Work shall be free from defects and shall conform to the requirements of this Agreement.
1. In the event that there are no such standards, the Work shall be performed with due diligence and with the best efforts of the Consultant.
  2. Purchaser's review and approval of Consultant's or its Subcontractor's specifications, drawings, plans and other such documents shall in no way relieve or lessen Consultant's responsibilities set forth in this Agreement.
- B. Consultant shall cure any breach of the foregoing warranties at no cost to Purchaser and shall reimburse Purchaser for any damages that may be incurred by Purchaser as a result of reliance by Purchaser, its employees, agents, other Consultants or subcontractors on such Work or anticipated performance by Consultant. If Consultant should fail to cure such breach or if Purchaser determines that Consultant will be unable to cure such breach before the scheduled time of completion, Purchaser may correct such breach itself or through a third party and charge Consultant for the costs incurred therefor. The rights and remedies of the Purchaser set forth in this Section are in addition to any other rights and remedies provided by law.

#### **ARTICLE VII - INTELLECTUAL PROPERTY RIGHTS**

- A. Ownership of Work and Data. The Work and all Data associated with the Work, whether or not patentable, registrable as a copyrightable work, or registrable as a trademark or service mark, shall become the property of Purchaser and Purchaser shall own all intellectual property rights therein (including the rights to any patent, trademark or service mark, trade secret, and copyright therein). Consultant hereby agrees that any materials and works of authorship conceived or written by Consultant during the term of this Agreement that pertain in any material respect to the Work shall be done as "work made for hire" as defined and used in the Copyright Act of 1976, 17 USC § 1 et seq., and that Purchaser, as the entity for which the work is prepared, shall own all right, title and interest in and to such materials, including the entire copyright therein. To the extent that any such materials are not deemed to be a "work made for hire," Consultant will assign to Purchaser ownership of all right, title, and interest in and to such materials, including ownership of the entire copyright therein.
- B. Infringement. Consultant warrants that the goods and services provided by Consultant hereunder are and will be original, do not and will not infringe on or misappropriate any United States or foreign patent, copyright, trademark, or other intellectual property rights of any third party, and have not been and will not be previously assigned, licensed or otherwise encumbered. If the Work or any portion thereof is held to constitute an infringement or misappropriation of the intellectual property rights of a third party, Consultant shall, at its expense and within a reasonable time, either (1) secure for Purchaser the right to use the Work or any portion thereof which is said to be infringing by procuring for Purchaser a license or otherwise, or (2) replace the Work or such portion thereof with non-infringing Work that meets the requirements of this Agreement, or (3) remove

such infringing Work or such portion thereof, as Purchaser may elect, and refund the sums paid therefor by Purchaser, together with any out-of-pocket costs incurred by Purchaser in connection with its purchase and use of the infringing Work, all without damage or injury to Purchaser's other property.

- C. Data Furnished by Purchaser. All Data furnished by Purchaser in connection with the Work shall remain Purchaser's exclusive property. Consultant shall not use Purchaser-furnished Data for any purpose other than for the Work. Consultant shall: (1) sign and deliver a written itemized receipt for all Purchaser-furnished Data and shall be responsible for its safekeeping, and (2) return such Purchaser-furnished Data and all copies thereof to Purchaser upon completing the Work.

#### **ARTICLE VIII - INDEMNITY**

- A. Consultant's Indemnity. Consultant shall indemnify, defend, and hold harmless Purchaser, its subsidiaries and affiliates, and their respective agents, officers, employees, successors, assigns, and indemnitees (the "Indemnified Parties"), from and against any and all losses, costs, damages, claims, liabilities, fines, penalties, and expenses (including, without limitation, attorneys' and other professional fees and expenses, and court costs, incurred in connection with the investigation, defense, and settlement of any claim asserted against any Indemnified Party or the enforcement of Consultant's obligations under this Article VIII) (collectively, "Losses"), which any of the Indemnified Parties may suffer or incur in whole or in part arising out of or in any way related to the Work performed or to be performed, the presence of Consultant and/or its Subcontractors at Purchaser's Site, and/or the actions or omissions of Consultant and/or its Subcontractors, including, without limitation, Losses relating to: (1) bodily or mental injury to or death of any person, including, without limitation, any person employed by Purchaser, by Consultant, or by any Subcontractor; (2) damage to or loss of use of property of Purchaser, Consultant, any Subcontractor, or any third party; (3) any contractual liability owed by Purchaser to a third party; (4) any breach of or inaccuracy in the covenants, representations, and warranties made by Consultant under this Agreement; and/or (5) any violation by Consultant or any Subcontractor of any ordinance, regulation, rule, or law of the United States or any political subdivision or duly constituted public authority; subject, however, to the limitations provided in Section VIII(B) (for Work performed in Pennsylvania), or Section VIII(C) (for Work performed in states other than Pennsylvania). Purchaser shall be entitled to control the defense of any action indemnified hereunder, with legal counsel of its own choosing.
- B. WITH RESPECT TO WORK PERFORMED OR TO BE PERFORMED WITHIN THE COMMONWEALTH OF PENNSYLVANIA, Consultant's indemnity obligations under Section VIII(A) shall apply in each case whether or not caused or contributed to by the fault or negligence of any or all of the Indemnified Parties, and Consultant expressly agrees that Consultant will indemnify, defend, and hold harmless the Indemnified Parties in connection with Section VIII(A) even if any such Losses are caused in whole or in part by the sole or concurrent negligence of one or more of the Indemnified Parties. Consultant agrees to waive and release any rights of contribution, indemnity, or subrogation it may have against any of the Indemnified Parties as a result of an indemnity claim asserted by another Indemnified Party under Section VIII(A). Section VIII(A) is intended to be an express written contract to indemnify as contemplated under Section 303(b) of the Pennsylvania Workers' Compensation Act (or any successor to such provision).
- C. WITH RESPECT TO WORK PERFORMED OR TO BE PERFORMED AT ANY LOCATION WHICH IS NOT WITHIN THE COMMONWEALTH OF PENNSYLVANIA, Consultant's indemnity obligations under Section VIII(A) shall not apply to any Losses to the extent such Losses are found to have been initiated or proximately caused by or resulting from the negligence or willful misconduct of any of the Indemnified Parties.
- D. Waiver of Immunities. If an employee of Consultant or its Subcontractor, or such employee's heirs, assigns, or anyone otherwise entitled to receive damages by reason of injury or death to such employee, brings an action at law against any Indemnified Party, then Consultant, for itself, its successors, assigns, and Subcontractors, hereby expressly agrees to waive any provision of any workers' compensation act or other similar law whereby Consultant could preclude its joinder by such Indemnified Party as an additional defendant, or avoid liability for damages, contribution, defense, or indemnity in any action at law, or otherwise. Consultant's obligation to Purchaser herein shall not be limited by any limitation on the amount or type of damages, benefits or compensation payable by or for Consultant under any worker's compensation acts, disability benefit acts, or other employee benefit acts on account of claims against Purchaser by an employee of Consultant or anyone employed directly or indirectly by Consultant or anyone for whose acts Consultant may be liable.
- E. No Impairments. Consultant's obligations under this Article VIII shall not be limited to the extent of any insurance available to or provided by Consultant.

#### **ARTICLE IX - INSURANCE**

- A. Consultant's Insurance. Consultant agrees to secure and maintain in force minimum policies of insurance of the types listed below and shall furnish to Purchaser, prior to starting Work and throughout the duration of the Work, certificates of insurance evidencing current coverage listed below. These certificates shall be endorsed with substantially the following language:
- "This policy will not be canceled or allowed to lapse, and no change shall be made in this policy which alters, restricts or reduces the insurance provided or changes the name of the insured without first giving at least thirty (30) days' notice in writing to FirstEnergy Service Company, Insurance Risk Management, 76 South Main Street, Akron, Ohio 44308, with receipt of notice acknowledged."
1. Commercial General Liability (CGL) insurance including products-completed operations, independent contractors, and contractual liability coverages. Coverage under this policy shall have limits of liability of not less than \$2,000,000 per occurrence, combined single limit for bodily injury (including disease or death), personal injury, and property damage (including loss of use) liability.
  2. Automobile Liability insurance, including non-ownership and hired car endorsement, with minimum limits of \$1,000,000 per occurrence, combined single limit.
  3. Worker's Compensation coverage in the statutory amounts under the worker's compensation act(s) of the location(s) in which the Work is to be performed, for the current period.
  4. Employer's Liability with a minimum limit of \$1,000,000 for each accident or illness.
- Any of the above per-occurrence limits may be satisfied by a combination of primary and excess liability coverage.
- B. Additional Insured. FirstEnergy Corp. and its subsidiaries and affiliates shall be included as an additional insured for CGL and Automobile Liability policies, it being understood that said policies shall be primary and non-contributory with insurance carried by Purchaser and shall contain a cross-liability clause providing severability of interests so that coverage will respond as if separate policies were in force for each insured. A signed copy of the endorsement adding FirstEnergy Corp. and its subsidiaries and its affiliates as an additional insured shall be attached to the certificate of insurance providing general liability coverage.
- C. Lapse of Coverage. In the event of cancellation or lapse of or prohibited change in any policy for which a certificate is required to be furnished under this Agreement, Purchaser shall have the right to suspend the work of Consultant until the policy and certificates in evidence thereof are reinstated or arrangements acceptable to Purchaser are made pending issuance of new policies and certificates. If any such insurance shall be about to lapse or be canceled, Consultant shall, at least thirty (30) days before coverage thereunder ceases, obtain a new policy with like coverage, and if Consultant fails to do so, Purchaser may obtain insurance protecting it from the hazards covered by such lapsed or cancelled policy, and all premiums and expenses of such insurance shall be charged against Consultant and shall be a legitimate deduction from any sum due it from Purchaser.
- D. Waiver of Subrogation. Consultant and any of its Subcontractors shall waive and hereby waives any rights of subrogation which they or any of their insurers may have against Purchaser, its affiliates, and each non-affiliated company disclosed in this Agreement, their respective agents or employees.

#### **ARTICLE X - TERM & TERMINATION**

- A. Purchaser may terminate this Agreement at any time, including with respect to any Work in process, if (a) Consultant fails to obtain, or maintain as valid, any license, permit or approval required to allow lawful performance of the Work; (b) Purchaser determines, in its sole discretion, that Consultant is not complying with any law; (c) Consultant has failed to perform the Work in accordance with the acceptable practices and customary diligence of the profession or industry of which Consultant is a member or in a timely way; (d) Consultant breaches any material term or condition of this Agreement; or (e) Purchaser determines, in its sole discretion, that Consultant is not financially stable or responsible. Notice of termination pursuant to this Paragraph X(A) shall be in writing and shall be effective upon receipt thereof.
- B. Purchaser may terminate this Agreement for any reason at any time upon ten (10) days prior written notice. In the event of termination under this Section X, Consultant shall be entitled to and shall receive payment in full for all services provided and all reimbursable expenses incurred up to and including the effective date of termination.

**ARTICLE XI – COMPLIANCE WITH LAWS, REGULATIONS, AND PERMITS**

- A. During the performance of this Agreement, Consultant shall strictly comply with all federal, state and local laws, rules or regulations and executive orders applicable to the Work.
- B. Without limiting the foregoing, and unless exempted under the rules, regulations and relevant orders (41 CFR Chapter 60) of the Secretary of Labor, in connection with the Work, Consultant agrees as follows:
1. Consultant shall not discriminate against any employee or applicant for employment because of race, color, religion, sex or national origin. Consultant shall take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex or national origin. Such action shall include, but not be limited to, employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. Consultant shall post in conspicuous places, available to employees and applicants for employment, notices to be provided by the U.S. Department of Labor setting forth the provisions of this nondiscrimination clause.
  2. Consultant shall state, in all solicitations or advertisements for employees placed by or on its behalf, that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex or national origin.
  3. Consultant shall send to each labor union or representative of workers with which it has a collective bargaining agreement, contract or understanding, a notice to be provided by the U.S. Department of Labor, advising the labor union or workers' representative of Consultant's commitments under the following provisions, as amended from time to time:
    - a. Section 202 of Executive Order 11246 (Equal Opportunity);
    - b. Executive Order 11701 (Employment of Veterans);
    - c. Executive Order 11758 (Employment of the Handicapped);
    - d. Executive Order 11141 (Employment Discrimination Because of Age); and
    - e. Executive Order 11625 and Public Law 95-507 (Utilization of Disadvantaged Business Enterprises), and shall post copies thereof in conspicuous places available to employees and applicants for employment.
- C. Because Purchaser (or if applicable, one or more affiliates or non-affiliated companies) is a supplier of electricity and/or services to the U.S. government, it must include, and Consultant shall comply with, the below listed clauses from the Federal Acquisition Regulation ("FAR"), 48 Code of Federal Regulations Chapter 1, as amended from time to time, if the applicable criteria specified in the FAR (those currently applicable are summarized parenthetically) are met. If Consultant's subcontracts meet such criteria, Consultant shall include the terms or substance of the applicable clause in its subcontracts. If the provisions of this paragraph C conflict with the balance of the Agreement, this paragraph C shall prevail.
1. 52.203-6 Restrictions on Subcontractor Sales to the Government (required in all subcontracts under this Agreement which exceed \$100,000);
  2. 52.203-7 Anti-Kickback Procedures (required in all subcontracts under this Agreement which exceed \$100,000, other than those for commercial items);
  3. 52.204-2 Security Requirements (required in all subcontracts under this Agreement which involve access to classified information);
  4. 52.219-8 Utilization of Small Business Concerns (required in all non-personal subcontracts with a value greater than \$100,000);
  5. 52.219-9 Utilization of Small Business Concerns will be included in all subcontracts that offer further subcontracting opportunities, and that Purchaser will require all subcontractors (except small business concerns) that receive subcontracts in excess of \$550,000 (\$1,000,000 for construction) to adopt a subcontracting plan that complies with the requirements of this clause;
  6. 52.222-4 Contract Work Hours and Safety Standards Act—Overtime Compensation (required in all subcontracts exceeding \$100,000, unless otherwise exempted);
  7. 52.222-26 Equal Opportunity (required in all contracts/subcontracts; however, if the cumulative value of nonexempt Federal contracts/subcontracts is \$10,000 or less in any 12 month period, including the 12 months preceding the award, the contractor/subcontractor is exempt from the clause requirements);
  8. 52.222-35 Affirmative Action for Disabled Veterans and Veterans of the Vietnam Era (required in all contracts/subcontracts with a value of \$10,000 or more);
  9. 52.222-36 Affirmative Action for Workers with Disabilities (required in all contracts/subcontracts with a value of \$10,000 or more);
  10. 52.222-37 Employment Reports on Disabled Veterans and Veterans of the Vietnam Era (required in all contracts/subcontracts with a value of \$10,000 or more);
  11. 52.223-14 Toxic Chemical Release Reporting (Except for acquisitions of commercial items, and unless otherwise exempt, this clause is required for competitive subcontracts expected to exceed \$100,000, including all options, and in any resultant subcontract exceeding \$100,000, including all options);
  12. 52.225-13 Restrictions on Certain Foreign Purchases (required in all subcontracts for contracts with a value exceeding \$2,500, unless otherwise exempted);
  13. 52.222-11 Subcontracts (Labor Standards) (required in all service contracts in excess of \$2,000 for construction within the United States) This provision requires that the following clauses be inserted into contracts meeting the criteria: Davis-Bacon Act, Contract Work Hours and Safety Standards Act—Overtime Compensation, Apprentices and Trainees, Payrolls and Basic Records, Compliance with Copeland Act Requirements, Withholding of Funds, Subcontracts (Labor Standards), Contract Termination—Debarment, Disputes Concerning Labor Standards, Compliance with Davis-Bacon and Related Act Regulations, and Certification of Eligibility.
  14. 52.222-41 Service Contract Act of 1965, as Amended (required in all service contracts subject to the Act (i) which exceed \$2,500; or (ii) which are for an indefinite dollar amount and the contracting officer does not know in advance that the contract amount will be \$2,500 or less).
- D. Consultant shall comply with the Department of Commerce Export Administration Regulations ("EAR") in 15 CFR Chapter VII, subchapter C, including 15 CFR Section 734.2 which prohibits the export or release of controlled technology and/or software to foreign nationals within the United States who are not lawfully admitted to the United States for permanent residence. Consultant shall confirm that these regulations either do not apply to Consultant's activities under the terms of this Agreement or that Consultant has procedures to ensure compliance. If Consultant is directly or indirectly employing a foreign national not currently lawfully admitted to the United States for permanent residence to perform work under this Agreement, Consultant warrants to Purchaser that such employment does not violate the foregoing regulations.
- E. **FOREIGN CORRUPT PRACTICES ACT PROVISIONS** The following provisions shall apply to Consultant (unless it is a foreign concern) if it performs or obtains any of the Work in a foreign country:

1. All payments to Consultant shall be by check or bank transfer only. No payment shall be in cash or by bearer instrument and no payment shall be made to any corporation or person other than Consultant. All payments due hereunder shall be made to Consultant at its principal place of business in the United States, even if Consultant performs or obtains the Work in a foreign country.
  2. Consultant represents that it is familiar with the Foreign Corrupt Practices Act (the "FCPA") and its purposes; and that, in particular, it is familiar with the prohibition against paying or giving of anything of value, either directly or indirectly, by an American company to an official of a foreign government for the purpose of influencing an act or decision in his official capacity, or inducing him to use his influence with that government, to assist a company in obtaining or retaining business for or with, or directing business to, any person.
  3. Consultant represents that none of its partners, purchasers, principals, and staff members are officials, officers, or representatives of any government or political party or candidates for political office. Consultant shall not use any part of its compensation for any purpose, and shall take no action, that would constitute a violation of any law of the United States (including the FCPA) or of any jurisdiction where it performs services or manufactures or sells goods. Purchaser represents that it does not desire and will not request any Work by Consultant that would or might constitute any such violation.
  4. Purchaser may terminate the Contract for default at any time, without any liability or obligation, if it believes, in good faith, that Consultant has violated this Article. Any action by Consultant which would or might constitute a violation of the FCPA, or a request for such action from Consultant's representative, shall result in immediate termination of the Contract for default. Should Consultant ever receive, directly or indirectly, from any Purchaser representative a request that Consultant believes will or might violate the FCPA, Consultant shall immediately notify Purchaser's general counsel.
  5. Purchaser may disclose the existence and terms of the Contract, including the compensation provisions, at any time, for any reason and to whomever Purchaser's general counsel determines has a legitimate need to know the same including, without limitation, the United States government, the government of any country where the Work is performed or obtained, and any regulatory agency with jurisdiction over Purchaser.
- F. Consultant shall comply with the Occupational Safety and Health Act of 1970 and all rules, regulations, standards, requirements, and revisions thereof or adopted pursuant thereto.
- G. Unless this Agreement otherwise provides, Consultant shall, at its own expense, obtain from appropriate governmental authorities all permits, inspections and licenses which are required for the Work and comply with all rules and regulations of insurance companies which have insured any of the Work.
- H. Any costs, fines, penalties, awards, damages or other liabilities associated with any violations of this Article shall be borne and paid by Consultant.
- I. If applicable, Consultant agrees to comply with all Hazard Communication Standards promulgated by the Occupational Safety and Health Administration (OSHA), 29 CFR 1910.1200, et seq., as amended, to insure that chemical hazards produced, imported, or used with the workplace are evaluated, and that hazard information is transmitted to affected employees of Consultant, of any subcontractor or of Purchaser.
- J. Consultant acknowledges and agrees that its employees, if given access to FirstEnergy's (FirstEnergy Corp., its subsidiaries and affiliates) Information and Control Systems, may be required to sign an agreement governing Consultant's and such employees' use of such systems.
- K. Consultant shall comply with all requirements of any governmental regulatory codes of conduct applicable to the work performed under this Agreement, including the FERC Standards of Conduct (Order No. 2004); New Jersey BPU Affiliate Relations, Fair Competition, and Accounting Standards (N.J.A.C. 14:4-5.1 et seq.); Ohio Corporation Separation Rules (O.A.C. 4901:1-20-16); and Pennsylvania PUC Competitive Safeguard regulations (52 Pa. Code §§ 54.121 and 54.122); or any successor to those provisions.
- L. Consultant shall comply with all requirements of Executive Order 13201 (E.O. 13201) mandating Government contractors and subcontractors to post to inform their employees that under Federal law they have certain rights related to union membership and the use of union dues and fees.

#### **ARTICLE XII- SET-OFF**

Purchaser shall be entitled at all times to set-off any amount owing from Consultant to Purchaser or any affiliate of Purchaser against any amount payable by Purchaser hereunder, and in no event shall Purchaser be liable for interest.

#### **ARTICLE XIII – LIMITATION OF LIABILITY**

Under no circumstances shall Purchaser, its subsidiaries and affiliates, be liable for any anticipated profits or for incidental or consequential damages.

#### **ARTICLE XIV – ASSIGNMENT AND SUBCONTRACTS**

- A. Consultant may not assign any rights or claims, or delegate any duties under this Agreement, in whole or in part, without the prior written consent of Purchaser, which may be withheld at Purchaser's sole discretion. In the event of any assignment or delegation permitted hereunder, Consultant shall continue to be liable for the performance of its obligations hereunder. For purposes of this Agreement, the term "assignment" shall include a transfer of Consultant's rights hereunder, and/or a succession to its obligations hereunder (i) by operation of law, including a merger, consolidation, corporate reorganization, reclassification or liquidation of Consultant or a sale of all or substantially all of Consultant's assets, or (ii) by a change in the control of Consultant. As used herein, "control" means the possession, directly or indirectly, of the power to direct or cause the direction of Consultant's management and policies, whether through ownership of or the right to vote a majority of the voting stock in the case of a corporation, or the comparable interest in the case of any other entity, or by contract, or otherwise.
- B. If Consultant proposes to subcontract any of the Work hereunder, it shall submit to Purchaser the name of each proposed Subcontractor(s) prior to engaging such Subcontractor, with the proposed scope of the Work to be undertaken and such information about the Subcontractor(s) as Purchaser may reasonably request. Purchaser may reject any and all Subcontractors at its absolute discretion.

#### **ARTICLE XV - NON-WAIVER**

The delay or failure of either party to assert or enforce in any instance strict performance of any of the terms of this Agreement or to exercise any rights hereunder conferred, shall not be construed as a waiver or relinquishment to any extent of its rights to assert or rely upon such terms or rights at any later time or on any future occasion.

#### **ARTICLE XVI-- PROHIBITION OF PUBLICITY**

Consultant shall not refer to this Agreement or reference the Purchaser, its subsidiaries and affiliates, directly or indirectly, in its advertising or promotional materials without express written consent of Purchaser.

#### **ARTICLE XVII CONFIDENTIALITY**

- A. Consultant agrees that the Work, Data, drawings, plans, specifications, calculations, reports and other documents and information associated with the Work, regardless of form, and any information that Consultant receives from Purchaser, or observes in connection with its business dealings with Purchaser, shall be deemed and treated by the parties as the confidential information of the Purchaser (referred to herein as "Confidential Information"). Consultant shall return Data and Confidential Information to Purchaser upon completion of performance of this Agreement.
- B. Consultant shall not use or disclose Confidential Information for any reason or purpose without the prior written consent of the Purchaser. Consultant may use Confidential Information for the sole purpose of the performance of this Agreement for the benefit of the Purchaser. Consultant will take all precautions and actions to prevent sale, transfer, sublicense, use or disclosure of Confidential Information to any third party.
- C. Notwithstanding, the restrictions set forth in this Article XVII shall not apply to Confidential Information: (a) which is in the public domain at the time it was disclosed by Purchaser to Consultant; or (b) which can be demonstrated by written records was already known to Consultant prior to the time it was disclosed to Consultant by Purchaser; or (c) which is independently developed by employees of Consultant who did not receive Confidential Information and who developed without the use or benefit of Confidential Information; or (d) which is disclosed to Consultant from a source other than Purchaser without breach of this or any other agreement by the person disclosing to the Consultant and without breach of this Agreement or any other duty of the Consultant.

**ARTICLE XVIII- SEVERABILITY**

If any portion of this Agreement is held invalid, the Parties agree that such invalidity shall not affect the validity of the remaining portions of this Agreement, and the Parties further agree to substitute for the invalid portion a valid provision that most closely approximates the economic effect and intent of the invalid provision.

**ARTICLE XIX - FORCE MAJEURE**

Neither party shall be liable to the other for any expenses, loss or damage resulting from delays or prevention of performance arising from causes beyond its reasonable control caused by fire, flood, accident, strikes, civil commotion, governmental or military authority, insurrection, riots, embargo, unavoidable delays in transportation, acts of God, or public enemy. In the event of any delay arising by reason of any of the foregoing events, the time for performance shall be extended by a period of time equal to the time lost by reason of such delay or as otherwise agreed to in writing by the parties. The Consultant will notify the Purchaser as soon as reasonably practical and in writing within forty-eight (48) hours of the Consultant's becoming aware of a force majeure occurrence as defined herein which will or has caused a delay. Within seven (7) working days of such occurrence, the Consultant will further define the precise cause or causes of the delay, the measures taken or to be taken to minimize the delay, the time table by which the measures will be implemented, the duration of the delay, the extension of time for performance of the Agreement the Consultant is claiming and documented evidence that support the claim. The Purchaser will review the Consultant's claim and advise the Consultant in writing of Purchaser's decision regarding the Consultant's claim for extension of time for performance of the Agreement.

**ARTICLE XX - SALES TAX**

Taxes, if any, shall be shown separately on any bids or invoices sent to Purchaser. Direct Payment Permit Numbers authorizing purchase of tangible personal property without payment of the tax at the time of purchase, have been issued to Purchaser. The Permit Numbers are 98001123 for Ohio Edison Co., 128 for Pennsylvania Power Co., 98002722 for FirstEnergy Nuclear Operating Co., 98000312 for The Cleveland Electric Illuminating Co., 98001495 for The Toledo Edison Co., DP-210-485-010 for Jersey Central Power and Light Co., 127 for Pennsylvania Electric Company Co., 135 for Metropolitan Edison Co. and 98-002723 for FirstEnergy Generation Corp. In Michigan, a Michigan Sales and Use Tax Certificate of Exemption shall be made available upon request. Purchaser agrees to maintain adequate records of all purchases and pay tax on the taxable items directly to the Treasurer of each respective State. In Ohio, Direct Payment Permits do not apply to construction contracts under which the contractor is considered to be the consumer and liable for the tax on materials incorporated into a structure or improvement as provided in Section 5739.01 (B) Ohio Revised Code. Pennsylvania Direct Payment Permits do not apply to construction contracts under which a contractor is considered to be the consumer and liable for the tax on materials incorporated into the property of Pennsylvania companies. Pennsylvania Sales and Use Tax Regulations Sections 31.11 through 31.16 provide for tax-exempt purchase of materials by a contractor for those materials that will be incorporated into and become a part of the property of Pennsylvania companies. In order to qualify, the property must be directly used in the rendition of the Public Utility Service. Contract bids should be submitted accordingly. The successful bidder will be issued a properly executed "Certification" form upon request to permit tax-exempt purchase of qualifying materials.

*Questions concerning Pennsylvania or New Jersey sales taxes should be directed to the FirstEnergy Service Company, at (973) 401-8323. Questions about Ohio sales taxes (and states other than Pennsylvania or New Jersey), should be directed to the FirstEnergy Service Company, at (330) 384-5334.*

**ARTICLE XXI - GOVERNING LAW**

Unless otherwise stated on the face of the Purchase Order, this Agreement is to be governed by and interpreted in accordance with the law of the State of Ohio. The parties expressly exclude the applicability of the United Nations Convention on Contracts for the International Sale of Goods, if the same would otherwise apply here. Any legal suit, action, or proceeding to collect payment due hereunder from Purchaser, or otherwise arising out of or relating to this Agreement, may be (and, if against Purchaser, must exclusively be) instituted in a State or Federal Court in the County of Summit, State of Ohio, and Consultant waives any objection which it may have now or hereafter to the laying of the venue of any such suit, action or proceeding and hereby irrevocably submits to the jurisdiction of any such court in any such suit, action or proceeding.

**ARTICLE XXII - INTERPRETATION**

The following principles of interpretation shall apply to this Agreement: (i) paragraph headings and captions are inserted for convenience only and shall not be considered in construing intent; (ii) neither Purchaser nor Consultant shall be considered to be the party responsible for the drafting of any particular provision of this Agreement; (iii) the words "hereof," "herein," "hereunder," and words of similar import shall refer to this Agreement as a whole and not to any particular provision hereof; (iv) the word "including" means "including, but not limited to" and shall be interpreted as broadly as possible; (v) words in the singular include the plural and vice versa, (vi) All references to "days" shall be calendar days (and not merely business days, unless the Agreement so states), and (vii) any provision hereof that is prohibited or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such prohibition or unenforceability without invalidating the remaining provisions hereof or affecting the validity or enforceability of such provision in any other jurisdiction and the provision that is prohibited or unenforceable shall be reformed or modified to reflect the parties' intent to the maximum extent permitted by applicable legal requirements.

**ARTICLE XXIII - EXECUTION AND COUNTERPARTS**

This Agreement may be executed in multiple counterparts, which taken together shall constitute an original without the necessity of all parties signing the same page or the same documents, and may be executed by signatures to electronically or telephonically transmitted counterparts in lieu of original printed or photocopied documents. Signatures transmitted by facsimile shall be considered original signatures.

IN WITNESS WHEREOF, the parties have duly executed this Agreement as of \_\_\_\_\_, 2009.

FIRSTENERGY SERVICE COMPANY

CONSULTANT

By \_\_\_\_\_

By \_\_\_\_\_

Title \_\_\_\_\_

Title \_\_\_\_\_

Date \_\_\_\_\_

Date \_\_\_\_\_

**SUPPLEMENTAL TERMS AND CONDITIONS  
FOR CONTRACTS WITH CONSERVATION SERVICE PROVIDERS (“CSPs”)**

**NON-AFFILIATION**

The CSP represents that it is not an affiliate of any Electric Distribution Company (“EDC”) in the Commonwealth of Pennsylvania, including FirstEnergy’s EDCs Pennsylvania Power Company, Metropolitan Edison Company, or Pennsylvania Electric Company.

**MERGER**

If CSP should merge with a Pennsylvania EDC or otherwise restructure in such a manner as to provide any such EDC with a direct or indirect ownership interest in CSP, then CSP shall immediately notify Purchaser of any such transaction as soon as the law permits. CSP acknowledges that in such an event, this Agreement shall automatically terminate and CSP shall be liable for any and all reasonable costs incurred by Purchaser to replace CSP with a comparable vendor. This remedy shall be in addition to any and all other legal or equitable remedies available to Purchaser.

**CSP REGISTRATION**

CSP represents and warrants that it has complied with any and all filings required by law, including without limitation, any registration requirements of the Pennsylvania Public Utility Commission that are necessary to become a registered CSP. CSP further represents and warrants that it will maintain such registration in good standing throughout the term of this Agreement. CSP shall provide Purchaser with proof of valid registration or any renewals thereof. CSP acknowledges that the failure to maintain valid registration shall constitute a breach of this Agreement. In such an event, CSP shall be liable to Purchaser for any and all reasonable costs incurred by Purchaser to replace CSP with a comparable vendor. This remedy shall be in addition to any and all other legal or equitable remedies available to Purchaser.



BLACK & VEATCH  
898 VETERANS MEMORIAL HIGHWAY  
HAUPPAUGE NY 11788

Your number with us  
210012230

Please deliver to:  
FirstEnergy  
76 S. MAIN ST.  
AKRON 44308

### Purchase Order

PO number/date  
55109917 / 03/24/2009  
Contact person/Telephone  
Joshua Martin/330-384-2482  
Our fax number  
330-374-6216

Valid from: 03/24/2009  
Valid to : 12/31/2009

Freight Charges & FOB Terms: No freight, FOB origin  
Terms of payt.: Within 45 days Due net

Currency USD

FirstEnergy Service Company on behalf of The Cleveland Electric Illuminating Company, FirstEnergy Service Company, Jersey Central Power & Light Company, Metropolitan Edison Company, Ohio Edison Company, Pennsylvania Electric Company, Pennsylvania Power Company, The Toledo Edison Company, FirstEnergy Generation Corp., FES (FirstEnergy Solutions), ATSI (American Transmission Systems Inc.) and FirstEnergy Nuclear Operating Company (FENOC), (Purchaser). The purchaser subsidiary and/or affiliate company(s) shall be identified by the ship-to address included herein or on any subsequent blanket purchase order release authorization ship-to address as included thereon, as appropriate. If more than one company is identified as the purchaser, the liability of each company named shall be several and not joint and shall be limited to such company's interest as identified therein.

Supplier Contact:  
Steve Stolze  
Phone: 631-786-0507  
Email: StolzeSA@bv.com

FirstEnergy Technical Contact:  
Kurt Turosky, Mgr, Energy Efficiency Comp & Perf

Phone:330-384-5847  
Email:turoskyk@firstenergycorp.com

-----  
PA Energy Efficiency Plan Consulting  
-----

Invoicing:

FirstEnergy's vision is a paperless, automated procure-to-pay process. Our objective is 100% adoption of electronic presentment and payment by our suppliers.

Suppliers performing work with FirstEnergy are expected to enroll in and use the Xign Network to submit invoices electronically to FirstEnergy and to receive payment electronically from FirstEnergy.

Supplier acknowledges that timely submission of invoices is critical for effective budget and financial planning for FirstEnergy.

We encourage you to enroll with Xign our third party provider for electronic payment and presentment and their Discount Manager program. To enroll with Xign, please go to <http://firstenergy.xign.net>. Select "ENROLL NOW" and then select the "I DO NOT HAVE AN ENROLLMENT CODE" option.

In the event Supplier does not choose to support FirstEnergy's vision for a paperless procure-to-pay process, all invoices rendered under this purchase order shall be sent directly to:

FirstEnergy Service Company  
76 S. Main St.  
Akron, OH 44308  
Attn: Kurt Turosky

The invoice must include the following, as applicable:

- Purchase order number
- Line item number
- Task Authorization number, if applicable
- Timesheets
- Receipts for reimbursable expenses

Questions about electronic payment/presentment, invoices or payments may be directed to the Accounts Payable help desk at (814)539-3200.

Item	FE Material No. Order qty.	Unit	Price per unit	Net value
	00001			
----- PA Energy Efficiency Plan Consulting Services -----				

SCOPE OF WORK:  
-----

Consultant to provide consulting services and resources for the development of a compliance strategy and plan as required by the energy efficiency, conservation and demand side response initiatives recently mandated in Pennsylvania as Act 129 of 2008 of House Bill 2200 and detailed in the engagement letter dated February 26, 2009.

CONTRACT DOCUMENTS:  
-----

The following listed items are the Contract Documents and constitute the complete Agreement between Purchaser and Consultant. In the event of conflict among any of the below listed documents in matters of interpretation, precedence as to interpretation shall be given in accordance with the following order:

1. Change orders, if any.
2. This Purchase Order, no. 55109917.
3. FirstEnergy's Consulting Services Terms and Conditions (CNSLT FINAL REV 24 01-16-09) along with the Supplemental Terms and Conditions for contracts with Conservation Service Providers ("CSPs") apply to this agreement.
4. Black & Veatch's Proposal dated February 26, 2009 - attached and incorporated herein with the exception to the modifications to the pricing and assumptions as detailed below.

PRICING & ASSUMPTIONS:  
-----

- 1.) Black & Veatch will deliver the scope of work as proposed within 11 weeks from project kick-off.
- 2.) Black & Veatch will fix the price for the work and selected options as quoted with the exception of SubTasks 3.3 and 3.4 which have been withdrawn from the RFP process. The fixed fee amount for this engagement is \$271,800 plus expenses. The surveys are optional and would be at the additional costs detailed below.

Estimating Assumptions

- a) Prompt delivery of all Data Request items noted on proposal page 11 within on week of the kick off meeting.
- b) Comments on all draft documents will be compiled into one master edit copy per Company, that FirstEnergy will provide direction as to how to address any conflicting edits, and that comments will be received within one week of delivery of draft materials.
- c) Black & Veatch will use its own in-house software for conducting the market potential and program design analyses. If FirstEnergy desires that we use DSMore instead, there is a \$10,000 fee to cover licensing and population of the software with FirstEnergy data for Pennsylvania operating companies.
- e) Primary Customer Research surveys will not be conducted as part of the base bid. If

surveys are desired, the decision to do so will be made at the kick off meeting, and customer lists and approvals will be provided within one week of the kick off meeting. Because we have the materials 90% designed, and trained consultants in place coming off the other job, we can now deliver 400 completes PER COMPANY residential and 100 completes PER COMPANY for commercial for \$55,000.

The price for the statewide survey (100 residential completes per company) it would be \$45,000.

f) Three sets of programs will be developed - one for each operating company: Met Ed, Penelec and Penn Power. The analysis will entail three sets of programs, with common programs as appropriate, analyzed for each of the three companies' residential, commercial and industrial sectors.

g) The proposal assumes that Black & Veatch will prepare separate chapters addressing the programs for each company for incorporation into one filing document for FirstEnergy's Pennsylvania operations.

h) Travel-related and other out-of-pocket expenses (e.g., Fed-Ex, telephone, etc.) will be billed at our actual cost

i) The level of effort associated with Black & Veatch services proposed depends upon a number of factors beyond Black & Veatch's control. The fixed fee assumes that timely and reasonably complete documentation is provided by FirstEnergy, that the extent and nature of deficiencies (if any) in the documentation are not material, and that FirstEnergy staff are available to support our efforts according to the agreed project timeline.

j) If customer surveys are selected as an option to be added to the scope of work, Black & Veatch will require FirstEnergy to deliver at or within 5 days of the kick off meeting the following:

Lists of customer names, addresses, phone numbers and account numbers for random samples of residential and non-residential customers for each of the three PA utilities (i.e., nine electronic files with customer lists)

Approval of a pre-survey notification letter that will alert customers of the survey and encourage their cooperation

Approval of our offer of \$50 gasoline cards for the first 100 customer responses

Timely approval of survey instruments

Logos for each company (jpeg file)

Signature files for each company cover letter (jpeg file)

Customer contact per company to be included on the cover letter

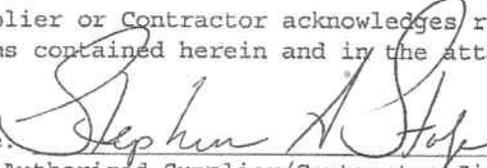
FirstEnergy's Consulting Services Terms and Conditions (CNSLT FINAL REV 24 01-16-09) along with the Supplemental Terms and Conditions for contracts with Conservation Service Providers ("CSPs") apply to this agreement.

Supplier or Contractor to execute both copies and return a copy to the address below:

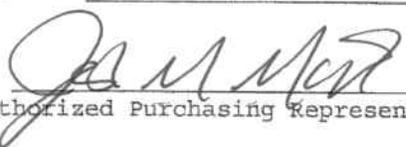
FirstEnergy Service Company  
76 South Main Street  
Akron, Ohio 44308-1890  
Mail Stop A-GO-09

Supplier or Contractor to retain a copy for Supplier's/Contractor's records.

Supplier or Contractor acknowledges receipt of and agreement to this writing and the terms contained herein and in the attached terms and conditions.

Name:  Date: 4/14/09  
(Authorized Supplier/Contractor Signature)

(Print) Name STEPHEN A. STOLZE Title: Associate Vice President

Name:  Date: 4/17/09  
(Authorized Purchasing Representative Signature)

(Print) Name Joshua M. Martin Title: Sr. Sourcing Specialist

**Appendix D**

All measure budgeted costs by year, sum to programs, including administrative, marketing, and incentives costs.

**Appendix D-1**

Measure budgeted for 7 months starting November 1, 2009, ending May 31 2010

Appendix D-1

Measure Name	Program	Rate Class	Utility			Retailer Sales Incentive	Rebate Processing	Retail Store Discount Tracking	Service Provider Costs	Service Provide Equip/Audit	Incentive Shipping & Other	Incentive Rebate for Equip	Annual Utility/SP O&M	
			Labor/Cost	Marketing	M&V									
1	DLC-CAC	Demand	Res	\$1,853	\$6,563	\$1,090.0	\$0.0	\$0.0	\$0.0	\$49,050.0	\$196,200.0	\$0.0	\$54,500.0	\$169,432
2	DLC-Pool Pumps	Demand	Res	\$97	\$6,563	\$57.0	\$0.0	\$0.0	\$0.0	\$2,565.0	\$16,245.0	\$0.0	\$4,275.0	\$12,268
3	DLC-Water Heat	Demand	Res	\$3	\$6,563	\$2.0	\$0.0	\$0.0	\$0.0	\$90.0	\$570.0	\$0.0	\$150.0	\$430
4	1-Res Home Audits - CFL 4 - Low Flow 2	1-Res Audits	Res	\$0	\$6,563	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
5	Targeted Audit - Space Heat	1-Res Audits	Res	\$0	\$6,563	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
6	Res Home Audits Year 1 kit	1-Res Audits	Res	\$20,410	\$11,359	\$9,627.3	\$0.0	\$0.0	\$0.0	\$31,288.6	\$0.0	\$0.0	\$844,622.1	\$0
7	Refrigerator/Freezer recycling	2-RES App Turn-In	Res	\$192	\$9,310	\$4,121.1	\$0.0	\$0.0	\$0.0	\$48,079.1	\$0.0	\$0.0	\$68,684.4	\$0
8	Room Air Conditioners	2-RES App Turn-In	Res	\$884	\$6,715	\$609.9	\$0.0	\$0.0	\$0.0	\$3,049.3	\$0.0	\$0.0	\$7,623.1	\$0
9	ASHP - SEER 15	3-RES EE HVAC	Res	\$424	\$3,673	\$128.5	\$428.2	\$214.1	\$0.0	\$0.0	\$0.0	\$0.0	\$13,917.3	\$0
10	CAC - SEER 15	3-RES EE HVAC	Res	\$9,335	\$21,616	\$856.4	\$4,282.2	\$2,141.1	\$0.0	\$0.0	\$0.0	\$0.0	\$77,080.3	\$0
11	CAC - Maintenance	3-RES EE HVAC	Res	\$884	\$22,257	\$884.3	\$0.0	\$1,326.5	\$0.0	\$0.0	\$0.0	\$0.0	\$22,108.6	\$0
12	Furnace Fans	3-RES EE HVAC	Res	\$0	\$6,563	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
13	EE Ground Source Heat Pump	3-RES EE HVAC	Res	\$0	\$1,918	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
14	Solar Water Heating	4-Res-EE P	Res	\$0	\$786	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
15	HP Water Heater	4-Res-EE P	Res	\$0	\$786	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
16	EE Water Heater	4-Res-EE P	Res	\$0	\$786	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
17	Programmable Thermostat_Heat	4-Res-EE P	Res	\$61	\$786	\$46.8	\$0.0	\$0.0	\$0.0	\$140.3	\$0.0	\$0.0	\$3,282.1	\$0
18	Pool Pump Rerprogramming to be Off Noon to Eight PM	1-Res Audits	Res	\$0	\$786	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
19	CFL bulbs regular-15	1-Res Audits	Res	\$0	\$786	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
20	CFL Giveaway	4-Res-EE P	Res	\$0	\$786	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
21	CFL bulbs regular - Outside - 15	4-Res-EE P	Res	\$0	\$786	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
22	CFL bulbs regular - 13	4-Res-EE P	Res	\$33,054	\$47,318	\$0.0	\$0.0	\$0.0	\$80,227.3	\$112,318.2	\$0.0	\$0.0	\$176,500.0	\$0
23	Electric Dryer	4-Res-EE P	Res	\$281	\$861	\$74.8	\$374.0	\$187.0	\$0.0	\$0.0	\$0.0	\$0.0	\$2,805.2	\$0
24	Dehumidifiers	4-Res-EE P	Res	\$281	\$861	\$74.8	\$374.0	\$187.0	\$0.0	\$0.0	\$0.0	\$0.0	\$374.0	\$0
25	Freezers Energy Star-Chest Freezer	4-Res-EE P	Res	\$281	\$861	\$74.8	\$374.0	\$187.0	\$0.0	\$0.0	\$0.0	\$0.0	\$935.1	\$0
26	Holiday Lights	4-Res-EE P	Res	\$0	\$786	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
27	LED Night Light	1-Res Audits	Res	\$0	\$786	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
28	Variable Speed Pool Pump+Proper Commissioning	4-Res-EE P	Res	\$0	\$786	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
29	Refrigerators-Freezers Energy Star - Side by Side	4-Res-EE P	Res	\$281	\$861	\$74.8	\$374.0	\$187.0	\$0.0	\$0.0	\$0.0	\$0.0	\$1,870.1	\$0
30	Refrigerators-Freezers Energy Star - Top Freezer	4-Res-EE P	Res	\$281	\$861	\$74.8	\$374.0	\$187.0	\$0.0	\$0.0	\$0.0	\$0.0	\$1,870.1	\$0
31	Room Air Conditioners	4-Res-EE P	Res	\$0	\$786	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
32	Smart Strip plug outle	4-Res-EE P	Res	\$0	\$786	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
33	Torchiere Floor Lamps	4-Res-EE P	Res	\$7	\$789	\$0.0	\$0.0	\$0.0	\$3.2	\$0.0	\$0.0	\$0.0	\$64.2	\$0
34	Residential New Construction - PY12	5-RES New Con	Res	\$37,045	\$10,069	\$2,805.2	\$0.0	\$0.0	\$0.0	\$98,180.7	\$0.0	\$0.0	\$69,072.4	\$0
35	Residential New Construction - PY34	5-RES New Con	Res	\$0	\$6,563	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
36	Behavior_Mod	9-Behavior Modification	Res	\$0	\$1,485	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
37	Estar Windows	1-Res Audits	Res	\$0	\$1,485	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
38	Duct sealing 20 leakage base	1-Res Audits	Res	\$0	\$1,485	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
39	Low Flow Showerhead:	1-Res Audits	Res	\$0	\$1,485	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
40	Kitchen Aerator	1-Res Audits	Res	\$0	\$1,485	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
41	Bathroom Aerator	1-Res Audits	Res	\$0	\$1,485	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
42	Pipe Wrap	1-Res Audits	Res	\$0	\$1,485	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
43	Roof Insulation	1-Res Audits	Res	\$0	\$1,485	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
44	Whole Building - Light Measure (Test-In)	1-Res Audits	Res	\$0	\$1,485	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
45	Low Income Warm Program Through Act12	7-Low Income	Res	\$128,837	\$6,563	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$364,583.3	\$0
46	Low Income Warm Program Through Act129 (Additional SmartStrips)	7-Low Income	Res	\$769	\$786	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$2,538.6	\$0
47	1-Res Home Audits - CFL 4 - Low Flow 2 Water Hea	1-Res Audits LJ	Res	\$2,794	\$105,419	\$587.1	\$0.0	\$0.0	\$0.0	\$11,888.0	\$0.0	\$0.0	\$50,634.2	\$0
48	Schools Children Education-No Saving	1-Res Audits LJ	Res	\$717	\$28,345	\$338.1	\$0.0	\$0.0	\$0.0	\$1,098.9	\$0.0	\$0.0	\$29,664.7	\$0
49	Refrigerator/Freezer recycling	2-RES App Turn-In LJ	Res	\$69	\$105,497	\$1,481.4	\$0.0	\$0.0	\$0.0	\$17,282.7	\$0.0	\$0.0	\$24,689.6	\$0
50	Programmable Thermostat_Heat	1-Res Audits LJ	Res	\$0	\$786	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
51	CFL bulbs regular-15 -Free No Water Heat	1-Res Audits LJ	Res	\$0	\$786	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
52	Request	4-Res-EE P LI	Res	\$0	\$786	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
53	CFL bulbs regular - Outside - 15 - Store Rebates	4-Res-EE P LI	Res	\$0	\$786	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
54	CFL bulbs regular - 19 - Store Rebates	4-Res-EE P LI	Res	\$1,405	\$2,764	\$0.0	\$0.0	\$0.0	\$3,409.7	\$4,773.5	\$0.0	\$0.0	\$7,501.3	\$0
55	LED Night Light	1-Res Audits LJ	Res	\$0	\$786	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
56	Low Income Lighting-Warm Ligh	7-Low Income	Res	\$2,681	\$6,250	\$219.8	\$0.0	\$0.0	\$0.0	\$1,758.3	\$0.0	\$0.0	\$17,583.3	\$0

Appendix D-1

57	Low Income Lighting-Warm SmartStrip	7-Low Income	Res	\$2,423	\$786	\$72.5	\$0.0	\$0.0	\$0.0	\$580.3	\$0.0	\$0.0	\$10,154.4	\$0
58	Low Income Lighting-Low Usag	7-Low Income	Res	\$2,023	\$6,250	\$165.8	\$0.0	\$0.0	\$0.0	\$1,326.4	\$0.0	\$0.0	\$13,263.8	\$0
59	Multiple Family - CFL Lighting	8-Multiple Family	Res	\$0	\$6,250	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
60	Multiple Family - T8-Lighting	8-Multiple Family	SM C&I	\$384	\$6,745	\$61.9	\$0.0	\$371.4	\$0.0	\$0.0	\$0.0	\$0.0	\$4,333.3	\$0
61	Commercial, Industrial Audit - Sm&M	3-C/I Equip	SM C&I	\$552	\$6,584	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
62	Commercial, Industrial Audit - Large	4-C/I Equip	LG C&I	\$901	\$7,055	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
<b>Commercial CFL Program - Kits Mailed to Small Commercial</b>														
63	Commercial	3-C/I Equip	SM C&I	\$0	\$786	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
64	Commercial, Industrial Audit - Gov	2-Governmental Programs	LG C&I	\$485	\$6,250	\$39.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$9,904.7	\$0
<b>High Bay HID replaced by 6F54T5HO</b>														
65	High Bay HID replaced by 6F54T5HO	2-Governmental Programs	LG C&I	\$41	\$6,875	\$3.4	\$0.0	\$27.0	\$0.0	\$0.0	\$0.0	\$0.0	\$747.4	\$0
66	HPT8 4ft 4 lamp, T12 to HPT8	2-Governmental Programs	LG C&I	\$3,096	\$6,875	\$253.8	\$0.0	\$2,030.4	\$0.0	\$0.0	\$0.0	\$0.0	\$10,964.3	\$0
67	LED Exit Signs Electronic Fixtures (Retrofit Only)	2-Governmental Programs	LG C&I	\$1,669	\$6,875	\$136.8	\$0.0	\$1,094.4	\$0.0	\$0.0	\$0.0	\$0.0	\$8,207.7	\$0
68	Occupancy Sensors under 500 W	2-Governmental Programs	LG C&I	\$315	\$6,875	\$25.8	\$0.0	\$206.3	\$0.0	\$0.0	\$0.0	\$0.0	\$2,457.6	\$0
69	LED Auto Traffic Signals	2-Governmental Programs	SM C&I	\$315	\$6,875	\$25.8	\$0.0	\$206.3	\$0.0	\$0.0	\$0.0	\$0.0	\$4,642.8	\$0
70	LED Pedestrian Signals	2-Governmental Programs	SM C&I	\$3,776	\$6,875	\$309.5	\$0.0	\$2,476.2	\$0.0	\$0.0	\$0.0	\$0.0	\$30,952.2	\$0
<b>Street Lighting - Weighted Average All Replacements</b>														
71	Water-Cooled cent Chiller 150 - 300 ton 0.57 kW/ton with 0.46 kW/ton IPLV	2-Governmental Programs	Gov	\$14,188	\$6,875	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$44,615.6	\$113,363
72	Water-Cooled cent Chiller 150 - 300 ton 0.57 kW/ton with 0.46 kW/ton IPLV	2-Governmental Programs	LG C&I	\$0	\$6,875	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
<b>Custom Incentives Gov</b>														
73	Custom Incentives Gov	2-Governmental Programs	LG C&I	\$0	\$6,875	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
74	AC <65,000 1 Ph	3-C/I Equip	SM C&I	\$0	\$3,125	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
75	AC 65,000 - 135,000	3-C/I Equip	SM C&I	\$0	\$3,125	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
76	AC 240,000 - 760,000	3-C/I Equip	SM C&I	\$0	\$3,125	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
77	Clothes Washer CEE Tier1, Electric Water heater, Electric Dryer	3-C/I Equip	SM C&I	\$510	\$3,343	\$109.2	\$728.1	\$364.0	\$0.0	\$0.0	\$0.0	\$0.0	\$3,640.3	\$0
<b>AntiSweatHeater Controller for Cooler - one controller controlling at least two doors</b>														
78	AntiSweatHeater Controller for Cooler - one controller controlling at least two doors	3-C/I Equip	SM C&I	\$0	\$3,125	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
<b>AntiSweatHeater Controller for Freezers - one controller controlling at least two doors</b>														
79	AntiSweatHeater Controller for Freezers - one controller controlling at least two doors	3-C/I Equip	SM C&I	\$0	\$3,125	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
80	ENERGY STAR Commercial Solid Door Freezers less than 20ft3	3-C/I Equip	SM C&I	\$122	\$3,143	\$18.2	\$182.0	\$45.5	\$0.0	\$0.0	\$0.0	\$0.0	\$1,186.3	\$0
81	ENERGY STAR Commercial Solid Door Freezers 20 to 48 ft3	3-C/I Equip	SM C&I	\$122	\$3,143	\$18.2	\$182.0	\$45.5	\$0.0	\$0.0	\$0.0	\$0.0	\$2,713.8	\$0
82	ENERGY STAR Commercial Solid Door Refrigerators less than 20ft3	3-C/I Equip	SM C&I	\$122	\$3,143	\$18.2	\$182.0	\$45.5	\$0.0	\$0.0	\$0.0	\$0.0	\$578.8	\$0
83	ENERGY STAR Commercial Solid Door Refrigerators 20 to 48 ft3	3-C/I Equip	SM C&I	\$122	\$3,143	\$18.2	\$182.0	\$45.5	\$0.0	\$0.0	\$0.0	\$0.0	\$1,144.0	\$0
84	ENERGY STAR Ice Machines less than 500 lbs	3-C/I Equip	SM C&I	\$122	\$3,143	\$18.2	\$182.0	\$45.5	\$0.0	\$0.0	\$0.0	\$0.0	\$455.0	\$0
85	ENERGY STAR Ice Machines 500 to 1000 lbs	3-C/I Equip	SM C&I	\$122	\$3,143	\$18.2	\$182.0	\$45.5	\$0.0	\$0.0	\$0.0	\$0.0	\$1,365.1	\$0
86	ENERGY STAR Ice Machines more than 1000 lb	3-C/I Equip	SM C&I	\$122	\$3,143	\$18.2	\$182.0	\$45.5	\$0.0	\$0.0	\$0.0	\$0.0	\$1,820.1	\$0
87	ENERGY STAR Steam Cookers 3 Pan	3-C/I Equip	SM C&I	\$122	\$3,143	\$18.2	\$182.0	\$45.5	\$0.0	\$0.0	\$0.0	\$0.0	\$3,640.3	\$0
<b>High Bay HID replaced by 6F54T5HO</b>														
88	High Bay HID replaced by 6F54T5HO	3-C/I Equip	SM C&I	\$0	\$3,125	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
89	EE Water Heater	3-C/I Equip	SM C&I	\$324	\$3,206	\$60.7	\$404.8	\$202.4	\$0.0	\$0.0	\$0.0	\$0.0	\$2,023.9	\$0
90	HP Water Heater (Base Usage 22831)	3-C/I Equip	SM C&I	\$910	\$3,262	\$136.5	\$3,412.8	\$227.5	\$0.0	\$0.0	\$0.0	\$0.0	\$9,100.7	\$0
91	HPT8 4ft 4 lamp, T12 to HPT8	3-C/I Equip	SM C&I	\$17,885	\$11,483	\$4,178.9	\$0.0	\$93,606.3	\$0.0	\$0.0	\$0.0	\$0.0	\$421,228.3	\$0
92	LED Exit Signs Electronic Fixtures (Retrofit Only)	3-C/I Equip	SM C&I	\$25,120	\$8,151	\$1,276.4	\$0.0	\$10,211.2	\$0.0	\$0.0	\$0.0	\$0.0	\$76,583.9	\$0
93	Occupancy Sensors under 500 W	3-C/I Equip	SM C&I	\$0	\$3,125	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
94	Strip Mall Low Cost DI Suite	3-C/I Equip	SM C&I	\$0	\$3,125	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
95	Commercial Smart Strip plug outle	3-C/I Equip	SM C&I	\$29	\$786	\$0.0	\$0.0	\$0.0	\$0.0	\$9.1	\$0.0	\$0.0	\$182.0	\$0
96	Pre Rinse Sprayers	3-C/I Equip	SM C&I	\$147	\$3,125	\$0.0	\$0.0	\$0.0	\$0.0	\$45.5	\$0.0	\$0.0	\$3,185.2	\$0
97	Refrigerant charging corrector	3-C/I Equip	SM C&I	\$655	\$3,307	\$182.0	\$0.0	\$910.1	\$0.0	\$0.0	\$0.0	\$0.0	\$13,651.0	\$0
98	Refrigeration Commissioning	3-C/I Equip	SM C&I	\$33	\$3,134	\$9.1	\$0.0	\$45.5	\$0.0	\$0.0	\$0.0	\$0.0	\$227.5	\$0
99	Strip curtains for walk-ins - freezer	3-C/I Equip	SM C&I	\$33	\$3,134	\$9.1	\$0.0	\$45.5	\$0.0	\$0.0	\$0.0	\$0.0	\$455.0	\$0
100	Vending Equipment Controlle	3-C/I Equip	SM C&I	\$0	\$3,125	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
101	Custom Incentives Small	3-C/I Equip	SM C&I	\$16,920	\$3,444	\$318.5	\$0.0	\$22,959.2	\$0.0	\$0.0	\$0.0	\$0.0	\$127,409.7	\$0
102	MasterMetered MultiFamily CFL Kits	8-Multiple Family	SM C&I	\$0	\$6,250	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
103	Demand-controlled ventilation (DCV)	4-C/I Equip	LG C&I	\$0	\$3,125	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
<b>High Bay HID replaced by 6F54T5HO</b>														
104	High Bay HID replaced by 6F54T5HO	4-C/I Equip	LG C&I	\$0	\$3,125	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
105	HPT8 4ft 4 lamp, T12 to HPT8	4-C/I Equip	LG C&I	\$79,176	\$7,148	\$4,023.2	\$0.0	\$32,185.3	\$0.0	\$0.0	\$0.0	\$0.0	\$260,701.2	\$0
106	Occupancy Sensors under 500 W	4-C/I Equip	LG C&I	\$0	\$3,125	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
107	Water-Cooled cent Chiller 150 - 300 ton 0.57 kW/ton with 0.46 kW/ton IPLV	4-C/I Equip	LG C&I	\$0	\$3,125	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
108	Water-Cooled Centrifugal Chiller < 150 ton 0.56 kW/ton with 0.53 kW/ton IPLV	4-C/I Equip	LG C&I	\$0	\$3,125	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0



**Appendix D-2**

Measure budgeted for 12 months starting June 1, 2010, ending May 31 2011

Appendix D-2

Measure Name	Program	Rate Class	Utility			Retailer Sales Incentive	Rebate Processing	Retail Store Discount Tracking	Service Provider Costs	Service Provide Equip/Audit	Incentive Shipping & Other	Incentive Rebate for Equip	Annual Utility/SP O&M
			Labor/Cost	Marketing	M&V								
1 DLC-CAC	Demand	Res	\$26,085	\$0	\$15,344.0	\$0.0	\$0.0	\$0.0	\$690,480.0	\$2,761,920.0	\$0.0	\$767,200.0	\$1,649,842
2 DLC-Pool Pumps	Demand	Res	\$1,190	\$0	\$700.0	\$0.0	\$0.0	\$0.0	\$31,500.0	\$199,500.0	\$0.0	\$52,500.0	\$104,215
3 DLC-Water Heat	Demand	Res	\$153	\$0	\$90.0	\$0.0	\$0.0	\$0.0	\$4,050.0	\$25,650.0	\$0.0	\$6,750.0	\$13,399
4 1-Res Home Audits - CFL 4 - Low Flow 2	1-Res Audits	Res	\$114,240	\$37,528	\$24,000.0	\$0.0	\$0.0	\$0.0	\$486,000.0	\$0.0	\$0.0	\$2,070,000.0	\$0
5 Targeted Audit - Space Heat	1-Res Audits	Res	\$191	\$352	\$32.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$1,066.0	\$0
6 Res Home Audits Year 1 kit	1-Res Audits	Res	\$0	\$63	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
7 Refrigerator/Freezer recycling	2-RES App Turn-In	Res	\$1,470	\$21,328	\$31,500.0	\$0.0	\$0.0	\$0.0	\$367,500.0	\$0.0	\$0.0	\$525,000.0	\$0
8 Room Air Conditioners	2-RES App Turn-In	Res	\$4,350	\$1,078	\$3,000.0	\$0.0	\$0.0	\$0.0	\$15,000.0	\$0.0	\$0.0	\$37,500.0	\$0
9 ASHP - SEER 15	3-RES EE HVAC	Res	\$2,120	\$8,874	\$642.3	\$2,141.1	\$1,070.6	\$0.0	\$0.0	\$0.0	\$0.0	\$69,586.4	\$0
10 CAC - SEER 15	3-RES EE HVAC	Res	\$10,900	\$23,096	\$1,000.0	\$5,000.0	\$2,500.0	\$0.0	\$0.0	\$0.0	\$0.0	\$90,000.0	\$0
11 CAC - Maintenance	3-RES EE HVAC	Res	\$4,422	\$101,795	\$4,421.7	\$0.0	\$6,632.6	\$0.0	\$0.0	\$0.0	\$0.0	\$110,542.8	\$0
12 Furnace Fans	3-RES EE HVAC	Res	\$444	\$796	\$93.5	\$0.0	\$233.8	\$0.0	\$0.0	\$0.0	\$0.0	\$1,870.1	\$0
13 EE Ground Source Heat Pump	3-RES EE HVAC	Res	\$2,430	\$396	\$300.0	\$0.0	\$150.0	\$0.0	\$0.0	\$0.0	\$0.0	\$19,530.0	\$0
14 Solar Water Heating	4-Res-EE P	Res	\$915	\$1,002	\$192.5	\$0.0	\$481.4	\$0.0	\$0.0	\$0.0	\$0.0	\$48,136.4	\$0
15 HP Water Heater	4-Res-EE P	Res	\$915	\$1,002	\$192.5	\$0.0	\$481.4	\$0.0	\$0.0	\$0.0	\$0.0	\$28,881.8	\$0
16 EE Water Heater	4-Res-EE P	Res	\$1,510	\$1,629	\$317.9	\$0.0	\$794.8	\$0.0	\$0.0	\$0.0	\$0.0	\$7,948.0	\$0
17 Programmable Thermostat_Heat	4-Res-EE P	Res	\$61	\$39	\$46.8	\$0.0	\$0.0	\$0.0	\$140.3	\$0.0	\$0.0	\$3,282.1	\$0
18 Pool Pump Rerprogramming to be Off Noon to Eight PM	1-Res Audits	Res	\$0	\$39	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
19 CFL bulbs regular-15	1-Res Audits	Res	\$0	\$39	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
20 CFL Giveaway	4-Res-EE P	Res	\$68,354	\$55,878	\$24,068.2	\$0.0	\$0.0	\$0.0	\$259,936.4	\$0.0	\$0.0	\$336,954.6	\$0
21 CFL bulbs regular - Outside - 15	4-Res-EE P	Res	\$0	\$39	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
22 CFL bulbs regular - 13	4-Res-EE P	Res	\$175,100	\$246,539	\$0.0	\$0.0	\$0.0	\$425,000.0	\$595,000.0	\$0.0	\$0.0	\$935,000.0	\$0
23 Clothes Washer Energy Star, Electric Water heater, Electric Dryer	4-Res-EE P	Res	\$16,848	\$4,532	\$4,492.7	\$22,463.6	\$11,231.8	\$0.0	\$0.0	\$0.0	\$0.0	\$168,477.3	\$0
24 Dehumidifiers	4-Res-EE P	Res	\$10,831	\$2,927	\$2,888.2	\$14,440.9	\$7,220.5	\$0.0	\$0.0	\$0.0	\$0.0	\$14,440.9	\$0
25 Freezers Energy Star-Chest Freezer	4-Res-EE P	Res	\$3,370	\$938	\$898.5	\$4,492.7	\$2,246.4	\$0.0	\$0.0	\$0.0	\$0.0	\$11,231.8	\$0
26 Holiday Lights	4-Res-EE P	Res	\$404	\$232	\$192.5	\$481.4	\$770.2	\$0.0	\$0.0	\$0.0	\$0.0	\$7,701.8	\$0
27 LED Night Light	1-Res Audits	Res	\$0	\$39	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
28 Variable Speed Pool Pump+Proper Commissioning	4-Res-EE P	Res	\$1,843	\$306	\$267.1	\$1,335.3	\$534.1	\$0.0	\$0.0	\$0.0	\$0.0	\$53,410.3	\$0
29 Refrigerators-Freezers Energy Star - Side by Side	4-Res-EE P	Res	\$7,500	\$2,039	\$2,000.0	\$10,000.0	\$5,000.0	\$0.0	\$0.0	\$0.0	\$0.0	\$50,000.0	\$0
30 Refrigerators-Freezers Energy Star - Top Freezer	4-Res-EE P	Res	\$9,627	\$2,607	\$2,567.3	\$12,836.4	\$6,418.2	\$0.0	\$0.0	\$0.0	\$0.0	\$64,181.8	\$0
31 Room Air Conditioners	4-Res-EE P	Res	\$2,439	\$39	\$320.9	\$0.0	\$641.8	\$0.0	\$0.0	\$0.0	\$0.0	\$8,022.7	\$0
32 Smart Strip plug outlet	4-Res-EE P	Res	\$524	\$273	\$0.0	\$0.0	\$0.0	\$233.8	\$0.0	\$0.0	\$0.0	\$4,675.3	\$0
33 Torchiere Floor Lamps	4-Res-EE P	Res	\$7	\$43	\$0.0	\$0.0	\$0.0	\$3.2	\$0.0	\$0.0	\$0.0	\$64.2	\$0
34 Residential New Construction - PY12	5-RES New Con	Res	\$86,438	\$8,510	\$6,545.4	\$0.0	\$0.0	\$0.0	\$229,088.4	\$0.0	\$0.0	\$161,168.9	\$0
35 Residential New Construction - PY34	5-RES New Con	Res	\$0	\$328	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
36 Behavior_Mod	9-Behavior Modification	Res	\$0	\$74	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
37 Estar Windows	1-Res Audits	Res	\$316	\$74	\$56.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$2,805.2	\$0
38 Duct sealing 20 leakage base	1-Res Audits	Res	\$344	\$74	\$28.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$2,805.2	\$0
39 Low Flow Showerhead:	1-Res Audits	Res	\$0	\$74	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
40 Kitchen Aerator	1-Res Audits	Res	\$0	\$74	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
41 Bathroom Aerator	1-Res Audits	Res	\$0	\$74	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
42 Pipe Wrap	1-Res Audits	Res	\$0	\$74	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
43 Roof Insulation	1-Res Audits	Res	\$316	\$74	\$56.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$2,805.2	\$0
44 Whole Building - Light Measure (Test-In)	1-Res Audits	Res	\$4,672	\$4,086	\$160.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$40,113.6	\$0
45 Low Income Warm Program Through Act12	7-Low Income	Res	\$315,316	\$328	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$892,278.8	\$0
46 Low Income Warm Program Through Act129 (Additional SmartStrips)	7-Low Income	Res	\$1,882	\$39	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$6,212.9	\$0
47 1-Res Home Audits - CFL 4 - Low Flow 2 Water Hea	1-Res Audits LJ	Res	\$13,972	\$4,862	\$2,935.3	\$0.0	\$0.0	\$0.0	\$59,440.1	\$0.0	\$0.0	\$253,171.0	\$0
48 Schools Children Education-No Saving	1-Res Audits LJ	Res	\$3,584	\$1,849	\$1,690.6	\$0.0	\$0.0	\$0.0	\$5,494.6	\$0.0	\$0.0	\$148,323.3	\$0
49 Refrigerator/Freezer recycling	2-RES App Turn-In LJ	Res	\$346	\$5,250	\$7,406.9	\$0.0	\$0.0	\$0.0	\$86,413.7	\$0.0	\$0.0	\$123,448.1	\$0
50 Programmable Thermostat_Heat	1-Res Audits LJ	Res	\$0	\$39	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
51 CFL bulbs regular-15 -Free No Water Heat	1-Res Audits LJ	Res	\$0	\$39	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
CFL bulbs regular-15 -Free No Water Heat Mailed At Request	4-Res-EE P LI	Res	\$0	\$39	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
53 CFL bulbs regular - Outside - 15 - Store Rebates	4-Res-EE P LI	Res	\$0	\$39	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
54 CFL bulbs regular - 19 - Store Rebates	4-Res-EE P LI	Res	\$7,024	\$9,927	\$0.0	\$0.0	\$0.0	\$17,048.3	\$23,867.6	\$0.0	\$0.0	\$37,506.3	\$0
55 LED Night Light	1-Res Audits LJ	Res	\$0	\$39	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
56 Low Income Lighting-Warm Light	7-Low Income	Res	\$6,563	\$313	\$537.9	\$0.0	\$0.0	\$0.0	\$4,303.3	\$0.0	\$0.0	\$43,033.3	\$0

Appendix D-2

57	Low Income Lighting-Warm SmartStrip	7-Low Income	Res	\$5,929	\$39	\$177.5	\$0.0	\$0.0	\$0.0	\$1,420.1	\$0.0	\$0.0	\$24,851.8	\$0
58	Low Income Lighting-Low Usag	7-Low Income	Res	\$10,114	\$313	\$829.0	\$0.0	\$0.0	\$0.0	\$6,631.9	\$829.0	\$0.0	\$66,318.8	\$0
59	Multiple Family - CFL Lighting	8-Multiple Family	Res	\$8,063	\$313	\$601.7	\$0.0	\$0.0	\$0.0	\$16,847.7	\$0.0	\$0.0	\$48,136.4	\$0
60	Multiple Family - T8-Lighting	8-Multiple Family	SM C&I	\$269	\$659	\$43.3	\$0.0	\$260.0	\$0.0	\$0.0	\$0.0	\$0.0	\$3,033.3	\$0
61	Commercial, Industrial Audit - Sm&M	3-C/I Equip	SM C&I	\$276	\$480	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
62	Commercial, Industrial Audit - Large	4-C/I Equip	LG C&I	\$451	\$715	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
<b>Commercial CFL Program - Kits Mailed to Small Commercial</b>														
63	Commercial, Industrial Audit - Gov	2-Governmental Programs	SM C&I	\$0	\$39	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
64	Commercial, Industrial Audit - Gov	2-Governmental Programs	LG C&I	\$485	\$313	\$39.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$9,904.7	\$0
65	High Bay HID replaced by 6F54T5HO	2-Governmental Programs	LG C&I	\$7,552	\$344	\$619.0	\$0.0	\$4,952.3	\$0.0	\$0.0	\$0.0	\$0.0	\$137,279.1	\$0
66	HPT8 4ft 4 lamp, T12 to HPT8	2-Governmental Programs	LG C&I	\$4,934	\$344	\$404.4	\$0.0	\$3,235.6	\$0.0	\$0.0	\$0.0	\$0.0	\$17,472.0	\$0
67	LED Exit Signs Electronic Fixtures (Retrofit Only)	2-Governmental Programs	LG C&I	\$9,179	\$344	\$752.4	\$0.0	\$6,019.0	\$0.0	\$0.0	\$0.0	\$0.0	\$45,142.5	\$0
68	Occupancy Sensors under 500 W	2-Governmental Programs	LG C&I	\$1,731	\$344	\$141.9	\$0.0	\$1,134.9	\$0.0	\$0.0	\$0.0	\$0.0	\$13,516.8	\$0
69	LED Auto Traffic Signals	2-Governmental Programs	SM C&I	\$1,731	\$344	\$141.9	\$0.0	\$1,134.9	\$0.0	\$0.0	\$0.0	\$0.0	\$25,535.5	\$0
70	LED Pedestrian Signals	2-Governmental Programs	SM C&I	\$20,769	\$344	\$1,702.4	\$0.0	\$13,619.0	\$0.0	\$0.0	\$0.0	\$0.0	\$170,237.0	\$0
<b>Street Lighting - Weighted Average All Replacements</b>														
71	Water-Cooled cent Chiller 150 - 300 ton 0.57 kW/ton with 0.46 kW/ton IPLV	2-Governmental Programs	Gov	\$70,939	\$344	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$223,078.1	\$566,817
72	Custom Incentives Gov	2-Governmental Programs	LG C&I	\$0	\$344	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
73	AC <65,000 1 Ph	3-C/I Equip	SM C&I	\$14,722	\$344	\$123.8	\$0.0	\$9.9	\$0.0	\$0.0	\$0.0	\$0.0	\$49,523.5	\$0
74	AC 65,000 - 135,000	3-C/I Equip	SM C&I	\$255	\$265	\$54.6	\$364.0	\$182.0	\$0.0	\$0.0	\$0.0	\$0.0	\$6,632.4	\$0
75	AC 240,000 - 760,000	3-C/I Equip	SM C&I	\$846	\$429	\$136.5	\$1,365.1	\$273.0	\$0.0	\$0.0	\$0.0	\$0.0	\$12,927.4	\$0
76	Clothes Washer CEE Tier1, Electric Water heater, Electric Dryer	3-C/I Equip	SM C&I	\$846	\$429	\$136.5	\$1,365.1	\$273.0	\$0.0	\$0.0	\$0.0	\$0.0	\$46,218.9	\$0
77	AntiSweatHeater Controller for Cooler - one controller controlling at least two doors	3-C/I Equip	SM C&I	\$2,548	\$1,248	\$546.0	\$3,640.3	\$1,820.1	\$0.0	\$0.0	\$0.0	\$0.0	\$18,201.4	\$0
78	AntiSweatHeater Controller for Freezers - one controller controlling at least two doors	3-C/I Equip	SM C&I	\$0	\$156	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
79	ENERGY STAR Commercial Solid Door Freezers less than 20ft3	3-C/I Equip	SM C&I	\$0	\$156	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
80	ENERGY STAR Commercial Solid Door Freezers 20 to 48 ft3	3-C/I Equip	SM C&I	\$488	\$229	\$72.8	\$728.1	\$182.0	\$0.0	\$0.0	\$0.0	\$0.0	\$4,745.1	\$0
81	ENERGY STAR Commercial Solid Door Refrigerators less than 20ft3	3-C/I Equip	SM C&I	\$488	\$229	\$72.8	\$728.1	\$182.0	\$0.0	\$0.0	\$0.0	\$0.0	\$10,855.3	\$0
82	ENERGY STAR Commercial Solid Door Refrigerators 20 to 48 ft3	3-C/I Equip	SM C&I	\$122	\$174	\$18.2	\$182.0	\$45.5	\$0.0	\$0.0	\$0.0	\$0.0	\$578.8	\$0
83	ENERGY STAR Ice Machines less than 500 lbs	3-C/I Equip	SM C&I	\$122	\$174	\$18.2	\$182.0	\$45.5	\$0.0	\$0.0	\$0.0	\$0.0	\$1,144.0	\$0
84	ENERGY STAR Ice Machines 500 to 1000 lbs	3-C/I Equip	SM C&I	\$4,878	\$884	\$728.1	\$7,280.6	\$1,820.1	\$0.0	\$0.0	\$0.0	\$0.0	\$18,201.4	\$0
85	ENERGY STAR Ice Machines more than 1000 lb	3-C/I Equip	SM C&I	\$610	\$247	\$91.0	\$910.1	\$227.5	\$0.0	\$0.0	\$0.0	\$0.0	\$6,825.5	\$0
86	ENERGY STAR Steam Cookers 3 Pan	3-C/I Equip	SM C&I	\$4,878	\$884	\$728.1	\$7,280.6	\$1,820.1	\$0.0	\$0.0	\$0.0	\$0.0	\$72,805.5	\$0
87	High Bay HID replaced by 6F54T5HO	3-C/I Equip	SM C&I	\$3,658	\$702	\$546.0	\$5,460.4	\$1,365.1	\$0.0	\$0.0	\$0.0	\$0.0	\$109,208.3	\$0
88	EE Water Heater	3-C/I Equip	SM C&I	\$0	\$156	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
89	HP Water Heater (Base Usage 22831)	3-C/I Equip	SM C&I	\$728	\$338	\$136.5	\$910.1	\$455.0	\$0.0	\$0.0	\$0.0	\$0.0	\$4,550.3	\$0
90	HPT8 4ft 4 lamp, T12 to HPT8	3-C/I Equip	SM C&I	\$4,550	\$839	\$682.6	\$17,063.8	\$1,137.6	\$0.0	\$0.0	\$0.0	\$0.0	\$45,503.5	\$0
91	LED Exit Signs Electronic Fixtures (Retrofit Only)	3-C/I Equip	SM C&I	\$17,885	\$8,514	\$4,178.9	\$0.0	\$93,606.3	\$0.0	\$0.0	\$0.0	\$0.0	\$421,228.3	\$0
92	Occupancy Sensors under 500 W	3-C/I Equip	SM C&I	\$82,240	\$4,523	\$4,178.9	\$0.0	\$33,430.8	\$0.0	\$0.0	\$0.0	\$0.0	\$250,731.1	\$0
93	Strip Mall Low Cost DI Suite	3-C/I Equip	SM C&I	\$0	\$156	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
94	Commercial Smart Strip plug outle	3-C/I Equip	SM C&I	\$0	\$156	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
95	Pre Rinse Sprayers	3-C/I Equip	SM C&I	\$29	\$39	\$0.0	\$0.0	\$0.0	\$9.1	\$0.0	\$0.0	\$0.0	\$182.0	\$0
96	Refrigerant charging corrector	3-C/I Equip	SM C&I	\$737	\$156	\$0.0	\$0.0	\$0.0	\$227.5	\$0.0	\$0.0	\$0.0	\$15,926.2	\$0
97	Refrigeration Commissioning	3-C/I Equip	SM C&I	\$6,552	\$1,976	\$1,820.1	\$0.0	\$9,100.7	\$0.0	\$0.0	\$0.0	\$0.0	\$136,510.4	\$0
98	Strip curtains for walk-ins - freezer	3-C/I Equip	SM C&I	\$0	\$156	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
99	Vending Equipment Controlle	3-C/I Equip	SM C&I	\$33	\$165	\$9.1	\$0.0	\$45.5	\$0.0	\$0.0	\$0.0	\$0.0	\$455.0	\$0
100	Custom Incentives Small	3-C/I Equip	SM C&I	\$1,065	\$429	\$273.0	\$1,365.1	\$1,365.1	\$0.0	\$0.0	\$0.0	\$0.0	\$34,127.6	\$0
101	MasterMetered MultiFamily CFL Kits	8-Multiple Family	SM C&I	\$60,429	\$1,294	\$1,137.6	\$0.0	\$81,997.2	\$0.0	\$0.0	\$0.0	\$0.0	\$455,034.7	\$0
102	Demand-controlled ventilation (DCV)	4-C/I Equip	LG C&I	\$6,221	\$313	\$464.3	\$0.0	\$0.0	\$0.0	\$12,999.9	\$0.0	\$0.0	\$37,142.6	\$0
103	High Bay HID replaced by 6F54T5HO	4-C/I Equip	LG C&I	\$0	\$156	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
104	HPT8 4ft 4 lamp, T12 to HPT8	4-C/I Equip	LG C&I	\$118,764	\$6,191	\$6,034.8	\$0.0	\$48,278.0	\$0.0	\$0.0	\$0.0	\$0.0	\$391,051.8	\$0
105	Occupancy Sensors under 500 W	4-C/I Equip	LG C&I	\$0	\$156	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
106	Water-Cooled cent Chiller 150 - 300 ton 0.57 kW/ton with 0.46 kW/ton IPLV	4-C/I Equip	LG C&I	\$0	\$156	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
107	Water-Cooled Centrifugal Chiller < 150 ton 0.56 kW/ton with 0.53 kW/ton IPLV	4-C/I Equip	LG C&I	\$0	\$156	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0

Appendix D-2

109	Custom Incentives Large	4-C/I Equip	LG C&I	\$70,920	\$3,906	\$375,000.0	\$0.0	\$300.0	\$0.0	\$0.0	\$0.0	\$0.0	\$1,500,000.0	\$0
110	Motors 1 HP 1200	3-C/I Equip	SM C&I	\$0	\$156	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
111	Motors 5 HP 1200	3-C/I Equip	SM C&I	\$0	\$156	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
112	Motors 10 HP 1200	4-C/I Equip	LG C&I	\$0	\$156	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
113	Motors 20 HP 1200	4-C/I Equip	LG C&I	\$0	\$156	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
114	Motors 1 HP 3600	3-C/I Equip	SM C&I	\$0	\$156	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
115	Motors 5 HP 3600	3-C/I Equip	SM C&I	\$0	\$156	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
116	Motors 10 HP 3600	4-C/I Equip	LG C&I	\$0	\$156	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
117	Motors 20 HP 3600	4-C/I Equip	LG C&I	\$0	\$156	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
118	Water Pumps with VFD's	3-C/I Equip	SM C&I	\$0	\$156	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
119	HVAC Fans with VFD's	3-C/I Equip	SM C&I	\$0	\$156	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
120	Air Compressors with VFD's	3-C/I Equip	SM C&I	\$0	\$156	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
121	Water Pumps with VFD's	3-C/I Equip	SM C&I	\$0	\$156	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
122	HVAC Fans with VFD's	3-C/I Equip	SM C&I	\$0	\$156	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
123	Air Compressors with VFD's	3-C/I Equip	SM C&I	\$0	\$156	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
124	Water Pumps with VFD's	4-C/I Equip	LG C&I	\$916	\$157	\$6.3	\$100.0	\$10.0	\$0.0	\$0.0	\$0.0	\$0.0	\$2,250.0	\$0
125	HVAC Fans with VFD's	4-C/I Equip	LG C&I	\$916	\$157	\$6.3	\$100.0	\$10.0	\$0.0	\$0.0	\$0.0	\$0.0	\$2,250.0	\$0
126	Air Compressors with VFD's	4-C/I Equip	LG C&I	\$916	\$157	\$6.3	\$100.0	\$10.0	\$0.0	\$0.0	\$0.0	\$0.0	\$2,250.0	\$0

127	Demand			\$6,350,568	\$27,428	\$0	\$16,134	\$0	\$0	\$0	\$726,030	\$2,987,070	\$0	\$826,450	\$1,767,456
128	1-Res Audits			\$2,792,613	\$120,079	\$42,666	\$24,333	\$0	\$0	\$0	\$486,000	\$0	\$0	\$2,119,535	\$0
129	2-RES App Turn-In			\$1,007,726	\$5,820	\$22,406	\$34,500	\$0	\$0	\$0	\$382,500	\$0	\$0	\$562,500	\$0
130	3-RES EE HVAC			\$470,987	\$20,316	\$134,957	\$6,458	\$7,141	\$10,587	\$0	\$0	\$0	\$0	\$291,529	\$0
131	4-Res-EE P			\$3,783,349	\$300,246	\$320,065	\$38,445	\$66,050	\$35,820	\$425,237	\$855,077	\$0	\$0	\$1,742,420	\$0
132	5-RES New Con			\$492,079	\$86,438	\$8,838	\$6,545	\$0	\$0	\$0	\$229,088	\$0	\$0	\$161,169	\$0
133	9-Behavior Modification			\$74	\$0	\$74	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
134	8-Multiple Family			\$135,366	\$14,553	\$1,284	\$1,109	\$0	\$260	\$0	\$29,848	\$0	\$0	\$88,312	\$0
135	7-Low Income			\$1,387,430	\$339,803	\$1,032	\$1,544	\$0	\$0	\$0	\$12,355	\$0	\$0	\$1,032,696	\$0
136	1-Res Audits LI			\$495,441	\$17,556	\$6,830	\$4,626	\$0	\$0	\$0	\$64,935	\$0	\$0	\$401,494	\$0
137	2-RES App Turn-In LI			\$222,865	\$346	\$5,250	\$7,407	\$0	\$0	\$0	\$86,414	\$0	\$0	\$123,448	\$0
138	4-Res-EE P LI			\$95,452	\$7,024	\$10,006	\$0	\$0	\$0	\$17,048	\$23,868	\$0	\$0	\$37,506	\$0
139	1-C/I Audits			\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
140	2-Governmental Programs			\$1,427,986	\$132,042	\$3,406	\$3,925	\$0	\$30,106	\$0	\$0	\$0	\$0	\$691,689	\$566,817
141	3-C/I Equip			\$2,188,050	\$194,264	\$27,191	\$15,565	\$48,825	\$229,374	\$237	\$0	\$0	\$0	\$1,672,593	\$0
142	4-C/I Equip			\$2,533,337	\$192,883	\$12,690	\$381,054	\$300	\$48,608	\$0	\$0	\$0	\$0	\$1,897,802	\$0
143	5-IND MOTOR			\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
144				\$23,383,323	\$1,458,797	\$596,695	\$541,646	\$122,317	\$354,755	\$442,522	\$2,896,114	\$2,987,070	\$0	\$11,649,133	\$2,334,273

		Utility				Retailer Sales		Retail Store		Service Provider		Service Provide		Incentive		Incentive Rebate		Utility/SP	
		Total	Labor/Cost	Marketing	M&V	Incentive	Rebate Processing	Discount Tracking	Service Provider Costs	Equip/Audit	Shipping & Other		for Equip	O&M					
148	Recovery Allocation																		
149	Residential	Res	\$17,172,546	\$933,117	\$552,436	\$140,595	\$73,191	\$46,407	\$442,285	\$2,883,114	\$2,987,070	\$0	\$7,346,873	\$1,767,456					
150	Small Commercial & Industria	SM C&I	\$2,485,013	\$223,254	\$28,850	\$17,917	\$48,825	\$244,388	\$237	\$13,000	\$0	\$0	\$1,908,542	\$0					
151	Large Commercial & Industria	LG C&I	\$2,864,587	\$231,487	\$15,065	\$383,135	\$300	\$63,960	\$0	\$0	\$0	\$0	\$2,170,640	\$0					
152	Direct Gov	GOV	\$861,178	\$70,939	\$344	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$223,078	\$566,817					
			\$23,383,323	\$1,458,797	\$596,695	\$541,646	\$122,317	\$354,755	\$442,522	\$2,896,114	\$2,987,070	\$0	\$11,649,133	\$2,334,273					

**Appendix D-3**

Measure budgeted for 12 months starting June 1, 2011, ending May 31 2012

Measure Name	Program	Rate Class	Utility			Retailer Sales		Rebate		Retail Store		Service Provider		Incentive		Annual Utility/SP O&M
			Labor/Cost	Marketing	M&V	Incentive	Processing	Discount Tracking	Costs	Service Provide Equip/Audit	Shipping & Other	Incentive Rebate for Equip				
1 DLC-CAC	Demand	Res	\$25,298	\$0	\$14,881.0	\$0.0	\$0.0	\$0.0	\$0.0	\$669,645.0	\$2,678,580.0	\$0.0	\$744,050.0	\$830,504		
2 DLC-Pool Pumps	Demand	Res	\$918	\$0	\$540.0	\$0.0	\$0.0	\$0.0	\$0.0	\$24,300.0	\$153,900.0	\$0.0	\$40,500.0	\$41,728		
3 DLC-Water Heat	Demand	Res	\$202	\$0	\$119.0	\$0.0	\$0.0	\$0.0	\$0.0	\$5,355.0	\$33,915.0	\$0.0	\$8,925.0	\$9,196		
4 1-Res Home Audits - CFL 4 - Low Flow 2	1-Res Audits	Res	\$114,240	\$37,528	\$24,000.0	\$0.0	\$0.0	\$0.0	\$0.0	\$486,000.0	\$0.0	\$0.0	\$2,070,000.0	\$0		
5 Targeted Audit - Space Heat	1-Res Audits	Res	\$6,571	\$1,138	\$1,123.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$34,527.1	\$0		
6 Res Home Audits Year 1 kit	1-Res Audits	Res	\$0	\$63	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0		
7 Refrigerator/Freezer recycling	2-RES App Turn-In	Res	\$1,470	\$21,328	\$31,500.0	\$0.0	\$0.0	\$0.0	\$0.0	\$367,500.0	\$0.0	\$0.0	\$525,000.0	\$0		
8 Room Air Conditioners	2-RES App Turn-In	Res	\$4,350	\$1,078	\$3,000.0	\$0.0	\$0.0	\$0.0	\$0.0	\$15,000.0	\$0.0	\$0.0	\$37,500.0	\$0		
9 ASHP - SEER 15	3-RES EE HVAC	Res	\$2,120	\$8,874	\$642.3	\$2,141.1	\$1,070.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$69,586.4	\$0		
10 CAC - SEER 15	3-RES EE HVAC	Res	\$10,900	\$23,096	\$1,000.0	\$5,000.0	\$2,500.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$90,000.0	\$0		
11 CAC - Maintenance	3-RES EE HVAC	Res	\$4,422	\$101,795	\$4,421.7	\$0.0	\$6,632.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$110,542.8	\$0		
12 Furnace Fans	3-RES EE HVAC	Res	\$1,777	\$2,198	\$374.0	\$0.0	\$935.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$7,480.4	\$0		
13 EE Ground Source Heat Pump	3-RES EE HVAC	Res	\$4,050	\$596	\$500.0	\$0.0	\$250.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$32,550.0	\$0		
14 Solar Water Heating	4-Res-EE P	Res	\$915	\$1,002	\$192.5	\$0.0	\$481.4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$48,136.4	\$0		
15 HP Water Heater	4-Res-EE P	Res	\$915	\$1,002	\$192.5	\$0.0	\$481.4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$28,881.8	\$0		
16 EE Water Heater	4-Res-EE P	Res	\$4,750	\$5,039	\$1,000.0	\$0.0	\$2,500.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$25,000.0	\$0		
17 Programmable Thermostat_Heat	4-Res-EE P	Res	\$260	\$39	\$200.0	\$0.0	\$0.0	\$0.0	\$0.0	\$600.0	\$0.0	\$0.0	\$14,041.1	\$0		
Pool Pump Rerprogramming to be Off Noon to Eight PM	1-Res Audits	Res	\$0	\$39	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0		
19 CFL bulbs regular-15	1-Res Audits	Res	\$0	\$39	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0		
20 CFL Giveaway	4-Res-EE P	Res	\$35,500	\$29,039	\$12,500.0	\$0.0	\$0.0	\$0.0	\$0.0	\$135,000.0	\$0.0	\$0.0	\$175,000.0	\$0		
21 CFL bulbs regular - Outside - 15	4-Res-EE P	Res	\$0	\$39	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0		
22 CFL bulbs regular - 13	4-Res-EE P	Res	\$123,600	\$174,039	\$0.0	\$0.0	\$0.0	\$0.0	\$300,000.0	\$420,000.0	\$0.0	\$0.0	\$660,000.0	\$0		
Clothes Washer Energy Star, Electric Water heater,																
23 Electric Dryer	4-Res-EE P	Res	\$4,814	\$1,323	\$1,283.6	\$6,418.2	\$3,209.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$48,136.4	\$0		
24 Dehumidifiers	4-Res-EE P	Res	\$4,814	\$1,323	\$1,283.6	\$6,418.2	\$3,209.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$6,418.2	\$0		
25 Freezers Energy Star-Chest Freeze	4-Res-EE P	Res	\$2,407	\$681	\$641.8	\$3,209.1	\$1,604.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$8,022.7	\$0		
26 Holiday Lights	4-Res-EE P	Res	\$404	\$232	\$192.5	\$481.4	\$770.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$7,701.8	\$0		
27 LED Night Light	1-Res Audits	Res	\$0	\$39	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0		
Variable Speed Pool Pump+Proper Commissioning	4-Res-EE P	Res	\$1,843	\$306	\$267.1	\$1,335.3	\$534.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$53,410.3	\$0		
29 Refrigerators-Freezers Energy Star - Side by Sid	4-Res-EE P	Res	\$6,000	\$1,639	\$1,600.0	\$8,000.0	\$4,000.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$40,000.0	\$0		
30 Refrigerators-Freezers Energy Star - Top Freeze	4-Res-EE P	Res	\$4,814	\$1,323	\$1,283.6	\$6,418.2	\$3,209.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$32,090.9	\$0		
31 Room Air Conditioners	4-Res-EE P	Res	\$2,439	\$39	\$320.9	\$0.0	\$641.8	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$8,022.7	\$0		
32 Smart Strip plug outlet	4-Res-EE P	Res	\$1,309	\$624	\$0.0	\$0.0	\$0.0	\$584.4	\$0.0	\$0.0	\$0.0	\$0.0	\$11,688.2	\$0		
33 Torchiere Floor Lamp	4-Res-EE P	Res	\$7	\$43	\$0.0	\$0.0	\$0.0	\$3.2	\$0.0	\$0.0	\$0.0	\$0.0	\$64.2	\$0		
34 Residential New Construction - PY12	5-RES New Con	Res	\$0	\$328	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0		
35 Residential New Construction - PY34	5-RES New Con	Res	\$21,130	\$2,328	\$1,600.0	\$0.0	\$0.0	\$0.0	\$0.0	\$56,000.0	\$0.0	\$0.0	\$240,000.0	\$0		
36 Behavior_Mod	9-Behavior Modification	Res	\$8,000	\$74	\$20,000.0	\$0.0	\$0.0	\$0.0	\$0.0	\$280,000.0	\$0.0	\$0.0	\$0.0	\$0		
37 Estar Windows	1-Res Audits	Res	\$3,156	\$74	\$561.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$28,051.6	\$0		
38 Duct sealing 20 leakage base	1-Res Audits	Res	\$3,436	\$74	\$280.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$28,051.6	\$0		
39 Low Flow Showerheads	1-Res Audits	Res	\$0	\$74	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0		
40 Kitchen Aerator	1-Res Audits	Res	\$0	\$74	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0		
41 Bathroom Aerator	1-Res Audits	Res	\$0	\$74	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0		
42 Pipe Wrap	1-Res Audits	Res	\$0	\$74	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0		
43 Roof Insulation	1-Res Audits	Res	\$3,156	\$74	\$561.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$28,051.6	\$0		
44 Whole Building - Light Measure (Test-In)	1-Res Audits	Res	\$34,944	\$30,074	\$1,200.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$300,000.0	\$0		
45 Low Income Warm Program Through Act125	7-Low Income	Res	\$329,970	\$328	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$933,748.0	\$0		
46 Low Income Warm Program Through Act129 (Additional SmartStrips)	7-Low Income	Res	\$1,969	\$39	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$6,501.7	\$0		
47 1-Res Home Audits - CFL 4 - Low Flow 2 Water Heat	1-Res Audits LI	Res	\$13,972	\$4,862	\$2,935.3	\$0.0	\$0.0	\$0.0	\$0.0	\$59,440.1	\$0.0	\$0.0	\$253,171.0	\$0		
48 Schools Children Education-No Savings	1-Res Audits LI	Res	\$3,584	\$1,849	\$1,690.6	\$0.0	\$0.0	\$0.0	\$0.0	\$5,494.6	\$0.0	\$0.0	\$148,323.3	\$0		
49 Refrigerator/Freezer recycling	2-RES App Turn-In LI	Res	\$346	\$5,250	\$7,406.9	\$0.0	\$0.0	\$0.0	\$0.0	\$86,413.7	\$0.0	\$0.0	\$123,448.1	\$0		
50 Programmable Thermostat_Heat	1-Res Audits LI	Res	\$4	\$39	\$3.2	\$0.0	\$0.0	\$0.0	\$0.0	\$9.6	\$0.0	\$0.0	\$225.3	\$0		
51 CFL bulbs regular-15 -Free No Water Heat	1-Res Audits LI	Res	\$8	\$41	\$0.8	\$0.0	\$0.0	\$0.0	\$0.0	\$6.4	\$0.0	\$0.0	\$64.2	\$0		
CFL bulbs regular-15 -Free No Water Heat Mailed At Request	4-Res-EE P LI	Res	\$0	\$39	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0		
53 CFL bulbs regular - Outside - 15 - Store Rebates	4-Res-EE P LI	Res	\$0	\$39	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0		
54 CFL bulbs regular - 19 - Store Rebates	4-Res-EE P LI	Res	\$7,024	\$9,927	\$0.0	\$0.0	\$0.0	\$17,048.3	\$23,867.6	\$0.0	\$0.0	\$0.0	\$37,506.3	\$0		
55 LED Night Light	1-Res Audits LI	Res	\$0	\$39	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0		
56 Low Income Lighting-Warm Light	7-Low Income	Res	\$6,868	\$313	\$562.9	\$0.0	\$0.0	\$0.0	\$0.0	\$4,503.3	\$0.0	\$0.0	\$45,033.3	\$0		

57	Low Income Lighting-Warm SmartStrig	7-Low Income	Res	\$6,204	\$39	\$185.8	\$0.0	\$0.0	\$0.0	\$1,486.1	\$0.0	\$0.0	\$26,006.8	\$0
58	Low Income Lighting-Low Usage	7-Low Income	Res	\$10,114	\$313	\$829.0	\$0.0	\$0.0	\$0.0	\$6,631.9	\$0.0	\$0.0	\$66,318.8	\$0
59	Multiple Family - CFL Lighting	8-Multiple Family	Res	\$8,063	\$313	\$601.7	\$0.0	\$0.0	\$0.0	\$16,847.7	\$0.0	\$0.0	\$48,136.4	\$0
60	Multiple Family - T8-Lighting	8-Multiple Family	SM C&I	\$115	\$461	\$18.6	\$0.0	\$111.4	\$0.0	\$0.0	\$0.0	\$0.0	\$1,300.0	\$0
61	Commercial, Industrial Audit - Sm&Md	3-C/I Equip	SM C&I	\$0	\$313	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
62	Commercial, Industrial Audit - Large	4-C/I Equip	LG C&I	\$0	\$313	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
<b>Commercial CFL Program - Kits Mailed to Small Commercial</b>														
63	Commercial, Industrial Audit - Gov	3-C/I Equip	SM C&I	\$17,415	\$39	\$0.0	\$0.0	\$0.0	\$0.0	\$7,280.6	\$0.0	\$0.0	\$455,034.7	\$10,671
64	Commercial, Industrial Audit - Gov	2-Governmental Programs	LG C&I	\$0	\$313	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
65	High Bay HID replaced by 6F54TSHO	2-Governmental Programs	LG C&I	\$7,552	\$344	\$619.0	\$0.0	\$4,952.3	\$0.0	\$0.0	\$0.0	\$0.0	\$137,279.1	\$0
66	HPT8 4ft 4 lamp, T12 to HPT8	2-Governmental Programs	LG C&I	\$0	\$344	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
67	LED Exit Signs Electronic Fixtures (Retrofit Only)	2-Governmental Programs	LG C&I	\$9,179	\$344	\$752.4	\$0.0	\$6,019.0	\$0.0	\$0.0	\$0.0	\$0.0	\$45,142.5	\$0
68	Occupancy Sensors under 500 W	2-Governmental Programs	LG C&I	\$1,731	\$344	\$141.9	\$0.0	\$1,134.9	\$0.0	\$0.0	\$0.0	\$0.0	\$13,516.8	\$0
69	LED Auto Traffic Signals	2-Governmental Programs	SM C&I	\$1,731	\$344	\$141.9	\$0.0	\$1,134.9	\$0.0	\$0.0	\$0.0	\$0.0	\$25,535.5	\$0
70	LED Pedestrian Signals	2-Governmental Programs	SM C&I	\$20,769	\$344	\$1,702.4	\$0.0	\$13,619.0	\$0.0	\$0.0	\$0.0	\$0.0	\$170,237.0	\$0
<b>Street Lighting - Weighted Average All Replacements</b>														
71	Water-Cooled cent Chiller 150 - 300 ton 0.57 kW/ton	2-Governmental Programs	Gov	\$70,939	\$344	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$223,078.1	\$566,817
72	Water-Cooled cent Chiller 150 - 300 ton 0.57 kW/ton with 0.46 kW/ton IPLV	2-Governmental Programs	LG C&I	\$0	\$344	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
73	Custom Incentives Gov	2-Governmental Programs	LG C&I	\$7,361	\$344	\$61.9	\$0.0	\$5.0	\$0.0	\$0.0	\$0.0	\$0.0	\$24,761.7	\$0
74	AC <65,000 1 Ph	3-C/I Equip	SM C&I	\$1,274	\$702	\$273.0	\$1,820.1	\$910.1	\$0.0	\$0.0	\$0.0	\$0.0	\$33,162.1	\$0
75	AC 65,000 - 135,000	3-C/I Equip	SM C&I	\$4,232	\$1,521	\$682.6	\$6,825.5	\$1,365.1	\$0.0	\$0.0	\$0.0	\$0.0	\$64,636.9	\$0
76	AC 240,000 - 760,000	3-C/I Equip	SM C&I	\$3,527	\$1,294	\$568.8	\$5,687.9	\$1,137.6	\$0.0	\$0.0	\$0.0	\$0.0	\$192,578.8	\$0
77	Clothes Washer CEE Tier1, Electric Water heater, Electric Dryer	3-C/I Equip	SM C&I	\$2,548	\$1,248	\$546.0	\$3,640.3	\$1,820.1	\$0.0	\$0.0	\$0.0	\$0.0	\$18,201.4	\$0
78	AntiSweatHeater Controller for Cooler - one controller controlling at least two doors	3-C/I Equip	SM C&I	\$2,446	\$220	\$63.7	\$0.0	\$127.4	\$0.0	\$0.0	\$0.0	\$0.0	\$34,537.3	\$0
79	AntiSweatHeater Controller for Freezers - one controller controlling at least two doors	3-C/I Equip	SM C&I	\$6,290	\$320	\$163.8	\$0.0	\$327.6	\$0.0	\$0.0	\$0.0	\$0.0	\$81,387.2	\$0
80	ENERGY STAR Commercial Solid Door Freezers less than 20ft3	3-C/I Equip	SM C&I	\$366	\$211	\$54.6	\$546.0	\$136.5	\$0.0	\$0.0	\$0.0	\$0.0	\$3,558.8	\$0
81	ENERGY STAR Commercial Solid Door Freezers 20 to 48 ft3	3-C/I Equip	SM C&I	\$366	\$211	\$54.6	\$546.0	\$136.5	\$0.0	\$0.0	\$0.0	\$0.0	\$8,141.5	\$0
82	ENERGY STAR Commercial Solid Door Refrigerators less than 20ft3	3-C/I Equip	SM C&I	\$122	\$174	\$18.2	\$182.0	\$45.5	\$0.0	\$0.0	\$0.0	\$0.0	\$578.8	\$0
83	ENERGY STAR Commercial Solid Door Refrigerators 20 to 48 ft3	3-C/I Equip	SM C&I	\$122	\$174	\$18.2	\$182.0	\$45.5	\$0.0	\$0.0	\$0.0	\$0.0	\$1,144.0	\$0
84	ENERGY STAR Ice Machines less than 500 lbs	3-C/I Equip	SM C&I	\$6,097	\$1,066	\$910.1	\$9,100.7	\$2,275.2	\$0.0	\$0.0	\$0.0	\$0.0	\$22,751.7	\$0
85	ENERGY STAR Ice Machines 500 to 1000 lbs	3-C/I Equip	SM C&I	\$610	\$247	\$91.0	\$910.1	\$227.5	\$0.0	\$0.0	\$0.0	\$0.0	\$6,825.5	\$0
86	ENERGY STAR Ice Machines more than 1000 lbs	3-C/I Equip	SM C&I	\$4,878	\$884	\$728.1	\$7,280.6	\$1,820.1	\$0.0	\$0.0	\$0.0	\$0.0	\$72,805.5	\$0
87	ENERGY STAR Steam Cookers 3 Pan	3-C/I Equip	SM C&I	\$3,658	\$702	\$546.0	\$5,460.4	\$1,365.1	\$0.0	\$0.0	\$0.0	\$0.0	\$109,208.3	\$0
88	High Bay HID replaced by 6F54TSHO	3-C/I Equip	SM C&I	\$17,868	\$3,660	\$1,751.8	\$0.0	\$14,014.2	\$0.0	\$0.0	\$0.0	\$0.0	\$582,710.4	\$0
89	EE Water Heater	3-C/I Equip	SM C&I	\$728	\$338	\$136.5	\$910.1	\$455.0	\$0.0	\$0.0	\$0.0	\$0.0	\$4,550.3	\$0
90	HP Water Heater (Base Usage 22831)	3-C/I Equip	SM C&I	\$4,550	\$839	\$682.6	\$17,063.8	\$1,137.6	\$0.0	\$0.0	\$0.0	\$0.0	\$45,503.5	\$0
91	HPT8 4ft 4 lamp, T12 to HPT8	3-C/I Equip	SM C&I	\$0	\$156	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
92	LED Exit Signs Electronic Fixtures (Retrofit Only)	3-C/I Equip	SM C&I	\$82,240	\$4,523	\$4,178.9	\$0.0	\$33,430.8	\$0.0	\$0.0	\$0.0	\$0.0	\$250,731.1	\$0
93	Occupancy Sensors under 500 W	3-C/I Equip	SM C&I	\$9,214	\$384	\$227.5	\$0.0	\$1,820.1	\$0.0	\$0.0	\$0.0	\$0.0	\$32,516.8	\$0
94	Strip Mall Low Cost DI Suite	3-C/I Equip	SM C&I	\$69,284	\$270	\$113.8	\$0.0	\$910.1	\$0.0	\$0.0	\$0.0	\$0.0	\$233,887.8	\$0
95	Commercial Smart Strip plug outlet	3-C/I Equip	SM C&I	\$29	\$39	\$0.0	\$0.0	\$0.0	\$0.0	\$9.1	\$0.0	\$0.0	\$182.0	\$0
96	Pre Rinse Sprayers	3-C/I Equip	SM C&I	\$737	\$156	\$0.0	\$0.0	\$0.0	\$227.5	\$0.0	\$0.0	\$0.0	\$15,926.2	\$0
97	Refrigerant charging correctior	3-C/I Equip	SM C&I	\$32,762	\$9,257	\$9,100.7	\$0.0	\$45,503.5	\$0.0	\$0.0	\$0.0	\$0.0	\$682,552.0	\$0
98	Refrigeration Commissioning	3-C/I Equip	SM C&I	\$0	\$156	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
99	Strip curtains for walk-ins - freezer	3-C/I Equip	SM C&I	\$33	\$165	\$9.1	\$0.0	\$45.5	\$0.0	\$0.0	\$0.0	\$0.0	\$455.0	\$0
100	Vending Equipment Controller	3-C/I Equip	SM C&I	\$2,130	\$702	\$546.0	\$2,730.2	\$2,730.2	\$0.0	\$0.0	\$0.0	\$0.0	\$68,255.2	\$0
101	Custom Incentives Small	3-C/I Equip	SM C&I	\$221,981	\$4,335	\$4,178.9	\$0.0	\$301,211.7	\$0.0	\$0.0	\$0.0	\$0.0	\$1,671,540.9	\$0
102	MasterMetered MultiFamily CFL Kits	8-Multiple Family	SM C&I	\$6,221	\$313	\$464.3	\$0.0	\$0.0	\$0.0	\$12,999.9	\$0.0	\$0.0	\$37,142.6	\$0
103	Demand-controlled ventilation (DCV)	4-C/I Equip	LG C&I	\$0	\$156	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
104	High Bay HID replaced by 6F54TSHO	4-C/I Equip	LG C&I	\$41,036	\$8,203	\$4,023.2	\$0.0	\$32,185.3	\$0.0	\$0.0	\$0.0	\$0.0	\$892,177.5	\$0
105	HPT8 4ft 4 lamp, T12 to HPT8	4-C/I Equip	LG C&I	\$0	\$156	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
106	Occupancy Sensors under 500 W	4-C/I Equip	LG C&I	\$4,646	\$571	\$414.8	\$0.0	\$3,318.5	\$0.0	\$0.0	\$0.0	\$0.0	\$39,523.7	\$0
107	Water-Cooled cent Chiller 150 - 300 ton 0.57 kW/ton with 0.46 kW/ton IPLV	4-C/I Equip	LG C&I	\$0	\$156	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
108	Water-Cooled Centrifugal Chiller < 150 ton 0.56 kW/ton with 0.53 kW/ton IPLV	4-C/I Equip	LG C&I	\$0	\$156	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
109	Custom Incentives Large	4-C/I Equip	LG C&I	\$70,920	\$3,906	\$375,000.0	\$0.0	\$300.0	\$0.0	\$0.0	\$0.0	\$0.0	\$1,500,000.0	\$0
110	Motors 1 HP 1200	3-C/I Equip	SM C&I	\$0	\$156	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
111	Motors 5 HP 1200	3-C/I Equip	SM C&I	\$0	\$156	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
112	Motors 10 HP 1200	4-C/I Equip	LG C&I	\$4	\$158	\$2.0	\$25.0	\$20.0	\$0.0	\$0.0	\$0.0	\$0.0	\$700.0	\$0
113	Motors 20 HP 1200	4-C/I Equip	LG C&I	\$4	\$158	\$2.0	\$25.0	\$20.0	\$0.0	\$0.0	\$0.0	\$0.0	\$1,130.0	\$0
114	Motors 1 HP 3600	3-C/I Equip	SM C&I	\$0	\$156	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0



**Appendix D-4**

Measure budgeted for 12 months starting June 1, 2012, ending May 31 2013

Measure Name	Program	Recovery Class	Utility			Retailer Sales Incentive	Rebate Processing	Retail Store Discount Tracking	Service Provider Costs	Service Provide Equip/Audit	Incentive Shipping & Other	Incentive Rebate for Equip	Utility/SP O&M
			Labor/Cost	Marketing	M&V								
1 DLC-CAC	Demand	Res	\$0	\$0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0	
2 DLC-Pool Pumps	Demand	Res	\$0	\$0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0	
3 DLC-Water Heat	Demand	Res	\$0	\$0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0	
4 1-Res Home Audits - CFL 4 - Low Flow 2	1-Res Audits	Res	\$119,000	\$39,078	\$25,000.0	\$0.0	\$0.0	\$0.0	\$506,250.0	\$0.0	\$0.0	\$2,156,250.0	\$0
5 Targeted Audit - Space Heat	1-Res Audits	Res	\$6,571	\$1,138	\$1,123.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$34,527.1	\$0
6 Res Home Audits Year 1 kit	1-Res Audits	Res	\$0	\$63	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
7 Refrigerator/Freezer recycling	2-RES App Turn-In	Res	\$1,470	\$21,328	\$31,500.0	\$0.0	\$0.0	\$0.0	\$367,500.0	\$0.0	\$0.0	\$525,000.0	\$0
8 Room Air Conditioners	2-RES App Turn-In	Res	\$4,350	\$1,078	\$3,000.0	\$0.0	\$0.0	\$0.0	\$15,000.0	\$0.0	\$0.0	\$37,500.0	\$0
9 ASHP - SEER 15	3-RES EE HVAC	Res	\$2,120	\$8,874	\$642.3	\$2,141.1	\$1,070.6	\$0.0	\$0.0	\$0.0	\$0.0	\$69,586.4	\$0
10 CAC - SEER 15	3-RES EE HVAC	Res	\$10,900	\$23,096	\$1,000.0	\$5,000.0	\$2,500.0	\$0.0	\$0.0	\$0.0	\$0.0	\$90,000.0	\$0
11 CAC - Maintenance	3-RES EE HVAC	Res	\$4,422	\$101,795	\$4,421.7	\$0.0	\$6,632.6	\$0.0	\$0.0	\$0.0	\$0.0	\$110,542.8	\$0
12 Furnace Fans	3-RES EE HVAC	Res	\$3,553	\$4,068	\$748.0	\$0.0	\$1,870.1	\$0.0	\$0.0	\$0.0	\$0.0	\$14,960.9	\$0
13 EE Ground Source Heat Pump	3-RES EE HVAC	Res	\$4,050	\$596	\$500.0	\$0.0	\$250.0	\$0.0	\$0.0	\$0.0	\$0.0	\$32,550.0	\$0
14 Solar Water Heating	4-Res-EE P	Res	\$915	\$1,002	\$192.5	\$0.0	\$481.4	\$0.0	\$0.0	\$0.0	\$0.0	\$48,136.4	\$0
15 HP Water Heater	4-Res-EE P	Res	\$915	\$1,002	\$192.5	\$0.0	\$481.4	\$0.0	\$0.0	\$0.0	\$0.0	\$28,881.8	\$0
16 EE Water Heater	4-Res-EE P	Res	\$4,188	\$4,448	\$881.7	\$0.0	\$2,204.2	\$0.0	\$0.0	\$0.0	\$0.0	\$22,041.8	\$0
17 Programmable Thermostat_Heat	4-Res-EE P	Res	\$260	\$39	\$200.0	\$0.0	\$0.0	\$0.0	\$600.0	\$0.0	\$0.0	\$14,040.1	\$0
18 Pool Pump Rerprogramming to be Off Noon to Eight PM	1-Res Audits	Res	\$0	\$39	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
19 CFL bulbs regular-15	1-Res Audits	Res	\$0	\$39	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
20 CFL Giveaway	4-Res-EE P	Res	\$35,500	\$29,039	\$12,500.0	\$0.0	\$0.0	\$0.0	\$135,000.0	\$0.0	\$0.0	\$175,000.0	\$0
21 CFL bulbs regular - Outside - 15	4-Res-EE P	Res	\$0	\$39	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
22 CFL bulbs regular - 13	4-Res-EE P	Res	\$126,582	\$178,237	\$0.0	\$0.0	\$0.0	\$307,237.2	\$430,132.1	\$0.0	\$0.0	\$675,921.9	\$0
23 Clothes Washer Energy Star, Electric Water heater, Electric Dryer	4-Res-EE P	Res	\$4,814	\$1,323	\$1,283.6	\$6,418.2	\$3,209.1	\$0.0	\$0.0	\$0.0	\$0.0	\$48,136.4	\$0
24 Dehumidifiers	4-Res-EE P	Res	\$4,814	\$1,323	\$1,283.6	\$6,418.2	\$3,209.1	\$0.0	\$0.0	\$0.0	\$0.0	\$6,418.2	\$0
25 Freezers Energy Star-Chest Freezer	4-Res-EE P	Res	\$2,407	\$681	\$641.8	\$3,209.1	\$1,604.5	\$0.0	\$0.0	\$0.0	\$0.0	\$8,022.7	\$0
26 Holiday Lights	4-Res-EE P	Res	\$404	\$232	\$192.5	\$481.4	\$770.2	\$0.0	\$0.0	\$0.0	\$0.0	\$7,701.8	\$0
27 LED Night Light	1-Res Audits	Res	\$0	\$39	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
28 Variable Speed Pool Pump+Proper Commissioning	4-Res-EE P	Res	\$1,843	\$306	\$267.1	\$1,335.3	\$534.1	\$0.0	\$0.0	\$0.0	\$0.0	\$53,410.3	\$0
29 Refrigerators-Freezers Energy Star - Side by Side	4-Res-EE P	Res	\$6,000	\$1,639	\$1,600.0	\$8,000.0	\$4,000.0	\$0.0	\$0.0	\$0.0	\$0.0	\$40,000.0	\$0
30 Refrigerators-Freezers Energy Star - Top Freezer	4-Res-EE P	Res	\$4,814	\$1,323	\$1,283.6	\$6,418.2	\$3,209.1	\$0.0	\$0.0	\$0.0	\$0.0	\$32,090.9	\$0
31 Room Air Conditioners	4-Res-EE P	Res	\$2,439	\$39	\$320.9	\$0.0	\$641.8	\$0.0	\$0.0	\$0.0	\$0.0	\$8,022.7	\$0
32 Smart Strip plug outlet	4-Res-EE P	Res	\$1,309	\$624	\$0.0	\$0.0	\$0.0	\$584.4	\$0.0	\$0.0	\$0.0	\$11,688.2	\$0
33 Torchiere Floor Lamps	4-Res-EE P	Res	\$7	\$43	\$0.0	\$0.0	\$0.0	\$3.2	\$0.0	\$0.0	\$0.0	\$64.2	\$0
34 Residential New Construction - PY12	5-RES New Con	Res	\$0	\$328	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
35 Residential New Construction - PY34	5-RES New Con	Res	\$21,130	\$2,328	\$1,600.0	\$0.0	\$0.0	\$0.0	\$56,000.0	\$0.0	\$0.0	\$240,000.0	\$0
36 Behavior_Mod	9-Behavior Modification	Res	\$41,996	\$74	\$104,990.2	\$0.0	\$0.0	\$0.0	\$1,469,862.3	\$0.0	\$0.0	\$0.0	\$0
37 Estar Windows	1-Res Audits	Res	\$3,156	\$74	\$561.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$28,051.6	\$0
38 Duct sealing 20 leakage base	1-Res Audits	Res	\$3,436	\$74	\$280.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$28,051.6	\$0
39 Low Flow Showerheads	1-Res Audits	Res	\$0	\$74	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
40 Kitchen Aerator	1-Res Audits	Res	\$0	\$74	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
41 Bathroom Aerator	1-Res Audits	Res	\$0	\$74	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
42 Pipe Wrap	1-Res Audits	Res	\$0	\$74	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
43 Roof Insulation	1-Res Audits	Res	\$3,156	\$74	\$561.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$28,051.6	\$0
44 Whole Building - Light Measure (Test-In)	1-Res Audits	Res	\$34,944	\$30,074	\$1,200.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$300,000.0	\$0
45 Low Income Warm Program Through Act129	7-Low Income	Res	\$344,014	\$328	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$973,489.3	\$0
46 Low Income Warm Program Through Act129 (Additional SmartStrips)	7-Low Income	Res	\$2,053	\$39	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$6,778.4	\$0
47 1-Res Home Audits - CFL 4 - Low Flow 2 Water Heat	1-Res Audits LI	Res	\$13,972	\$4,862	\$2,935.3	\$0.0	\$0.0	\$0.0	\$59,440.1	\$0.0	\$0.0	\$253,171.0	\$0
48 Schools Childern Education-No Savings	1-Res Audits LI	Res	\$3,584	\$1,849	\$1,690.6	\$0.0	\$0.0	\$0.0	\$5,494.6	\$0.0	\$0.0	\$148,323.3	\$0
49 Refrigerator/Freezer recycling	2-RES App Turn-In LI	Res	\$348	\$5,290	\$7,466.5	\$0.0	\$0.0	\$0.0	\$87,109.5	\$0.0	\$0.0	\$124,442.1	\$0
50 Programmable Thermostat_Heat	1-Res Audits LI	Res	\$4	\$39	\$3.2	\$0.0	\$0.0	\$0.0	\$9.6	\$0.0	\$0.0	\$225.3	\$0
51 CFL bulbs regular-15 -Free No Water Heat	1-Res Audits LI	Res	\$0	\$39	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
52 CFL bulbs regular-15 -Free No Water Heat Mailed At Request	4-Res-EE P LI	Res	\$0	\$39	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0



102	MasterMetered MultiFamily CFL Kits	8-Multiple Family	SM C&I	\$6,221	\$313	\$464.3	\$0.0	\$0.0	\$0.0	\$12,999.9	\$0.0	\$0.0	\$37,142.6	\$0
103	Demand-controlled ventilation (DCV)	4-C/I Equip	LG C&I	\$0	\$156	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
104	High Bay HID replaced by 6F54T5HO	4-C/I Equip	LG C&I	\$37,069	\$7,425	\$3,634.3	\$0.0	\$29,074.1	\$0.0	\$0.0	\$0.0	\$0.0	\$805,933.0	\$0
105	HPT8 4ft 4 lamp, T12 to HPT8	4-C/I Equip	LG C&I	\$12	\$157	\$0.6	\$0.0	\$5.0	\$0.0	\$0.0	\$0.0	\$0.0	\$40.3	\$0
106	Occupancy Sensors under 500 W	4-C/I Equip	LG C&I	\$4,646	\$571	\$414.8	\$0.0	\$3,318.5	\$0.0	\$0.0	\$0.0	\$0.0	\$39,523.7	\$0
107	Water-Cooled cent Chiller 150 - 300 ton	4-C/I Equip	LG C&I	\$0	\$156	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
108	0.57 kW/ton with 0.46 kW/ton IPLV	4-C/I Equip	LG C&I	\$0	\$156	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
109	Water-Cooled Centrifugal Chiller < 150 ton	4-C/I Equip	LG C&I	\$0	\$156	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
109	0.56 kW/ton with 0.53 kW/ton IPLV	4-C/I Equip	LG C&I	\$0	\$156	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
109	Custom Incentives Large	4-C/I Equip	LG C&I	\$23,640	\$1,406	\$125,000.0	\$0.0	\$100.0	\$0.0	\$0.0	\$0.0	\$0.0	\$500,000.0	\$0
110	Motors 1 HP 1200	3-C/I Equip	SM C&I	\$0	\$156	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
111	Motors 5 HP 1200	3-C/I Equip	SM C&I	\$0	\$156	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
112	Motors 10 HP 1200	4-C/I Equip	LG C&I	\$4	\$158	\$2.0	\$25.0	\$20.0	\$0.0	\$0.0	\$0.0	\$0.0	\$700.0	\$0
113	Motors 20 HP 1200	4-C/I Equip	LG C&I	\$4	\$158	\$2.0	\$25.0	\$20.0	\$0.0	\$0.0	\$0.0	\$0.0	\$1,130.0	\$0
114	Motors 1 HP 3600	3-C/I Equip	SM C&I	\$0	\$156	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
115	Motors 5 HP 3600	3-C/I Equip	SM C&I	\$0	\$156	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
116	Motors 10 HP 3600	4-C/I Equip	LG C&I	\$0	\$156	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
117	Motors 20 HP 3600	4-C/I Equip	LG C&I	\$0	\$156	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
118	Water Pumps with VFD's	3-C/I Equip	SM C&I	\$0	\$156	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
119	HVAC Fans with VFD's	3-C/I Equip	SM C&I	\$0	\$156	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
120	Air Compressors with VFD's	3-C/I Equip	SM C&I	\$0	\$156	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
121	Water Pumps with VFD's	3-C/I Equip	SM C&I	\$0	\$156	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
122	HVAC Fans with VFD's	3-C/I Equip	SM C&I	\$0	\$156	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
123	Air Compressors with VFD's	3-C/I Equip	SM C&I	\$0	\$156	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0
124	Water Pumps with VFD's	4-C/I Equip	LG C&I	\$1,833	\$158	\$12.5	\$200.0	\$20.0	\$0.0	\$0.0	\$0.0	\$0.0	\$4,500.0	\$0
125	HVAC Fans with VFD's	4-C/I Equip	LG C&I	\$1,833	\$158	\$12.5	\$200.0	\$20.0	\$0.0	\$0.0	\$0.0	\$0.0	\$4,500.0	\$0
126	Air Compressors with VFD's	4-C/I Equip	LG C&I	\$1,833	\$158	\$12.5	\$200.0	\$20.0	\$0.0	\$0.0	\$0.0	\$0.0	\$4,500.0	\$0
125														
126														
127	Demand			\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
128	1-Res Audits			\$3,351,161	\$170,263	\$70,991	\$28,726	\$0	\$0	\$506,250	\$0	\$0	\$2,574,932	\$0
129	2-RES App Turn-In			\$1,007,726	\$5,820	\$22,406	\$34,500	\$0	\$0	\$382,500	\$0	\$0	\$562,500	\$0
130	3-RES EE HVAC			\$507,891	\$25,045	\$138,430	\$7,312	\$7,141	\$12,323	\$0	\$0	\$0	\$317,640	\$0
131	4-Res-EE P			\$2,545,148	\$197,209	\$221,340	\$20,840	\$32,280	\$20,345	\$307,825	\$565,732	\$0	\$1,179,577	\$0
132	5-RES New Con			\$321,386	\$21,130	\$2,656	\$1,600	\$0	\$0	\$0	\$56,000	\$0	\$240,000	\$0
133	9-Behavior Modification			\$1,616,923	\$41,996	\$74	\$104,990	\$0	\$0	\$1,469,862	\$0	\$0	\$0	\$0
134	8-Multiple Family			\$132,984	\$14,391	\$1,075	\$1,083	\$0	\$103	\$0	\$29,848	\$0	\$86,484	\$0
135	7-Low Income			\$1,505,977	\$369,809	\$1,032	\$1,610	\$0	\$0	\$0	\$12,876	\$0	\$1,120,650	\$0
136	1-Res Audits LI			\$495,683	\$17,560	\$6,830	\$4,629	\$0	\$0	\$0	\$64,944	\$0	\$401,720	\$0
137	2-RES App Turn-In LI			\$224,657	\$348	\$5,290	\$7,467	\$0	\$0	\$0	\$87,110	\$0	\$124,442	\$0
138	4-Res-EE P LI			\$95,452	\$7,024	\$10,006	\$0	\$0	\$0	\$17,048	\$23,868	\$0	\$37,506	\$0
139	1-C/I Audits			\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
140	2-Governmental Programs			\$869,180	\$71,187	\$3,406	\$20	\$0	\$163	\$0	\$0	\$0	\$227,587	\$566,817
141	3-C/I Equip			\$4,380,401	\$384,491	\$30,430	\$20,850	\$24,053	\$284,056	\$23	\$7,281	\$0	\$3,618,547	\$10,671
142	4-C/I Equip			\$1,605,483	\$70,873	\$11,444	\$129,091	\$650	\$32,598	\$0	\$0	\$0	\$1,360,827	\$0
143	5-IND MOTOR			\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
144				\$18,660,053	\$1,397,145	\$525,410	\$362,718	\$64,125	\$349,588	\$324,896	\$3,206,270	\$0	\$11,852,412	\$577,488
145														
146														
147														
148	Recovery Allocation													
149	Residential	Res		\$11,745,965	\$864,267	\$479,367	\$212,275	\$39,421	\$32,668	\$324,873	\$3,185,990	\$0	\$6,607,104	\$0
150	Small Commercial & Industrial	SM C&I		\$4,440,112	\$390,819	\$31,880	\$21,331	\$24,053	\$284,160	\$23	\$20,280	\$0	\$3,656,894	\$10,671
151	Large Commercial & Industrial	LG C&I		\$1,612,798	\$71,121	\$13,819	\$129,112	\$650	\$32,760	\$0	\$0	\$0	\$1,365,336	\$0
152	Direct Gov	GOV		\$861,178	\$70,939	\$344	\$0	\$0	\$0	\$0	\$0	\$0	\$223,078	\$566,817
				\$18,660,053	\$1,397,145	\$525,410	\$362,718	\$64,125	\$349,588	\$324,896	\$3,206,270	\$0	\$11,852,412	\$577,488

148	Recovery Allocation														
149	Residential	Res		\$11,745,965	\$864,267	\$479,367	\$212,275	\$39,421	\$32,668	\$324,873	\$3,185,990	\$0	\$6,607,104	\$0	
150	Small Commercial & Industrial	SM C&I		\$4,440,112	\$390,819	\$31,880	\$21,331	\$24,053	\$284,160	\$23	\$20,280	\$0	\$3,656,894	\$10,671	
151	Large Commercial & Industrial	LG C&I		\$1,612,798	\$71,121	\$13,819	\$129,112	\$650	\$32,760	\$0	\$0	\$0	\$1,365,336	\$0	
152	Direct Gov	GOV		\$861,178	\$70,939	\$344	\$0	\$0	\$0	\$0	\$0	\$0	\$223,078	\$566,817	
				\$18,660,053	\$1,397,145	\$525,410	\$362,718	\$64,125	\$349,588	\$324,896	\$3,206,270	\$0	\$11,852,412	\$577,488	

**Appendix D-5**  
Per Unit Budgeted Assumption per Measure

Appendix D-5  
Per Unit Budget Assumptions

Measure Name	Program	Rate Class	First Year start up costs*	Annual Base Cost after First Year	Per Unit A&G	Per Unit Program Costs	Per Unit Utility Costs	Utility Labor/Cost	Per Unit Marketing	Per Unit M&M	Retailer Sales Incentive	Rebate Processing	Retail Store Discount Tracking	Service Provider Costs	Service Provide Equip/Audit	Incentive Shipping & Other	Incentive Rebate for Equip	Utility/SP O&M	Rebate O&M
1	DLC-CAC	Demand	\$6,563	0.0000	\$3	\$45	\$48	\$1.70	\$1.00	\$0.00				\$45.00	\$180.00		\$50.00	\$15.00	\$50.00
2	DLC-Pool Pumps	Demand	\$6,563	0.0000	\$3	\$45	\$48	\$1.70	\$1.00	\$0.00				\$45.00	\$285.00		\$75.00	\$15.00	\$75.00
3	DLC-Water Heat	Demand	\$6,563	0.0000	\$3	\$45	\$48	\$1.70	\$1.00	\$0.00				\$45.00	\$285.00		\$75.00	\$15.00	\$75.00
4	1-Res Home Audits - CFL 4 - Low Flow 2	1-Res Audits	\$6,563	328,1250	\$2	\$26	\$28	\$4.76	\$1.55	\$1.00				\$20.25		\$0.00	\$86.25		
5	Targeted Audit - Space Heat	1-Res Audits	\$6,563	328,1250	\$3	\$50	\$53	\$40.95	\$5.05	\$7.00							\$215.18		
6	Res Home Audits Year 1 kit	1-Res Audits	\$1,250	42,5000	\$0	\$7	\$7	\$2.12	\$1.05	\$1.00				\$3.25			\$87.73		
7	Refrigerator/Freezer recycling	2-RES App Turn-In	\$6,563	328,1250	\$7	\$33	\$40	\$0.14	\$2.00	\$3.00				\$35.00			\$50.00		
8	Room Air Conditioners	2-RES App Turn-In	\$6,563	328,1250	\$5	\$10	\$15	\$2.90	\$0.50	\$2.00				\$10.00			\$25.00		
9	ASHP - SEER 15	3-RES EE HVAC	\$1,918	95,8750	\$4	\$65	\$69	\$9.90	\$41.00	\$3.00	\$10.00	\$5.00		\$0.00			\$325.00		
10	CAC - SEER 15	3-RES EE HVAC	\$1,918	95,8750	\$5	\$80	\$85	\$21.80	\$46.00	\$2.00	\$10.00	\$5.00		\$0.00			\$180.00		
11	CAC - Maintenance	3-RES EE HVAC	\$1,918	95,8750	\$3	\$50	\$53	\$2.00	\$46.00	\$2.00				\$0.00			\$50.00		
12	Furnace Fans	3-RES EE HVAC	\$6,563	328,1250	\$2	\$25	\$27	\$9.50	\$10.00	\$2.00				\$5.00			\$40.00		
13	EE Ground Source Heat Pump	3-RES EE HVAC	\$1,918	95,8750	\$6	\$100	\$106	\$81.00	\$10.00	\$10.00				\$5.00			\$651.00		
14	Solar Water Heating	4-Res-EE P	\$786	39,3125	\$2	\$25	\$27	\$9.50	\$10.00	\$2.00				\$5.00			\$50.00		
15	HP Water Heater	4-Res-EE P	\$786	39,3125	\$2	\$25	\$27	\$9.50	\$10.00	\$2.00				\$5.00			\$300.00		
16	EE Water Heater	4-Res-EE P	\$786	39,3125	\$2	\$25	\$27	\$9.50	\$10.00	\$2.00				\$5.00			\$50.00		
17	Programmable Thermostat-Heat	4-Res-EE P	\$786	39,3125	\$0	\$5	\$5	\$1.30		\$1.00				\$3.00			\$70.20		
	Pool Pump Reprogramming to be Off																		
18	Noon to Eight PM	1-Res Audits	\$786	39,3125	\$5	\$80	\$85	\$77.80	\$1.00	\$1.00	\$2.00	\$3.00					\$80.00		
19	CFL bulbs regular-15	1-Res Audits	\$786	39,3125	\$0	\$5	\$5	\$2.55	\$0.50	\$0.25				\$2.00			\$20.00		
20	CFL Giveaway	4-Res-EE P	\$786	39,3125	\$0	\$4	\$4	\$0.71	\$0.58	\$0.25				\$2.70			\$3.50		
21	CFL bulbs regular - Outside - 15	4-Res-EE P	\$786	39,3125	\$0	\$1	\$1	\$0.03		\$1.00			\$0.50				\$1.00		
22	CFL bulbs regular - 13	4-Res-EE P	\$786	39,3125	\$0	\$2	\$2	\$0.21	\$0.29				\$0.50				\$1.10		
23	Clothes Washer Energy Star, Electric	4-Res-EE P	\$786	39,3125	\$2	\$25	\$27	\$7.50	\$2.00	\$2.00	\$10.00	\$5.00					\$75.00		
24	Dehumidifiers	4-Res-EE P	\$786	39,3125	\$2	\$25	\$27	\$7.50	\$2.00	\$2.00	\$10.00	\$5.00					\$10.00		
25	Freezers Energy Star-Chest Freezer	4-Res-EE P	\$786	39,3125	\$2	\$25	\$27	\$7.50	\$2.00	\$2.00	\$10.00	\$5.00					\$25.00		
26	Holiday Lights	4-Res-EE P	\$786	39,3125	\$0	\$5	\$5	\$1.05	\$0.50	\$0.50	\$1.25	\$2.00					\$20.00		
27	LED Night Light	1-Res Audits	\$786	39,3125	\$0	\$1	\$1	\$0.03					\$0.50				\$10.00		
28	Variable Speed Pool Pump+Proper Commissioning	4-Res-EE P	\$786	39,3125	\$1	\$15	\$16	\$6.90	\$1.00	\$1.00	\$5.00	\$2.00					\$200.00		
29	Refrigerators-Freezers Energy Star - Side by Side	4-Res-EE P	\$786	39,3125	\$2	\$25	\$27	\$7.50	\$2.00	\$2.00	\$10.00	\$5.00					\$50.00		
30	Refrigerators-Freezers Energy Star - Top Freezer	4-Res-EE P	\$786	39,3125	\$2	\$25	\$27	\$7.50	\$2.00	\$2.00	\$10.00	\$5.00					\$50.00		
31	Room Air Conditioners	4-Res-EE P	\$786	39,3125	\$1	\$10	\$11	\$7.60		\$1.00				\$2.00			\$25.00		
32	Smart Strip plug outlet	4-Res-EE P	\$786	39,3125	\$0	\$2	\$2	\$1.12	\$0.50				\$0.50				\$10.00		
33	Torchiere Floor Lamps	4-Res-EE P	\$786	39,3125	\$0	\$2	\$2	\$1.12	\$0.50				\$0.50				\$10.00		
34	Residential New Construction - PY12	5-RES New Con	\$6,563	328,1250	\$57	\$952	\$1,009	\$264.12	\$25.00	\$20.00				\$700.00			\$492.47		
35	Residential New Construction - PY34	5-RES New Con	\$6,563	328,1250	\$57	\$952	\$1,009	\$264.12	\$25.00	\$20.00				\$700.00			\$3,000.00		
36	Behavior_Mod	Modification	\$1,485	74,2500	\$0	\$15	\$15	\$0.40		\$1.00				\$14.00			\$0.00		
37	Star Windows	1-Res Audits	\$1,485	74,2500	\$2	\$25	\$27	\$22.50	\$4.00								\$200.00		
38	Duct sealing 20 leakage base	1-Res Audits	\$1,485	74,2500	\$2	\$25	\$27	\$24.50	\$2.00								\$200.00		
39	Low Flow Showerheads	1-Res Audits	\$1,485	74,2500	\$0	\$2	\$2	\$1.62	\$0.50								\$23.00		
40	Kitchen Aerator	1-Res Audits	\$1,485	74,2500	\$0	\$1	\$1	\$0.81	\$0.25								\$7.00		
41	Bathroom Aerator	1-Res Audits	\$1,485	74,2500	\$0	\$1	\$1	\$0.81	\$0.25								\$7.00		
42	Pipe Wrap	1-Res Audits	\$1,485	74,2500	\$1	\$10	\$11	\$9.60	\$1.00								\$50.00		
43	Roof Insulation	1-Res Audits	\$1,485	74,2500	\$2	\$25	\$27	\$22.50	\$4.00								\$200.00		
44	Whole Building - Light Measure (Test-It)	1-Res Audits	\$1,485	74,2500	\$3	\$52	\$55	\$29.12	\$25.00	\$1.00							\$250.00		
45	Low Income Warm Program Through Act129	7-Low Income	\$6,563	328,1250	\$33	\$553	\$586	\$586.18									\$1,658.77		
46	Low Income Warm Program Through Act129 (Additional SmartStrips)	7-Low Income	\$786	39,3125	\$1	\$10	\$11	\$10.60									\$35.00		
47	1-Res Home Audits - CFL 4 - Low Flow 2 Water Heat	1-Res Audits LI	LI RES \$104,509	312,5000	\$2	\$26	\$28	\$4.76	\$1.55	\$1.00	\$0.00	\$0.00	\$0.00	\$20.25		\$86.25			
48	Schools Children Education-No Savings	1-Res Audits LI	LI RES \$27,990	74,2500	\$0	\$7	\$7	\$2.12	\$1.05	\$1.00	\$0.00	\$0.00	\$0.00	\$3.25		\$87.73			
49	Refrigerator/Freezer recycling	2-RES App Turn-In LI	LI RES \$104,509	312,5000	\$2	\$33	\$35	\$0.14	\$2.00	\$3.00				\$35.00		\$50.00			
50	Programmable Thermostat_Heat	1-Res Audits LI	LI RES \$786	39,3125	\$0	\$5	\$5	\$1.30		\$1.00				\$3.00		\$70.20			
51	CFL bulbs regular-15 -Free No Water Heat	1-Res Audits LI	LI RES \$786	39,3125	\$0	\$5	\$5	\$2.55	\$0.50	\$0.25				\$2.00		\$20.00			
52	CFL bulbs regular-15 -Free No Water Heat Mailed At Request	4-Res-EE P LI	LI RES \$786	39,3125	\$0	\$4	\$4	\$0.71	\$0.50	\$0.25				\$2.00		\$3.50			
53	CFL bulbs regular - Outside - 15 - Store Rebates	4-Res-EE P LI	LI RES \$786	39,3125	\$0	\$1	\$1	\$0.03					\$0.50				\$1.00		
54	CFL bulbs regular - 19 - Store Rebates	4-Res-EE P LI	LI RES \$786	39,3125	\$0	\$2	\$2	\$0.21	\$0.29	\$0.00	\$0.00	\$0.00	\$0.50				\$1.10		
55	LED Night Light	1-Res Audits LI	LI RES \$786	39,3125	\$0	\$1	\$1	\$0.03					\$0.50				\$10.00		
56	Low Income Lighting-Warm Light	7-Low Income	LI RES \$6,250	312,5000	\$0	\$5	\$5	\$3.05	\$0.25					\$2.00		\$20.00			
57	Low Income Lighting-Warm SmartStrip	7-Low Income	LI RES \$786	39,3125	\$1	\$10	\$11	\$8.35	\$0.25					\$2.00		\$35.00			
58	Low Income Lighting-Low Usage	7-Low Income	LI RES \$6,250	312,5000	\$0	\$5	\$5	\$3.05	\$0.25					\$2.00		\$20.00			
59	Multiple Family - CFL Lighting	8-Multiple Family	LI RES \$6,250	312,5000	\$1	\$10	\$11	\$3.35	\$0.25					\$7.00		\$20.00			
60	Multiple Family - T8-Lighting	8-Multiple Family	SM C&I \$6,250	312,5000	\$1	\$10	\$11	\$3.10	\$4.00	\$0.50	\$3.00			\$0.00		\$35.00			
61	Commercial, Industrial Audit - Sm&Md	3-C/1 Equip	SM C&I \$6,250	312,5000	\$2	\$25	\$27	\$16.50	\$10.00							\$0.00			
62	Commercial, Industrial Audit - Large	4-C/1 Equip	LG C&I \$6,250	312,5000	\$6	\$100	\$106	\$56.00	\$50.00							\$0.00			
63	Commercial CFL Program - Kits Mailed to Small Commercial	3-C/1 Equip	SM C&I \$786	39,3125	\$0	\$2	\$2	\$1.20					\$0.50			\$31.25			
64	Commercial, Industrial Audit - Gov	2-Governmental Programs	LG C&I \$6,250	312,5000	\$6	\$100	\$106	\$98.00	\$8.00					\$0.00		\$2,000.00			
65	High Bay HID replaced by 6F54TSHO	2-Governmental Programs	LG C&I \$6,875	343,7500	\$0	\$5	\$5	\$3.05	\$0.25			\$2.00		\$0.00		\$55.44			
66	HPT8 4ft 4 lamp, T12 to HPT8	2-Governmental Programs	LG C&I \$6,875	343,7500	\$0	\$5	\$5	\$3.05	\$0.25			\$2.00		\$0.00		\$10.80			
67	LED Exit Signs Electronic Fixtures (Retrofit Only)	2-Governmental Programs	LG C&I \$6,875	343,7500	\$0	\$5	\$5	\$3.05	\$0.25			\$2.00		\$0.00		\$15.00			
68	Occupancy Sensors under 500 W	2-Governmental Programs	LG C&I \$6,875	343,7500	\$0	\$5	\$5	\$3.05	\$0.25			\$2.00		\$0.00		\$23.82			
69	LED Auto Traffic Signals	2-Governmental Programs	SM C&I \$6,875	343,7500	\$0	\$5	\$5	\$3.05	\$0.25			\$2.00		\$0.00		\$45.00			

Appendix D-5  
Per Unit Budget Assumptions

70	LED Pedestrian Signals	2-Governmental Programs	SM C&I	\$6,875	343.7500	\$0	\$5	\$5	\$3.05	\$0.25	\$2.00	\$0.00	\$25.00	
71	Street Lighting - Weighted Average All Replacements	2-Governmental Programs	SM C&I	\$6,875	343.7500	\$1	\$15	\$16	\$15.90				\$50.00	\$21.88
72	Water-Cooled cent Chiller 150 - 300 ton 0.57 kW/ton with 0.46 kW/ton IPLV	2-Governmental Programs	LG C&I	\$6,875	343.7500	\$170	\$2,830	\$3,000	#####	\$25.00	\$15.00	\$0.00	\$799.68	
73	Custom Incentives Gov	2-Governmental Programs	LG C&I	\$6,875	343.7500	\$170	\$2,830	\$3,000	#####	\$25.00	\$2.00	\$0.00	\$10,000.00	
74	AC <45,000 1 Ph	3-C/I Equip	SM C&I	\$3,125	156.2500	\$2	\$25	\$27	\$7.00	\$3.00	\$1.50	\$10.00	\$5.00	\$182.20
75	AC 65,000 - 135,000	3-C/I Equip	SM C&I	\$3,125	156.2500	\$3	\$50	\$53	\$15.50	\$5.00	\$2.50	\$25.00	\$5.00	\$236.75
76	AC 240,000 - 760,000	3-C/I Equip	SM C&I	\$3,125	156.2500	\$3	\$50	\$53	\$15.50	\$5.00	\$2.50	\$25.00	\$5.00	\$846.44
77	Clothes Washer CEE Tier1, Electric Water heater, Electric Dryer	3-C/I Equip	SM C&I	\$3,125	156.2500	\$2	\$25	\$27	\$7.00	\$3.00	\$1.50	\$10.00	\$5.00	\$50.00
78	AntiSweatHeater Controller for Cooler - one controller controlling at least two doors	3-C/I Equip	SM C&I	\$3,125	156.2500	\$2	\$40	\$42	\$38.40	\$1.00	\$1.00	\$2.00	\$542.15	
79	AntiSweatHeater Controller for Freezers - one controller controlling at least two doors	3-C/I Equip	SM C&I	\$3,125	156.2500	\$2	\$40	\$42	\$38.40	\$1.00	\$1.00	\$2.00	\$496.83	
80	ENERGY STAR Commercial Solid Door Freezers less than 2013	3-C/I Equip	SM C&I	\$3,125	156.2500	\$2	\$40	\$42	\$13.40	\$2.00	\$2.00	\$20.00	\$5.00	\$130.35
81	ENERGY STAR Commercial Solid Door Freezers 20 to 48 ft3	3-C/I Equip	SM C&I	\$3,125	156.2500	\$2	\$40	\$42	\$13.40	\$2.00	\$2.00	\$20.00	\$5.00	\$298.20
82	ENERGY STAR Commercial Solid Door Refrigerators less than 2013	3-C/I Equip	SM C&I	\$3,125	156.2500	\$2	\$40	\$42	\$13.40	\$2.00	\$2.00	\$20.00	\$5.00	\$63.60
83	ENERGY STAR Commercial Solid Door Refrigerators 20 to 48 ft3	3-C/I Equip	SM C&I	\$3,125	156.2500	\$2	\$40	\$42	\$13.40	\$2.00	\$2.00	\$20.00	\$5.00	\$125.70
84	ENERGY STAR Ice Machines less than 500 lbs	3-C/I Equip	SM C&I	\$3,125	156.2500	\$2	\$40	\$42	\$13.40	\$2.00	\$2.00	\$20.00	\$5.00	\$50.00
85	ENERGY STAR Ice Machines 500 to 1000 lbs	3-C/I Equip	SM C&I	\$3,125	156.2500	\$2	\$40	\$42	\$13.40	\$2.00	\$2.00	\$20.00	\$5.00	\$150.00
86	ENERGY STAR Ice Machines more than 1000 lbs	3-C/I Equip	SM C&I	\$3,125	156.2500	\$2	\$40	\$42	\$13.40	\$2.00	\$2.00	\$20.00	\$5.00	\$200.00
87	ENERGY STAR Steam Cookers 3 Pan	3-C/I Equip	SM C&I	\$3,125	156.2500	\$2	\$40	\$42	\$13.40	\$2.00	\$2.00	\$20.00	\$5.00	\$400.00
88	High Bay HID replaced by 6F54TSHO	3-C/I Equip	SM C&I	\$3,125	156.2500	\$0	\$5	\$5	\$2.55	\$0.50	\$0.25	\$2.00	\$5.00	\$83.16
89	EE Water Heater	3-C/I Equip	SM C&I	\$3,125	156.2500	\$2	\$25	\$27	\$8.00	\$2.00	\$1.50	\$10.00	\$5.00	\$50.00
90	HP Water Heater (Base Usage 22831)	3-C/I Equip	SM C&I	\$3,125	156.2500	\$6	\$100	\$106	\$20.00	\$3.00	\$3.00	\$75.00	\$5.00	\$200.00
91	HPT8 4ft 4 lamp, T12 to HPT8	3-C/I Equip	SM C&I	\$3,125	156.2500	\$0	\$7	\$7	\$1.07	\$0.50	\$0.25	\$5.60	\$25.20	
92	LED Exit Signs Electronic Fixtures (Retrofit Only)	3-C/I Equip	SM C&I	\$6,875	343.7500	\$0	\$7	\$7	\$4.92	\$0.25	\$0.25	\$2.00	\$15.00	
93	Occupancy Sensors under 500 W	3-C/I Equip	SM C&I	\$3,125	156.2500	\$1	\$12	\$13	\$10.12	\$0.25	\$0.25	\$2.00	\$35.73	
94	Strip Mall Low Cost DI Suite	3-C/I Equip	SM C&I	\$3,125	156.2500	\$9	\$146	\$155	\$152.26	\$0.25	\$0.25	\$2.00	\$514.00	
95	Commercial Smart Strip plug outlet	3-C/I Equip	SM C&I	\$786	39.3125	\$0	\$2	\$2	\$1.62			\$0.50	\$10.00	
96	Pre Rinse Sprayers	3-C/I Equip	SM C&I	\$3,125	156.2500	\$0	\$2	\$2	\$1.62			\$0.50	\$35.00	
97	Refrigerant charging correction	3-C/I Equip	SM C&I	\$3,125	156.2500	\$1	\$10	\$11	\$3.60	\$1.00	\$1.00	\$5.00	\$75.00	
98	Refrigeration Commissioning	3-C/I Equip	SM C&I	\$3,125	156.2500	\$1	\$10	\$11	\$3.60	\$1.00	\$1.00	\$5.00	\$25.00	
99	Strip curtains for walk-ins - freezer	3-C/I Equip	SM C&I	\$3,125	156.2500	\$1	\$10	\$11	\$3.60	\$1.00	\$1.00	\$5.00	\$50.00	
100	Vending Equipment Controller	3-C/I Equip	SM C&I	\$3,125	156.2500	\$1	\$15	\$16	\$3.90	\$1.00	\$1.00	\$5.00	\$5.00	
101	Custom Incentives Small	3-C/I Equip	SM C&I	\$3,125	156.2500	\$180	\$3,000	\$3,180	#####	\$25.00	\$25.00	#####	\$10,000.00	
102	MasterMetered Multifamily CFL Kits	8-Multiple Family	SM C&I	\$6,250	312.5000	\$1	\$10	\$11	\$3.35	\$0.25	\$0.25	\$7.00	\$20.00	
103	Demand-controlled ventilation (DCV)	4-C/I Equip	LG C&I	\$3,125	156.2500	\$6	\$100	\$106	\$57.00	\$25.00	\$9.00	\$15.00	\$500.00	
104	High Bay HID replaced by 6F54TSHO	4-C/I Equip	LG C&I	\$3,125	156.2500	\$0	\$5	\$5	\$2.55	\$0.50	\$0.25	\$2.00	\$5.44	
105	HPT8 4ft 4 lamp, T12 to HPT8	4-C/I Equip	LG C&I	\$3,125	156.2500	\$0	\$7	\$7	\$4.92	\$0.25	\$0.25	\$2.00	\$16.20	
106	Occupancy Sensors under 500 W	4-C/I Equip	LG C&I	\$3,125	156.2500	\$0	\$5	\$5	\$2.80	\$0.25	\$0.25	\$2.00	\$23.82	
107	Water-Cooled cent Chiller 150 - 300 ton 0.57 kW/ton with 0.46 kW/ton IPLV	4-C/I Equip	LG C&I	\$3,125	156.2500	\$15	\$250	\$265	\$50.00	\$25.00	\$25.00	\$150.00	\$15.00	
108	Water-Cooled Centrifugal Chiller < 150 ton 0.56 kW/ton with 0.53 kW/ton IPLV	4-C/I Equip	LG C&I	\$3,125	156.2500	\$15	\$250	\$265	\$50.00	\$25.00	\$25.00	\$150.00	\$15.00	
109	Custom Incentives Large	4-C/I Equip	LG C&I	\$3,125	156.2500	\$170	\$2,830	\$3,000	\$472.80	\$25.00	####	\$2.00	\$10,000.00	
110	Motors 1 HP 1200	3-C/I Equip	SM C&I	\$3,125	156.2500	\$2	\$33	\$35	\$30.08	\$0.20	\$0.20	\$2.50	\$2.00	
111	Motors 5 HP 1200	3-C/I Equip	SM C&I	\$3,125	156.2500	\$8	\$130	\$138	\$132.90	\$0.20	\$0.20	\$2.50	\$2.00	
112	Motors 10 HP 1200	4-C/I Equip	LG C&I	\$3,125	156.2500	\$0	\$5	\$5	\$0.40	\$0.20	\$0.20	\$2.50	\$2.00	
113	Motors 20 HP 1200	4-C/I Equip	LG C&I	\$3,125	156.2500	\$0	\$5	\$5	\$0.40	\$0.20	\$0.20	\$2.50	\$2.00	
114	Motors 1 HP 3600	3-C/I Equip	SM C&I	\$3,125	156.2500	\$2	\$33	\$35	\$30.08	\$0.20	\$0.20	\$2.50	\$2.00	
115	Motors 5 HP 3600	3-C/I Equip	SM C&I	\$3,125	156.2500	\$8	\$130	\$138	\$132.90	\$0.20	\$0.20	\$2.50	\$2.00	
116	Motors 10 HP 3600	4-C/I Equip	LG C&I	\$3,125	156.2500	\$0	\$5	\$5	\$0.40	\$0.20	\$0.20	\$2.50	\$2.00	
117	Motors 20 HP 3600	4-C/I Equip	LG C&I	\$3,125	156.2500	\$0	\$5	\$5	\$0.40	\$0.20	\$0.20	\$2.50	\$2.00	
118	Water Pumps with VFD's	3-C/I Equip	SM C&I	\$3,125	156.2500	\$2	\$33	\$34	\$29.55	\$0.20	\$0.20	\$2.50	\$2.00	
119	HVAC Fans with VFD's	3-C/I Equip	SM C&I	\$3,125	156.2500	\$2	\$33	\$34	\$29.55	\$0.20	\$0.20	\$2.50	\$2.00	
120	Air Compressors with VFD's	3-C/I Equip	SM C&I	\$3,125	156.2500	\$2	\$33	\$34	\$29.55	\$0.20	\$0.20	\$2.50	\$2.00	
121	Water Pumps with VFD's	3-C/I Equip	SM C&I	\$3,125	156.2500	\$8	\$130	\$138	\$124.60	\$0.20	\$1.00	\$10.00	\$2.00	
122	HVAC Fans with VFD's	3-C/I Equip	SM C&I	\$3,125	156.2500	\$8	\$130	\$138	\$124.60	\$0.20	\$1.00	\$10.00	\$2.00	
123	Air Compressors with VFD's	3-C/I Equip	SM C&I	\$3,125	156.2500	\$8	\$130	\$138	\$124.60	\$0.20	\$1.00	\$10.00	\$2.00	
124	Water Pumps with VFD's	4-C/I Equip	LG C&I	\$3,125	156.2500	\$12	\$195	\$207	\$183.25	\$0.20	\$1.25	\$20.00	\$2.00	
125	HVAC Fans with VFD's	4-C/I Equip	LG C&I	\$3,125	156.2500	\$12	\$195	\$207	\$183.25	\$0.20	\$1.25	\$20.00	\$2.00	
126	Air Compressors with VFD's	4-C/I Equip	LG C&I	\$3,125	156.2500	\$12	\$195	\$207	\$183.25	\$0.20	\$1.25	\$20.00	\$2.00	

**Appendix D-6**  
Per Program Budget Detail

<b>Penelec Budget Summary</b>					
<b>Four Year Program Budget</b>		<b>Program Year 1</b>	<b>Program Year 2</b>	<b>Program Year 3</b>	<b>Program Year 4</b>
		Fall 2009	From 6/2010	From 6/2011	From 6/2012
		Until-5/2010	Until-5/2011	Until-5/2012	Until-5/2013
	Total Budget				
<b>Total</b>	<b>\$72,990,951</b>	<b>\$5,286,996</b>	<b>\$23,383,323</b>	<b>\$25,660,580</b>	<b>\$18,660,053</b>
Utility Labor/Cost***	\$4,848,476	\$416,266	\$1,458,797	\$1,576,267	\$1,397,145
Marketing***	\$2,405,089	\$755,909	\$596,695	\$527,076	\$525,410
M&V***	\$1,489,645	\$34,776	\$541,646	\$550,504	\$362,718
Retailer Sales Incentive	\$302,031	\$12,632	\$122,317	\$102,957	\$64,125
Rebate Processing	\$1,384,406	\$172,155	\$354,755	\$507,908	\$349,588
Retail Store Discount Tracking	\$1,168,985	\$83,695	\$442,522	\$317,873	\$324,896
Service Provider Costs***	\$9,170,235	\$383,469	\$2,896,114	\$2,684,382	\$3,206,270
Service Provide Equip/Audit	\$6,066,480	\$213,015	\$2,987,070	\$2,866,395	\$0
Incentive Shipping & Other**	\$0	\$0	\$0	\$0	\$0
Incentive Rebate for Equip**	\$41,489,433	\$2,919,585	\$11,649,133	\$15,068,302	\$11,852,412
Utility/SP O&M	\$4,666,172	\$295,494	\$2,334,273	\$1,458,916	\$577,488

\*\*Variable based on number of units of participation each year.

\*\*\* Budget line items reflect the results of measure based modeling for the EE Plan filing. Actual program expenditures (e.g. for promotion, EM&V, Tracking, labor costs) will be allocated to the sector based on budgeted amounts.

These budget figures are consistent with those filed with the Pennsylvania PSC under the FirstEnergy EECF. Actual budgets will vary due to vendor contractual agreements and customer participation levels, among other factors out of the utility's control.

Appendix D-6  
Per Program Budget Detail

<b>Residential Home Energy Audits and Outreach Program</b>					
<b>Four Year Program Budget</b>		<b>Program Year 1</b>	<b>Program Year 2</b>	<b>Program Year 3</b>	<b>Program Year 4</b>
		Fall 2009	From 6/2010	From 6/2011	From 6/2012
		Until-5/2010	Until-5/2011	Until-5/2012	Until-5/2013
	Program Code*	1-Res Audits	1-Res Audits	1-Res Audits	1-Res Audits
	Total Budget				
<b>Total</b>	<b>\$10,325,796</b>	<b>\$944,670</b>	<b>\$2,792,613</b>	<b>\$3,237,351</b>	<b>\$3,351,161</b>
Utility Labor/Cost***	\$476,254	\$20,410	\$120,079	\$165,503	\$170,263
Marketing***	\$221,820	\$38,722	\$42,666	\$69,441	\$70,991
M&V***	\$90,412	\$9,627	\$24,333	\$27,726	\$28,726
Retailer Sales Incentive	\$0	\$0	\$0	\$0	\$0
Rebate Processing	\$0	\$0	\$0	\$0	\$0
Retail Store Discount Tracking	\$0	\$0	\$0	\$0	\$0
Service Provider Costs***	\$1,509,539	\$31,289	\$486,000	\$486,000	\$506,250
Service Provide Equip/Audit	\$0	\$0	\$0	\$0	\$0
Incentive Shipping & Other**	\$0	\$0	\$0	\$0	\$0
Incentive Rebate for Equip**	\$8,027,771	\$844,622	\$2,119,535	\$2,488,682	\$2,574,932
Utility/SP O&M	\$0	\$0	\$0	\$0	\$0

\* This code links this budget to the model input tables in file labeled "ME-EC\_Plan\_Appendices-WCharts-Budget"

\*\* Variable based on number of units of participation each year.

\*\*\* Budget line items reflect the results of measure based modeling for the EE Plan filing. Actual program expenditures (e.g. for promotion, EM&V, Tracking, labor costs) will be allocated to the sector based on budgeted amounts.

These budget figures are consistent with those filed with the Pennsylvania PSC under the FirstEnergy EECF. Actual budgets will vary due to vendor contractual agreements and customer participation levels, among other factors out of the utility's control.

Appendix D-6  
Per Program Budget Detail

<b>Residential Appliance Turn-In Program</b>					
<b>Four Year Program Budget</b>		<b>Program Year 1</b>	<b>Program Year 2</b>	<b>Program Year 3</b>	<b>Program Year 4</b>
		Fall 2009	From 6/2010	From 6/2011	From 6/2012
		Until-5/2010	Until-5/2011	Until-5/2012	Until-5/2013
	Program Code*	2-RES App Turn-In	2-RES App Turn-In	2-RES App Turn-In	2-RES App Turn-In
	Total Budget				
<b>Total</b>	<b>\$3,172,447</b>	<b>\$149,268</b>	<b>\$1,007,726</b>	<b>\$1,007,726</b>	<b>\$1,007,726</b>
Utility Labor/Cost***	\$18,537	\$1,077	\$5,820	\$5,820	\$5,820
Marketing***	\$83,244	\$16,025	\$22,406	\$22,406	\$22,406
M&V***	\$108,231	\$4,731	\$34,500	\$34,500	\$34,500
Retailer Sales Incentive	\$0	\$0	\$0	\$0	\$0
Rebate Processing	\$0	\$0	\$0	\$0	\$0
Retail Store Discount Tracking	\$0	\$0	\$0	\$0	\$0
Service Provider Costs***	\$1,198,628	\$51,128	\$382,500	\$382,500	\$382,500
Service Provide Equip/Audit	\$0	\$0	\$0	\$0	\$0
Incentive Shipping & Other**	\$0	\$0	\$0	\$0	\$0
Incentive Rebate for Equip**	\$1,763,808	\$76,308	\$562,500	\$562,500	\$562,500
Utility/SP O&M	\$0	\$0	\$0	\$0	\$0

\* This code links this budget to the model input tables in file labeled "ME-EC\_Plan\_Appendices-WCharts-Budget"

\*\*Variable based on number of units of participation each year.

\*\*\* Budget line items reflect the results of measure based modeling for the EE Plan filing. Actual program expenditures (e.g. for promotion, EM&V, Tracking, labor costs) will be allocated to the sector based on budgeted amounts.

These budget figures are consistent with those filed with the Pennsylvania PSC under the FirstEnergy EECF. Actual budgets will vary due to vendor contractual agreements and customer participation levels, among other factors out of the utility's control.

Appendix D-6  
Per Program Budget Detail

<b>Residential Energy Efficient HVAC Program</b>					
<b>Four Year Program Budget</b>		<b>Program Year 1</b>	<b>Program Year 2</b>	<b>Program Year 3</b>	<b>Program Year 4</b>
		Fall 2009	From 6/2010	From 6/2011	From 6/2012
		Until-5/2010	Until-5/2011	Until-5/2012	Until-5/2013
	Program Code*	3-RES EE HVAC	3-RES EE HVAC	3-RES EE HVAC	3-RES EE HVAC
	Total Budget				
<b>Total</b>	<b>\$1,844,271</b>	<b>\$190,038</b>	<b>\$470,987</b>	<b>\$495,455</b>	<b>\$687,791</b>
Utility Labor/Cost***	\$259,172	\$10,644	\$20,316	\$23,268	\$204,945
Marketing***	\$465,973	\$56,026	\$134,957	\$136,560	\$138,430
M&V***	\$22,577	\$1,869	\$6,458	\$6,938	\$7,312
Retailer Sales Incentive	\$26,134	\$4,710	\$7,141	\$7,141	\$7,141
Rebate Processing	\$37,980	\$3,682	\$10,587	\$11,388	\$12,323
Retail Store Discount Tracking	\$0	\$0	\$0	\$0	\$0
Service Provider Costs***	\$0	\$0	\$0	\$0	\$0
Service Provide Equip/Audit	\$0	\$0	\$0	\$0	\$0
Incentive Shipping & Other**	\$0	\$0	\$0	\$0	\$0
Incentive Rebate for Equip**	\$1,032,435	\$113,106	\$291,529	\$310,160	\$317,640
Utility/SP O&M	\$0	\$0	\$0	\$0	\$0

\* This code links this budget to the model input tables in file labeled "ME-EC\_Plan\_Appendices-WCharts-Budget"

\*\*Variable based on number of units of participation each year.

\*\*\* Budget line items reflect the results of measure based modeling for the EE Plan filing. Actual program expenditures (e.g. for promotion, EM&V, Tracking, labor costs) will be allocated to the sector based on budgeted amounts.

These budget figures are consistent with those filed with the Pennsylvania PSC under the FirstEnergy EECF. Actual budgets will vary due to vendor contractual agreements and customer participation levels, among other factors out of the utility's control.

Appendix D-6  
Per Program Budget Detail

<b>Residential Energy Efficient Products Program</b>					
<b>Four Year Program Budget</b>		<b>Program Year 1</b>	<b>Program Year 2</b>	<b>Program Year 3</b>	<b>Program Year 4</b>
		Fall 2009	From 6/2010	From 6/2011	From 6/2012
		Until-5/2010	Until-5/2011	Until-5/2012	Until-5/2013
	Program Code*	4-Res-EE P	4-Res-EE P	4-Res-EE P	4-Res-EE P
	Total Budget				
<b>Total</b>	<b>\$9,316,116</b>	<b>\$478,415</b>	<b>\$3,783,349</b>	<b>\$2,509,203</b>	<b>\$2,545,148</b>
Utility Labor/Cost***	\$726,768	\$34,524	\$300,246	\$194,789	\$197,209
Marketing***	\$819,414	\$60,275	\$320,065	\$217,734	\$221,340
M&V***	\$80,664	\$421	\$38,445	\$20,958	\$20,840
Retailer Sales Incentive	\$132,481	\$1,870	\$66,050	\$32,280	\$32,280
Rebate Processing	\$77,741	\$935	\$35,820	\$20,641	\$20,345
Retail Store Discount Tracking	\$1,113,880	\$80,230	\$425,237	\$300,588	\$307,825
Service Provider Costs***	\$2,088,867	\$112,458	\$855,077	\$555,600	\$565,732
Service Provide Equip/Audit	\$0	\$0	\$0	\$0	\$0
Incentive Shipping & Other**	\$0	\$0	\$0	\$0	\$0
Incentive Rebate for Equip**	\$4,276,301	\$187,701	\$1,742,409	\$1,166,614	\$1,179,577
Utility/SP O&M	\$0	\$0	\$0	\$0	\$0

\* This code links this budget to the model input tables in file labeled "ME-EC\_Plan\_Appendices-WCharts-Budget"

\*\*Variable based on number of units of participation each year.

\*\*\* Budget line items reflect the results of measure based modeling for the EE Plan filing. Actual program expenditures (e.g. for promotion, EM&V, Tracking, labor costs) will be allocated to the sector based on budgeted amounts.

These budget figures are consistent with those filed with the Pennsylvania PSC under the FirstEnergy EECF. Actual budgets will vary due to vendor contractual agreements and customer participation levels, among other factors out of the utility's control.

Appendix D-6  
Per Program Budget Detail

<b>Residential New Construction Program</b>					
<b>Four Year Program Budget</b>		<b>Program Year 1</b>	<b>Program Year 2</b>	<b>Program Year 3</b>	<b>Program Year 4</b>
		Fall 2009	From 6/2010	From 6/2011	From 6/2012
		Until-5/2010	Until-5/2011	Until-5/2012	Until-5/2013
	Program Code*	5-RES New Con	5-RES New Con	5-RES New Con	5-RES New Con
	Total Budget				
<b>Total</b>	<b>\$1,358,585</b>	<b>\$223,735</b>	<b>\$492,079</b>	<b>\$321,386</b>	<b>\$321,386</b>
Utility Labor/Cost***	\$165,743	\$37,045	\$86,438	\$21,130	\$21,130
Marketing***	\$30,782	\$16,631	\$8,838	\$2,656	\$2,656
M&V***	\$12,551	\$2,805	\$6,545	\$1,600	\$1,600
Retailer Sales Incentive	\$0	\$0	\$0	\$0	\$0
Rebate Processing	\$0	\$0	\$0	\$0	\$0
Retail Store Discount Tracking	\$0	\$0	\$0	\$0	\$0
Service Provider Costs***	\$439,269	\$98,181	\$229,088	\$56,000	\$56,000
Service Provide Equip/Audit	\$0	\$0	\$0	\$0	\$0
Incentive Shipping & Other**	\$0	\$0	\$0	\$0	\$0
Incentive Rebate for Equip**	\$710,241	\$69,072	\$161,169	\$240,000	\$240,000
Utility/SP O&M	\$0	\$0	\$0	\$0	\$0

\* This code links this budget to the model input tables in file labeled "ME-EC\_Plan\_Appendices-WCharts-Budget"

\*\*Variable based on number of units of participation each year.

\*\*\* Budget line items reflect the results of measure based modeling for the EE Plan filing. Actual program expenditures (e.g. for promotion, EM&V, Tracking, labor costs) will be allocated to the sector based on budgeted amounts.

These budget figures are consistent with those filed with the Pennsylvania PSC under the FirstEnergy EECF. Actual budgets will vary due to vendor contractual agreements and customer participation levels, among other factors out of the utility's control.

Appendix D-6  
Per Program Budget Detail

<b>Behavioral Modification and Education Program</b>					
<b>Four Year Program Budget</b>		<b>Program Year 1</b>	<b>Program Year 2</b>	<b>Program Year 3</b>	<b>Program Year 4</b>
		Fall 2009	From 6/2010	From 6/2011	From 6/2012
		Until-5/2010	Until-5/2011	Until-5/2012	Until-5/2013
	Program Code*	9-Behavioral Modification	9-Behavioral Modification	9-Behavioral Modification	9-Behavioral Modification
	Total Budget				
<b>Total</b>	<b>\$1,746,656</b>	<b>\$1,485</b>	<b>\$74</b>	<b>\$308,074</b>	<b>\$1,437,023</b>
Utility Labor/Cost***	\$49,996	\$0	\$0	\$8,000	\$41,996
Marketing***	\$1,708	\$1,485	\$74	\$74	\$74
M&V***	\$124,990	\$0	\$0	\$20,000	\$104,990
Retailer Sales Incentive	\$0	\$0	\$0	\$0	\$0
Rebate Processing	\$0	\$0	\$0	\$0	\$0
Retail Store Discount Tracking	\$0	\$0	\$0	\$0	\$0
Service Provider Costs***	\$1,569,962	\$0	\$0	\$280,000	\$1,289,962
Service Provide Equip/Audit	\$0	\$0	\$0	\$0	\$0
Incentive Shipping & Other**	\$0	\$0	\$0	\$0	\$0
Incentive Rebate for Equip**	\$0	\$0	\$0	\$0	\$0
Utility/SP O&M	\$0	\$0	\$0	\$0	\$0

\* This code links this budget to the model input tables in file labeled "ME-EC\_Plan\_Appendices-WCharts-Budget"

\*\* Variable based on number of units of participation each year.

\*\*\* Budget line items reflect the results of measure based modeling for the EE Plan filing. Actual program expenditures (e.g. for promotion, EM&V, Tracking, labor costs) will be allocated to the sector based on budgeted amounts.

These budget figures are consistent with those filed with the Pennsylvania PSC under the FirstEnergy EECF. Actual budgets will vary due to vendor contractual agreements and customer participation levels, among other factors out of the utility's control.

Appendix D-6  
Per Program Budget Detail

Residential Low-Income Program					
Four Year Program Budget		Program Year 1	Program Year 2	Program Year 3	Program Year 4
		Fall 2009	From 6/2010	From 6/2011	From 6/2012
		Until-5/2010	Until-5/2011	Until-5/2012	Until-5/2013
	Program Code*	7-Low Income	7-Low Income	7-Low Income	7-Low Income
	Total Budget				
<b>Total</b>	\$4,910,986	\$569,614	\$1,387,430	\$1,447,965	\$1,505,977
Utility Labor/Cost***	\$1,201,470	\$136,733	\$339,803	\$355,125	\$369,809
Marketing***	\$23,730	\$20,635	\$1,032	\$1,032	\$1,032
M&V***	\$5,190	\$458	\$1,544	\$1,578	\$1,610
Retailer Sales Incentive	\$0	\$0	\$0	\$0	\$0
Rebate Processing	\$0	\$0	\$0	\$0	\$0
Retail Store Discount Tracking	\$0	\$0	\$0	\$0	\$0
Service Provider Costs***	\$41,518	\$3,665	\$12,355	\$12,621	\$12,876
Service Provide Equip/Audit	\$0	\$0	\$0	\$0	\$0
Incentive Shipping & Other**	\$0	\$0	\$0	\$0	\$0
Incentive Rebate for Equip**	<b>\$3,639,078</b>	<b>\$408,123</b>	<b>\$1,032,696</b>	<b>\$1,077,609</b>	<b>\$1,120,650</b>
Utility/SP O&M	\$0	\$0	\$0	\$0	\$0

\* This code links this budget to the model input tables in file labeled "ME-EC\_Plan\_Appendices-WCharts-Budget"

\*\*Variable based on number of units of participation each year.

\*\*\* Budget line items reflect the results of measure based modeling for the EE Plan filing. Actual program expenditures (e.g. for promotion, EM&V, Tracking, labor costs) will be allocated to the sector based on budgeted amounts.

These budget figures are consistent with those filed with the Pennsylvania PSC under the FirstEnergy EECP. Actual budgets will vary due to vendor contractual agreements and customer participation levels, among other factors out of the utility's control.

Appendix D-6  
Per Program Budget Detail

<b>Residential Low-Income Home Energy Audits Program</b>					
<b>Four Year Program Budget</b>		<b>Program Year 1</b>	<b>Program Year 2</b>	<b>Program Year 3</b>	<b>Program Year 4</b>
		Fall 2009	From 6/2010	From 6/2011	From 6/2012
		Until-5/2010	Until-5/2011	Until-5/2012	Until-5/2013
	Program Code*	1-Res Audits LI	1-Res Audits LI	1-Res Audits LI	1-Res Audits LI
	Total Budget				
<b>Total</b>	<b>\$1,720,733</b>	<b>\$233,845</b>	<b>\$495,441</b>	<b>\$495,764</b>	<b>\$495,683</b>
Utility Labor/Cost***	\$56,197	\$3,511	\$17,556	\$17,569	\$17,560
Marketing***	\$156,613	\$136,123	\$6,830	\$6,831	\$6,830
M&V***	\$14,810	\$925	\$4,626	\$4,630	\$4,629
Retailer Sales Incentive	\$0	\$0	\$0	\$0	\$0
Rebate Processing	\$0	\$0	\$0	\$0	\$0
Retail Store Discount Tracking	\$0	\$0	\$0	\$0	\$0
Service Provider Costs***	\$207,817	\$12,987	\$64,935	\$64,951	\$64,944
Service Provide Equip/Audit	\$0	\$0	\$0	\$0	\$0
Incentive Shipping & Other**	\$0	\$0	\$0	\$0	\$0
Incentive Rebate for Equip**	\$1,285,296	\$80,299	\$401,494	\$401,784	\$401,720
Utility/SP O&M	\$0	\$0	\$0	\$0	\$0

\* This code links this budget to the model input tables in file labeled "ME-EC\_Plan\_Appendices-WCharts-Budget"

\*\*Variable based on number of units of participation each year.

\*\*\* Budget line items reflect the results of measure based modeling for the EE Plan filing. Actual program expenditures (e.g. for promotion, EM&V, Tracking, labor costs) will be allocated to the sector based on budgeted amounts.

These budget figures are consistent with those filed with the Pennsylvania PSC under the FirstEnergy EECF. Actual budgets will vary due to vendor contractual agreements and customer participation levels, among other factors out of the utility's control.

Appendix D-6  
Per Program Budget Detail

<b>Residential Low-Income Appliance Turn-In Program</b>					
<b>Four Year Program Budget</b>		<b>Program Year 1</b>	<b>Program Year 2</b>	<b>Program Year 3</b>	<b>Program Year 4</b>
		Fall 2009	From 6/2010	From 6/2011	From 6/2012
		Until-5/2010	Until-5/2011	Until-5/2012	Until-5/2013
	Program Code*	2-RES App Turn-In LI			
	Total Budget				
<b>Total</b>	<b>\$819,406</b>	<b>\$149,020</b>	<b>\$222,865</b>	<b>\$222,865</b>	<b>\$224,657</b>
Utility Labor/Cost***	\$1,109	\$69	\$346	\$346	\$348
Marketing***	\$121,288	\$105,497	\$5,250	\$5,250	\$5,290
M&V***	\$23,762	\$1,481	\$7,407	\$7,407	\$7,467
Retailer Sales Incentive	\$0	\$0	\$0	\$0	\$0
Rebate Processing	\$0	\$0	\$0	\$0	\$0
Retail Store Discount Tracking	\$0	\$0	\$0	\$0	\$0
Service Provider Costs***	\$277,220	\$17,283	\$86,414	\$86,414	\$87,110
Service Provide Equip/Audit	\$0	\$0	\$0	\$0	\$0
Incentive Shipping & Other**	\$0	\$0	\$0	\$0	\$0
Incentive Rebate for Equip**	\$396,028	\$24,690	\$123,448	\$123,448	\$124,442
Utility/SP O&M	\$0	\$0	\$0	\$0	\$0

\* This code links this budget to the model input tables in file labeled "ME-EC\_Plan\_Appendices-WCharts-Budget"

\*\*Variable based on number of units of participation each year.

\*\*\* Budget line items reflect the results of measure based modeling for the EE Plan filing. Actual program expenditures (e.g. for promotion, EM&V, Tracking, labor costs) will be allocated to the sector based on budgeted amounts.

These budget figures are consistent with those filed with the Pennsylvania PSC under the FirstEnergy EECF. Actual budgets will vary due to vendor contractual agreements and customer participation levels, among other factors out of the utility's control.

Appendix D-6  
Per Program Budget Detail

<b>Residential Low-Income Energy Efficient Products Program</b>					
<b>Four Year Program Budget</b>		<b>Program Year 1</b>	<b>Program Year 2</b>	<b>Program Year 3</b>	<b>Program Year 4</b>
		Fall 2009	From 6/2010	From 6/2011	From 6/2012
		Until-5/2010	Until-5/2011	Until-5/2012	Until-5/2013
	Program Code*	4-Res-EE P LI	4-Res-EE P LI	4-Res-EE P LI	4-Res-EE P LI
	Total Budget				
<b>Total</b>	<b>\$307,782</b>	<b>\$21,426</b>	<b>\$95,452</b>	<b>\$95,452</b>	<b>\$95,452</b>
Utility Labor/Cost***	\$22,476	\$1,405	\$7,024	\$7,024	\$7,024
Marketing***	\$34,354	\$4,336	\$10,006	\$10,006	\$10,006
M&V***	\$0	\$0	\$0	\$0	\$0
Retailer Sales Incentive	\$0	\$0	\$0	\$0	\$0
Rebate Processing	\$0	\$0	\$0	\$0	\$0
Retail Store Discount Tracking	\$54,555	\$3,410	\$17,048	\$17,048	\$17,048
Service Provider Costs***	\$76,376	\$4,774	\$23,868	\$23,868	\$23,868
Service Provide Equip/Audit	\$0	\$0	\$0	\$0	\$0
Incentive Shipping & Other**	\$0	\$0	\$0	\$0	\$0
Incentive Rebate for Equip**	\$120,020	\$7,501	\$37,506	\$37,506	\$37,506
Utility/SP O&M	\$0	\$0	\$0	\$0	\$0

\* This code links this budget to the model input tables in file labeled "ME-EC\_Plan\_Appendices-WCharts-Budget"

\*\*Variable based on number of units of participation each year.

\*\*\* Budget line items reflect the results of measure based modeling for the EE Plan filing. Actual program expenditures (e.g. for promotion, EM&V, Tracking, labor costs) will be allocated to the sector based on budgeted amounts.

These budget figures are consistent with those filed with the Pennsylvania PSC under the FirstEnergy EECF. Actual budgets will vary due to vendor contractual agreements and customer participation levels, among other factors out of the utility's control.

Appendix D-6  
Per Program Budget Detail

<b>Residential Multi-Family Program</b>					
<b>Four Year Program Budget</b>		<b>Program Year 1</b>	<b>Program Year 2</b>	<b>Program Year 3</b>	<b>Program Year 4</b>
		Fall 2009	From 6/2010	From 6/2011	From 6/2012
		Until-5/2010	Until-5/2011	Until-5/2012	Until-5/2013
	Program Code*	8-Multiple Family	8-Multiple Family	8-Multiple Family	8-Multiple Family
	Total Budget				
<b>Total</b>	<b>\$425,854</b>	<b>\$24,396</b>	<b>\$135,366</b>	<b>\$133,108</b>	<b>\$132,984</b>
Utility Labor/Cost***	\$43,727	\$384	\$14,553	\$14,399	\$14,391
Marketing***	\$22,691	\$19,245	\$1,284	\$1,086	\$1,075
M&V***	\$3,339	\$62	\$1,109	\$1,085	\$1,083
Retailer Sales Incentive	\$0	\$0	\$0	\$0	\$0
Rebate Processing	\$846	\$371	\$260	\$111	\$103
Retail Store Discount Tracking	\$0	\$0	\$0	\$0	\$0
Service Provider Costs***	\$89,543	\$0	\$29,848	\$29,848	\$29,848
Service Provide Equip/Audit	\$0	\$0	\$0	\$0	\$0
Incentive Shipping & Other**	\$0	\$0	\$0	\$0	\$0
Incentive Rebate for Equip**	\$265,708	\$4,333	\$88,312	\$86,579	\$86,484
Utility/SP O&M	\$0	\$0	\$0	\$0	\$0

\* This code links this budget to the model input tables in file labeled "ME-EC\_Plan\_Appendices-WCharts-Budget"

\*\*Variable based on number of units of participation each year.

\*\*\* Budget line items reflect the results of measure based modeling for the EE Plan filing. Actual program expenditures (e.g. for promotion, EM&V, Tracking, labor costs) will be allocated to the sector based on budgeted amounts.

These budget figures are consistent with those filed with the Pennsylvania PSC under the FirstEnergy EECF. Actual budgets will vary due to vendor contractual agreements and customer participation levels, among other factors out of the utility's control.

Appendix D-6  
Per Program Budget Detail

<b>Residential Direct Load Control Program</b>					
<b>Four Year Program Budget</b>		<b>Program Year 1</b>	<b>Program Year 2</b>	<b>Program Year 3</b>	<b>Program Year 4</b>
		Fall 2009	From 6/2010	From 6/2011	From 6/2012
		Until-5/2010	Until-5/2011	Until-5/2012	Until-5/2013
	Program Code*	Demand	Demand	Demand	Demand
	Total Budget				
<b>Total</b>	\$12,161,690	\$528,565	\$6,350,568	\$5,282,556	\$0
Utility Labor/Cost***	\$55,799	\$1,953	\$27,428	\$26,418	\$0
Marketing***	\$19,688	\$19,688	\$0	\$0	\$0
M&V***	\$32,823	\$1,149	\$16,134	\$15,540	\$0
Retailer Sales Incentive	\$0	\$0	\$0	\$0	\$0
Rebate Processing	\$0	\$0	\$0	\$0	\$0
Retail Store Discount Tracking	\$0	\$0	\$0	\$0	\$0
Service Provider Costs***	\$1,477,035	\$51,705	\$726,030	\$699,300	\$0
Service Provide Equip/Audit	\$6,066,480	\$213,015	\$2,987,070	\$2,866,395	\$0
Incentive Shipping & Other**	\$0	\$0	\$0	\$0	\$0
Incentive Rebate for Equip**	\$1,678,850	\$58,925	\$826,450	\$793,475	\$0
Utility/SP O&M	\$2,831,015	\$182,131	\$1,767,456	\$881,428	\$0

\* This code links this budget to the model input tables in file labeled "ME-EC\_Plan\_Appendices-WCharts-Budget"

\*\*Variable based on number of units of participation each year.

\*\*\* Budget line items reflect the results of measure based modeling for the EE Plan filing. Actual program expenditures (e.g. for promotion, EM&V, Tracking, labor costs) will be allocated to the sector based on budgeted amounts.

These budget figures are consistent with those filed with the Pennsylvania PSC under the FirstEnergy EECF. Actual budgets will vary due to vendor contractual agreements and customer participation levels, among other factors out of the utility's control.

Appendix D-6  
Per Program Budget Detail

<b>Commercial/Industrial Audit &amp; Technology Assessment Program</b>					
<b>Four Year Program Budget</b>		<b>Program Year 1</b>	<b>Program Year 2</b>	<b>Program Year 3</b>	<b>Program Year 4</b>
		Fall 2009	From 6/2010	From 6/2011	From 6/2012
		Until-5/2010	Until-5/2011	Until-5/2012	Until-5/2013
	Program Code*	1-C/I Audits	1-C/I Audits	1-C/I Audits	1-C/I Audits
	Total Budget				
<b>Total</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
Utility Labor/Cost***	\$0	\$0	\$0	\$0	\$0
Marketing***	\$0	\$0	\$0	\$0	\$0
M&V***	\$0	\$0	\$0	\$0	\$0
Retailer Sales Incentive	\$0	\$0	\$0	\$0	\$0
Rebate Processing	\$0	\$0	\$0	\$0	\$0
Retail Store Discount Tracking	\$0	\$0	\$0	\$0	\$0
Service Provider Costs***	\$0	\$0	\$0	\$0	\$0
Service Provide Equip/Audit	\$0	\$0	\$0	\$0	\$0
Incentive Shipping & Other**	\$0	\$0	\$0	\$0	\$0
Incentive Rebate for Equip**	\$0	\$0	\$0	\$0	\$0
Utility/SP O&M	\$0	\$0	\$0	\$0	\$0

\* This code links this budget to the model input tables in file labeled "ME-EC\_Plan\_Appendices-WCharts-Budget"

\*\*Variable based on number of units of participation each year.

\*\*\* Budget line items reflect the results of measure based modeling for the EE Plan filing. Actual program expenditures (e.g. for promotion, EM&V, Tracking, labor costs) will be allocated to the sector based on budgeted amounts.

These budget figures are consistent with those filed with the Pennsylvania PSC under the FirstEnergy EECF. Actual budgets will vary due to vendor contractual agreements and customer participation levels, among other factors out of the utility's control.

Appendix D-6  
Per Program Budget Detail

<b>Governmental &amp; Institutional Program</b>					
<b>Four Year Program Budget</b>		<b>Program Year 1</b>	<b>Program Year 2</b>	<b>Program Year 3</b>	<b>Program Year 4</b>
		Fall 2009	From 6/2010	From 6/2011	From 6/2012
		Until-5/2010	Until-5/2011	Until-5/2012	Until-5/2013
	Program Code*	2-Governmental Programs	2-Governmental Programs	2-Governmental Programs	2-Governmental Programs
	Total Budget				
<b>Total</b>	<b>\$3,981,188</b>	<b>\$324,701</b>	<b>\$1,427,986</b>	<b>\$1,359,320</b>	<b>\$869,180</b>
Utility Labor/Cost***	\$346,376	\$23,885	\$132,042	\$119,262	\$71,187
Marketing***	\$78,344	\$68,125	\$3,406	\$3,406	\$3,406
M&V***	\$8,160	\$795	\$3,925	\$3,419	\$20
Retailer Sales Incentive	\$0	\$0	\$0	\$0	\$0
Rebate Processing	\$63,174	\$6,041	\$30,106	\$26,865	\$163
Retail Store Discount Tracking	\$0	\$0	\$0	\$0	\$0
Service Provider Costs***	\$0	\$0	\$0	\$0	\$0
Service Provide Equip/Audit	\$0	\$0	\$0	\$0	\$0
Incentive Shipping & Other**	\$0	\$0	\$0	\$0	\$0
Incentive Rebate for Equip**	\$1,671,320	\$112,492	\$691,689	\$639,551	\$227,587
Utility/SP O&M	\$1,813,815	\$113,363	\$566,817	\$566,817	\$566,817

\* This code links this budget to the model input tables in file labeled "ME-EC\_Plan\_Appendices-WCharts-Budget"

\*\*Variable based on number of units of participation each year.

\*\*\* Budget line items reflect the results of measure based modeling for the EE Plan filing. Actual program expenditures (e.g. for promotion, EM&V, Tracking, labor costs) will be allocated to the sector based on budgeted amounts.

These budget figures are consistent with those filed with the Pennsylvania PSC under the FirstEnergy EECF. Actual budgets will vary due to vendor contractual agreements and customer participation levels, among other factors out of the utility's control.

Appendix D-6  
Per Program Budget Detail

<b>Small Commercial/Industrial Equipment Program</b>					
<b>Four Year Program Budget</b>		<b>Program Year 1</b>	<b>Program Year 2</b>	<b>Program Year 3</b>	<b>Program Year 4</b>
		Fall 2009	From 6/2010	From 6/2011	From 6/2012
		Until-5/2010	Until-5/2011	Until-5/2012	Until-5/2013
	Program Code*	3-C I Equip	3-C I Equip	3-C I Equip	3-C I Equip
	Total Budget				
<b>Total</b>	<b>\$13,417,280</b>	<b>\$1,014,369</b>	<b>\$2,188,050</b>	<b>\$5,744,461</b>	<b>\$4,470,401</b>
Utility Labor/Cost***	\$1,138,356	\$64,093	\$194,264	\$495,508	\$384,491
Marketing***	\$231,759	\$138,266	\$27,191	\$35,872	\$30,430
M&V***	\$68,486	\$6,426	\$15,565	\$25,644	\$20,850
Retailer Sales Incentive	\$141,766	\$6,002	\$48,825	\$62,886	\$24,053
Rebate Processing	\$1,055,365	\$128,936	\$229,374	\$412,999	\$284,056
Retail Store Discount Tracking	\$551	\$55	\$237	\$237	\$23
Service Provider Costs***	\$104,561	\$0	\$0	\$7,281	\$97,281
Service Provide Equip/Audit	\$0	\$0	\$0	\$0	\$0
Incentive Shipping & Other**	\$0	\$0	\$0	\$0	\$0
Incentive Rebate for Equip**	\$10,655,095	\$670,591	\$1,672,593	\$4,693,364	\$3,618,547
Utility/SP O&M	\$21,342	\$0	\$0	\$10,671	\$10,671

\* This code links this budget to the model input tables in file labeled "ME-EC\_Plan\_Appendices-WCharts-Budget"

\*\* Variable based on number of units of participation each year.

\*\*\* Budget line items reflect the results of measure based modeling for the EE Plan filing. Actual program expenditures (e.g. for promotion, EM&V, Tracking, labor costs) will be allocated to the sector based on budgeted amounts.

These budget figures are consistent with those filed with the Pennsylvania PSC under the FirstEnergy EECF. Actual budgets will vary due to vendor contractual agreements and customer participation levels, among other factors out of the utility's control.

Appendix D-6  
Per Program Budget Detail

<b>Large Commercial/Industrial Equipment Program</b>					
<b>Four Year Program Budget</b>		<b>Program Year 1</b>	<b>Program Year 2</b>	<b>Program Year 3</b>	<b>Program Year 4</b>
		Fall 2009	From 6/2010	From 6/2011	From 6/2012
		Until-5/2010	Until-5/2011	Until-5/2012	Until-5/2013
	Program Code*	4-C/I Equip	4-C/I Equip	4-C/I Equip	4-C/I Equip
	Total Budget				
<b>Total</b>	<b>\$8,806,665</b>	<b>\$433,449</b>	<b>\$2,533,337</b>	<b>\$2,999,893</b>	<b>\$2,839,986</b>
Utility Labor/Cost***	\$567,141	\$80,533	\$192,883	\$122,108	\$171,617
Marketing***	\$320,167	\$54,828	\$12,690	\$14,721	\$237,928
M&V***	\$893,650	\$4,026	\$381,054	\$379,479	\$129,091
Retailer Sales Incentive	\$5,638	\$50	\$300	\$650	\$4,638
Rebate Processing	\$510,238	\$32,190	\$48,608	\$35,904	\$393,536
Retail Store Discount Tracking	\$0	\$0	\$0	\$0	\$0
Service Provider Costs***	\$0	\$0	\$0	\$0	\$0
Service Provide Equip/Audit	\$0	\$0	\$0	\$0	\$0
Incentive Shipping & Other**	\$0	\$0	\$0	\$0	\$0
Incentive Rebate for Equip**	\$6,509,830	\$261,821	\$1,897,802	\$2,447,031	\$1,903,176
Utility/SP O&M	\$0	\$0	\$0	\$0	\$0

\* This code links this budget to the model input tables in file labeled "ME-EC\_Plan\_Appendices-WCharts-Budget"

\*\* Variable based on number of units of participation each year.

\*\*\* Budget line items reflect the results of measure based modeling for the EE Plan filing. Actual program expenditures (e.g. for promotion, EM&V, Tracking, labor costs) will be allocated to the sector based on budgeted amounts.

These budget figures are consistent with those filed with the Pennsylvania PSC under the FirstEnergy EECF. Actual budgets will vary due to vendor contractual agreements and customer participation levels, among other factors out of the utility's control.

Appendix D-6  
Per Program Budget Detail

<b>Industrial Motors &amp; Variable Speed Drives Program</b>					
<b>Four Year Program Budget</b>		<b>Program Year 1</b>	<b>Program Year 2</b>	<b>Program Year 3</b>	<b>Program Year 4</b>
		Fall 2009	From 6/2010	From 6/2011	From 6/2012
		Until-5/2010	Until-5/2011	Until-5/2012	Until-5/2013
	Program Code*	5-IND MOTOR	5-IND MOTOR	5-IND MOTOR	5-IND MOTOR
	Total Budget				
<b>Total</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
Utility Labor/Cost***	\$0	\$0	\$0	\$0	\$0
Marketing***	\$0	\$0	\$0	\$0	\$0
M&V***	\$0	\$0	\$0	\$0	\$0
Retailer Sales Incentive	\$0	\$0	\$0	\$0	\$0
Rebate Processing	\$0	\$0	\$0	\$0	\$0
Retail Store Discount Tracking	\$0	\$0	\$0	\$0	\$0
Service Provider Costs***	\$0	\$0	\$0	\$0	\$0
Service Provide Equip/Audit	\$0	\$0	\$0	\$0	\$0
Incentive Shipping & Other**	\$0	\$0	\$0	\$0	\$0
Incentive Rebate for Equip**	\$0	\$0	\$0	\$0	\$0
Utility/SP O&M	\$0	\$0	\$0	\$0	\$0

\* This code links this budget to the model input tables in file labeled "ME-EC\_Plan\_Appendices-WCharts-Budget"

\*\*Variable based on number of units of participation each year.

\*\*\* Budget line items reflect the results of measure based modeling for the EE Plan filing. Actual program expenditures (e.g. for promotion, EM&V, Tracking, labor costs) will be allocated to the sector based on budgeted amounts.

These budget figures are consistent with those filed with the Pennsylvania PSC under the FirstEnergy EECF. Actual budgets will vary due to vendor contractual agreements and customer participation levels, among other factors out of the utility's control.

**Appendix E**

Measure savings for programs included, including key assumptions

Appendix E

	Measure Name	Program	Rate Class	kWh Savings	kW Savings	Life	Source of Saving Values and Life
1	DLC-CAC	Demand	Res	36	0.720	13	Smart Grid Installation Estimate
2	DLC-Pool Pumps	Demand	Res	38	1.470	13	Smart Grid Installation for CAC + TRM
3	DLC-Water Heat	Demand	Res	38	1.070	13	Smart Grid Installation for CAC + TRM
4	1-Res Home Audits - CFL 4 - Low Flow	1-Res Audits	Res	560	0.045	7	Sum of Other Measures Listed
5	Targeted Audit - Space Heat	1-Res Audits	Res	1,176	0.051	7	TRM: Mix of prescriptive measures
6	Res Home Audits Year 1 kit	1-Res Audits	Res	294	0.011	6	Sum of Other Measures Listed
7	Refrigerator/Freezer recycling	2-RES App Turn-In	Res	1,344	0.167	8	TRM
8	Room Air Conditioners	2-RES App Turn-In	Res	114	0.258	8	TRM
9	ASHP - SEER 15	3-RES EE HVAC	Res	1,781	0.236	12	TRM
10	CAC - SEER 15	3-RES EE HVAC	Res	205	0.265	15	TRM
11	CAC - Maintenance	3-RES EE HVAC	Res	200	0.258	7	TRM
12	Furnace Fans	3-RES EE HVAC	Res	327	0.000	15	TRM
13	EE Ground Source Heat Pump	3-RES EE HVAC	Res	4,193	0.095	15	TRM
14	Solar Water Heating	4-Res-EE P	Res	1,874	0.336	15	TRM
15	HP Water Heater	4-Res-EE P	Res	1,703	0.156	15	TRM
16	EE Water Heater	4-Res-EE P	Res	156	0.014	15	TRM
17	Programable Thermostat_Heat	4-Res-EE P	Res	663	0.000	15	FE Comments to PA Draft TRM for PY3,4
18	Pool Pump Rerprogramming to be Off Noon to Eight PM	1-Res Audits	Res	0	0.600	15	SCE Work paper adepted to PA
19	CFL bulbs regular-15	1-Res Audits	Res	147	0.007	6	TRM
20	CFL Giveaway	4-Res-EE P	Res	38	0.002	6	TRM
21	CFL bulbs regular - Outside - 15	4-Res-EE P	Res	80	0.000	6	TRM but Estimate of Hours from Survey
22	CFL bulbs regular - 13	4-Res-EE P	Res	38	0.002	6	TRM
23	Clothes Washer Energy Star, Electric Water heater, Electric Dryer	4-Res-EE P	Res	230	0.013	11	TRM with Electric Heat
24	Dehumidifiers	4-Res-EE P	Res	104	0.009	12	TRM
25	Freezers Energy Star-Chest Freezer	4-Res-EE P	Res	46	0.010	13	TRM
26	Holiday Lights	4-Res-EE P	Res	57	0.000	10	TRM
27	LED Night Light	1-Res Audits	Res	14	0.000	8	TRM
28	Variable Speed Pool Pump+Proper Commissioning	4-Res-EE P	Res	1,780	0.534	10	SCE Work paper adepted to PA
29	Refrigerators-Freezers Energy Star - Side by Side	4-Res-EE P	Res	85	0.011	13	TRM
30	Refrigerators-Freezers Energy Star - Top Freezer	4-Res-EE P	Res	71	0.011	13	TRM
31	Room Air Conditioners	4-Res-EE P	Res	53	0.053	10	TRM
32	Smart Strip plug outlet	4-Res-EE P	Res	164	0.012	5	TRM
33	Torchiere Floor Lamps	4-Res-EE P	Res	94	0.005	10	TRM
34	Residential New Construction - PY12	5-RES New Con	Res	1,461	0.219	15	ACEEE PA Report
35	Residential New Construction - PY34	5-RES New Con	Res	8,900	1.335	15	30 cents per kWh and kW/kWh = 0.00015

Appendix E

	Measure Name	Program	Rate Class	kWh Savings	kW Savings	Life	Source of Saving Values and Life
36	<b>Behavior_Mod</b>	<b>9-Behavior Modification</b>	Res	<b>223</b>	<b>0.020</b>	<b>1</b>	<b>Estimtion based on 2% savings, 12,500 kWh baseline</b>
37	Estar Windows	1-Res Audits	Res	623	0.034	15	ACEEE PA Report
38	Duct sealing 20 leakage base	1-Res Audits	Res	639	0.471	15	PA TRM with 3.5 ton
39	Low Flow Showerheads	1-Res Audits	Res	370	0.034	9	PA TRM
40	Kitchen Aerator	1-Res Audits	Res	54	0.005	5	PA TRM
41	Bathroom Aerator	1-Res Audits	Res	48	0.004	5	PA TRM
42	Pipe Wrap	1-Res Audits	Res	110	0.010	13	PA TRM
43	Roof Insulation	1-Res Audits	Res	808	0.081	15	PA TRM
44	<b>Whole Building - Light Measure (Test-In)</b>	<b>1-Res Audits</b>	Res	<b>0</b>	<b>0.025</b>	<b>8</b>	<b>PT TRM + Program design</b>
45	Low Income Warm Program Through Act125	7-Low Income	LI RES	1,335	0.320	15	08' WARM Program M&V Average Savings Derated 25% to be conservative
46	Low Income Warm Program Through Act129 (Additional SmartStrips	7-Low Income	LI RES	146	0.010	5	TRM
47	1-Res Home Audits - CFL 4 - Low Flow 2 Water Hea	1-Res Audits LI	LI RES	499	0.040	7	Sum of Other Measures Listed
48	Schools Childern Education-No Savings	1-Res Audits LI	LI RES	261	0.010	6	Sum of Other Measures Listed
49	Refrigerator/Freezer recycling	2-RES App Turn-In LI	LI RES	1,197	0.148	8	TRM
50	Programable Thermostat_Heat	1-Res Audits LI	LI RES	590	0.000	15	FE Comments to PA Draft TRM for PY3,4
51	CFL bulbs regular-15 -Free No Water Hea	1-Res Audits LI	LI RES	131	0.006	6	TRM
52	CFL bulbs regular-15 -Free No Water Heat Mailed At Reques	4-Res-EE P LI	LI RES	34	0.002	6	TRM
53	CFL bulbs regular - Outside - 15 - Store Rebates	4-Res-EE P LI	LI RES	71	0.000	6	TRM but Estimate of Hours from Survey
54	CFL bulbs regular - 19 - Store Rebates	4-Res-EE P LI	LI RES	34	0.002	6	TRM
55	LED Night Light	1-Res Audits LI	LI RES	12	0.000	8	TRM
56	Low Income Lighting-Warm Ligh	7-Low Income	LI RES	61	0.000	6	4 CFLs using 1.5 hours a day.
57	Low Income Lighting-Warm SmartStrij	7-Low Income	LI RES	130	0.009	5	TRM
58	Low Income Lighting-Low Usag	7-Low Income	LI RES	407	0.038	6	TRM: 4x13w, 1x19w, 1x23w, 2LED NL, Furnace Whistle, faucet aerator
59	Multiple Family - CFL Lightin	8-Multiple Family	Res	238	0.010	6	TRM: 6 CFLs, 2 LED NightLights, LF Showerhead
60	Multiple Family - T8-Lightin	2-Governmental Programs	Gov	140	0.032	15	TRM
61	Commercial, Industrial Audit - Sm&Mc	3-C/I Equip	SM C&I	0	0.000	0	0
62	Commercial, Industrial Audit - Large	4-C/I Equip	LG C&I	0	0.000	0	0
63	<b>Commercial CFL Program - Kits Mailed to Small Commercial</b>	<b>3-C/I Equip</b>	SM C&I	<b>643</b>	<b>0.171</b>	<b>6</b>	<b>PA TRM - average hours and CF</b>
64	Commercial, Industrial Audit - Gov	2-Governmental Programs	Gov	0	0.000	0	0
65	<b>High Bay HID replaced by 6F54T5HO</b>	2-Governmental Programs	Gov	<b>822</b>	<b>0.110</b>	<b>12</b>	<b>TRM</b>

Appendix E

	Measure Name	Program	Rate Class	kWh Savings	kW Savings	Life	Source of Saving Values and Life
66	HPT8 4ft 4 lamp, T12 to HPT8	2-Governmental Programs	Gov	160	0.027	15	TRM
67	LED Exit Signs Electronic Fixtures (Retrofit Only)	2-Governmental Programs	Gov	226	0.026	10	TRM
68	Occupancy Sensors under 500 W	2-Governmental Programs	Gov	353	0.008	10	DSMore MI Database - Demand downgraded (no demand savings for prescriptive Occ sensor)
69	LED Auto Traffic Signals	2-Governmental Programs	Gov	476	0.054	10	TRM 8"
70	LED Pedestrian Signals	2-Governmental Programs	Gov	842	0.096	10	TRM
71	<b>Street Lighting - Weighted Average All Replacements</b> Water-Cooled cent Chiller 150 - 300 ton 0.57 kW/ton with 0.46 kW/ton IPLV	2-Governmental Programs	Gov	329	0.000	10	=(175-100)*365*12/1000
72		2-Governmental Programs	Gov	7,117	7.633	15	TRM
73	<b>Custom Incentives Gov</b>	2-Governmental Programs	Gov	89,000	8.900	15	Models FE Program as Implemented in units of 100,000 kWh savings
74	AC <65,000 1 Ph	3-C/I Equip	SM C&I	270	0.361	15	TRM
75	AC 65,000 - 135,000	3-C/I Equip	SM C&I	351	0.708	15	TRM
76	AC 240,000 - 760,000	3-C/I Equip	SM C&I	1,256	2.439	15	TRM
77	Clothes Washer CEE Tier1, Electric Water heater, Electric Dryer:	3-C/I Equip	SM C&I	563	0.593	10	DSMore MI Database
78	<b>AntiSweatHeater Controller for Cooler - one controller controlling at least two doors</b>	3-C/I Equip	SM C&I	4,551	0.123	15	TRM
79	<b>AntiSweatHeater Controller for Freezers - one controller controlling at least two doors</b>	3-C/I Equip	SM C&I	8,377	0.128	15	TRM
80	ENERGY STAR Commercial Solid Door Freezers less than 20ft <sup>2</sup>	3-C/I Equip	SM C&I	773	0.088	12	TRM
81	ENERGY STAR Commercial Solid Door Freezers 20 to 48 ft <sup>3</sup>	3-C/I Equip	SM C&I	1,769	0.202	12	TRM
82	ENERGY STAR Commercial Solid Door Refrigerators less than 20ft <sup>3</sup>	3-C/I Equip	SM C&I	377	0.043	12	TRM
83	ENERGY STAR Commercial Solid Door Refrigerators 20 to 48 ft <sup>3</sup>	3-C/I Equip	SM C&I	746	0.085	12	TRM
84	ENERGY STAR Ice Machines less than 500 lbs	3-C/I Equip	SM C&I	1,470	0.168	12	TRM
85	ENERGY STAR Ice Machines 500 to 1000 lbs	3-C/I Equip	SM C&I	2,399	0.274	12	TRM
86	ENERGY STAR Ice Machines more than 1000 lbs	3-C/I Equip	SM C&I	5,383	0.614	12	TRM
87	ENERGY STAR Steam Cookers 3 Pan	3-C/I Equip	SM C&I	9,957	2.270	12	TRM
88	<b>High Bay HID replaced by 6F54T5HO</b>	3-C/I Equip	SM C&I	822	0.110	12	TRM
89	EE Water Heater	3-C/I Equip	SM C&I	284	0.058	15	TRM
90	HP Water Heater (Base Usage 22831)	3-C/I Equip	SM C&I	12,638	0.953	15	TRM
91	HPT8 4ft 4 lamp, T12 to HPT8	3-C/I Equip	SM C&I	160	0.027	15	TRM
92	LED Exit Signs Electronic Fixtures (Retrofit Only)	3-C/I Equip	SM C&I	226	0.026	10	TRM
93	Occupancy Sensors under 500 W	3-C/I Equip	SM C&I	353	0.008	10	DSMore MI Database - Demand downgraded (no demand savings for prescriptive Occ sensor)
94	<b>Strip Mall Low Cost DI Suite</b>	3-C/I Equip	SM C&I	3,085	0.286	9	TRM: Mix of prescriptive measures, some refrigeration improvements from SCE work paper - interim TRM needed
95	Commercial Smart Strip plug outlet	3-C/I Equip	SM C&I	110	0.009	5	PA TRM

Appendix E

	Measure Name	Program	Rate Class	kWh Savings	kW Savings	Life	Source of Saving Values and Life
96	Pre Rinse Sprayers	3-C/I Equip	SM C&I	1,242	0.103	5	DSMore MI Database
97	Refrigerant charging correction	3-C/I Equip	SM C&I	634	0.451	10	DSMore MI Database
98	Refrigeration Commissioning	3-C/I Equip	SM C&I	334	0.038	3	DSMore MI Database
99	Strip curtains for walk-ins - freezer	3-C/I Equip	SM C&I	546	0.062	4	DSMore MI Database
100	Vending Equipment Controller	3-C/I Equip	SM C&I	1,600	0.000	5	PA TRM
101	Custom Incentives Small	3-C/I Equip	SM C&I	89,000	8.900	15	Models FE Program as Implemented
102	MasterMetered MultiFamily CFL Kits	2-Governmental Programs	Gov	238	0.010	6	TRM: 6 CFLs, 2 LED NightLights, LF Showerhead
103	Demand-controlled ventilation (DCV)	4-C/I Equip	LG C&I	7,120	1.193	15	ACEEE PA Report
104	High Bay HID replaced by 6F54T5HO	4-C/I Equip	LG C&I	822	0.110	12	TRM
105	HPT8 4ft 4 lamp, T12 to HPT8	4-C/I Equip	LG C&I	160	0.027	15	TRM
106	Occupancy Sensors under 500 W Water-Cooled cent Chiller 150 - 300 ton 0.57 kW/ton with 0.46 kW/ton	4-C/I Equip	LG C&I	353	0.007	10	DSMore MI Database - Demand downgraded (no demand savings for prescriptive Occ sensor)
107	IPLV Water-Cooled Centrifugal Chiller < 150 ton 0.56 kW/ton with 0.53 kW/ton	4-C/I Equip	LG C&I	7,117	7.633	15	TRM
108	IPLV	4-C/I Equip	LG C&I	7,951	8.527	15	TRM
109	Custom Incentives Large	4-C/I Equip	LG C&I	89,000	8.900	15	DSMore MI Database
110	Motors 1 HP 1200	3-C/I Equip	SM C&I	87	0.007	15	TRM
111	Motors 5 HP 1200	3-C/I Equip	SM C&I	292	0.022	15	TRM
112	Motors 10 HP 1200	4-C/I Equip	LG C&I	415	0.032	15	TRM
113	Motors 20 HP 1200	4-C/I Equip	LG C&I	763	0.058	15	TRM
114	Motors 1 HP 3600	3-C/I Equip	SM C&I	59	0.004	15	TRM
115	Motors 5 HP 3600	3-C/I Equip	SM C&I	155	0.012	15	TRM
116	Motors 10 HP 3600	4-C/I Equip	LG C&I	289	0.022	15	TRM
117	Motors 20 HP 3600	4-C/I Equip	LG C&I	446	0.034	15	TRM
118	Water Pumps with VFD's	3-C/I Equip	SM C&I	579	0.012	15	TRM
119	HVAC Fans with VFD's	3-C/I Equip	SM C&I	586	0.012	15	TRM
120	Air Compressors with VFD's	3-C/I Equip	SM C&I	582	0.012	15	TRM
121	Water Pumps with VFD's	3-C/I Equip	SM C&I	2,897	0.061	15	TRM
122	HVAC Fans with VFD's	3-C/I Equip	SM C&I	2,928	0.061	15	TRM
123	Air Compressors with VFD's	3-C/I Equip	SM C&I	2,910	0.061	15	TRM
124	Water Pumps with VFD's	4-C/I Equip	LG C&I	5,794	0.121	15	TRM
125	HVAC Fans with VFD's	4-C/I Equip	LG C&I	5,856	0.122	15	TRM
126	Air Compressors with VFD's	4-C/I Equip	LG C&I	5,821	0.122	15	TRM

Appendix F

Measure Name	Program	Number of 2010 Program participants/ Measure Units	Number of 2011 Program participants/ Measure Units	Number of 2012 Program participants/ Measure Units	Number of 2013 Program participants/ Measure Units	Participants Assumptions
1 DLC-CAC	Demand	1,090	15,344	14,881	0	Res*Sat*Survey-Reduced by SmartGrid
2 DLC-Pool Pumps	Demand	57	700	540	0	Res*Sat*Survey-Reduced by SmartGrid
3 <b>DLC-Water Heat</b>	Demand	2	90	119	0	Res*Sat*Survey-Reduced by SmartGrid
4 <b>1-Res Home Audits - CFL 4 - Low Flow 2</b>	1-Res Audits	0	24,000	24,000	25,000	Res*Sat*Survey * 93.2%
5 1-Res Home Audits - CFL 4 - Low Flow 2	1-Res Audits	0	5	160	160	Res*Sat*Survey
6 Schools Children Education-No Savings	1-Res Audits	9,627	0	0	0	Estimate of Activity * 93.2%
7 Refrigerator/Freezer recycling	2-RES App Turn-In	1,374	10,500	10,500	10,500	Res*Sat*Survey * 93.2%
8 Room Air Conditioners	2-RES App Turn-In	305	1,500	1,500	1,500	Budgetary Limits
9 ASHP - SEER 15	3-RES EE HVAC	43	214	214	214	10% of CAC
10 <b>CAC - SEER 15</b>	3-RES EE HVAC	428	500	500	500	Res*Sat*Survey - Minus 10%
11 CAC - Maintenance	3-RES EE HVAC	442	2,211	2,211	2,211	Res*Sat*Survey
12 Furnace Fans	3-RES EE HVAC	0	47	187	374	Budgetary Limits
13 EE Ground Source Heat Pump	<b>3-RES EE HVAC</b>	0	30	50	50	Budgetary Limits
14 Solar Water Heating	4-Res-EE P	0	96	96	96	Budgetary Limits
15 HP Water Heater	4-Res-EE P	0	96	96	96	Budgetary Limits
16 EE Water Heater	4-Res-EE P	0	159	500	441	Res*Sat*Survey
17 Programable Thermostat_Heat	<b>1-Res Audits</b>	47	47	200	200	Res*Sat*Survey * 93.2%
18 Programable Thermostat_CAC	4-Res-EE P	0	0	0	0	Res*Sat*Survey
19 <b>CFL bulbs regular-15</b>	1-Res Audits	0	0	0	0	Res*Sat*Survey * 93.2%
20 <b>CFL bulbs regular-15</b>	4-Res-EE P	0	96,273	50,000	50,000	Res*Sat*Survey * 93.2%
21 <b>CFL bulbs regular - Outside - 15</b>	4-Res-EE P	0	0	0	0	Res*Sat*Survey * 93.2%
22 <b>CFL bulbs regular - 19</b>	4-Res-EE P	160,455	850,000	600,000	614,474	Res*Sat*Survey * 93.2%
Clothes Washer Energy Star, Electric Water heater, Electric						
23 Dryer	4-Res-EE P	37	2,246	642	642	Budgetary Limits
24 Dehumidifiers	4-Res-EE P	37	1,444	642	642	Budgetary Limits
25 Freezers Energy Star-Chest Freezer	4-Res-EE P	37	449	321	321	Budgetary Limits
26 Holiday Lights	4-Res-EE P	0	385	385	385	Res*Sat*Survey
27 LED Night Light	<b>1-Res Audits</b>	0	0	0	0	Free to School Audits * 93.2%
28 Pump and Motor Single Speed	4-Res-EE P	0	267	267	267	Res*Sat*Survey
29 Refrigerators-Freezers Energy Star - Side by Side	4-Res-EE P	37	1,000	800	800	Budgetary Limits
30 Refrigerators-Freezers Energy Star - Top Freezer	4-Res-EE P	37	1,284	642	642	Budgetary Limits
31 Room Air Conditioners	4-Res-EE P	0	321	321	321	Res*Sat*Survey
32 Smart Strip plug outlet	4-Res-EE P	0	468	1,169	1,169	(Res*Sat*Survey)*25%
33 Torchiere Floor Lamps	4-Res-EE P	6	6	6	6	Budgetary Limits
34 Residential New Construction - 15%	5-RES New Con	140	327	0	0	Budgetary Limits
35 Residential New Construction - 30%	5-RES New Con	0	0	80	80	Budgetary Limits

Appendix F

Measure Name	Program	Number of 2010 Program participants/ Measure Units	Number of 2011 Program participants/ Measure Units	Number of 2012 Program participants/ Measure Units	Number of 2013 Program participants/ Measure Units	Participants Assumptions
36 Ceiling Fans	6-Res Whole	0	0	20,000	104,990	Budgetary Limits
37 Estar Windows	6-Res Whole	0	14	140	140	Budgetary Limits
38 Duct sealing 20 leakage base	6-Res Whole	0	14	140	140	Budgetary Limits
39 Low Flow Showerheads	6-Res Whole	0	0	0	0	Budgetary Limits
40 Kitchen Aerator	6-Res Whole	0	0	0	0	Budgetary Limits
41 Bathroom Aerator	6-Res Whole	0	0	0	0	Budgetary Limits
42 Pipe Wrap	6-Res Whole	0	0	0	0	Budgetary Limits
43 Roof Insulation	6-Res Whole	0	14	140	140	Budgetary Limits
44 Whole Building	6-Res Whole	0	160	1,200	1,200	Budgetary Limits
45 Low Income Warm Program Through Act129	7-Low Income	220	538	563	587	WARM Forecast * 25%
Low Income Warm Program Through Act129 (Additional SmartStrips)	7-Low Income	73	178	186	194	WARM Forecast * 25% * 1/3
47 1-Res Home Audits - CFL 4 - Low Flow 2 Water Heat	1-Res Audits LI	587	2,935	2,935	2,935	Res*Sat*Survey * 6.8%
48 Schools Children Education-No Savings	1-Res Audits LI	338	1,691	1,691	1,691	Estimate of Activity * 6.8%
49 Refrigerator/Freezer recycling	2-RES App Turn-In LI	494	2,469	2,469	2,489	Res*Sat*Survey * 6.8%
50 Programable Thermostat_Heat	1-Res Audits LI	0	0	3	3	Res*Sat*Survey * 6.8%
51 CFL bulbs regular-15 -Free No Water Heat	1-Res Audits LI	0	0	3	0	Res*Sat*Survey * 6.8%
CFL bulbs regular-15 -Free No Water Heat Mailed At Request	4-Res-EE P LI	0	0	0	0	Res*Sat*Survey * 6.8%
53 CFL bulbs regular - Outside - 15 - Store Rebates	4-Res-EE P LI	0	0	0	0	Res*Sat*Survey * 6.8%
54 CFL bulbs regular - 19 - Store Rebates	4-Res-EE P LI	6,819	34,097	34,097	34,097	Res*Sat*Survey * 6.8%
55 LED Night Light	1-Res Audits LI	0	0	0	0	Free to School Audits * 6.8%
56 Low Income Lighting-Warm Light	7-Low Income	879	2,152	2,252	2,348	WARM Forecast
57 Low Income Lighting-Warm SmartStrip	7-Low Income	290	710	743	775	WARM Forecast * 1/3
58 Low Income Lighting-Low Usage	7-Low Income	663	3,316	3,316	3,316	Low Income - Low Usage Count
59 Multiple Family - CFL Lighting	8-Multiple Family	0	2,407	2,407	2,407	PAHA Provided
60 Multiple Family - T8-Lighting	<b>2-Governmental Programs</b>	124	87	37	34	PAHA Provided
61 Commercial, Industrial Audit - Sm&Md	1-C/I Audits	33	17	0	0	Budgetary Limits
62 Commercial, Industrial Audit - Large	1-C/I Audits	16	8	0	0	Budgetary Limits
63 Commercial CFL Program	1-C/I Audits	0	0	14,561	14,561	Comm*Survey
64 Commercial, Industrial Audit - Gov	1-C/I Audits	5	5	0	0	Budgetary Limits
65 Exterior HID replacement above 175W to 250W HID retrofit	<b>2-Governmental Programs</b>	13	2,476	2,476	81	Base on Fed Sales

Appendix F

Measure Name	Program	Number of 2010 Program participants/ Measure Units	Number of 2011 Program participants/ Measure Units	Number of 2012 Program participants/ Measure Units	Number of 2013 Program participants/ Measure Units	Participants Assumptions
66 HPT8 4ft 4 lamp, T12 to HPT8	2-Governmental Programs	1,015	1,618	0	0	Base on Fed Sales
67 LED Exit Signs Electronic Fixtures (Retrofit Only)	2-Governmental Programs	547	3,010	3,010	0	Base on Fed Sales
68 Occupancy Sensors under 500 W	2-Governmental Programs	103	567	567	0	Base on Fed Sales
69 LED Auto Traffic Signals	2-Governmental Programs	103	567	567	0	Intersection Estimate
70 LED Pedestrian Signals	2-Governmental Programs	1,238	6,809	6,809	0	Intersection Estimate
71 Street Lighting - 175 Mercury to 100 HPS	2-Governmental Programs	892	4,462	4,462	4,462	Street Light Count
Water-Cooled cent Chiller 150 - 300 ton 0.57 kW/ton with 0.46 kW/ton IPLV	2-Governmental Programs	0	0	0	0	Fed Large User Counts
Water-Cooled Centrifugal Chiller < 150 ton 0.56 kW/ton with 0.53 kW/ton IPLV	2-Governmental Programs	0	5	2	0	Fed Large User Counts
74 AC <65,000 1 Ph	3-C/I Equip	0	36	182	175	Budgetary Limits
75 AC 65,000 - 135,000	3-C/I Equip	0	55	273	173	Budgetary Limits
76 AC 240,000 - 760,000	3-C/I Equip	0	55	228	173	Budgetary Limits
Clothes Washer CEE Tier1, Electric Water heater, Electric Dryer	3-C/I Equip	73	364	364	364	Budgetary Limits
78 Demand-controlled ventilation (DCV)	3-C/I Equip	0	0	64	64	Budgetary Limits
79 Efficient Refrigeration Condenser	3-C/I Equip	0	0	164	164	Budgetary Limits
ENERGY STAR Commercial Solid Door Freezers less than 20ft3	3-C/I Equip	9	36	27	9	Budgetary Limits
80 ENERGY STAR Commercial Solid Door Freezers 20 to 48 ft3	3-C/I Equip	9	36	27	9	Budgetary Limits
81 ENERGY STAR Commercial Solid Door Refrigerators less than 20ft3	3-C/I Equip	9	9	9	9	Budgetary Limits
82 ENERGY STAR Commercial Solid Door Refrigerators 20 to 48 ft3	3-C/I Equip	9	9	9	9	Budgetary Limits
83 ENERGY STAR Ice Machines less than 500 lbs	3-C/I Equip	9	364	455	182	Budgetary Limits
84 ENERGY STAR Ice Machines 500 to 1000 lbs	3-C/I Equip	9	46	46	10	Budgetary Limits
85 ENERGY STAR Ice Machines more than 1000 lbs	3-C/I Equip	9	364	364	91	Budgetary Limits
86 ENERGY STAR Steam Cookers 3 Pan	3-C/I Equip	9	273	273	0	Budgetary Limits
87						
88 Exterior HID replacement above 175W to 250W HID retrofit	3-C/I Equip	0	0	7,007	6,005	Comm*Survey
89 <b>EE Water Heater</b>	3-C/I Equip	40	91	91	91	Comm*Survey Minus 10%
90 HP Water Heater (Base Usage 22831)	3-C/I Equip	46	228	228	0	10% of Water Heating
91 HPT8 4ft 4 lamp, T12 to HPT8	3-C/I Equip	16,715	16,715	0	0	Comm*Survey*Square Foot Estimate
92 LED Exit Signs Electronic Fixtures (Retrofit Only)	3-C/I Equip	5,106	16,715	16,715	16,715	Comm*Survey
93 Occupancy Sensors under 500 W	3-C/I Equip	0	0	910	910	Comm*Survey
94 <b>Food Service Low Cost Direct Install Suite</b>	3-C/I Equip	0	0	455	455	Comm*Survey
95 <b>Commercial Smart Strip plug outlet</b>	3-C/I Equip	18	18	18	18	Comm*Survey

Appendix F

Measure Name	Program	Number of 2010 Program participants/ Measure Units	Number of 2011 Program participants/ Measure Units	Number of 2012 Program participants/ Measure Units	Number of 2013 Program participants/ Measure Units	Participants Assumptions
96 Pre Rinse Sprayers	3-C/I Equip	91	455	455	27	Budgetary Limits
97 Refrigerant charging correction	3-C/I Equip	182	1,820	9,101	9,101	Comm*Survey
98 Refrigeration Commissioning	3-C/I Equip	9	0	0	0	Budgetary Limits
99 Strip curtains for walk-ins - freezer	3-C/I Equip	9	9	9	0	Budgetary Limits
100 Vending Equipment Controller	3-C/I Equip	0	273	546	545	Budgetary Limits
101 Window Film	3-C/I Equip	13	46	167	100	Budgetary Limits
102 Setback/Setup	3-C/I Equip	0	1,857	1,857	1,857	Budgetary Limits
103 Demand-controlled ventilation (DCV)	4-C/I Equip	0	0	0	0	Budgetary Limits
104 Exterior HID replacement above 175W to 250W HID retrofit	4-C/I Equip	0	0	16,093	14,537	Comm*Survey
105 HPT8 4ft 4 lamp, T12 to HPT8	4-C/I Equip	16,093	24,139	0	2	Comm*Survey*Square Foot Estimate
106 Occupancy Sensors under 500 W	4-C/I Equip	0	0	1,659	1,659	Comm*Survey
107 Water-Cooled cent Chiller 150 - 300 ton 0.57 kW/ton with 0.46 kW/ton IPLV	4-C/I Equip	0	0	0	0	Budgetary Limits
108 Water-Cooled Centrifugal Chiller < 150 ton 0.56 kW/ton with 0.53 kW/ton IPLV	4-C/I Equip	0	0	0	0	Budgetary Limits
109 Window Film	4-C/I Equip	0	150	150	50	Budgetary Limits
110 Motors 1 HP 1200	5-IND MOTOR	0	0	0	0	Using NJ Experience for Motor Program
111 Motors 5 HP 1200	5-IND MOTOR	0	0	0	0	Using NJ Experience for Motor Program
112 Motors 10 HP 1200	5-IND MOTOR	0	0	10	10	Using NJ Experience for Motor Program
113 Motors 20 HP 1200	5-IND MOTOR	0	0	10	10	Using NJ Experience for Motor Program
114 Motors 1 HP 3600	5-IND MOTOR	0	0	0	0	Using NJ Experience for Motor Program
115 Motors 5 HP 3600	5-IND MOTOR	0	0	0	0	Using NJ Experience for Motor Program
116 Motors 10 HP 3600	5-IND MOTOR	0	0	0	0	Using NJ Experience for Motor Program
117 Motors 20 HP 3600	5-IND MOTOR	0	0	0	0	Using NJ Experience for Motor Program
118 Water Pumps with VFD's	5-IND MOTOR	0	0	0	0	Using NJ Experience for Motor Program
119 HVAC Fans with VFD's	5-IND MOTOR	0	0	0	0	Using NJ Experience for Motor Program
120 Air Compressors with VFD's	5-IND MOTOR	0	0	0	0	Using NJ Experience for Motor Program
121 Water Pumps with VFD's	5-IND MOTOR	0	0	0	0	Using NJ Experience for Motor Program
122 HVAC Fans with VFD's	5-IND MOTOR	0	0	0	0	Using NJ Experience for Motor Program
123 Air Compressors with VFD's	5-IND MOTOR	0	0	0	0	Using NJ Experience for Motor Program
124 Water Pumps with VFD's	5-IND MOTOR	1	5	10	10	Using NJ Experience for Motor Program
125 HVAC Fans with VFD's	5-IND MOTOR	1	5	10	10	Using NJ Experience for Motor Program
126 Air Compressors with VFD's	5-IND MOTOR	1	5	10	10	Using NJ Experience for Motor Program

**Table 1: Portfolio Summary of Lifetime Costs and Benefits**

<b>Portfolio</b>	<b>Discount Rate</b>	<b>Total Discounted Lifetime Costs (\$000)</b>	<b>Total Discounted Lifetime Benefits (\$000)</b>	<b>Total Discounted Net Lifetime Benefits (\$000)</b>	<b>Cost- Benefit Ratio</b>
<b>Residential</b> <i>(exclusive of Low-Income)</i>	7.52%	<b>61,874,339</b>	<b>158,992,825</b>	<b>97,118,486</b>	<b>2.57</b>
<b>Residential Low-Income (Warm Plus)</b>	7.52%	<b>7,998,947</b>	<b>19,800,279</b>	<b>11,801,332</b>	<b>2.48</b>
<b>Commercial/Industrial Small</b>	7.52%	<b>25,811,425</b>	<b>91,249,623</b>	<b>65,438,198</b>	<b>3.54</b>
<b>Commercial/Industrial Large</b>	7.52%	<b>23,171,356</b>	<b>43,960,815</b>	<b>20,789,459</b>	<b>1.90</b>
<b>Governmental/Non-Profit</b>	7.52%	<b>16,502,774</b>	<b>46,373,178</b>	<b>29,870,405</b>	<b>2.81</b>
<b>Total</b>	7.52%	<b>135,358,840</b>	<b>360,376,720</b>	<b>225,017,880</b>	<b>2.66</b>

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

Summary of Portfolio Energy and Demand Savings								
MWh Saved for Consumption Reductions kW Saved for Peak Load Reductions	Program Year 2010		Program Year 2011		Program Year 2012		Program Year 2013	
	MWh Saved	kW Saved						
Baseline <sub>1</sub>	14,399,289	2,395,000	14,399,289	2,395,000	14,399,289	2,395,000	14,399,289	2,395,000
Residential Sector (exclusive of Low- Income) - Cumulative Projected Portfolio Savings <sub>2</sub>	11,433	1,839	80,244	20,053	143,152	37,728	221,129	45,140
Residential Low-Income Sector - Cumulative Projected Portfolio Savings <sub>2</sub>	1,871	210	10,216	1,071	18,608	1,941	27,066	2,822
Commercial/Industrial Small Sector - Cumulative Projected Portfolio Savings <sub>2</sub>	5,034	763	22,783	3,857	67,324	13,596	99,349	21,650
Commercial/Industrial Large Sector - Cumulative Net Weather Adjusted Savings <sub>2</sub>	2,160	365	16,581	2,027	39,378	4,624	53,692	6,337
Governmental/Non-Profit Sector - Cumulative Projected Portfolio Savings <sub>2</sub>	3,175	398	21,150	2,499	45,673	6,048	56,921	8,030
PJM Peak Demand				4,000		53,356		
EE&C Plan Total - Cumulative Projected Savings	23,673	3,576	150,972	33,507	314,134	117,293	458,159	83,979
Percent Reduction From Baseline (MWh)	0.2%	0.1%	1.0%	1.4%	2.2%	4.9%	3.2%	3.5%
Commission Identified Goal			143,993				431,979	107,775
Percent Savings Due to Portfolio Above or Below Commission Goal			4.8%				6.1%	8.8%
<small>1 Commission approved Consumption Forecast and Peak Demand Forecast per Section H of the January 15 Implementation Order. (Template Section 10A &amp; 10B)  2 Adjusted for weather and extraordinary load as applicable.  3 kW savings depicted for 2013 as 1% above goal are due to savings accumulated from energy efficiency programs that run beyond the summer period of 2012 (June 1 – September 30).</small>								

**Table 3: Summary of Portfolio Costs**

<b>Summary of Portfolio Costs</b>				
	<b>Program Year 2010</b>	<b>Program Year 2011</b>	<b>Program Year 2012</b>	<b>Program Year 2013</b>
	<b>Portfolio Budget (\$)</b>	<b>Portfolio Budget (\$)</b>	<b>Portfolio Budget (\$)</b>	<b>Portfolio Budget (\$)</b>
Residential Portfolio Annual Budget (\$000 and percent of Portfolio Budget)	<b>2,522,426</b>	<b>14,971,358</b>	<b>13,235,713</b>	<b>9,424,196</b>
Residential Low-Income Portfolio Annual Budget (\$000 and percent of Portfolio Budget)	<b>973,846</b>	<b>2,201,207</b>	<b>2,262,065</b>	<b>2,321,788</b>
Commercial/Industrial Small Portfolio Annual Budget (\$000 and percent of Portfolio Budget)	<b>845,299</b>	<b>1,823,358</b>	<b>4,787,006</b>	<b>3,650,300</b>
Commercial/Industrial Large Portfolio Annual Budget (\$000 and percent of Portfolio Budget)	<b>361,204</b>	<b>2,111,094</b>	<b>2,499,888</b>	<b>1,337,890</b>
Governmental/Non-Profit Portfolio Annual Budget (\$000 and percent of Portfolio Budget)	<b>584,161</b>	<b>2,276,326</b>	<b>2,875,928</b>	<b>1,925,897</b>
PJM Peak Demand Program		<b>418,438</b>	<b>5,581,562</b>	
<b>Total Portfolio Annual Budget</b>	<b>5,286,937</b>	<b>23,801,780</b>	<b>31,242,161</b>	<b>18,660,072</b>

Table 4: Program Summaries

Table 4: Program Summaries							
	Program Name	Program Market	Program Two Sentence Summary	Program Years Operated	Net Lifetime MWh Savings	Net Peak Demand kW Savings	Percentage of Portfolio and Total Lifetime MWh savings %
Residential Portfolio Programs (exclusive of Low Income)	Demand Reduction	RES	Reduce Residential Central Air Conditioning (CAC) Load over the highest 100 load hours	4	15,405	24,679	0.4%
	Home Energy Audits and Outreach	RES	Available through two levels: 1) self-administered on-line audit and 2) a walk-through on-site audit performed by auditor.	4	327,968	3,675	7.6%
	Appliance Turn-In	RES	Provide incentive to households for turning in older inefficient appliances and lighting equipment.	4	357,965	6,720	8.3%
	EE HVAC & Solar	RES	Provide incentives supporting implementation of contractor-installed HVAC, solar or other eligible systems.	4	41,646	2,510	1.0%
	EE Products	RES	Provides financial incentives and support to retailers that sell energy efficient products, such as Energy Star® qualified appliances or compact fluorescent light bulbs.	4	711,269	5,063	16.6%
	New Construction	RES	Provides incentives to builders for achieving Energy STAR Homes status, or the Home Energy Rating System Program (HERS) associated with a highly energy efficient home.	4	31,606	316	0.7%
	Whole Building Comprehensive	RES	Provides comprehensive diagnostic assessments followed by direct installation of selected low-cost measures plus incentives to households for implementation of measures addressing building shell, appliances and other energy-consuming features. Customers can tap into prescriptive rebates as well as the Keystone Loan program.	4	45,946	1,051	1.2%
	Behavior Modification and Education	RES	Provides customers with a combination of energy efficiency tips and information regarding their energy usages compared to their peers. Modifies participants' behavior to effect energy savings.	2	27,810	2,503	0.6%
	Multiple Family	RES	This program will be delivered in cooperation PHFA, and will target low-income communities. The program seeks to motivate property owner/manager and landlords toward installing energy efficiency measures. Costs associated with Residential accounts will be tracked through the Residential multifamily program. Costs associated with non-residential accounts will be tracked through the C/1 multifamily program.	4	12,044	75	0.3%
	<b>Totals for Residential Sector</b>					1,525,711	45,541
Residential Low-Income Sector Programs	Warm Plus	LI RES	The "WARM Plus" Act 129 program expands the measures installed under the existing Low-Income Usage Reduction Program, known as the WARM program, and provides WARM services to additional income-eligible customers	4	73,793	1,043	1.7%
	Home Energy Audits	LI RES	Available through two levels: 1) self-administered on-line audit and 2) a walk-through on-site audit performed by auditor.	4	42,740	434	1.0%
	Appliance Turn-In	LI RES	Provide incentive to households for turning in older inefficient appliances and lighting equipment.	4	75,821	1,175	1.8%
	EE Products	LI RES	Provides financial incentives and support to retailers that sell energy efficient products, such as Energy Star® qualified appliances or compact fluorescent light bulbs.	4	26,154	171	0.6%
	<b>Totals for Low-Income Sector</b>					218,508	2,822

Table 4: Program Summaries							
	Program Name	Program Market	Program Two Sentence Summary	Program Years Operated	Net Lifetime MWh Savings	Net Peak Demand kW Savings	Percentage of Portfolio and Total Lifetime MWh savings %
Commercial/ Industrial Small Portfolio Programs	Energy Audit	Small C&I	Provides two levels of energy audit services: 1) a simple walk-through audit for small business with non-complex loads, and 2) a more comprehensive assessment for medium to large non-residential customers to help identify existing end-uses of energy and find specific ways in which energy savings can be achieved.	4	235,522	10,678	6.0%
	C/I Equipment	Small C&I	Provides for the implementation of cost effective energy efficiency measures through the authorized Conservation Service Provider (CSP) contractor network for all Small C&I customers. Other delivery mechanisms may include kits of CFLs mailed to participants and audits coupled with direct installation of low cost measures.	4	1,154,895	21,650	26.9%
	Totals for C/I Small Sector					1,154,895	21,650
Commercial/ Industrial Large Portfolio Programs	C/I Equipment	Large C&I	Provides for the implementation of cost effective, high efficiency standard and non-standard measures through the authorized Conservation Service Provider (CSP) contractor network for Large C&I customers.	4	737,530	6,337	17.2%
	Industrial Motors and VSD	Large C&I	This program is designed to encourage the company's commercial and industrial customers to: 1. Upgrade their existing motors to NEMA Premium® motors when switching out old motors due to breakdowns and/or programmed replacements 2. Install variable speed drives on motors that do not always operate at the same speed.	4	146,970	320	3.8%
	Totals for C/I Large Sector					737,530	6,337
Governmental/ Non-Profit Portfolio Programs	Governmental & Institutional	Gov't	This program involves a feasibility study to identify energy savings opportunity to expedite the Federal and municipal agencies taking action. Provides for the implementation of cost effective, high efficiency standard and non-standard measures through a Conservation Service Provider (CSP) for local, state and federal buildings, as well as for institutional customers.	4	651,546	8,030	15.2%
	Totals for Gov't/NP Sector Programs				651,546	8,030	15.2%
<b>Total for Plan</b>					<b>4,288,190</b>	<b>84,380</b>	<b>100.0%</b>

Appendix G

Table 5: Budget and Parity Analysis Summary

Customer Class	Average Annualized Budget	% of Total EDC Budget	% of Total Budget Allocating Government & Other	% of Total Customer Revenue	Difference
Residential	10,038,423	50.83%			0.00%
Residential Low Income	1,939,727	9.82%			0.00%
<b>Residential Subtotal</b>	<b>11,978,150</b>	<b>60.66%</b>	<b>60.66%</b>	<b>41.00%</b>	<b>19.66%</b>
C&I Small	2,776,491	14.06%	17.48%	29.40%	-11.92%
C&I Large	1,577,519	7.99%	10.46%	29.20%	-18.74%
<b>C&amp;I Subtotal</b>	<b>4,354,010</b>	<b>22.05%</b>	<b>27.94%</b>	<b>58.60%</b>	<b>-30.66%</b>
Gov Street Lighting	690,644	3.50%	3.50%	0.30%	3.20%
GS/Public Service, MS	60,838	0.31%	0.31%	0.10%	0.21%
Gov Multi-Family	49,430	0.25%	NA	NA	NA
Gov Small C&I	626,555	3.17%	NA	NA	NA
Gov Large C&I	488,111	2.47%	NA	NA	NA
<b>Governmental/Non-Profit Subtotal</b>	<b>1,915,578</b>	<b>9.70%</b>	<b>3.81%</b>	<b>0.40%</b>	<b>3.41%</b>
<b>Residential/C&amp;I/Governmental/Non-Profit Subtotal</b>	<b>18,247,738</b>	<b>92.40%</b>			
Other Expenditures: Small C&I	62,500				
Other Expenditures: Large C&I	1,437,500				
<b>Other Expenditures Subtotal</b>	<b>1,500,000</b>	<b>7.60%</b>	<b>7.60%</b>		
<b>EDC TOTAL</b>	<b>19,747,738</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	

1) Portions of Governmental is served as part of C&I Small and C&I Large rate classes

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

<b>Residential Portfolio (including Low-Income)</b>			
<b>EE&amp;C Program</b>	<b>Cost Elements (\$)</b>		
	<i>Total Incentives</i>	<i>Operations Costs</i>	<i>Total Budget (2010-2013)</i>
Demand Reduction	6,066,480	6,095,210	12,161,690
<b>Home Energy Audits and Outreach</b>	<b>9,313,068</b>	<b>2,733,461</b>	<b>12,046,529</b>
Appliance Turn-In	2,159,835	1,832,018	3,991,853
EE HVAC & Solar	1,032,435	631,936	1,664,371
EE Products	4,396,321	5,227,576	9,623,897
New Construction	710,241	648,344	1,358,585
<b>Behavioral Modification and Education</b>	-	1,926,556	1,926,556
Multiple Family	144,409	83,724	228,133
Warm Plus	3,639,078	1,271,908	4,910,986
<b>Totals</b>	<b>27,461,867</b>	<b>20,450,733</b>	<b>47,912,600</b>

<b>Small Commercial &amp; Industrial</b>			
<b>EE&amp;C Program</b>	<b>Cost Elements (\$)</b>		
	<i>Total Incentives</i>	<i>Operations Costs</i>	<i>Total Budget (2010-2013)</i>
PJM Demand Response	197,922	52,078	250,000
<b>C/I Equipment</b>	<b>8,393,575</b>	<b>2,712,388</b>	<b>11,105,963</b>
<b>Totals</b>	<b>8,591,497</b>	<b>2,764,466</b>	<b>11,355,963</b>

Appendix G

<b>Large Commercial &amp; Industrial</b>			
<b>EE&amp;C Program</b>	<b>Cost Elements (\$)</b>		
	<i>Total Incentives</i>	<i>Operations Costs</i>	<i>Total Budget (2010-2013)</i>
<b>C/I Equipment</b>	<b>4,972,854</b>	<b>1,337,221</b>	<b>6,310,076</b>
Industrial Motors and VSD	0	0	0
PJM Demand Response	5,250,918	499,082	5,750,000
Totals	10,223,772	1,836,304	12,060,076

<b>Governmental/Non-Profit</b>			
<b>EE&amp;C Program</b>	<b>Cost Elements (\$)</b>		
	<i>Total Incentives</i>	<i>Operations Costs</i>	<i>Total Budget (2010-2013)</i>
Street Lighting	713,850	2,048,725	2,762,575
GS/Public Service, MS	182,539	60,814	243,353
Multiple Family	121,299	76,421	197,721
Governmental & Institutional	3,448,367	1,010,297	4,458,663
Totals	4,466,055	3,196,257	7,662,312

Appendix G

**Table 6B: Allocation of Common Costs to Applicable Customer Sector**

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

**Notes:**

1 List all identified cost elements that are determined to be applicable to multiple customer sectors, or are common across all sectors. Because cost elements may vary for each EDC and program, the EDC should designate cost elements at its discretion, and the

2 Provide a brief explanation of the methodology used to allocate each common cost element to the applicable customer sectors.

**Table 6C: Summary of Portfolio EE&C Costs**

<b>Portfolio</b>	<b>Total Sector Portfolio-specific Costs</b>	<b>Total Common Costs</b>	<b>Total of All Costs</b>
Residential (Including Low-Income)	\$47,912,600	\$2,616,227	\$50,528,827
Commercial/Industrial -- Small	\$14,059,905	\$724,561	\$14,784,466
Commercial/Industrial -- Large	<b>\$14,012,518</b>	\$515,984	<b>\$14,528,502</b>
Governmental/Non-profit	\$3,005,928	\$154,907	\$3,160,835
<b>Totals</b>	<b>\$78,990,951</b>	<b>\$4,011,679</b>	<b>\$83,002,630</b>

**Notes:**

1 Cost figures are to be carried over from the last column ("Totals") of Table 7A.

2 Cost figures are to be carried over from the bottom row ("Totals") of Table 7B.

Table 7A: TRC Benefits Table

Residential		TRC Benefits By Program Per Year (\$000)										
Program	Program Year	TRC	Program Costs (\$000)	Program Benefits (\$000)	Capacity	Capacity	Energy	Energy	Load Reductions in kW		MWh Saved	
					Annual Benefits	Annual Gen/T&D	Annual Benefits	Annual On/Off Peak	Annual	Lifetime	Annual	Lifetime
Demand Reduction	2010	1.25	528,565	662,848	604,707		58,141		871	24,679	41	15,405
	2011	1.55	6,350,568	9,832,599	8,985,837		846,762		13,044	24,679	624	15,405
	2012	1.90	5,282,556	10,014,459	9,178,667		835,791		24,679	24,679	1,185	15,405
	2013	0.00	-	-	-		-		24,679	24,679	1,185	15,405
Home Energy Audits and Outreach	2010	1.72	944,670	1,623,957	44,680		1,579,278		108	3,675	2,828	327,968
	2011	3.01	2,811,087	8,456,475	500,505		7,955,970		1,210	3,675	16,386	327,968
	2012	2.82	3,420,498	9,630,412	632,217		8,998,195		2,420	3,675	30,900	327,968
	2013	2.94	3,534,308	10,376,667	687,325		9,689,342		3,675	3,675	45,975	327,968
Appliance Turn-In	2010	8.87	149,268	1,324,438	143,703		1,180,735		308	6,720	1,882	357,965
	2011	10.37	1,007,726	10,448,478	1,081,958		9,366,520		2,445	6,720	16,170	357,965
	2012	10.83	1,007,726	10,909,355	1,180,361		9,728,994		4,583	6,720	30,458	357,965
	2013	11.20	1,007,726	11,289,899	1,237,487		10,052,411		6,720	6,720	44,746	357,965
EE HVAC	2010	0.70	496,193	347,269	140,853		206,416		238	2,510	253	41,646
	2011	1.12	1,126,278	1,266,346	402,639		863,707		994	2,510	1,320	41,646
	2012	1.22	1,208,166	1,468,996	439,282		1,029,714		1,752	2,510	2,517	41,646
	2013	1.27	1,250,524	1,587,076	459,633		1,127,443		2,510	2,510	3,776	41,646
EE Products	2010	4.25	851,009	3,614,836	117,754		3,497,082		284	5,063	6,225	711,269
	2011	3.65	6,530,441	23,864,484	939,425		22,925,059		2,233	5,063	44,488	711,269
	2012	3.77	4,604,319	17,354,946	748,671		16,606,275		3,636	5,063	71,100	711,269
	2013	3.94	4,657,849	18,364,717	798,016		17,566,700		5,063	5,063	98,260	711,269
New Construction	2010	0.86	267,570	229,634	23,636		205,999		31	316	205	31,606
	2011	0.93	594,362	554,866	58,339		496,527		102	316	683	31,606
	2012	2.65	321,386	852,546	92,285		760,261		209	316	1,395	31,606
	2013	2.73	321,386	876,210	95,555		780,655		316	316	2,107	31,606
Behavioral Modification and Education	2010	0.00	1,485	-	-		-		-	2,503	-	27,810
	2011	0.00	74	-	-		-		-	2,503	-	27,810
	2012	1.48	308,074	455,414	27,466		427,949		401	2,503	4,450	27,810
	2013	1.55	1,616,923	2,503,418	192,522		2,310,896		2,102	2,503	23,360	27,810
Multiple Family	2010	0.00	6,250	-	-		-		-	75	-	12,044
	2011	4.69	73,961	346,950	11,215		335,735		25	75	574	12,044
	2012	4.88	73,961	360,796	12,332		348,464		50	75	1,147	12,044
	2013	5.07	73,961	374,735	12,968		361,767		75	75	1,721	12,044
<b>Total</b>		<b>3.15</b>	<b>50,428,871</b>	<b>158,992,825</b>	<b>28,850,038</b>		<b>130,142,787</b>		<b>45,140</b>	<b>45,541</b>	<b>221,129</b>	<b>1,525,711</b>

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.

Table 7B: TRC Benefits Table

Residential Low-Income	TRC Benefits By Program Per Year (\$000)											
	Program Year	TRC	Program Costs (\$000)	Program Benefits (\$000)	Capacity	Capacity	Energy	Energy	kW		MWh Saved	
					Annual Benefits	Annual Gen/T&D	Annual Benefits	Annual On/Off Peak	Annual	Lifetime	Annual	Lifetime
Warm Plus	2010	0.98	569,614	560,980	65,513	See footnote 1	495,467	See footnote 2 on PUC Table 7A	99	1,043	665	73,793
	2011	1.34	1,387,430	1,863,682	199,641	on PUC	1,664,040		405	1,043	2,983	73,793
	2012	1.37	1,447,965	1,983,566	221,454	Table 7A	1,762,112		720	1,043	5,345	73,793
	2013	1.39	1,505,977	2,099,062	237,413		1,861,649		1,043	1,043	7,751	73,793
Residential Audits	2010	0.96	233,833	224,031	11,187	See footnote 1	212,844	See footnote 2 on PUC Table 7A	27	434	381	42,740
	2011	2.37	495,445	1,176,582	61,155	on PUC	1,115,427		163	434	2,286	42,740
	2012	2.48	495,768	1,227,248	67,253	Table 7A	1,159,995		298	434	4,194	42,740
	2013	2.57	495,687	1,274,705	70,713		1,203,992		434	434	6,101	42,740
Appliance Turn-In	2010	2.72	148,973	404,828	34,215	See footnote 1	370,613	See footnote 2 on PUC Table 7A	73	1,175	591	75,821
	2011	9.52	222,880	2,121,385	185,416	on PUC	1,935,968		440	1,175	3,545	75,821
	2012	9.93	222,880	2,213,236	202,280	Table 7A	2,010,956		806	1,175	6,500	75,821
	2013	10.27	224,672	2,308,360	213,777		2,094,583		1,175	1,175	9,478	75,821
Energy Efficient Products	2010	3.70	36,428	134,828	4,402	See footnote 1	130,426	See footnote 2 on PUC Table 7A	11	171	234	26,154
	2011	4.15	170,465	707,572	24,064	on PUC	683,508		64	171	1,401	26,154
	2012	4.32	170,465	735,883	26,460	Table 7A	709,423		117	171	2,569	26,154
	2013	4.48	170,465	764,332	27,825		736,506		171	171	3,736	26,154
<b>Total</b>		<b>2.48</b>	<b>7,998,947</b>	<b>19,800,279</b>	<b>1,652,770</b>		<b>18,147,509</b>		<b>2,822</b>	<b>2,822</b>	<b>27,066</b>	<b>218,508</b>

Table 7C: TRC Benefits Table

Commercial/Industrial Small		TRC Benefits By Program Per Year (\$000)											
Program	Program Year	TRC	Program Costs (\$000)	Program Benefits (\$000)	Capacity	Capacity	Energy	Energy	Load Reductions in kW		MWh Saved		
					Annual	Annual	Annual	Annual	Annual	Lifetime	Annual	Lifetime	
					Benefits	Gen/T&D	Benefits	On/Off Peak					
Energy Audit	2010	0	0	0	0	See footnote 1 on PUC Table 7A	0	See footnote 2 on PUC Table 7A	0	0	0	0	
	2011	0	0	0	0		0		0	0	0	0	0
	2012	0	0	0	0		0		0	0	0	0	0
	2013	0	0	0	0		0		0	0	0	0	0
C/I Equipment	2010	1.72	2,681,866	4,609,343	535,915		4,073,429		763	21,650	5,034	1,154,895	
	2011	2.77	5,846,850	16,220,175	2,154,182		14,065,993		3,857	21,650	22,783	1,154,895	
	2012	3.75	10,887,752	40,806,706	6,608,896		34,197,810		13,596	21,650	67,324	1,154,895	
	2013	4.63	6,394,957	29,613,398	5,494,029		24,119,369		21,652	21,650	99,349	1,154,895	
<b>Total</b>		<b>3.54</b>	<b>25,811,425</b>	<b>91,249,623</b>	<b>14,793,022</b>		<b>76,456,601</b>		<b>21,652</b>	<b>21,650</b>	<b>99,349</b>	<b>1,154,895</b>	

Table 7D: TRC Benefits Table

Commercial/Industrial Large		TRC Benefits By Program Per Year (\$000)										
Program	Program Year	TRC	Program Costs (\$000)	Program Benefits (\$000)	Capacity	Capacity	Energy	Energy	Load Reductions in kW		MWh Saved	
					Annual	Annual	Annual	Annual	Annual	Lifetime	Annual	Lifetime
					Benefits	Gen/T&D	Benefits	On/Off Peak				
C/I Equipment	2010	0.79	2,318,623	1,836,495	281,033		1,555,462		365	6,337	2,160	737,530
	2011	1.80	6,730,906	12,138,438	1,351,776		10,786,663		2,027	6,337	16,581	737,530
	2012	2.18	8,457,698	18,410,111	2,069,052		16,341,059		4,624	6,337	39,378	737,530
	2013	2.04	5,664,130	11,575,771	1,374,518	See footnote 1 on PUC Table 7A	10,201,252	See footnote 2 on PUC Table 7A	6,337	6,337	53,692	737,530
Industrial Motors and VSD	2010	0	0	0	0		0		0	0	0	0
	2011	0	0	0	0		0		0	0	0	0
	2012	0	0	0	0		0		0	0	0	0
	2013	0	0	0	0		0		0	0	0	0
<b>Total</b>		<b>1.90</b>	<b>23,171,356</b>	<b>43,960,815</b>	<b>5,076,379</b>		<b>38,884,436</b>		<b>6,337</b>	<b>6,337</b>	<b>53,692</b>	<b>737,530</b>

**Table 7E: TRC Benefits Table**

o Submit yearly projections for each program thru final year of that program for TRC evaluation.

Governmental/Non-Profit	TRC Benefits By Program Per Year (\$000)													
	Program Year	TRC	Program Costs (\$000)	Program Benefits (\$000)	Capacity	Capacity	Energy	Energy	Load Reductions in		MWh Saved			
Annual Benefits					Annual Gen/T&D	Annual Benefits	Annual On/Off Peak	Annual kW	Lifetime	Annual	Lifetime			
Streetlighting	2010	1.07	179,042	191,625	0		191,625		0	0	293	46,900		
	2011	1.16	861,178	1,000,393	0		1,000,393		0	0	1,759	46,900		
	2012	1.20	861,178	1,031,282	0		1,031,282		0	0	3,224	46,900		
	2013	1.23	861,178	1,060,736	0		1,060,736		0	0	4,690	46,900		
Non-Profit	2010	1.71	67,792	115,963	13,293	See footnote 1 on PUC Table 7A	102,671	See footnote 2 on PUC Table 7A	20	399	143	30,031		
	2011	2.96	219,745	650,564	71,465		579,099		124	399	963	30,031		
	2012	3.51	270,388	948,490	122,714		825,776		300	399	2,108	30,031		
	2013	3.41	124,504	425,071	69,122		355,949		399	399	2,594	30,031		
Other	2010	1.71	1,297,146	2,218,876	254,346				1,964,530		379	7,632	2,739	574,615
	2011	2.96	4,204,660	12,448,081	1,367,432				11,080,648		2,375	7,632	18,428	574,615
	2012	3.51	5,173,677	18,148,677	2,348,041				15,800,636		5,747	7,632	40,340	574,615
	2013	3.41	2,382,287	8,133,420	1,322,590				6,810,830		7,631	7,632	49,637	574,615
Governmental & Non-Profit Total	2010	1.64	1,543,980	2,526,464	267,639				2,258,826		398	8,030	3,175	651,546
	2011	2.67	5,285,583	14,099,038	1,438,897				12,660,140		2,499	8,030	21,150	651,546
	2012	3.19	6,305,242	20,128,450	2,470,755				17,657,695		6,048	8,030	45,673	651,546
	2013	2.86	3,367,969	9,619,227	1,391,712				8,227,515		8,030	8,030	56,921	651,546
<b>Total</b>		<b>2.81</b>	<b>16,502,774</b>	<b>46,373,178</b>	<b>5,569,003</b>		<b>40,804,176</b>		<b>8,030</b>	<b>8,030</b>	<b>56,921</b>	<b>651,546</b>		

**Appendix H - Tariff Rider**  
Energy Efficiency and Conservation Charge Rider

Pennsylvania Electric Company

---

RIDERS

RIDER ~~SL~~

ENERGY EFFICIENCY AND CONSERVATION CHARGE RIDER

An Energy Efficiency and Conservation (“EEC”) Charge (“EEC-C”) shall be applied to each Billing Unit during a billing month to Customers served under this Tariff, with the exception of those served under Borderline Service rates, Billing Units are defined as follows:

Residential, Non-profit, Commercial, and  
Street Lighting Customer Classes: Per kWh

Industrial Customer Class: Per kW

Residential, Non-profit, Commercial, and Street Lighting Customer Class rates will be calculated to the nearest one-thousandth of a cent per kWh. Industrial Customer Class rates will be calculated to the nearest one-hundredth of a dollar per kW. The EEC-C rates shall be calculated separately for each Customer Class according to the provisions of this rider.

For service rendered ~~March-June 1, 2010-2011~~ through May 31, 2013 the EEC-C rates billed by Customer Class are as follows:

Residential Customer Class (Rate RS and Rate RT):

0.~~389~~~~366~~ cents per kWh.

Non-profit Customer Class (Rate GS – Volunteer Fire Company, and Non-Profit Ambulance Service, Rescue Squad and Senior Center Service Rate and Rate H):

0.~~143~~~~141~~ cents per kWh.

Commercial Customer Class (Rate GS-Small, Rate GS-Medium, and Outdoor Lighting Service):

0.~~136~~~~134~~ cents per kWh.

Street Lighting Customer Class (High Pressure Sodium Vapor Street Lighting Service, and Municipal Street Lighting Service):

Pennsylvania Electric Company

---

| 2.~~354~~<sup>300</sup> cents per kWh.

Industrial Customer Class (Rate GS-Large, Rate GP, and Rate LP):

| \$ 0.~~48~~<sup>34</sup> per kW.

Pennsylvania Electric Company

---

The EEC-C rates by Customer Class shall be calculated in accordance with the formula set forth below:

$$EEC-C = [(EEC_C - E) / S] \times [1 / (1 - T)]$$

$$EEC_C = EEC_{Exp1} + EEC_{Exp2} + EEC_{Exp3} + EEC_{Exp4}$$

Where:

- EEC-C = The charge in cents per Billing Unit by Customer Class as defined by this rider applied to each Billing Unit delivered for the Rate Schedules identified in this rider.
- EEC<sub>C</sub> = The Energy Efficiency and Conservation Costs by Customer Class projected to be incurred by the Company for the EEC-C Computational Year calculated in accordance with the formula shown above.
- EEC<sub>Exp1</sub> = Costs incurred associated with the Customer Class specific EEC Programs as approved by the Commission for the EEC-C Computation Period by Customer Class. These costs would also include an allocated portion of any projected indirect costs to be incurred associated with all the Company's EEC Programs for the EEC-C Computational Period.
- EEC<sub>Exp2</sub> = An allocated portion of incremental administrative start-up costs incurred by the Company through February 28, 2010 in connection with the development of the Company's EEC Programs in response to the Commission's orders and guidance at Docket No. M-2008-2069887. These costs to design, create, and obtain Commission approval for the Company's EEC Programs include, but are not limited to, consultant costs, legal fees, and other direct and indirect costs associated with the development and implementation of the Company's EEC Programs in compliance with Commission directives. These costs shall be amortized over the 3-month period ending May 31, 2010.

Pennsylvania Electric Company

---

- $EEC_{Exp3}$  = An allocated portion of the costs the Company incurs to fund the Commission's statewide evaluator contract which shall be excluded in the final determination of the Act 129 limitation on the Company's EEC Programs costs.
- $EEC_{Exp4}$  = An allocated portion of energy-related costs to be paid to PJM for the Economic Load Response Program, or any successor PJM program, incurred by the Company as the load serving entity.
- $E$  = The cumulative over or under-collection of EEC costs by Customer Class that results from the billing of the EEC-C rates (an over-collection is denoted by a positive E and an under-collection by a negative E).
- $S$  = The Company's projected Billing Units (kWh sales delivered to all Customers in the specific Customer Class or kW demand based on PJM Peak Load Contribution).
- $T$  = The Pennsylvania gross receipts tax rate in effect during the billing month expressed in decimal form as reflected in the Company's base rates.

All capitalized terms not otherwise defined in this rider shall have the definitions specified in the Definitions of Terms section of this tariff. For the purpose of this rider, the following additional definitions shall apply:

1. EEC-C Computational Period – The 39-month period from March 1, 2010 through May 31, 2013.
2. EEC-C Reconciliation Year – The 12-month period ending May 31 each year for the duration of this rider.
3. Peak Load Contribution – A Customer's contribution to a zone's normalized summer peak load, as estimated by the Company.

Upon determination that the EEC-C rates, if left unchanged, would result in material over or under-collection of all recoverable costs incurred or expected to be incurred by Customer Class, the Company may request that the Commission approve one or more interim revisions to the EEC-C rates to become effective thirty (30) days from the date of filing, unless otherwise ordered by the Commission.

The Company shall file an annual report of collections under this rider within thirty (30) days following the conclusion of each EEC-C Reconciliation Year.

Pennsylvania Electric Company

---

At the conclusion of the duration of this reconciliation rider, the Company is authorized to recover or refund any remaining amounts not reconciled at that time under such mechanism as approved by the Commission.

Application of the EEC-C rates shall be subject to annual review and audit by the Commission.

Calculation of Pennsylvania Electric Company's Energy Efficiency and Conservation ("EEC") Charge ("EEC-C") Rates  
Effective June 1, 2011

Line No.	Description	Penelec Residential Customer Class (1)	Penelec Non-profit Customer Class (2)	Penelec Commercial Customer Class (3)	Penelec Street Lighting Customer Class (4)	Penelec Industrial Customer Class (5)	Penelec Total (6)
1	2% of Penelec's Annual Revenues for 12 Months Ended 12/31/2006 for Maximum Annual Cost Recovery						\$ 22,974,742 (A)
2	2% of Penelec's Annual Revenues for 12 Months Ended 12/31/2006 for Maximum Annual Cost Recovery for 48 months ending May 31, 2013 (Line 1 x 4 years)						\$ 91,898,968
3	Penelec's Estimated EEC Program Costs for 48 Months Ending May 31, 2013 (PUC Table 5 x 4 years)	\$ 47,912,600	\$ 243,353	\$ 13,809,905	\$ 2,762,575	\$ 8,262,518	\$ 72,990,951
4	<b>PJM Peak Demand Program (PUC Table 6A)</b>	\$ -	\$ -	\$ 250,000	\$ -	\$ 5,750,000	\$ 6,000,000
5	Penelec's Common Costs Allocated to Applicable Customer Sector (PUC Table 6B)	\$ 2,616,227	\$ 12,393	\$ 724,561	\$ 142,514	\$ 515,984	\$ 4,011,679
6	Penelec's Estimated PJM Economic Load Response Program Costs					\$ 762	\$ 762
7	Penelec Subtotal subject to 2% cap (Sum Lines 3-6)	\$ 50,528,827	\$ 255,746	\$ 14,784,466	\$ 2,905,089	\$ 14,529,264	\$ 83,003,392
8	Penelec's Share of Statewide Evaluator Costs	\$ 542,718	\$ 2,571	\$ 150,305	\$ 29,564	\$ 107,036	\$ 832,194
9	Total EEC Costs for 48 months Ending May 31, 2013 (Sum Line 7 + 8)	\$ 51,071,545	\$ 258,317	\$ 14,934,771	\$ 2,934,653	\$ 14,636,300	\$ 83,835,586
10	<b>EEC-C Revenue collected through January 31, 2011, net of PA Gross Receipts Tax</b>	\$ 13,213,258	\$ 58,663	\$ 3,914,399	\$ 792,349	\$ 2,639,891	\$ 20,618,560
11	<b>Budgeted EEC-C Revenues February 1, 2011 - May 31, 2011</b>	\$ 5,564,712	\$ 34,440	\$ 1,600,189	\$ 314,928	\$ 1,346,892	\$ 8,861,161
12	<b>Remaining EEC Costs to be collected June 1, 2011 - May 31, 2013 (Line 9 - Lines 10-11)</b>	\$ 32,293,575	\$ 165,214	\$ 9,420,183	\$ 1,827,376	\$ 10,649,517	\$ 54,355,865
13	<b>Customer Class Projected Kilowatt-Hours ("kWh") Delivered or Peak Load Contribution Kilowatt ("kW") for June 1, 2011 - May 31, 2013</b>	\$ 8,818,603,436 kWhs	\$ 121,970,119 kWhs	\$ 7,340,443,260 kWhs	\$ 82,501,124 kWhs	\$ 23,768,688 kWhs	
14	<b>EEC-C Rates Before Pa Gross Receipts Tax Gross-Up Factor (Line 12 / Line 13)</b>	\$ 0.00366 per kWh	\$ 0.00135 per kWh	\$ 0.00128 per kWh	\$ 0.02215 per kWh	\$ 0.44805 per kW	
15	Pa Gross Receipts Tax Gross-Up Factor [1 / (1-T)] with T = 5.90% Pa Gross Receipts Tax in Base Rates]	\$ 1.06270	\$ 1.06270	\$ 1.06270	\$ 1.06270	\$ 1.06270	
16	<b>Proposed EEC-C Rates Effective June 1, 2011 (Line 14 X Line 15)</b>	\$ 0.00389 per kWh	\$ 0.00143 per kWh	\$ 0.00136 per kWh	\$ 0.02354 per kWh	\$ 0.48000 per kW	

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