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August 28, 2009

James J. McNulty
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Commonwealth Keystone Building
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RE: Petition of PPL Electric Utilities Corporation for Approval of an Energy Efficiency and Conservation Plan - Docket No. M-2009-2093216

Dear Secretary McNulty:

Enclosed, for filing, is the original Main Brief of PPL Electric Utilities Corporation in the above-referenced proceeding.

As indicated on the certificate of service, copies have been provided to the parties in the manner indicated.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read 'Andrew S. Tubbs', is written over the typed name.

Andrew S. Tubbs

AST/jl
Enclosures
cc: Certificate of Service

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing has been served upon the following persons, in the manner indicated, in accordance with the requirements of 52 Pa. Code § 1.54 (relating to service by a participant).

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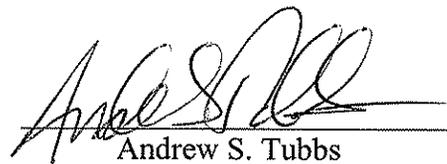
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**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Petition of PPL Electric Utilities :
Corporation for Approval of an Energy : Docket No. M-2009-2093216
Efficiency and Conservation Plan :

**MAIN BRIEF OF
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I. INTRODUCTION

On July 1, 2009, PPL Electric Utilities Corporation (“PPL Electric” or the “Company”) filed a Petition with the Pennsylvania Public Utility Commission (“Commission”), pursuant to Act 129 of 2008 (“Act 129”), P.L. 1592, 66 Pa.C.S. §§ 2806.1 and 2806.2, requesting approval of an Energy Efficiency and Conservation Plan (“EE&C Plan” or “Plan”). The EE&C Plan includes a broad portfolio of energy efficiency programs, conservation practices and peak load reductions, renewable technologies, and energy education initiatives. These integrated programs are designed to meet the goals established by Sections 2806.1 and 2806.2 of Act 129. For the reasons set forth below, PPL Electric respectfully requests that the Commission approve the EE&C Plan.¹

II. PROCEDURAL HISTORY

On October 15, 2008, Governor Edward Rendell signed Act 129 into law, and it became effective on November 14, 2008. Act 129, *inter alia*, imposed new requirements on Pennsylvania’s electric distribution companies (“EDCs”) in the areas of energy efficiency and conservation, smart meters, electricity procurement and alternative energy sources. To fulfill its obligations under Act 129, the Commission issued several orders and Secretarial Letters. Of particular importance is the Commission’s *Implementation Order*, which established the standards that each EE&C plan must meet and provided guidance on the procedures to be followed for submittal, review and approval of all aspects of each EE&C plan under Act 129.²

¹ PPL Electric submits that because this proceeding concerns a rate to be paid by customers, the page limitation contained in 52 Pa. Code § 5.501(e) applicable to briefs in non-rate related proceedings does not apply.

² *Energy Efficiency and Conservation Program Implementation Order*, Docket No. M-2008-2069887, entered on January 16, 2009 (“*Implementation Order*”), Reconsideration Order entered May 2, 2009.

On May 28, 2009, the Commission adopted standards for an expanded and updated Technical Reference Manual (“TRM”) to guide the evaluation of savings impacts.³ On June 23, 2009, the Commission issued its final Order setting forth the nature of the Total Resource Cost (“TRC”) test to be used to analyze the costs and benefits of the EE&C plans that EDCs are required to file.⁴

On July 1, 2009, PPL Electric filed its EE&C Plan with the Commission pursuant to Act 129 and the various Commission orders cited above. The proceeding was docketed by the Commission at Docket No. M-2009-2093216 and was assigned to Administrative Law Judge Susan D. Colwell (the “ALJ”). On July 31, 2009, PPL Electric filed its Amended Energy-Efficiency and Conservation Plan (“PPL Electric Exhibit 1”) and Supplemental Direct Testimony of M. Hossein Haeri.

Notice of the filing was published in the *Pennsylvania Bulletin* on July 18, 2009, 39 Pa. B. 4196, which set the response deadline as August 7, 2009 and included a notice of the prehearing conference set for July 27, 2009.

The Office of Consumer Advocate (“OCA”) filed a Notice of Appearance on July 7, 2009. A Notice of Appearance was filed by the Office of Trial Staff (“OTS”) on July 9, 2009. On July 10, 2009, the Sustainable Energy Fund (“SEF”) filed a Petition to Intervene. On July 10, 2009, UGI Utilities, Inc., UGI Penn Natural Gas, Inc. and UGI Central Penn Gas, Inc. (collectively, “UGI”) filed a Petition to Intervene. The Commonwealth of Pennsylvania, Department of Environmental Protection (“DEP”) filed a Petition to Intervene on July 16, 2009. Eric Joseph Epstein filed a Petition to Intervene on July 17, 2009. On July 20, 2009, the Office

³ *Implementation of the Alternative Energy Portfolio Standards Act of 2004: Standards for the Participation of Demand Side Management Resources – Technical Reference Manual Update*, Docket No. M-00051865 (Order entered June 1, 2009) (“2009 TRM Order”).

⁴ *Implementation of Act 129 of 2008 – Total Resource Cost (TRC) Test*, Docket No. M-2009-2108601 (Order entered June 23, 2009) (“TRC Order”).

of Small Business Advocate (“OSBA”) filed a Notice of Intervention. On July 23, 2009, Petitions to Intervene were filed by Richards Energy Group, Inc. (“Richards”) and Citizens for Pennsylvania’s Future (“PennFuture”). Petitions to Intervene were filed on July 24, 2009 by the PP&L Industrial Customer Alliance (“PPLICA”) and the Pennsylvania Association of Community Organizations for Reform Now (“ACORN”). On July 27, 2009, ClearChoice Energy⁵ (“ClearChoice”), Field Diagnostic Services, Inc. (“FDSI”), Direct Energy Business, LLC (“Direct Energy”) filed Petitions to Intervene.⁶ On August 3, 2009, EnerNOC, Inc. (“EnerNOC”) and Constellation NewEnergy (“Constellation”) filed Petitions to Intervene.

On July 20, 2009, PPL Electric filed an Answer in Opposition to UGI’s Petition to Intervene. The ALJ issued a Second Prehearing Order on July 29, 2009 granting UGI’s Petition to Intervene and limiting the scope of discovery relative to fuel-switching.

A prehearing conference was held on July 27, 2009. Counsel representing PPL Electric, OTS, OCA, OSBA, DEP, SEF, PPLICA, Richards, ACORN, and FDSI appeared. Mr. Epstein also was present. In accordance with the procedural schedule, direct testimony was distributed to all active parties on August 7, 2009 by OTS, OCA, OSBA, DEP, SEF, Richards, ACORN, FDSI, UGI and Mr. Epstein.⁷ Comments were also submitted by OTS, OCA, DEP, UGI, Mr. Epstein, EnerNOC, PennFuture, PPLICA, The E Cubed Company, LLC and Keystone HELP. On August 13, 2009 the ALJ issued an Initial Decision addressing various Petitions to Intervene that were

⁵ On July 31, 2009, ClearChoice Energy filed a Petition to Amend Intervention Pleading to Designate Counsel.

⁶ On July 27, 2009, a letter purported to be a Petition to Intervene by the E Cubed Company, LLC (“E Cubed”) on behalf of National Association of Energy Service Companies (“NAESCO”) and Ameri-TEC Mechanical, LLC, Capstone Turbine Corporation, Climate Energy, LLC, E Cubed Company, LLC, ECR International, Inc., Energy Concepts Engineering, P.C., Energy Spectrum, Inc., IRR Supply Centers, Inc., Quad-K-Energy Conservation, and Tim’s Plumbing and Heating, which the Petition to Intervene calls the “Joint Supporters.” This letter was signed by Ruben S. Brown, who identified himself as President of E Cubed. This Petition to Intervene was denied by the ALJ in an Initial Decision entered on August 11, 2009.

⁷ This brief only addresses issues raised in the testimony accepted into the record in this proceeding. PPL Electric will respond to issues raised in the comments in accordance with the procedural schedule.

filed following the July 27, 2009 pre-hearing conference. An evidentiary hearing was held on August 17, 2009

III. DESCRIPTION OF EE&C PLAN

The EE&C Plan includes a broad portfolio of energy efficiency, conservation practices and peak load reductions, and energy education initiatives. PPL Electric's portfolio of programs is designed to provide customer benefits and to meet the energy saving and peak load reduction goals set forth in Act 129. The Plan includes a range of energy efficiency and demand response programs that include every customer segment in PPL Electric's service territory. These programs are the key components of a comprehensive electric energy efficiency initiative designed to achieve the 1,146,000 MWh of reduced energy consumption and 297 MW of peak demand reductions required by Act 129.

The Plan addresses each of the requirements in 66 Pa.C.S. § 2806.1(b)(1)(i), as well as the filing requirements contained in the Commission's *Implementation Order*, and follows the template provided in the May 7, 2009 Secretarial Letter at Docket No. M-2008-2069887. The Plan is divided into the following nine sections: (1) Overview of Plan; (2) Energy-Efficiency Portfolio/Program Summary Tables and Charts; (3) Program Descriptions; (4) Program Management and Implementation Strategies; (5) Reporting and Tracking Systems; (6) Quality Assurance and Evaluation, Measurement and Verification; (7) Cost-Recovery Mechanism; (8) Cost-Effectiveness; and (9) Plan Compliance Information and Other Key Issues.

PPL Electric's primary objective is to deliver a portfolio of cost effective programs that will meet customers' needs, fulfill the Company's Plan objectives, as defined in Section 1.1.2 of the EE&C Plan, and achieve the results required by Act 129.

PPL Electric's portfolio reflects a strategic approach that is targeted, yet flexible enough to adjust and expand, as warranted, to meet changing market conditions and progress toward

Plan goals. Further, the portfolio offered by PPL Electric focuses on depth and sustainability of savings by offering customers a logical continuum of actions coupled with increasingly valuable incentives for cost-effective efficiency strategies. It will allow customers to make use of existing technical analyses, focus on organizational priorities, and employ a phased implementation approach. The portfolio builds on customer, trade ally, and stakeholder relationships through training, education, hardware, marketing strategies and customer support. PPL Electric's portfolio will capitalize on energy efficiency initiatives advanced by other organizations in the Commonwealth, as well as PPL Electric's existing programs, market knowledge, and community presence to efficiently meet program goals and target market sectors. Further, it will support the local economy by reducing customer energy costs, utilizing local labor whenever practical and by promoting the adoption and use of high quality equipment.

The Plan, as noted above, describes a comprehensive portfolio of energy efficiency, conservation practices and peak load reductions, renewable technologies and energy education initiatives. Specifically, the portfolio consists of the following fourteen (14) programs:

1. Efficient Equipment Incentive Program
2. Residential Energy Assessment & Weatherization
3. Compact Fluorescent Lighting Campaign
4. Appliance Recycling Program
5. ENERGY STAR® New Homes Program
6. Renewable Energy Program
7. Direct Load Control Program
8. Time of Use Rates
9. Energy-efficiency Behavior & Education
10. Low-income WRAP
11. Low-income E-Power Wise
12. Commercial and Industrial Custom Incentive Program
13. HVAC Tune-Up Program
14. Load Curtailment Program

All of the Company's programs are voluntary and, subject to the budget limitations for each program, a customer can elect to participate in any program for which he or she is eligible.

A full description of each of the fourteen programs is set forth in Section 3 of the EE&C Plan. PPL Electric Exhibit 1, § 3. These programs include a range of energy-efficiency and demand response programs targeted to every customer segment in PPL Electric's service territory. In compliance with the Secretarial Letter dated May 7, 2009 at Docket No. M-2008-2069887, PPL Electric has differentiated its programs according to the customer classes defined in the EE&C Plan template. PPL Electric Exhibit 1, § 3.1.2. PPL Electric defines residential customers as those customers served under Rate Schedules RS, RTS and RTD. PPL Electric defines large commercial and industrial customers as those customers served at primary and transmission voltage levels (Rate Schedules LP-4, LP-5, LP-6, IS-T, LPEP, ISA, PR-1, and PR-2). Small commercial and industrial customers include all non-residential accounts served at secondary voltage levels (*i.e.*, any Rate Schedule that is not "large commercial and industrial" and not "residential"). However, PPL Electric's programs are defined according to delivery strategies, the nature of customers' businesses, types of facilities, and types of energy-using equipment, rather than by the PPL Electric rate schedule for that customer. In other words, where programs offer customer benefits across multiple classes, and where similar implementation, marketing, and administrative strategies may be utilized to capture functional efficiencies, those programs will be offered to all appropriate customer classes. However, PPL Electric will document, track and report on its program results and progress toward goals by the customer classes identified in its Plan.

These programs are designed to meet the goals established by Sections 2806.1 and 2806.2 of Act 129, as interpreted by the Commission in the *Implementation Order*. See

Implementation Order, p. 2. These programs are designed as a portfolio of options which, once implemented, will offer PPL Electric's customers a wide-ranging set of programmatic choices, incentive options, and information and educational opportunities.

PPL Electric's portfolio of programs is designed to provide customer benefits and to meet the energy saving and peak load reduction goals set forth in Act 129 within the designated expenditure cap of two percent (2%) of 2006 annual revenues for each year of the four-year plan, which equates to approximately \$246 million. See PPL Electric Exhibit 1, §§ 1.1.2, 3.1.1.1. Specifically, PPL Electric's Plan includes measures and programs to achieve PPL Electric's calculated electricity consumption and peak load reduction targets of:

- a. 1% energy savings by 2011, which is 382,000 MWh or 44 average MW;
- b. 3% energy savings by 2013, which is 1,146,000 MWh or 132 average MW; and
- c. 4.5% peak load reduction by 2013, which is 297 MW.⁸

PPL Electric calculates that approximately six percent (6%) of its total load comes from low-income customers and, therefore, has designed its Act 129 programs to achieve approximately six percent (6%) of its energy consumption and peak load reductions from the low-income sector. PPL Electric Exhibit 1, § 9.1.3. Additional multi-sector programs, including both efficiency and demand reduction programs, are available and will be promoted to low-income customers and will produce energy and demand savings in that sector. To meet the energy and demand reduction set aside for the low-income sector, PPL Electric will leverage its existing delivery infrastructure, implement new grassroots social marketing efforts targeted to low-income communities and community groups, reach out to new low-income market partners

⁸ PPL Electric will meet this reduction requirement by September 30, 2012, as required by the Commission's Implementation Order.

to develop and implement co-marketing strategies, and expand its low-income WRAP program to reach new customers and increase measure installation.

PPL Electric's proposed Plan includes programs to achieve ten percent (10%) of total Plan reductions from institutional facilities, such as local governments, school districts, colleges, and nonprofit organizations. PPL Electric Exhibit 1, § 9.1.2. It also offers at least one energy efficiency and one demand response program to each customer class. Further, it seeks to leverage economies of scale and other efficiencies by offering programs across multiple customer sectors as appropriate.

The Plan includes procedures to measure, evaluate, and verify performance of the programs and the Plan as a whole. It also outlines a process for annual, independent evaluation of the results and the cost-effectiveness of the Plan using TRM wherever applicable. *See* PPL Electric Exhibit 1, § 3.1.2.

PPL Electric's Plan is cost-effective, based on the TRC criterion, and allocates the cost of measures to the same customer class that receives the benefit of those measures. PPL Electric Exhibit 1, § 8. Further, as discussed below, PPL Electric proposes a reconcilable adjustment clause for recovery of all applicable costs.

PPL Electric's programs are designed to provide a cohesive structure intended to support residential (including low-income), commercial and industrial, and government and non-profit sector customers through a logical continuum of energy efficiency actions, starting with facility review and analysis and ending with implementation, verification, and evaluation. PPL Electric Exhibit 1, § 3.1.1.1. Marketing and education functions, customer care and quality assurance, program tracking, and evaluation, monitoring, and verification will be common features of all programs. The entire Plan is supported by financial incentives and a delivery approach focused

on providing customers with the support they need to achieve their energy efficiency objectives. Implementation activities range from simple, common energy efficiency and demand response measures that can be installed with minimal oversight or administrative burdens to more complex measures that are vetted through a technical analysis and may (but are not required to) be part of a facility-wide energy management strategy.

IV. SUMMARY OF ARGUMENT

The specific issues raised in testimony by the parties to this proceeding are addressed in detail below. In reviewing these individual proposals, however, PPL Electric requests that the Commission not lose sight of several fundamental points that support full and prompt approval of the Company's EE&C Plan.

PPL Electric's Plan was not developed in a vacuum. Before finalizing its Plan, PPL Electric conducted extensive research, both locally and nationally, to determine what types of programs customers want and what types of programs have been successful in achieving energy conservation and demand reduction. PPL Electric also retained the services of an experienced and nationally recognized consulting firm to advise and assist in preparing its Plan. PPL Electric also engaged in an extensive stakeholder process through which it solicited and obtained valuable input from a wide variety of interested parties, including customer representatives, providers of conservation service, trade allies and other EDCs.

The result is an integrated plan consisting of a wide variety of measures carefully crafted and balanced to meet the requirements and constraints of Act 129. This was not an easy process. Act 129 contains very specific conservation and demand reduction requirements that must be met beginning in 2011. In addition, Act 129 requires that EDC plans must contain a variety of measures equitably distributed among customer classes with minimum set asides for low-income and certain institutional customers and requires an extensive and expensive process for

monitoring, evaluating and determining compliance. All of these requirements must be met within a hard spending cap, which is substantially less than has been spent in other jurisdictions to achieve less demanding conservation goals.

For these reasons, it is not possible or appropriate to modify one part of the Plan without addressing how those changes impact other portions of the Plan (for example, how changes to an energy efficiency measure would impact peak load reductions, cost allocation to customer sectors, or the institutional set-aside requirement), how those changes impact the cost-effectiveness of the portfolio as a whole, how these changes would impact the preferences of other stakeholders, and most importantly how those changes impact PPL Electric's ability to comply with Act 129.

While a number of parties have proposed certain changes to PPL Electric's Plan, the Plan has widespread support. The statutory parties, OTS, OCA and OSBA, have largely supported the Plan and their proposed revisions deal primarily with cost allocation and cost recovery issues. Neither PPLICA (representing large commercial and industrial customers) nor RESA/Direct (representing EGSs) has filed any testimony.

PPL Electric also was very careful to design its Plan to comply with Act 129 and all of the Commission's Orders and guidance regarding the implementation of Act 129. A number of parties, however, are using this proceeding to relitigate issues that have already been addressed in the Commission's Act 129 implementation orders. For example, the Commission has already addressed the issue of natural gas fuel switching raised by UGI, the free-ridership issue raised by SEF, and DEP's arguments concerning how to account for energy usage reductions. Because of the expedited nature of this proceeding and short time frame within which PPL Electric must be

in compliance with Act 129, it is not appropriate for parties to use this proceeding to relitigate matters previously decided by the Commission.

Several parties to this proceeding have proposed selected changes to PPL Electric's Plan to serve their own parochial and narrow self-interest. Examples of these changes include the SEF's proposal to reject PPL Electric's time-of-use rate and its proposal to include a solar domestic hot water heating to its list of measures for the Renewable Energy Program, FDSI's proposal to expand the HVAC Tune-Up Program and UGI's broad based proposal to include electric to gas fuel switching in the EE&C Plan. These parties vigorously defend their individual proposals, but do not and presumably cannot explain how their proposals would address all of the highly integrated relationships in the portfolio in a way that would permit PPL Electric to comply with Act 129, maintain or increase the cost-effectiveness (benefit-to-cost ratio) of the Plan, and/or satisfy all other stakeholders.

PPL Electric recognizes, of course, that there is no single plan that would be viewed as the "perfect plan" by every stakeholder. There are undoubtedly many combinations and emphases of measures and programs that could successfully meet Act 129's requirements. It is important to recognize the integrated nature of the Plan. Every change impacts some other portion of the portfolio and would require "rebalancing" to fully identify the impact. Also, changes requested by one party likely could negatively impact the preferences of another party. PPL Electric strongly believes that absent "fatal flaws," (such as non-compliance with the objective requirements of Act 129), it is not in the public interest to continue to iterate, "fine-tune," and rebalance the Plan at this time. Given the time deadlines to achieve the reduction targets of Act 129, it is extremely important to promptly launch programs, give customers the greatest opportunity to achieve savings, and to improve the Plan over time if changes are

necessary. The responsibility to comply with Act 129 and to optimize cost-effectiveness lies ultimately with PPL Electric, who will face substantial penalties if it does not comply. For this reason alone, PPL Electric should be permitted substantial flexibility and discretion in developing and implementing its Plan.

In this regard, it is important to remember that approval of PPL Electric's Plan is the beginning, not the end of the story. The Company's plan is based on the best available estimates, but actual results will undoubtedly vary from these estimates. In addition, compliance is far from certain. PPL Electric has identified a number of very substantial risks that could prevent full compliance. PPL Electric's Plan therefore includes extensive provisions for monitoring and evaluation, and provides opportunities for mid-course correction. Given the expedited time frame for compliance and the many uncertainties in the Plan, PPL Electric must have some discretion to revise and correct its Plan on an on-going basis without protracted regulatory review, if it is to have any meaningful chance of complying with Act 129. PPL Electric's proposal for this flexibility is set forth in Section V.E.2 of the Brief.

Finally, it is critically important that PPL Electric be permitted to move ahead as quickly as possible to implement its Plan. The first compliance deadline, May 31, 2011, is just over a year and a half away. PPL Electric has already begun to implement an infrastructure of new staff, Conservation Service Providers ("CSPs"), Trade Allies, systems, and processes in order to comply with Act 129. Moreover, PPL Electric has already solicited competitive bids and selected an Appliance Recycling CSP, which is under contract, and will award many of its other CSP contracts before November 2009. Any delay in approving the Plan will seriously jeopardize, if not completely destroy, PPL Electric's ability to comply with Act 129.

For these reasons and as more fully explained below, PPL Electric requests that the Commission approve the EE&C Plan in its entirety, as soon as possible.

V. ARGUMENT

A. ACT 129 CONSERVATION AND DEMAND REDUCTION REQUIREMENTS

The required elements of an EDC's Plan are set forth in Sections 2806.1 and 2806.2 of the Public Utility Code, 66 Pa.C.S. §§ 2806.1 and 2806.2, as well as the Commission's *Implementation Order*. The *Implementation Order* provides, in pertinent part, that an EDC's filing for Commission approval of an EE&C Plan must provide information regarding the following:

- a. A detailed plan addressing each of the requirements in 66 Pa.C.S. § 2806.1(b)(1)(i);
- b. Sufficient supporting documentation and/or verified statements or testimony;
- c. Approved contract(s) with one or more conservation service providers ("CSPs");
- d. Description of the work and measures being performed by CSPs and by the EDC along with a justification for the allocation;
- e. A budget showing total planned expenditures by program and customer class;
- f. A Section 1307 cost recovery mechanism;
- g. The Commission-approved consumption forecast for the period of June 1, 2009 through May 31, 2010;
- h. A weather adjustment calculation;
- i. The Commission-approved average of the EDC's 100 highest peak hours during the period of June 1, 2007 through September 30, 2007; and
- j. A description of the EDC's method for monitoring and verifying plan results.

See Implementation Order, pp. 10-12. In addition, consistent with the Act's requirements, the EDC's Plan must assign and allocate the costs associated with the EE&C measures to the same customer class that will receive the direct energy and conservation benefits from these measures (66 Pa. C.S. § 2806.1(a)(11)).

PPL Electric's Plan satisfies all of the requirements noted above. The EE&C Plan contains all of the information requested by the Commission in the *Implementation Order* (pp. 10-12) and has allocated costs associated with the EE&C measures to the customer class that receives the benefits.

1. Overall Conservation Requirements

a. 2011 Requirements

Each EDC with at least 100,000 customers is required to adopt a plan, approved by the Commission, to reduce electric consumption by at least one percent (1%) of its expected consumption for June 1, 2009 through May 31, 2010, adjusted for weather and extraordinary loads. This one percent (1%) reduction is to be accomplished by May 31, 2011. PPL Electric is an EDC with at least 100,000 customers. In PPL Electric's case, that target equates to approximately 1.15 million MWh. The Company's EE&C Plan is designed to achieve energy savings by May 31, 2013 of more than 1.3 million MWh. PPL Electric Exhibit 1, p. 220. The EE&C Plan is expected to result in an Energy and Demand savings of 1.1% by 2011. PPL Electric Exhibit 1, p. 18.

b. 2013 Requirements

By May 13, 2013, the total annual weather-normalized consumption is to be reduced by a minimum of three percent (3%). The EE&C Plan is expected to result in an Energy and Demand savings of 3.6% by 2013. PPL Electric Exhibit 1, p. 18.

2. Overall Demand Reduction Requirements

Concerning demand reductions, by May 31, 2013, peak demand is to be reduced by a minimum of four-and-a-half percent (4.5%) of the EDC's annual system peak demand in the 100 hours of highest demand, measured against the EDC's peak demand during the period of June 1, 2007 through May 31, 2008. *See* 66 Pa.C.S. § 2806.1(d). In PPL Electric's case, that target equates to 297 MW. As required by the Commission's *Implementation Order* (p. 29), the Company's EE&C Plan meets that target by September 30, 2012. *See* PPL Electric Exhibit 1, pp. 18, 220.

3. Requirement For a Variety of Programs Equitably Distributed

66 Pa.C.S. § 2806.1(a)(5) provides that the Commission shall implement standards to ensure that each plan includes a variety of energy efficiency and conservation measures and will provide the measures equitably to all classes of customers. The Commission addressed this requirement in the *Implementation Order*, and PPL Electric's Plan fully complies with this requirement by, among other things, offering mix of energy efficiency and demand response programs for all customers and by having measures for low-income customers as well as for governments, schools and nonprofit organizations.

4. 10% Government/Non-Profit Requirement

A minimum of 10% of the required reductions in consumption and demand, noted above, must be obtained from units of Federal, State and local government, including municipalities, school districts, institutions of higher education and nonprofit entities. 66 Pa.C.S. § 2806.1(b)(i)(G). For PPL Electric, those targets are 134,609 MWh and 33 MW respectively. The EE&C Plan designates activities to achieve 10% of total Plan reductions from institutional facilities—local governments, school districts, colleges, and nonprofit organizations. Institutional customers are eligible for the same programs as their underlying rate class but

marketing and other delivery details will be designed to address the specific needs of institutional customers. PPL Electric Exhibit 1, p. 2.

5. Low-Income Program Requirements

Regarding low-income customers, 66 Pa.C.S. § 2806.1(b)(i)(G) provides that an EDC's conservation plan shall include specific energy efficiency measures for households at or below 150% of the Federal poverty income guidelines. According to § 2806.1(b)(i)(G) the number of measures shall be proportionate to those households' share of the total energy usage in the service territory. Moreover, EDCs are to coordinate measures with other programs administered by the Commission or another Federal or State agency. An EDC's expenditures of under § 2806.1(b)(i)(G) are in addition to expenditures made under 52 Pa. Code Ch. 58 (relating to residential low-income usage reduction programs).

PPL Electric calculates that approximately 6% of its total load comes from low-income customers and therefore has designed its Act 129 programs to achieve approximately 6% of the energy consumption and peak load reductions from the low-income sector. PPL Electric Exhibit 1, p. 220. As discussed in Section 3.2.1 of the EE&C Plan, the Company has developed two programs specifically for the low-income sector. PPL Electric Exhibit 1, p. 220. Additional multi-sector programs, including both efficiency and demand reduction programs, are available and will be promoted to low-income customers and will accrue energy and demand savings in that sector. PPL Electric Exhibit 1, pp. 220-21. In order to meet the energy and demand reduction set aside for the low-income sector, PPL Electric will leverage its existing delivery infrastructure, implement new grassroots social marketing efforts targeted to low-income communities and community groups, reach out to new low-income market partners to develop and implement co-marketing strategies, and expand its low-income WRAP program to reach new customers and increase measure installation. PPL Electric Exhibit 1, p. 221.

6. Overall Issues Raised by the Parties

In general, many parties in this proceeding are supportive of PPL Electric's overall Plan. As discussed below, some parties have made some recommendations regarding individual programs (see Section V.A.7). However, others have made recommendations that relate to PPL Electric's overall EE&C Plan.

a. Rejection of Entire EE&C Plan

On page 2 of his testimony, SEF witness Costlow states that the SEF does not support PPL Electric's EE&C Plan and requests that the Commission reject the entire Plan as submitted. SEF St. 1, p. 2; Tr. 278. SEF's proposal should be rejected for three principal reasons. First, SEF is the only party to request that PPL Electric's Plan be rejected. As is evidenced by the record in this proceeding, the vast majority of the parties support PPL Electric's Plan and have reserved comment to a few issues in the Plan. At the end of the day, it is PPL Electric that must comply with requirements of Act 129 or face significant penalties if it fails to do so. For this reason, PPL Electric should be given significant discretion in determining how to meet the requirements of Act 129. SEF's request is unfounded and must be rejected.

Second, SEF provides absolutely no basis for its extreme position. PPL Electric's EE&C Plan has a variety of components – fourteen programs, program management and implementation strategies, evaluation, measurement and verification procedures and a cost recovery mechanism. SEF's entire testimony in this proceeding consists of criticisms of two PPL Electric programs (Compact Fluorescent Lighting Campaign and Time of Use Rates, SEF St. 1, pp. 7 – 10), proposals for new programs (domestic solar hot water heating measure, an industrial photovoltaic measure and an on-bill financing measure, SEF St. 1, pp. 11-12) and an assertion that PPL Electric misapplied the TRC test by counting incentives as a cost. SEF St. 1, pp. 3-4. The lack of merit in SEF's criticisms of PPL Electric's proposed programs are

addressed in Section V.A.7. The lack of merit in SEF's proposed programs are addressed in Section V.A.8.

Regarding treating incentives as a cost, SEF witness Costlow asserts that the inclusion of \$178,769,873 in incentive payments into the TRC test contradicts the Commission's final *TRC Order* which determined that incentive payments to customers are a cost to the EDC and a benefit to the customer which cancels each other out. SEF St. 1, pp. 3-4. Mr. Costlow is incorrect. The costs identified by Mr. Costlow are not *incentive* payments paid to customers by PPL Electric. Instead, these costs are *rebates* that cover part of the incremental TRC cost of energy efficiency measures. Characterizing these payments as incentives and excluding them from the TRC analysis is particularly problematic in the case of peak load management programs. In the case of these programs, payments to customers are not incentives, they are payments from the EDC to participants either directly or through a CSP intermediary to acquire peak load resources instead of purchasing additional capacity from the market. These payments compensate participants for the use of electrical services they forego during curtailment events. Although the actual costs of foregoing electric service to individual participants cannot be known exactly, it is reasonable to assume that the fact that they do participate in load curtailment, then the payment amount does indeed provide adequate compensation. It is important to note that, in the case of all peak load management programs, PPL Electric will remit the funds to CSPs for their services, a portion of which will be paid to customers through the CSPs' agreement with specific participants.

Finally, Mr. Costlow's proposal, if applied to PPL Electric's Plan as a whole, would significantly increase the benefit-to-cost ratio of the Plan and would provide further support for

PPL Electric's EE&C Plan as proposed. Clearly, SEF's criticisms provide no basis for PPL Electric's EE&C Plan to be rejected by the Commission.

b. ARRA and Act 129 Funding

DEP objects to any program in PPL Electric's EE&C Plan that permits PPL Electric to account for that portion of energy usage reductions funded through Pennsylvania's Alternative Energy Investment Act of 2008 ("Act 1") or the *American Recovery and Reinvestment Act of 2009* ("ARRA"). DEP St. 1, p. 5. DEP's proposal should be rejected for several reasons.

First and foremost, the Commission has already addressed this point in an order issued during the implementation process for Act 129 and has rejected DEP's position. Specifically, as explained by PPL Electric witness Cleff, in the *TRC Order* the Commission concluded that:

EDCs will be able to fully include a measure's benefits in the TRC test if any portion of the measure is attributable to Act 129. For the purposes of TRC testing, if the end-use customer is a recipient of an incentive/rebate from an Act 129 program, even if the customer is also a recipient of an Act 1 incentive or rebate for the same equipment or service, we conclude that the entire saving of that equipment or service can also be claimed by the EDC for TRC testing purposes.

TRC Order at p. 25. Although the Commission specifically refers to Act 1 in the above quotation, the same conclusion would logically apply if the customer received funding from ARRA or any other non-EDC source. PPL Electric St. 1-R, p.4. Moreover, Act 129 requires EDCs to "provide a list of all eligible Federal and State funding programs available to ratepayers for energy efficiency and conservation." 66 Pa.C.S. § 2806.1(j). The intent behind this provision is to provide customers with adequate information so that they can "pool" incentives from as many sources as possible to supplement the EDC's Act 129 incentives. This also further maximizes the likelihood that customers would implement energy efficiency projects. If allowing EDC's to claim the entire saving of this pooling effort is not consistent with Act 129

then why would the statute require EDCs to inform customers about incentives that have no impact on Act 129 energy efficiency targets?

Second, DEP's argument appears to be based on the mistaken assumption that ARRA funds will be used to supplant or replace existing ratepayer funding. DEP St. 1, p. 7. Regarding ARRA funds, it is critical to note that PPL Electric's EE&C Plan does not propose in any way to rely on federal funds to supplant or replace its Act 129 obligations. PPL Electric St. 1-R, p. 5. ARRA increases the total amount of funds available for energy efficiency and conservation efforts in Pennsylvania. PPL Electric must meet its Act 129 reduction targets in the absence of Act 1, ARRA and other non-Act 129 funding. *Id.* PPL Electric's Plan was developed independently of, and without including any other available federal or state funding. *Id.* Furthermore, Act 129 itself requires EDCs to notify customers of other federal and state programs. 66 Pa.C.S. § 2806.1(j). PPL Electric's EE&C Plan clearly states that its programs are designed to complement, not compete with, existing energy efficiency programs.

The U.S. Department of Energy ("DOE"), the administrator of ARRA funds, has provided guidance regarding the interplay between ARRA funding and ratepayer-funded conservation initiatives, and PPL Electric is in compliance with this guidance. PPL Electric St. 1-R, p. 5. As discussed by PPL Electric witness Cleff, the posted guidance provides that ARRA funds should increase the total amount of funds available for rebates and that ARRA funds cannot be used to supplant (replace) current funding. PPL Electric St. 1-R, p. 5. The funds can be used to: (1) supplement current funding; (2) fund activities that no longer have funding available; and (3) implement new initiatives such as new incentives from utilities. PPL Electric St. 1-R, pp. 5 -6. As explained above, PPL Electric's EE&C Plan is fully consistent with these requirements.

Third, DEP states that Pennsylvania receives ARRA-related funding from the DOE for various programs, and that it must list existing energy efficiency programs. DEP St. 1, p. 7. DEP notes that no Act 129 programs were included in the application materials that Pennsylvania submitted to the DOE. *Id.* This is not the case. In a recent revision to one of the funding applications (which is available at www.recovery.pa.gov) DEP specifically explains that under Act 129 the Commonwealth's electric utilities are developing mandated energy efficiency and conservation programs and that the annual funding levels may reach about \$250 million beginning in 2010. PPL Electric St. 4-R, pp. 8-9 (discussing the State Energy Program application filed by DEP with DOE, May 12, 2009, amended June 19, 2009). Therefore, Pennsylvania has in fact apprised DOE that energy efficiency and conservation programs will be implemented under Act 129.

Fourth, PPL Electric has relied on the Commission's determination that an EDC could fully include a measure's benefits if any portion of the measure is attributable to Act 129. DEP's proposal to not permit PPL Electric to account for that portion of energy usage reductions funded through Act 1 or ARRA, if adopted, is a complete reversal of the Commission's earlier determination. Moreover, if adopted, DEP's proposal would have a devastating effect on PPL Electric's ability to meet its reduction targets, particularly the May 2011 1% reduction, because Act 1/ARRA incentives are most likely to be available during this early time period. *See* DEP St. 1, p. 8; PPL Electric St. 1-R, p. 6. Prorating savings would likely result in customers' projects not meeting the cost-effective eligibility requirements of PPL Electric's commercial and industrial programs. *Id.* Limiting or potentially eliminating PPL Electric's ability to participate in any commercial and industrial customer project that receives Act 1/ARRA funding would be devastating because 65% of PPL Electric's EE&C Plan reductions are expected to come from

C&I customers. The same is true for the residential audit and weatherization program, and the renewable energy program. In fact, PPL Electric likely would have to withdraw those programs completely from its EE&C Plan. *Id.*, p. 7. Essentially, if the Commission had adopted DEP's proposal in the earlier order PPL Electric would have submitted a completely different plan.

Finally, DEP's recommendation regarding tracking and verifying a customer's participation in Act 1/ARRA funded projects should be rejected as it would be a time-consuming, cost-prohibitive and extremely complex process. PPL Electric St. 1-R, p. 8. For example, customers will have the ability to enroll in a PPL Electric Act 129 program and at a later date sign up for an Act 1 or/and ARRA program. Tracking and verification would obligate PPL Electric to contact and recontact customers on an ongoing basis to inquire about their participation in the various programs. Also, PPL Electric believes that it is not appropriate to ask customers to disclose all sources of funding for projects because this type of information may be considered private, confidential or proprietary. *Id.*

For the aforementioned reasons the Commission should reject DEP's request to limit the ability of an EDC to fully include the energy efficiency and conservation benefits in the TRC test if any portion of the EDC's efforts is attributable to Act 129. To grant DEP's request would be a reversal of Commission precedent, as noted above, and would have a devastating effect on PPL Electric's ability to meet its reduction targets.

c. Customers That Purchase Generation Supply From an EGS

Richard's Energy witness Frank Richards states that PPL Electric's EE&C Plan does not benefit customers who buy their generation supply from an EGS. Richards Energy St. 1, p. 4. This statement is simply incorrect. As explained by PPL Electric witness Cleff, with the exception of PPL Electric's Time-of-Use ("TOU") rate program, all programs in the EE&C Plan are equally available to customers who shop for their generation or take default service from PPL

Electric. PPL Electric St. 1-R, p. 14. All customers, shopping and non-shopping who take advantage of the programs included in the EE&C Plan will reduce their electricity consumption and save money regardless of their generation supplier. Further, as noted by Mr. Cleff, all customers, even those who do not participate in the Company's programs, will benefit from lower wholesale energy and capacity prices over time due to lower electricity consumption. *Id.*

d. Non-Profit Agencies

ACORN states that the "Commission should ensure that non-profit agencies serving disadvantaged and low-income populations receive specific attention under the Plan." ACORN St. 1, p. 14. PPL Electric notes that its programs are designed to provide a cohesive structure intended to support non-profit sector customers (and other customer sectors) through a logical continuum of energy efficiency actions. PPL Electric Exhibit 1, § 3.1.1.1. Moreover, § 3.5 of the EE&C Plan contains seven programs for the Government/Non-Profit Sector including: (1) the Efficient Equipment Incentive Program; (2) the Commercial and Industrial Custom Incentive Program; (3) the HVAC Tune-Up Program; (4) the Renewable Energy Program; (5) Direct Load Control Program; (6) Time of Use Rates; and (7) Load Curtailment. PPL Electric Exhibit 1, § 3.5. These efforts targeted at the Government/Non-Profit Sector are in addition to PPL Electric's strong commitment to helping low-income customers reduce their electricity consumption and save money. PPL Electric Exhibit 1, § 1.2.1.1. PPL Electric's WRAP is the Company's successful, valued LIURP program that will be expanded for Act 129 and PPL Electric will also offer new energy efficiency and demand response programs to low-income customers. *Id.* Therefore, PPL Electric believes that the EE&C Plan provides specific attention to non-profit agencies as well as the low-income populations served by these non-profit agencies.

e. Bid Programs in PJM RPM Auction

OCA witness Hahn states his support for the Company's proposal to include financial incentives from other sources, if available. OCA St. 1, p. 16. Mr. Hahn also recommends that the Company participate in existing market mechanisms, such as PJM's Reliability Pricing Model ("RPM") auctions, and return any benefits from such mechanisms to customers as a credit. *Id.* In addition, other parties state that PPL Electric should be required to bid energy efficiency and demand response into PJM's RPM auctions and credit customers with any benefits received through the Act 129 cost recovery mechanism. PPL Electric plans to follow this approach to the maximum extent possible for the peak load reductions associated with energy efficiency measures. However, PPL Electric expects that the CSP(s) for the Act 129 demand response programs (Direct Load Control and Load Curtailment) will bid those peak load reductions into the RPM auction (to the extent that those MWs were not previously committed from PJM's DR programs) and share those benefits with its customers.

7. Issues Relating to Individual Conservation and Demand Reduction Programs

This section addresses recommendations and concerns raised by the parties concerning the specific programs proposed by PPL Electric.

a. Efficient Equipment Incentive Program

(1) Fuel Substitution Program for Rate RTS Customers

OCA witness Hahn asserts that fuel substitution should be strictly limited to Rate Schedule RTS rate class customers. OCA St. 1, p. 19. PPL Electric agrees with Mr. Hahn's recommendation. PPL Electric's EE&C Plan contains a single fuel substitution measure – the Efficient Equipment Incentive Program. This program was designed solely for those customers on PPL Electric Rate Schedule RTS due to their unique circumstances. Specifically, Mr. Cleff

explained that Rate Schedule RTS is a unique rate schedule with a long history, including major capital investment by customers and a legacy of very low rates. PPL Electric St. 1-R, pp. 12-13. In addition, Mr. Cleff testified that these customers are very large users of electricity, and some of these customers will see a large rate increase in 2010 (on both an absolute dollar and percentage basis) when compared to other residential customers. *Id.*

(2) Fuel Switching – Gas to Electric

UGI asserts that PPL Electric's EE&C Plan could result in increasing rather than reducing the use of electricity. UGI St. 1, p. 16. DEP and Mr. Epstein also raise this issue. DEP St. 1, p. 24; Epstein St. 1, pp. 15-16.

Specifically, UGI suggests that PPL Electric's EE&C Plan could incentivize customers to change from natural gas appliances to electric appliances and heating equipment, particularly heat pumps. UGI St. 1, p. 16. If this occurs, UGI states that it will become the backup supplier for these customers, that it will have no immediate compensation for lost revenues, and that it will incur increased costs of this more specialized service. UGI St. 1, p. 24. In addition, UGI states that increased reliance on electric as a heating source will result in increased consumption of electricity and result in less energy efficiency. *Id.* To address this issue, UGI recommends the Commission prohibit PPL Electric from offering Act 129 rebates and from claiming associated peak load or energy savings, where (1) a natural gas water heater is being replaced, (2) a natural gas heater or combination natural gas heater and electric air conditioning system is being replaced, or (3) water and heating appliances are being installed in new buildings where natural gas is available.

At the outset, as explained by PPL Electric witness Haeri, it is highly unlikely that PPL Electric's EE&C Plan will induce customers to change from natural gas appliances to electric appliances. For example, Dr. Haeri noted that the rebate amounts proposed by PPL Electric

(\$250 - \$400 for SEER 14.5 to SEER 16) are not large enough to sway customers in their choice of heating and cooling equipment. PPL Electric St. 2-R, p. 6. Moreover, Dr. Haeri explained that a customer's choice of equipment will not be made solely based upon a small rebate, but instead will be dependent on many factors. Indeed, UGI's own witness, Mr. Raab admits that the degree to which PPL Electric's incentives might cause a switch from natural gas heating is uncertain and cannot be quantified precisely. UGI St. 1, p. 25.

Further, Dr. Haeri pointed out that heat pumps and gas furnaces are not directly comparable, because heat pumps also provide cooling. PPL Electric St. 2-R, p. 6. In addition, Dr. Haeri states that where a customer has a gas furnace and a central air conditioner, if the gas furnace has to be replaced, a high-efficiency gas furnace costing approximately \$4,000 would be a more likely choice than an \$8,000 heat pump. *Id.* From the consumer's point of view, a heat pump and a high-efficiency gas furnace are competing alternatives only in the rare occasion when both the gas furnace and the air conditioning system fail, and have to be replaced, at the same time.

UGI witness Raab also asserts that the potential for customers to switch from a natural gas appliance to an electric appliance does not show up in PPL Electric's analysis due to PPL Electric's reliance on "deemed savings" for its evaluations. UGI St. 1, pp. 24-25. Although UGI directs this critique at PPL Electric's EE&C Plan, it appears that UGI is actually challenging the Commission-approved TRM, which specifically established the savings values used by PPL Electric for relevant equipment, such as heat pumps. PPL Electric's EE&C Plan is not the proper forum for UGI to challenge the Commission's TRM. Instead, this issue should be raised in the course of future evaluations and possible revisions to the TRM, if such revisions are warranted.

In addition, UGI recommends that the Commission discount the estimated energy savings in the case of fuel conversion from natural gas to electric. UGI St. 1, pp. 26-27. As noted in the testimony of Dr. Haeri, the incentives proposed by PPL Electric are consistent with other programs operating throughout the United States and there is no evidence to suggest these incentive levels have led to fuel switching. PPL Electric St. 2-R, p. 7. Indeed, Mr. Raab was unable to quantify the amount of fuel switching from gas to electric that he expects based upon PPL Electric's EE&C Plan. UGI St. 1, p. 25.

It is important to note that PPL Electric has clearly stated that it does not believe that it should attempt to influence a customer's fuel choice. PPL Electric St. 2-R, p. 7. Therefore, PPL Electric has committed not to encourage fuel switching beyond the narrowly tailored Efficient Equipment Incentive Program for its Rate Schedule RTS customers. However, if customers independently decide to switch from gas to electricity, PPL Electric will encourage them to adopt the highest-efficiency replacement measure. This approach comports with UGI witness' Raab's stated belief that incentives should not be used to encourage a customer to make a selection of one fuel or the other. Tr. 286. This also is consistent with DEP's statement that "[f]uel switching is not a conservation measure." DEP St. 1, p. 24. Additionally, this addresses Mr. Epstein's concern regarding the selection of electricity over natural gas in the New Homes Program. Epstein St. 1, pp. 15-16.

b. Residential Energy Assessment & Weatherization

Mr. Epstein takes issue with the eligibility requirements for surveys and/or audits under the Residential Energy Assessment & Weatherization Program and avers that all residential customers should be eligible. Epstein St. 1, p. 12. PPL Electric's program is available to customers that have certain equipment powered by electricity (*i.e.*, electric heat, electric water heating, and/or central air conditioning). PPL Electric Exhibit 1, p. 48. PPL Electric is an

electric utility, and the objective of the Energy Assessment and Weatherization program is to reduce electricity use, primarily through weatherization. Weatherization does not reduce electric consumption if a customer does not have electric air conditioning, heat or water heating. Therefore, the Residential Energy Assessment & Weatherization Program is properly limited to customers with electric heat, electric water heaters and/or central air conditioning. *See* PPL Electric Exhibit 1, pp. 48-56.

c. Compact Fluorescent Lighting Campaign

SEF witness Costlow questions the cost-effectiveness of PPL Electric's EE&C Plan based upon his contention that the incremental costs of the CFL and low-income programs are inflated, and that PPL Electric overstated benefits of the CFL program by not addressing free-ridership. SEF St. 1, p. 7. However, as noted by PPL Electric witness Haeri, SEF witness Costlow fails to acknowledge that the Commission's TRM and TRC test specifically address net-to-gross adjustments, including free-ridership, and PPL Electric's determination of estimated savings complies with the TRM. All savings projections in the Plan are "net savings" inclusive of any net-to-gross adjustments that are specified in the TRM and TRC. PPL Electric St. 2-R, pp. 2-3. Further, actual, *ex post* savings will be determined during the EM&V process and will be validated by the Statewide Evaluator. *Id.* Moreover, as admitted by Mr. Costlow, the "free-rider" issue is not limited to the CFL program but will apply to all measures. Tr. 280. SEF's argument relative to "free-Rider" solves nothing.

In addition, SEF witness Costlow suggests that PPL Electric change the delivery method for the CFL Program from using retail stores to offer discounted CFLs (upstream buy-down/retail discount) to PPL Electric-issued coupons. SEF St. 1, pp. 8-9. However, Mr. Costlow fails provide a clear rationale as to why his proposal is superior to that proposed by PPL Electric. Indeed, PPL Electric witness Haeri testified that PPL Electric carefully reviewed

different delivery mechanisms with CFL program CSPs and evaluated experience in other states and that this analysis revealed that the upstream buy-down/retail discount delivery method is nearly universally preferred by customers and is the most effective and least costly. PPL Electric St. 2-R, p. 3. SEF witness Costlow also recommends that PPL Electric issue CFLs to low-income customers through “social marketing.” SEF St. 1, p. 15. As noted by PPL Electric witness Haeri, there are many ways to design program delivery details. PPL Electric St. 2-R, pp. 3-4. Further, Dr. Haeri testified that PPL Electric determined that it can achieve its reduction targets using the variety of delivery methods described in its EE&C Plan, including CFL giveaway campaigns (through events and CBOs), ePower WISE energy kits, and WRAP. *Id.* Discounted CFLs are also available to low-income customers through the CFL Campaign. However, Dr. Haeri noted that alternative “social marketing” approaches are unnecessary due to the number of free CFLs available to low-income customers. *Id.*

Mr. Costlow cites the results of PPL Electric’s surveys regarding consumers who have already purchased CFLs or would be willing to purchase them absent a rebate. Tr. 280-281. Mr. Costlow’s interpretation of the results of that survey is misleading. Although it is true that 73% of the survey respondents stated that they had purchased a CFL, this should not be construed, as Mr. Costlow seems to suggest, as 73% market saturation, since market size should be measured in terms of the number of sockets rather than consumers. The survey results further indicated 42% of customers surveyed said that they would purchase CFLs without a rebate. Again, the important point here is not whether a consumer would purchase a CFL, but how many would be willing to purchase and install a CFL if a rebate is made available. Although 73% of residential customers surveyed stated they have installed at least one CFL in their home, only 28% of the eligible bulb sockets in the customer’s home have CFLs. Tr. 157-158, 172-173. Therefore,

customers are not fully utilizing CFLs at this time and there is significant potential to increase CFLs. PPL Electric further contends that, while free-ridership is a legitimate equity concern, it is not of immediate relevance to PPL Electric's EE&C Plan and its cost-effectiveness. Moreover, as stated above, the free-ridership issue is better addressed in the context of post-implementation measurement and verification.

Mr. Epstein raises concerns regarding the disposal costs for mercury contained in the CFLs. Epstein St. 1, p. 9. PPL Electric plans to provide customer education and outreach on the proper handling and disposal of CFLs and mercury content. PPL Exhibit 1, p. 58. Moreover, PPL Electric's CSP contract for the Compact Fluorescent Lighting Campaign provides for locations for customers to properly dispose of CFLs. *Id.*

d. Appliance Recycling Program

DEP states that Appliance Recycling Programs must contain provisions that require proper management of the refrigerants and recycling. DEP St. 1, p. 22. PPL Electric's Appliance Recycling Program contract has been reviewed by the Commission, awarded to the CSP, and requires that the CSP recycle all applicable components and properly dispose of any remaining components. PPL Electric St. 1-R, p. 10. In addition, upon pick-up at the customer's facility, all appliances will be disabled immediately to prevent their reuse in the secondary market. All components of an appliance will be handled in accordance with all applicable laws and regulations, and will comply with the EPA's Responsible Appliance Disposal program. *Id.* Therefore, the EE&C Plan already satisfies the management and recycling concerns raised by DEP.

e. ENERGY STAR® New Homes Program

Mr. Epstein avers that the Commission should not approve the ENERGY STAR New Homes Program because some program details are yet to be determined and because some

requirements are not specifically stated. Epstein St. 1, p. 15. PPL Electric acknowledges that there are details yet to be determined regarding the ENERGY STAR New Homes Program, especially improvements to standardize the requirements of this program statewide. However, this does not warrant the total rejection of the program. The basic elements are outlined in the EE&C Plan. PPL Electric Exhibit 1, pp. 68-73. Moreover, the program is based on the well established U.S. Environmental Protection Agency's ENERGY STAR® New Homes program. Participants will work within the framework of the Residential Energy Services Network (RESNET) accredited Home Energy Rating System (HERS) to receive a qualifying HERS rating. These government programs are well established and form a solid foundation and model for PPL Electric's program. Furthermore, PPL Electric intends to follow the ENERGY STAR requirements established by the U.S. Environmental Protection Agency. Those requirements are widely available and are posted at www.energystar.gov.

f. Renewable Energy Program

The SEF recommends that PPL Electric should include a solar domestic hot water heating to its list of measures for its Renewable Energy Program. SEF St. 1, p. 15. Mr. Epstein also advocates for the inclusion of solar thermal devices. Epstein St. 1, p. 17. PPL Electric witness Haeri testified that PPL Electric did evaluate solar domestic hot water heating as a potential measure for its EE&C Plan, but this analysis determined that this measure was far less cost-effective from a TRC and participant perspective than photovoltaic systems and ground-source heat pumps. PPL Electric St. 2-R, pp. 4-5. Specifically, Dr. Haeri noted that the measure was not included in the EE&C Plan due to a low TRC and high incremental cost combined with the necessary balancing of Act 129 goals and budget restrictions but that, as part of the ongoing management of its EE&C Plan, PPL Electric will continue to evaluate other measures. *Id.* This statement is in accord with the PPL Electric EE&C Plan which states that, "...the renewable

energy program will initially focus on solar PV systems and ground-source heat pumps, but PPL Electric may expand the program to include more customer classes and technology options...”. PPL Electric Exhibit 1, p. 76. However, given the poor cost/benefit ratio of the solar thermal measures and the other restrictions of Act 129, particularly the spending cap, it would be unwise to implement SEF’s proposal at this time as it would reduce the cost effectiveness of the portfolio and, depending on the number of measures installed, could jeopardize PPL Electric’s ability to comply with Act 129. Importantly, SEF has provided no evidence as to how its high-cost/low-benefit proposed program could be incorporated into PPL Electric’s Plan without jeopardizing compliance with Act 129. It is PPL Electric’s obligation to comply with Act 129, not SEF’s. SEF’s proposal should be rejected.

g. Direct Load Control Program

(1) Air Conditioning Settings

Mr. Epstein avers that PPL Electric’s control of customers’ air conditioning settings could lead to uncomfortable temperature levels in customer homes. Epstein St. 1, p. 18. In response, both PPL Electric and its Direct Load Control CSP, as described in the EE&C Plan, will use technologies that prevent large temperature swings. PPL Electric Exhibit 1, p 80. In addition, direct load control of air conditioning (and other equipment) is voluntary and has been successfully implemented to reduce peak loads without adversely affecting comfort or indoor health. *See e.g., Commission’s Electric Power Outlook Report, July 2009, p. 24 (discussing a direct load control program in the Commonwealth).* It is also important to note that all programs are voluntary for customers. If participants are unhappy with the direct load control program, they may leave it at any time and any payment will be pro-rated for those months during which they participated.

(2) Post-2013 Direct Load Control Costs

SEF witness Costlow and OCA witness Hahn assert that PPL Electric incorrectly determined the TRC for its load curtailment and direct load control programs by funding the program beyond the 2012 expiration of the program. SEF St. 1, p.6; OCA St. 1, p.11. At the hearing, PPL Electric witness Haeri confirmed that PPL Electric should not have included benefits of the load control and curtailment programs beyond 2013 in its TRC analysis. PPL Electric St. 2-R, p. 2. Further, Dr. Haeri testified that PPL Electric has corrected its TRC model and the corrected estimated TRC ratio is 0.23 (initial ratio was 0.97) for the direct load control program and is 0.7 (initial ratio was 2.9) for the load curtailment program. *Id.* In addition, Dr. Haeri noted that the change in TRC for these load control programs results in a portfolio TRC of 2.80 (initial TRC was 2.89) and continues to easily meet the cost-effectiveness requirement of the Act.

(3) Demand Response CSPs

ClearChoice states that PPL Electric's Load Curtailment Program will result in a single CSP providing demand response services and requests that there be multiple demand response providers. ClearChoice St. 1, pp. 6, 10. As a caveat to its request for multiple demand response CSPs, ClearChoice requests that the multiple CSP be treated in a competitively neutral manner and, for example, be provided the same equipment. ClearChoice St. 1, p. 10. Moreover, and also connected to the request for multiple demand response CSPs, ClearChoice advocates for a cap to be placed on the amount of demand response a single provider can serve. ClearChoice St. 1, p. 10.

In response to the request for multiple demand response CSPs PPL Electric witness Cleff stated that "PPL Electric will not limit this program to a single CSP." PPL Electric St. 1-R, p. 13. The Company plans to solicit bids from demand response CSPs to provide blocks of firm

curtailable load and/or direct load control. *Id.* Witness Cleff further stated that the size of these blocks has not yet been determined, but the blocks are expected to be between 5 MW and 25 MW in size and that “PPL Electric plans to select the most cost-effective combination of these firm load reduction blocks.” *Id.* This commitment by PPL Electric addresses the requests for multiple demand response CSPs and the granularity of the blocks to be bid on by the CSPs alleviates the need for any cap amount of demand response a single provider can serve because the limited size of the blocks will allow for robust bidding process from entities of all sizes and means.

With regard to competitive neutrality, PPL Electric does not intend to favor any demand response CSP over another, and it would be difficult to do so because of the turnkey nature of the related programs. For example, a demand response CSP specializing in load curtailment will provide turnkey services to manage and administer the program and will deliver firm load reductions to PPL Electric. PPL Electric Exhibit 1, § 3.4 (Load Curtailment Program). Moreover, under this program the CSP installs necessary systems at a customer’s site. *Id.* Therefore, because of the turnkey nature of this program it will be difficult for PPL Electric to favor one CSP over another by providing favorable equipment (as noted by ClearChoice) because the equipment decisions are made by the turnkey CSP.

(4) Coordination of the Load Curtailment Programs with PJM’s Demand Reduction Programs

ClearChoice Energy and Richards request that PPL Electric coordinate its load curtailment programs with PJM’s programs and not require customers to leave PJM’s programs and use PPL’s CSP(s) exclusively. ClearChoice St. 1, p. 6; Richards St. 1, p. 4. PPL Electric witness Cleff testified that the Company’s load curtailment program is independent from PJM’s programs and, therefore, customers are free to participate in PPL Electric’s program only, PJM’s

programs only, or both. PPL Electric St. 1-R, p. 13. In addition, Mr. Cleff testified that a customer that has an existing contract with a PJM curtailment service provider other than PPL Electric's CSP may participate in PPL Electric's program alone, a PJM program alone or may participate in both. Tr. 169. Further, Mr. Cleff stated that if a customer is a PJM member and acts as its own curtailment service provider, the customer is allowed to participate in PPL's program. *Id.*

h. Time of Use Rates

The SEF avers that PPL Electric should not propose a TOU program because the Company had previously agreed to implement a TOU program in a prior proceeding. SEF St. 1, pp. 9-10. In addition, the SEF recommends that PPL Electric's proposed TOU Program be rejected because PPL Electric has failed to substantiate the benefits. SEF St. 1, p. 10. Both of the SEF's arguments are without merit.

First, as explained in PPL Electric's EE&C Plan, the TOU program is an integral part of PPL Electric's strategy for meeting the peak demand reductions required by Act 129. PPL Exhibit 1, pp. 84-88. As acknowledged by Mr. Costlow, PPL Electric filed a petition on July 31, 2009 to implement a new optional TOU program for all of its customers.⁹ SEF St. 1, p. 9. Mr. Costlow asserts that PPL Electric should not propose a TOU program in its EE&C Plan due its prior agreement to file such a program.¹⁰ SEF St. 1, pp. 9-10. This argument makes no sense. The SEF appears to ignore the fact that pursuant to Act 129, PPL Electric was required to make a TOU filing by January 1, 2010. 66 Pa.C.S. § 2807(f)(5). In addition, TOU rates are consistent

⁹ *PPL Electric Utilities Corporation Supplement No. 71 to Tariff Electric Pa. P.U.C. No. 201, Issued July 31, 2009, Effective for Service On and After January 1, 2010*, Docket No. R-2009-2122718. The filing provides extensive information regarding PPL Electric's proposed TOU rate program and PPL Electric requests that the Commission take administrative notice of this filing.

¹⁰ In its most recent default service proceeding PPL Electric agreed to file a year-round TOU program in mid-2009. *Petition of PPL Electric Utilities Corporation for Approval of a Default Service Program and Procurement Plan for the Period January 1, 2011 Through May 31, 2013*, Docket No. P-2008-2060309.

with the objective of Act 129 – to provide tools to customers to use energy more wisely. It would be inconsistent and not at all cost effective to require that PPL Electric provide the tools to its customers, but not be able to count the benefits provided by those tools. In addition, the SEF's proposal to preclude PPL Electric from counting the reductions garnered by its TOU program would only serve to penalize PPL Electric for being ahead of the curve on smart meter and TOU deployment. Moreover, as with other SEF proposals, SEF provides no explanation of any kind as to how PPL Electric would be able to comply with Act 129 demand reduction requirements without a TOU program.

Second, SEF ignores the fact that, consistent with Section 2806.1(b)(1)(i)(F) of Act 129, all costs and benefits in PPL Electric's EE&C Plan are estimates. 66 Pa.C.S. § 2806.1(b)(F). The actual values will be determined during the evaluation, measurement and verification process and verified by the Statewide Evaluator.

Mr. Epstein argues that the TOU proposal is premature and violates the terms of settlement in PPL Electric's Default Service proceeding at Docket No. P-2008-2060309. Epstein St. 1, p. 6. Mr. Epstein further notes that PPL Electric does not discuss the fact that it agreed to consider Mr. Epstein's "Green Weekend" rate proposal in the TOU proceeding. Mr. Epstein's assertions are unfounded. The EE&C Plan states that "[p]ursuant to the Commission-approved settlement at Docket No. P-2008-2060309, PPL Electric will make a separate filing for Commission approval of a Time of Use program for all eligible customers effective January 1, 2010. PPL Electric will endeavor to make this filing by July 31, 2009." PPL Electric Exhibit 1, p. 84. PPL Electric filed the new optional TOU program on July 31, 2009. Therefore, there has been no violation of the settlement. PPL Electric did agree, as part of that settlement, to consider Mr. Epstein's Green Weekend proposal in relation to the 2009 TOU filing. PPL Electric did not

address Mr. Epstein's Green Weekend proposal in the EE&C Plan because it had agreed to consider Mr. Epstein's proposal in the separate TOU proceeding. PPL Electric, in fact, did fully address Mr. Epstein's proposal in its 2009 TOU filing and has fully complied with the Default Service settlement.

i. Energy-Efficiency Behavior & Education

(1) Combine Residential Programs

OCA proposes that PPL Electric should combine its Energy Efficiency Behavior & Education program with the Residential Energy Assessment and Weatherization program. OCA St. 1, p. 2. PPL Electric disagrees and requests that each program remain separate. PPL Electric witness Cleff explained that each program, including Residential Energy Assessment and Weatherization, includes customer education that is specific to that program's focus. PPL Electric St. 1-R, p. 12. Further, Mr. Cleff described that the Energy Efficiency Behavior & Education program is intended to be separate from the advertising, promotion, and education provided in PPL Electric's specific energy efficiency and demand reduction programs, but that it will be coordinated with those efforts. *Id.* Moreover, PPL Electric witness Cleff testified that the elements of the Energy Efficiency Behavior & Education program could be treated as individual measures under another program such as the Audit & Weatherization program. *Id.* However, PPL Electric chose to keep it separate because many of those elements are expected to apply beyond audit and weatherization and beyond the residential customers who are eligible for that program, and because PPL Electric believes that it is important to track and analyze behavioral changes separately from "hardware" actions (new equipment, weatherization, etc.). *Id.* Therefore, PPL Electric requests that these programs remain as separate programs.

(2) The Distinction Between Education and Marketing

Mr. Epstein argues that EE&C Plan does not properly distinguish between education and marketing, and complains that PPL Electric had not hired a certified consumer educator. Epstein St. 1, p. 6. PPL Electric notes that references to “marketing” or “education” in PPL Electric’s Act 129 EE&C Plan are directly related and limited to Act 129 energy efficiency programs. PPL Electric defines “marketing” in its EE&C Plan as those activities directly related to promotion of a specific program or programs and “education” as general promotion of energy efficiency actions and behaviors, such as those referred to in PPL Electric’s Energy Efficiency Behavior and Education Program. Regarding the hiring of a “certified consumer educator,” Mr. Epstein does not define this term or explain the type of certification to which he is referring. Furthermore, PPL Electric is not aware of any Commission regulation or policy that requires the hiring of a “certified consumer educator.”

(3) Education Regarding the Elimination of Space Heaters

ACORN encourages PPL Electric to use the low-income programs proposed under Act 129 to target the elimination of space heaters in low-income customers’ properties as part of its EE&C Plan. ACORN St. 1, p. 10. As noted by PPL Electric witness Cleff, PPL Electric will consider this as part of its education targeted to low-income customers. PPL Electric St. 1-R, p. 14-15. However, PPL Electric does not believe that this approach should be mandated. *Id.*¹¹

j. Low-income WRAP

(1) Multi-Family Dwellings

ACORN states that the Commission should work with PPL Electric to “ensure that low-income households living in multi-family dwellings and in master meter situations receive

¹¹ PPL Electric St. 1, p. 15, line 2, contains a typographical error. To clarify its intent the Company reiterates that it does not believe that the space heater approach proposed by ACORN should be mandated by the Commission.

sufficient treatment under Act 129.” ACORN St. 1, p. 14. Mr. Epstein raises concerns about the situations where there is a multi-unit building with a single meter and the recipients of the incentives under the Low-income WRAP. Epstein St. 1, p. 20. PPL Electric’s EE&C Plan addresses this concern and believes no further mandate from the Commission on this issue is required at this time. The EE&C Plan identifies that a key challenge to an effective low-income WRAP Program is a situation where a multi-unit building has a single meter and the landlord, not the customer, will benefit from energy reductions. PPL Electric Exhibit 1, § 3.2.1. To be clear, low-income customers are intended to receive the benefits of this program. As such the EE&C Plan further provides that the Company will “[w]ork with landlords to pass efficiency benefits on to customers.” *Id.* Moreover, eligibility requirements for the low-income WRAP program are low-income residential rate class customers in single family buildings or multifamily buildings with 50% or more low-income residents. PPL Electric Exhibit 1, § 3.2.1. For low-income multifamily units, PPL Electric intends to focus on buildings where the units are individually metered and the tenants are customers. In Act 129 meetings with its WRAP contractors, the Company has requested that the contractors begin identifying multifamily buildings where the tenants are responsible for paying their electric bills. PPL Electric believes that the aforementioned commitments sufficiently address the concern raised by ACORN and Mr. Epstein, and that no further action on this issue is required by the Commission at this time.

(2) Low-Income WRAP and USP

Mr. Epstein states that he is concerned that existing Universal Service Programs (“USP”) will be attributed to low-income WRAP. Epstein St. 1, p. 20. PPL Electric’s Act 129 WRAP Program and associated costs are in addition to PPL Electric’s existing USP. Act 129 costs will be tracked and accounted for separately from the USP. The Company will develop and use cost

collecting numbers and codes to capture the costs associated with Act 129 programs and activities. *See* PPL Electric Exhibit 1, § 6.1.

k. Low-Income E-Power Wise

Mr. Epstein maintains that PPL Electric failed to identify the nature of Low-Income E-Power Wise Program's incentives and other factors such as the forecasted average cost per customer. Epstein St. 1, p. 22. This assertion is incorrect. The average cost per customer for this program can be obtained from the information in Table 67 (E-Power Wise Projected Participation), and Table 68 (Summary of Projected Benefits, Costs, and Cost-Effectiveness) in the EE&C Plan. PPL Electric Exhibit 1, § 3.2.1. These tables indicate that there are 7,200 estimated participants in E-Power Wise Program and the total estimated program cost (direct utility cost) is \$542,000. Therefore, the estimated cost per participant is approximately \$75 ($542,000/7,200 = \75.28). Mr. Epstein also expresses concern that customer education funds will be used to fund the Low-Income E-Power Wise Program. Epstein St. 1, p. 21. This concern is unfounded. No funding other than EE&C Plan funds will be used for Low-Income E-Power Wise Program.

l. Commercial and Industrial Custom Incentive Program

(1) The Whole Facility Approach

DEP avers that all Pennsylvania EDCs should be required to implement a uniform state-wide "whole building" program and that the EE&C Plan would prohibit customers from using "guaranteed savings contracts" offered by energy services companies. DEP St. 1, p. 17. PPL Electric looks forward to cooperating with DEP regarding conservation matters and that DEP's whole building concept could be beneficial to customers and increase the "depth" of savings achievable in a single facility. It is PPL Electric's position that each customer should have the opportunity to choose the type of energy efficiency measures that are most appropriate for that

customer. PPL Electric St. 1-R, pp. 9-10. PPL Electric's EE&C Plan allows customers to choose individual measures such as lighting, controls, and HVAC equipment or to select a "whole facility" approach through its Custom Incentive Program, or by applying many-to-all measures in the Efficient Equipment Program, to maximize the depth of savings. *Id.* Moreover PPL Electric's EE&C Plan does not prohibit customers from using energy service companies and, in fact, the Custom Incentive Program supports the "guaranteed energy savings contracts" offered by energy services companies. PPL Electric St. 1-R, p. 10.

(2) Key Account Managers

With regard to the Commercial and Industrial Custom Incentive Program, Mr. Epstein argues that Key Account Managers are sales representatives and they should not be used in the EE&C Plan. Epstein St. 1, p. 24. Mr. Epstein is in error. PPL Electric's Key Account Managers serve as liaison to and a single point of contact for PPL Electric's large industrial and commercial customers. Key Account Managers are a large customer's primary contact for all PPL Electric and electricity service issues and billing inquiries. Their primary role is to assist and advise large customers about many electric-related issues, including how to improve their energy efficiency, how to shop for electricity, how to reduce their electric costs, questions about their bill, how to resolve reliability or power quality issues, arrangements for new or discontinued service, and many other issues. They are not sales representatives and promotion of Act 129 programs designed to help customers reduce their energy usage and demand is consistent with the key account manager's role.

m. HVAC Tune-Up Program

FDSI states that PPL Electric's EE&C Plan is well-designed, comprehensive and cost-effective and commends PPL Electric for tailoring its program design to improve HVAC efficiency. FDSI St. 1, p. 22. Moreover, FDSI verified that the number of measures proposed by

PPL Electric is consistent with the expected energy consumption savings. *Id.* FDSI further states that the HVAC Tune-up Program proposed by PPL Electric comes the closest to achieving the essential elements of an effectively designed HVAC efficiency program and, therefore, provides a good, concrete example of how program should be designed, in most respects. FDSI St. 1, p. 21. FDSI, however, recommends that PPL Electric increase the estimated participation level for the HVAC Tune-up Program. *Id.* at p. 23.

Again, there are likely many possible combinations of energy efficiency measures, programs, estimated customer participation levels, etc. to cost-effectively meet the Act 129 reduction targets. None of these combinations is expected to be viewed as the “perfect solution” by every stakeholder and it is impractical to include every possible additional measure in its Plan or for PPL Electric to continue to iterate/evaluate various combinations of measures and programs. This is especially true where a substantial change is proposed by a party advancing its own narrow self interest. FDSI is in the HVAC diagnostic technology business and would directly benefit from the expansion of the HVAC Tune-up Program by selling more of its HVAC related products. *See* FDSI St. 1, pp. 4-5.

PPL Electric does not believe it is necessary or appropriate to increase the estimated participation level for the HVAC Tune-up Program at this time. However, as noted by PPL Electric witness Cleff stated that, “[d]uring its on-going management of the Plan, PPL Electric will monitor all participation levels compared to its Plan.” PPL Electric St. 1-R, p. 14. Moreover, “[i]f the actual participation level will likely exceed the estimated level in the Plan for the HVAC Tune-up Program, PPL Electric would likely consider making the program available to more participants because this program has a very high benefit-to-cost ratio.” *Id.*

n. Load Curtailment Program

Mr. Epstein raises concerns about the Load Curtailment for Government/Non-Profit Sector and avers that most non-profits will not be able to participate. Epstein St. 1, p. 26. Mr. Epstein's concerns are unfounded. Non-profits are able to participate in Load Curtailment for Government/Non-Profit Sector. PPL Electric Exhibit 1, § 3.5. PPL Electric's Load Curtailment Program targets governmental/non-profit customers with monthly demand of at least 100 kW who are able to curtail at least 15% or 30 kW (whichever is greater) of average load during peak summer periods. *Id.* Tenants in rental properties may participate with approval from the property owner. *Id.* Due to the minimum demand criteria, the Plan includes this program for governmental/non-profit sector customers, however, any customer that meets the program eligibility requirements may participate and their cost will be accounted for in their applicable customer segment. *Id.*

8. New Programs

This section addresses new programs that parties recommended should be included in the EE&C Plan.

a. On-Bill Financing

SEF witness Costlow recommends that PPL Electric add an on-bill financing program to its EE&C Plan in order to finance customer energy efficiency improvements. SEF St. 1, p. 12. PPL Electric objects to this recommendation for several reasons. As explained by PPL Electric witness Cleff, by his recommendation Mr. Costlow appears to assume that customers would not implement energy efficiency projects in the absence of additional PPL Electric financing. PPL Electric St. 1-R, p. 3. However, PPL Electric has designed its EE&C Plan to achieve its projected customer participation levels (and its reduction targets) without the additional cost and complexity of a customer financing program. Second, as the SEF admits in its testimony, there

are entities other than EDCs who currently provide financing for customers, including low-interest financing for energy efficiency projects. SEF St. 1, p. 12. In fact, SEF itself indicates that it successfully provides this type of financing.

In rebuttal, PPL Electric witness Cleff explained that financing should continue to be provided by those companies who have that core business, focus, infrastructure, and expertise and not EDCs. PPL Electric St. 1-R, pp. 3-4. Included in the list of potential financing companies is the SEF itself, numerous Energy Services Companies (“ESCOs”), Keystone HELP, and banks. The Commission should not require PPL Electric to “compete” with these entities. Moreover, the SEF’s proposal would require that PPL Electric incur additional expenditures and infrastructure to implement and manage on-bill financing, especially given the complex credit, accounting, regulatory (utility and financial) issues involved. SEF’s proposal should be rejected.

b. Smart Meters

DEP stresses the importance of the early deployment of smart meters to a successful energy efficiency and conservation program. DEP St. 1, p. 25-26. Although DEP acknowledged that PPL Electric has installed smart meters throughout its territory, it recommends that PPL Electric should revise its Plan and agree to commit itself to optimizing the use of its smart meters for the benefit of its customers on an expedited basis. *Id.*

PPL Electric has been a leader in the implementation of smart meter technology in Pennsylvania.¹² In the Spring of 2002, PPL Electric implemented an advance meter pilot to approximately 10,000 customers in the Allentown/Bethlehem, Pennsylvania area. Under the

¹² PPL Electric requests that the Commission take administrative notice of the Company’s efforts with regard to smart meter implementation. *See e.g., Petition of PPL Electric Utilities Corporation for Approval of a Smart Meter Technology Procurement and Installation Plan*, Docket No. M-2009-2123945, filed August 14, 2009; *PA PUC v. PPL Electric Utilities Corporation*, Docket No. R-20072155, order entered December 6, 2007 (cost related to advanced meters were reflected in the Company’s 2007 filing for an increase in distribution rates); *PA PUC v. PPL Electric Utilities Corporation*, Docket No. R-00049255, order entered December 22, 2004 (benefits and savings associated with PPL Electric’s advanced metering efforts were reflected in the determination of the Company’s distribution base rates).

pilot, PPL Electric tested the technical capabilities of its smart meter equipment and established procedures for system-wide deployment of its advanced meter infrastructure (“AMI”) system. Later in 2002, PPL Electric began full scale deployment of its AMI system, and by September 2004 had installed smart meters for all of its metered customers. The PPL Electric AMI system consists of meters, communications, infrastructure, computer services and applications that allow the Company to remotely read the meters for all of its customers.

Beginning in 2005, the Company upgraded its AMI System through installation of a Meter Data Management System (“MDMS”). The MDMS provides for multiple advanced metering applications including: (1) a customer interface that allows customers to analyze their specific usage; (2) a data storage base that provides storage for two years of hourly reads from all customers; (3) a billing system that allows hourly billing; (4) an energy settlement system that allows electric generation supplies to serve customers based on actual hourly usage; and (5) advanced load analysis capabilities.

In furtherance of its efforts to utilize smart meters, and pursuant to Act 129 (66 Pa. C.S. § 2807(f)), on August 14, 2009 at Docket No. M-2009-2123945, PPL Electric filed a petition seeking approval of its Smart Meter Technology Procurement and Installation Plan (“Smart Meter Plan”). Under its Smart Meter Plan, the Company proposes to study, test and pilot applications that enhance and expand upon the capabilities of PPL Electric’s current AMI. Therefore, while PPL Electric concurs with DEP about the importance of smart meters, PPL Electric’s Smart Meter Plan is currently pending before the Commission at Docket No. M-2009-2123945 and PPL Electric believes that issues related to smart meters should be addressed in that proceeding.

c. Distributed Generation

DEP recommends that the Commission prohibit distributed generation at a customer's facility to achieve peak load reductions. DEP St. 1, p. 23. This recommendation should be rejected. PPL Electric has no direct control over customer actions regarding the use of back-up generation. PPL Electric St. 1-R, p. 11. If customers participate in a load curtailment program and interrupt their load, any customer-sited generation that is behind-the-meter is the customer's decision and will reduce their electricity peak demand from the EDC. *Id.* DEP's concern appears to be with the emission standards for distributed generating units and not with PPL Electric's Plan. PPL Electric expects all customer-sited generation to have the proper environmental permits and to comply with those permits. *Id.*

d. Fuel Substitution - Electric to Gas

(1) The Commission Has Previously Considered And Rejected UGI's Request To Require That EDC's Include Electric to Gas Fuel Switching Programs In Their EE&C Plans

In its direct testimony UGI claims, "[a]s natural gas distribution companies ("NGDCs") that also procure gas for core market customers in wholesale natural gas markets in their capacity as suppliers-of-last-resort", to have several direct interests in this proceeding including, (1) improving PPL Electric's EE&C Plan to avoid "the unintended effect of influencing consumer appliance replacement decisions by artificially encouraging customers to choose an electric appliance eligible for an Act 129 rebate in lieu of a more efficient natural gas appliance;" and (2) suggesting that PPL Electric's EE&C Plan can be improved by expanding the rebates for the installation of natural gas equipment. UGI St. 1, p. 5. PPL Electric previously addressed UGI's first argument above in Section V.A.7. PPL Electric will now address UGI's arguments in

support of the inclusion of specific program measures to encourage customers to convert from electric to natural gas appliances.

At the outset PPL Electric notes that UGI does not assert that PPL Electric's EE&C Plan will not meet the Act 129 requirements. Indeed, UGI witness Raab states that PPL Electric's proposed programs "may achieve energy savings" but criticizes that plan for not encouraging direct end use of natural gas which, in Mr. Raab's opinion, would improve the Plan under the Commission's *TRC Order*. UGI St. 1, p. 12. Despite prior Commission determinations rejecting its attempts to insert the complex topic of fuel switching into EDCs' EE&C plans, UGI again advocates that the Commission require that PPL Electric's EE&C Plan be substantially revised to include broad based fuel-switching programs. The Commission in its *Implementation Order* determined that it would use the TRM previously adopted by the Commission in its implementation of the *Alternative Energy Portfolio Standards Act* at Docket No. M-00051685 (order entered on May 3, 2005) to assist in the Commission's evaluation process to monitor and verify EDC EE&C plan data.¹³ Specifically, the Commission stated that the TRM would be required to be updated and expanded to fulfill the requirements of the EE&C provisions of Act 129.¹⁴ Further, the Commission stated that it would update the TRM in order to allow the EDCs ample time to incorporate any TRM updates in their EE&C plans.¹⁵ By order entered June 1, 2009, the Commission issued an expanded and updated TRM for use in implementing Act 129.¹⁶

In its *2009 TRM Order* the Commission specifically addressed the issue of natural gas fuel switching. The Commission received comments from UGI and others supporting the inclusion of measures that count energy and demand savings when electric equipment is

¹³ *Implementation Order* at 13; 66 Pa. C.S. § 2806.1(a)(2).

¹⁴ *Implementation Order* at 13.

¹⁵ *Implementation Order* at 13-14.

¹⁶ See *2009 TRM Order*.

removed and replaced with equipment that uses natural gas.¹⁷ However, the Commission rejected proposals to include natural gas fuel switching in the 2009 TRM, stating:

The Commission recognizes that fuel switching is a complicated topic that will require additional time and effort to fully address. As the TRM will provide vital guidance to EDCs in developing their EE&C plans, which are due to be filed by July 1, 2009, there is not enough time to convene a working group to address all the related issues, fuel switching will not be included in this TRM.¹⁸

Instead, in its *2009 TRM Order* the Commission directed the establishment of a fuel-switching working group to identify, research and address issues raised by including fuel-switching measures in a future TRM and also directed that the working group provide a report to the Commission, with recommendations by June 1, 2010.¹⁹

The Commission's refusal to include fuel switching measures into the TRM was the third time that the Commission rejected UGI's advocacy for the use of natural gas equipment as a replacement measure for existing electric equipment in EDC EE&C plans. In response to the Commission's Additional Questions related to the Commission's draft *Implementation Order*, UGI asserted that "the Total Resource Cost Test can evaluate the effectiveness of a fuel switching program to meet the goals of Act 129."²⁰ In addition, UGI advocated that the Commission update the TRM to include common fuel switching measures "to make sure that the TRM is available as a guide to facilitate the consideration of fuel substitution measures in evaluating Act 129 compliance programs".²¹ Further, in its Reply Comments to the Commission's draft *Implementation Order* UGI argued that the "Commission should develop projected costs of natural gas and propane which could be used in evaluating the cost

¹⁷ UGI Comments filed March 12, 2009.

¹⁸ *2009 TRM Order* at 9.

¹⁹ *Id.* at Ordering Paragraph 5.

²⁰ UGI Comments filed December 8, 2008 at 2.

²¹ *Id.*

effectiveness of fuel substitution measures in meeting Act 129 requirements under the Total Resource Cost Test.”²²

Consistent with its resolution of the TRM, the Commission determined not to take up the issue of fuel switching or fuel substitution in its *Implementation Order*. It is clear that the Commission has set aside the issue of natural gas fuel switching at this time. Instead, the Commission has requested that this complex matter be initially addressed by the fuel switching working group and that the Commission be provided with a report from this working group by June 1, 2010. PPL Electric requests that Commission once again reaffirm its prior determinations and reject UGI’s proposals to require that PPL Electric include electric to natural gas programs in its EE&C Plan in advance of the report required by the Commission-established fuel-switching working group.

It is important to note that no other party in this proceeding supports UGI’s position, and indeed, the OCA and the DEP have stated their opposition to the inclusion of broad based fuel switching. OCA witness Hahn stated plainly that, “[f]uel switching is not a measure that contributes to the efficiency of the underlying electric equipment in the home.”²³ OCA St. 1, p. 19. Further, Mr. Hahn noted that “incentivizing a customer of one utility to switch to a different fuel source supplied by another utility raises many policy issues and questions as to what is in the customer’s best interest that may require further discussion.” *Id.* In addition, Mr. Hahn correctly noted a number of additional issues raised by UGI’s proposals:

Resolving this issue would likely result in considerable debate. I suspect this issue will change over time as gas prices and electric prices fluctuate. At any point in time, the answer as to which “fuel is more efficient” may change. Furthermore, cross subsidization issues are likely to emerge. All

²² UGI Reply Comments filed December 19, 2008 at 3.

²³ Although the OCA is opposed to fuel switching generally, the OCA’s witness indicated his support for PPL Electric’s Efficient Equipment Incentive Program, provided that it is limited to PPL Electric’s Rate Schedule RTS customers. OCA St. 1, p. 20.

of PPL residential customers will pay for the fuel switching program, but only those who also purchase natural gas service can benefit. This creates inequities in the opportunity of each customer to fairly benefit from energy efficiency. *Id.*

Similarly, DEP witness Guttman states that:

Fuel-switching is not a conservation measure. The Department opposes any measures that would promote consumers switching from electric consumption to gas or other fuels as a means to capture energy reduction. EDCs should instead focus on programs or measures that reduce base load consumption through conservation and source reduction strategies or use renewable sources of energy.

DEP St. 1, p. 24. Therefore, the DEP states that it is opposed to all of UGI's fuel switching programs. DEP witness Guttman provides the following explanation of the DEP's opposition:

As the Commission has recognized, Act 129 was not designed to be a fuel switching bill. That is, Act 129 did not intend to promote the use of one type of fuel over another as a means of reducing electric consumption. Act 129 was designed to reduce electric consumption through conservation measures. The Department believes strongly that no money expended under an EEC Plan that would promote fuel switching as a means to reducing electric consumption.

The opposition of OCA and DEP to UGI's proposed broad based fuel switching programs highlight the complexity involved in evaluating broad based fuel switching programs and the important policy considerations at issue. These arguments reflect the wisdom of the Commission's decision to set aside the issue of fuel switching to a separate proceeding and permit a thorough analysis of this complex issue.²⁴

(2) There Are Several Problems With UGI's Analysis Supporting Its Proposed Fuel Switching Programs

²⁴ Moreover, although UGI claims that it is imperative that the Commission include fuel switching measures in EDC EE&C plans now, as stated by the Commission in its *Implementation Order*, the EE&C plans are "evolutionary in nature as the Act provides for modification of plans after approval." *Implementation Order* at 10; See 66 Pa. C.S. §§ 2806.1(a)(6), 2806.1(b)(2) and 2806.1(b)(3). Therefore, UGI and other interested parties will have ample opportunity to recommend modifications to the EE&C plan during PPL Electric's annual report documenting the effectiveness of its plan, energy savings measurement and verification. *Implementation Order* at 13; 66 Pa. C.S. § 2806.1(i)(1). Therefore, UGI's stated concern that the EE&C plan will be in place for an extended period of time with limited opportunities for plan review and adjustment is simply incorrect.

As addressed in the previous section, PPL Electric opposes UGI's broad based fuel switching programs in this proceeding as these issues were previously addressed and set aside by the Commission for consideration by its fuel switching working group. However, if the Commission decides to evaluate UGI's proposals in this proceeding, there are numerous problems with UGI's fuel switching programs.

At the outset, PPL Electric witness Haeri noted that he was not aware of any jurisdiction where an electric utility was directed by regulators to provide incentives for electric to gas conversion.²⁵ PPL Electric St. 2-SR, p. 5. Further, Dr. Haeri identified four problems with UGI's proposal to require that PPL Electric to include electric to natural gas conversion programs in its EE&C Plan. Specifically, Dr. Haeri testified that: (1) adding fuel conversion measures in the EE&C Plan at this juncture would require substantial additional information, particularly on gas availability and gas avoided costs which are not available, and involve complex regulatory policy, and economic issues; (2) improving energy efficiency with fuel conversion is contradictory because it would result in customers reducing their electric use, but increasing their consumption of natural gas; (3) implementing fuel conversion would likely promote inter-fuel competition; and (4) encouraging conversion to gas may expose PPL Electric's customers to gas price volatility.²⁶ PPL Electric St. 2-SR, pp. 2-3.

²⁵ During cross-examination UGI introduced UGI Cross-examination Exhibit No. 1 which is labeled, *Final Report, Comprehensive Assessment of Demand Side Resource Potentials*. Tr. 203. By introducing this report it appears that UGI seeks to challenge PPL Electric witness Haeri's criticisms of UGI's broad based fuel switching programs based upon Dr. Haeri's prior work on behalf of Puget Sound Energy. UGI's arguments are without merit as a review of the Puget Sound study clearly shows that PPL Electric and Act 129 are substantially different than Puget Sound Energy and Washington State's biennial integrated resource planning. For example, Puget Sound Energy is a combination electric and natural gas utility.

²⁶ As to the issue of price volatility, Dr. Haeri noted that since 2000, electricity prices have gone up by less than 30% nationally. However, in the same time period, Pennsylvania's gas prices have risen by nearly 75%. This price volatility is not inconsequential - using coefficient of variation (CV) as a measure of price risk, the CV of risk for electric rates is 0.08 and almost 0.24 for gas (three times larger than electricity) in the same period. *Id.*

In addition, much of UGI's support for broad-based electric to gas fuel switching is based on a "source vs. site" argument that essentially argues that the use of electricity is inefficient compared to natural gas due to losses from generation to point of use. UGI St. 1, pp. 42-45. PPL Electric witness Haeri explained that Mr. Raab's analysis is based on several technical assumptions that may no longer be valid. PPL Electric St. 2-SR p, 4. Specifically, Dr. Haeri testified that recent innovations in heat pump technology have significantly shifted the balance of efficiency toward heat pumps when compared with competing gas space heating and water heating equipment. *Id.* Specifically, Dr. Haeri testified that heat pump water heaters generally are rated at an energy factor (EF) of 2.2, or 220 percent efficiency. *Id.* However, the federal efficiency standard for gas water heaters is only about 60%. *Id.* Therefore, the electric heat pump water heater would be a more energy efficient option as long as power is generated at an efficiency of at least 28 percent ($60\% / 220\% = 28\%$). Similarly, Dr. Haeri's analysis suggests that an electric heat pump would be the better alternative from the source energy point of view where power is produced with an efficiency of at least 30 percent. Therefore, even if Mr. Raab's argument that electricity retains approximately 30 percent of its energy through the "source-to-site" cycle, electric heat pumps for both water heating and space conditioning would be at least as efficient from a source energy point of view as the gas alternatives. These simple analyses indicate that the source energy argument for conversion to natural gas is not nearly as compelling as it might have once been.

Further, UGI witness Raab asserts that PPL Electric's analysis is erroneous because it ignores aspects of the California Standard Practice Manual. UGI St. 1, p 25. Specifically, UGI witness Raab objects to the fact that future operating costs for natural gas were omitted from the TRC analysis of the fuel conversion option for PPL Electric's Rate Schedule RTS customers. *Id.*

Although PPL Electric agrees that this omission exists and that the Commission's analysis should be based on a full life-cycle cost of the gas furnace, these costs were not included for two reasons: (1) the Commission's *TRC Order* did not specify what avoided costs for gas should be used; and (2) the fuel conversion program for Rate Schedule RTS customers proved cost-effective with a TRC benefit-to-cost ratio of 3.64 to 1. And, in any event, as noted by Dr. Haeri, PPL Electric's analysis indicates that the program would continue to be cost-effective even when the additional gas fuel costs are included. Moreover, given the small number of projected conversions in the Plan, the revised analysis will have no material effect on the Plan's TRC results. PPL Electric St. 2-R, p. 8.

Moreover, UGI's proposals to add substantial broad based fuel switching programs to PPL Electric's EE&C Plan pose a very significant risk to PPL Electric's ability to meet its Act 129 requirements. Specifically, although UGI's proposed programs may result in customers reducing their electric usage, the programs will not contribute to PPL Electric meeting its Act 129 peak load reduction requirements due to the fact that the presumed savings will primarily accrue during the Winter (heating season), which is outside the designated 100 Summer peak hours. Indeed, if PPL Electric were required to implement UGI's broad based fuel switching programs, PPL Electric would need to shift a significant amount of its EE&C Plan expenditures to encourage customers to convert from electric to natural gas or significantly expand the demand response programs. Both of these would upset the balance of the portfolio of programs currently set forth in PPL Electric's EE&C Plan. Therefore, PPL Electric recommends that the Commission again reject UGI's premature arguments in favor of electric to natural gas conversion in this proceeding and allow the Commission-established fuel switching working

group to address this topic and report its findings to the Commission based upon the input of all interested stakeholders.

(3) UGI's Broad Based Fuel Switching Programs Raise Significant Policy Issues

As noted above, the Commission has already determined that the issue of fuel conversion is complex and therefore established a fuel switching working group to address that issue. In addition, as noted by Dr. Haeri, the Commission must consider whether encouraging customers to reduce electric consumption by increasing their use of natural gas is good public policy. Indeed, the Commission and the Pennsylvania General Assembly have recognized that energy efficiency is not limited to electricity but also includes natural gas. Specifically, Section 1505(b) of the Public Utility Code authorizes the Commission to order a public utility to establish a conservation and load management program as part of determining or prescribing safe, adequate and sufficient service. 66 Pa.C.S. § 1505(b). In addition, Section 1319 provides that the Commission shall permit the recovery of conservation or load management programs implemented by a natural gas utility that are found to be prudent or cost effective. 66 Pa. C.S. § 1319. Moreover, Pennsylvania's restructuring of the natural gas industry provided further evidence of Pennsylvania's support for natural gas conservation by providing for the establishment of a competitively neutral cost-recovery mechanism to recover an NGDC's energy conservation costs to recover fully an NGDC's costs for its required universal service and conservation programs. 66 Pa. C.S. §§ 2203(6) – (8).

The Commission's regulations and policy statements also provide for the Commission to monitor energy conservation efforts, ensure that conservation standards are met, and provide for recovery of cost-effective conservation programs. Specifically, the Commission's regulations require that NGDCs report on energy conservation initiatives through its universal service and

energy conservation reporting requirements. 52 Pa. Code § 62.5. In addition, the Commission requires that Pennsylvania NGDCs perform Annual Resource Planning Reports and these reports are required to contain information on the conservation and load management programs implemented by the NGDCs. 52 Pa. Code §§ 59.81-84. PPL Electric also notes that the Commission is currently reviewing comments related to rate decoupling to encourage energy efficiency and conservation²⁷ and that the Commission has approved a settlement authorizing an NGDC to include the costs of energy efficiency programs in its distribution base rates.²⁸

(4) Conclusion Regarding Fuel Substitution Electric to Gas

PPL Electric opposes UGI's request that the Commission require PPL Electric to include electric to natural gas conversion programs in its EE&C Plan in this proceeding. As recognized by the Commission, fuel conversion is a highly complex issue that requires further investigation by the Commission and all interested stakeholders. PPL Electric agrees with the Commission's decision to establish a separate working group to focus solely on the issue of fuel conversion and PPL Electric looks forward to actively participating in the working group and providing its input into the final report due to the Commission by June 1, 2010. This proceeding is to review PPL Electric's EE&C Plan and the programs it has developed to meet its Act 129 requirements. UGI has not presented any evidence that PPL Electric's EE&C Plan will not achieve PPL Electric's Act 129 requirements. Although UGI has offered new programs for inclusion in PPL Electric's EE&C Plan, it has not provided any analysis as to how these new programs will impact the carefully balanced portfolio presented by PPL Electric. Therefore, in light of the complexity of the topic of fuel conversion, the important policy decisions relative to promoting increased use of

²⁷ *Compliance of Commonwealth of Pennsylvania with Section 410(a) of the American Recovery and Reinvestment Act of 2009*, Docket No. I-2009-2099881 (Order entered May 6, 2009).

²⁸ *Pennsylvania Public Utility Commission v. PECO Energy Company – Gas Division*, Docket No. R-2008-2028394 (Order entered October 29, 2008).

natural gas and the Commission prior determination to set this issue for consideration in the fuel switching working group, PPL Electric requests that UGI's recommendations be denied.

B. COST ISSUES

1. Plan Cost Issues

a. The Two Percent (2%) Cost Cap

OSBA states in the Direct Testimony of witness Knecht that it reserves its right to legally contest whether Act 129 limits the Company to spending two percent (2%) of the base period revenues over the Plan life rather than allowing the Company to spend two percent (2%) of the base period revenues in each year of the Plan. OSBA St. 1, pp. 2-3. PPL Electric believes that the EE&C Plan and its cost limitations are consistent Act 129 and Commission precedent.

Section 2806.1(g) of Act 129 requires that the total cost of any EE&C Plan can not exceed two percent (2%) of the EDC's total annual revenues as of December 31, 2006. PPL Electric's total annual revenues for calendar year 2006 were approximately \$3 billion (\$3,075,068,824), and two percent of this amount is approximately \$61.5 million (\$61,501,376). In the *Implementation Order*, the Commission concluded that "[w]ith regard to the two percent limitation provision of the Act, we agree with PPL Electric that this limitation on the 'total cost of any plan' should be interpreted as an annual amount, rather than an amount for the full term of the Plan." *Implementation Order*, p. 34. PPL Electric has relied on the Commission's determination regarding the total cost. If this determination is altered it would seriously jeopardize the potential success of the Plan.

SEF and Mr. Epstein contend that the Commission should strictly apply the two percent (2%) cost recovery cap of \$61.5 million on an annual basis and reject PPL Electric's request to apply a total program cap of \$246 million (\$61.5 million multiplied by the four program years). SEF St. 1, p. 11; Epstein St. 1, p. 12. As noted in the PPL Electric's petition, to the extent

necessary, PPL Electric requests that the Commission approve cost cap on a total EE&C Plan basis and grant waiver from applying the cost cap on strictly an annual basis. Because many of its EE&C programs will require some time to ramp up, PPL Electric anticipates that spending in the early years of its Plan will be less than 2%, and spending in the later years will be greater. PPL Electric St. 4, p. 5. Notably, the total spending over the four years will not exceed the Company's cap of \$246 million. *Id.* Therefore, because of this spending fluctuation, it is appropriate to grant PPL Electric, to the extent necessary, a waiver of the strict annual cost cap of \$61.5 million and allow the Company to use \$246 million for the total cost of the Plan. Moreover, PPL Electric notes that the OCA and other stakeholders support PPL Electric's approach, especially to levelize the cost recovery, while recognizing that it is appropriate for actual expenditures to vary from year-to-year, especially during the ramp-up in the early years. *See e.g.*, OCA St. 1, p. 15; OTS St. 1, pp. 10-11.

b. Statewide Evaluator Costs

It is PPL Electric's view that the cost of the statewide Act 129 evaluator is not a cost of the Company's EE&C Plan and should not be subject to the spending limitations set forth in Act 129. PPL Electric, therefore, has excluded this cost in determining its two percent (2%) cost cap. OTS avers that the cost of the statewide evaluator should be included in the cost of the Plan. OTS St. 2, p.11. In support, OTS notes that the only cost exclusion from the two percent cost cap mentioned in Act 129 is for the Low-Income Usage Reduction Programs. *See* 66 Pa.C.S. § 2806.1(g). Moreover, OTS notes that the cost of the statewide evaluator should be classified as an administrative cost subject to the two percent cap. OCA and Mr. Epstein also believe that the cost of the statewide evaluator should be included in the two percent (2%) cost cap. OCA St. 1, p. 8; Epstein St. 1, p. 11. Additionally, OSBA reserves the right to legally contest whether PPL

Electric may recover the cost related to the statewide evaluator that is in excess of the Act 129 cap. OSBA St. 1, p. 3.

As previously indicated, PPL Electric believes that the cost for the statewide Act 129 evaluator is not part of the two percent (2%) cost cap. In establishing that cost cap, Act 129 specifically characterizes the cap as a limitation on the “total cost of any plan required under this section.” 66 Pa.C.S. § 2806.1(g). Because the cost of the statewide Act 129 evaluator is not a cost of PPL Electric’s EE&C Plan, as contemplated by § 2806.1(g), the evaluator’s cost is not subject to the limitation set forth in Act 129.

Although OTS attempts to characterize the statewide evaluator cost as an administrative cost under the *Implementation Order*, the Commission’s order makes no such determination. The *Implementation Order* (p. 33) defines administrative costs, as related EE&C programs, to include costs relating to plan and program development, cost-benefit analysis, measurement and verification, and reporting. The Commission makes no determination regarding the cost of the statewide evaluator. Therefore, PPL Electric has relied on the plain language of § 2806.1(g) which provides that the cost cap applies only to the EE&C Plan, and does not include the cost of the statewide evaluator.

It also is important to note that PPL Electric was required to estimate carefully the costs relating to all of its EE&C programs. *Implementation Order*, p. 33. However, the cost related to the statewide evaluator is not an amount that PPL Electric is able to quantify with any certainty. Even OTS’ witness Hubert conceded on cross examination that he is not sure if the Commission will incur further costs under Act 129, nor could he explain how these other costs incurred by the Commission should be recovered. Tr. 274-275. This level of uncertainty in the determination of the cost related to the Commission’s evaluation efforts supports the premise that this cost (*i.e.*,

statewide evaluator costs) should not be part of the cost cap. If OTS' proposal is adopted, it would mean that an unspecified amount under the cap would need to be removed from the proposed programs and be reallocated to the statewide evaluation cost.

Finally, the proposal to include the cost of statewide evaluator in the cost of the EE&C Plan is fundamentally inconsistent with the recovery of all other costs incurred by the Commission in fulfilling its statutory obligations. The cost of operating the Commission are recovered through statewide assessments imposed pursuant to Section 510 of the Public Utility Code. 66 Pa.C.S. § 510. The Commission will undoubtedly incur substantial costs in implementing Act 129, and these costs will be recovered through Section 510 annual assessments. There is nothing in Act 129 to indicate that the legislature intended to abandon the Section 510 process for the cost of a statewide evaluator hired by the Commission as part of its obligations under Act 129.

c. Administrative Costs

Mr. Epstein states that the administrative costs have not been identified and further avers that there is no indication as to whether the projected EE&C administrative costs include costs attributable to CSPs. Epstein St. 1, p. 26. This assertion is incorrect. The types of costs included in the administrative cost category are fully described in EE&C Plan. PPL Electric Exhibit 1, § 4.2.3. The EE&C Plan explains that administrative costs are all costs of the Plan except customer incentives. Administrative costs consist of PPL Electric labor and material (approximately 5%), CSP labor and material (approximately 9%), marketing and trade-ally expenses (approximately 5%) and QA/QC and EM&V (approximately 6%). *Id.* Costs in each category were developed based on the Company's best estimate and information available on energy-efficiency programs being offered by investor-owned utilities in other jurisdictions.

Therefore, the administrative costs have been identified and administrative costs include costs attributable to CSPs. *Id.*

2. Cost Allocation Issues

a. Allocation Error in Initial Filing Corrected

Several parties identified an inconsistency in the allocation of common costs. *See e.g.*, OTS St. 2, p. 6, OSBA St.1, p. 6. Specifically, although the allocation of common costs was correctly described in the Company's EE&C Plan, the actual allocation of common costs did not follow this approach. PPL Electric St. 4-R, p. 4. As explained in § 7.5 of PPL Electric's EE&C Plan, some costs will relate to EE&C programs that are applicable to more than one customer class or that provide system-wide benefits. PPL Electric Exhibit 1, § 7.5. The Commission directed EDCs to allocate those costs, and general administrative costs, using reasonable and generally acceptable cost-of-service principles that are commonly utilized in base rate proceedings. PPL Electric St. 4-R, p. 4. Consistent with this provision of the *Implementation Order*, PPL Electric proposes to allocate such costs using an allocation factor equal to the percentage of the EE&C costs directly assigned to each customer class to the total of the EE&C costs directly assigned to all customer classes. PPL Electric St. 4-R, p. 4. The Company provided corrected allocations and an explanation in PPL Electric Exhibit JMK-2.

b. Allocation of Common Costs

Act 129 requires that EE&C measures must be paid for by the same customer class that receives the energy and conservation benefits of those measures. 66 Pa.C.S. § 2806.1(a)(11). OSBA notes that the Company's proposal to allocate general Plan administrative costs in proportion to direct costs is a conceptually reasonable one. OSBA St. 1, p. 5. OSBA, however, takes issue with the allocation of common costs and maintains that common costs are probably best allocated among the rate classes based on standard or reasonable cost allocation methods for

the specific program in question. OSBA St. 1, p. 5. In the alternative, OSBA opines that the costs associated with specific individuals could be more accurately assigned based on the time the individual spends on each program. *Id.* OSBA concludes by recommending that both an assessment of the reasonableness of program administrative costs, as well as the allocation of those costs to the rate class groups, be revisited with each annual reconciliation proceeding. OSBA also avers that PPL Electric's EE&C programs do not properly match the costs of the program with the customers who pay for the program. OSBA St. 1, p. 10.

PPL Electric has allocated the costs of the EE&C programs consistent with Act 129 and Commission precedent. In the *Implementation Order*, the Commission directed EDCs to first assign the costs relating to each measure to those classes that will receive the benefits. *Implementation Order*, p. 36. PPL Electric will follow this direct assignment approach wherever possible. PPL Electric St. 1, p. 6. Some costs, however, will relate to EE&C measures that are applicable to more than one customer class or that provide system-wide benefits. The Commission directed EDCs to allocate those costs, and general administrative costs, using reasonable and generally acceptable cost-of-service principles as are commonly utilized in base rate proceedings. *Implementation Order*, p. 36. Consistent with this provision of the *Implementation Order*, PPL Electric proposes to allocate such costs using an allocation factor equal to the percentage of the EE&C costs directly assigned to each customer class to the total of the EE&C costs directly assigned to all customer classes.

For each customer class, PPL Electric proposes to separately reconcile the revenues collected under the cost recovery mechanism with the adjusted budget amounts for that year. This reconciliation will be performed on an annual basis. In addition, PPL Electric proposes to make "mid-course" corrections in the cost recovery mechanism to reflect major changes to any

of its EE&C programs. The annual reconciliation and any “mid-course” corrections will be subject to Commission review and approval before PPL Electric actually adjusts customers’ rates.

c. Allocation of Institutional Customers

OSBA asserts that PPL Electric assigned all of its EE&C Plan costs for the institutional customer group (government and non-profit entities) to the Small C&I customer class. OSBA St. 1, p. 4. This is not the case. PPL Electric allocated the EE&C Plan costs for the institutional customer group to each of the three customer classes—Residential, Small C&I and Large C&I. Electric St. 4-R, p. 6. This allocation was based upon a ratio of the actual number of institutional customers in each of the three customer classes to the total number of institutional customers on PPL Electric’s system. *Id.* A spreadsheet illustrating the number of customers by customer class and the resulting allocation ratios are contained in PPL Electric Exhibit JMK-3. That Exhibit demonstrates that the ratio of institutional customer per customer class is: Small C&I - 84.79%; Large C&I - 1.16%; and Residential - 14.05%. Therefore, the comments of OSBA that PPL Electric assigned all of its EE&C Plan costs for the institutional customer group to the Small C&I customer class are not correct. Moreover, this shows that the small business customers will not be unduly burdened with paying for Act 129’s programs for these government/non-profit customers, as OSBA contends.

3. Cost Recovery Issues

Act 129 provides that costs of compliance are to be recovered in a Section 1307 automatic adjustment clause. 66 Pa.C.S. § 2806.1(k). The Company has complied and proposed a clause consistent with Section 1307. The Company has had substantial experience with such adjustment clauses for many years, dating back to the 1970s. PPL Electric St. 4-R, p. 2. Over the past 40 years, the Company, with input and approval from the Commission, has followed a well-

established approach for developing and implementing these clauses. *Id.* The proposed Act 129 Compliance Rider (“ACR”) precisely follows the approach the Company has used, with Commission approval, for many, many years. *Id.* No party has provided any reasonable basis to depart from this practice.

a. Double Recovery of Act 129 Costs

OTS expresses concern about potential double recovery of costs and requests that it be made clear that capital assets funded with EE&C revenues should be excluded from a rate base claim, should not be included as a corresponding depreciation expense claim, and should not subsequently earn a return. OTS St. 1, p. 21. This concern is unfounded; no double recovery will occur. All EE&C costs and revenue included in the Company’s proposed ACR will be segregated from base rates and will be subject to standard Commission Section 1307 review and audit to confirm this separation. PPL Electric St. 4-R, p. 5. Moreover, there are no capital costs included in the ACR; therefore, OTS’ concerns regarding depreciation and return are not applicable to PPL Electric’s EE&C Plan. *Id.*

b. Cost Recovery for Plan Years Commencing May 31, 2013

OTS recommends that any Commission-approved extension of EE&C cost recovery rate(s) for plan years commencing after May 31, 2013, should be evaluated, reconciled, recomputed, and adjusted annually based upon the effective period’s projected program costs and residual experience factor component refunds/recoveries. Although PPL Electric expects that the Commission will review any recovery mechanism for Act 129-related activities commencing after May 31, 2013, the Company is not proposing an expiration date for the ACR. PPL Electric St. 4, p. 9. First, the mechanism will be needed to refund any over collection or recover any under collection existing at the end of the four-year EE&C Plan. PPL Electric St. 4, p. 9. Second, the Company may be able to reduce the overall costs of its EE&C Plan by entering

into contracts with CSPs that extend beyond May 31, 2013. *Id.* If that approach is approved by the Commission, the cost recovery mechanism will be needed to collect the costs incurred during the latter years of those contracts. *Id.* Therefore, although PPL Electric is not opposed to Commission review of the EE&C cost recovery rate(s) for plan years commencing after May 31, 2013, this review should not supplant the efforts of PPL Electric to recover costs incurred during the initial Act 129 period.

c. Reconciliation

PPL Electric proposes that a levelized amount be recovered from customers in the Residential and Small Commercial and Industrial classes on a levelized cents per kWh basis, and from customers in the large commercial and industrial class on a levelized dollar per kW basis. Although PPL Electric will track EE&C program expenditures, it does not propose to perform a reconciliation of the revenues collected under the ACR with its actual program spending levels in each year. The Company will perform this reconciliation of total revenues collected to total program spending levels at the end of its 4-year EE&C Plan. PPL Electric St. 4, p. 8.

OSBA appears to support a levelized rate for the ACR, but seeks to reconcile the projected rate to actual program expenditures. OSBA St. 1, p. 7-8. This approach, however, would defeat the purpose of a levelized rate. PPL Electric St. 4-R, p. 3. Because the proposed programs and related spending will be ramped in over approximately the first 18 months of the Company's proposed EE&C Plan, the reconciliation process recommended by OSBA could produce wide disparities between annual cost recovery and spending, and, thereby, defeat the purpose of a levelized rate for the term of the plan. *Id.* As noted by OTS, "[t]he Company's proposed levelized rate has the advantage of reducing volatility to ratepayers' bills. Such stability is an important consideration when determining the reasonableness of rates." OTS St. 1, p 10. Therefore, because of the potential for wide disparities under OSBA's proposal, and the

advantages of PPL Electric's levelized approach, the Company's reconciliation proposal should be approved.

d. Amortization Period for Up-Front Costs

OTS recommends that the Company should amortize startup costs over its initial rate collection period of December 1, 2009 through May 31, 2010, and the interest component sought to be added should be computed using simple rather than compound interest. OTS St. 1, pp. 2, 21. The total cost of its EE&C Plan includes the costs that PPL Electric incurred to develop that Plan. In the *Implementation Order*, the Commission found that EDCs should be permitted to recover the incremental cost incurred to design, create, and obtain Commission approval of a plan. *Implementation Order*, p. 33. In addition, in an order entered on May 28, 2009 at Docket No. P-2009-2091818, the Commission granted PPL Electric's request to defer such plan development costs on its balance sheet as a regulatory asset. Accordingly, the Company proposes to amortize and recover those deferred costs ratably over the 42-month life of its initial EE&C Plan (*i.e.*, December 1, 2009 through May 31, 2013). PPL Electric St. 4, p. 5. The amortization of those costs will be included within the \$246 million spending cap.

e. Interest Costs Are Part of the EE&C Plan

OTS avers that interest costs should be excluded from the Company's total allowable EE&C Plan cost and should not otherwise be recovered in any future proceeding. OTS St. 1, pp. 2, 20. Act 129 provides that an electric distribution company shall recover on a full and current basis from customers all reasonable and prudent costs incurred in the provision or management of a plan provided under this section. 66 Pa.C.S. § 2806.1(k). PPL Electric considers interest costs related to the EE&C Plan as an element of managing recovery of the EE&C Plan costs and, therefore, believes that interest costs are recoverable.

In addition, Act 129 specifies the use of the Section 1307 automatic adjustment clause to recover Act 129 costs. 66 Pa.C.S. 2806.1(k). Inherent in over/under collections is a standard part of all Section 1037 automatic adjustment clauses. OTS offers no basis for its completely unprecedented proposal to exclude interest from Section 1307 cost recovery.

f. Asymmetrical Interest Rates

PPL Electric proposes that interest shall be computed monthly at the appropriate rate provided for in § 1308(d) of the Public Utility Code from the month the over or undercollection occurs to the effective month that the overcollection is refunded, or the undercollection is recouped. PPL Electric Exhibit JMK-1. OTS, however, advocates for the application of an asymmetrical interest rate. Specifically, OTS recommends that under-collections be subject to the legal rate of interest and over-collections be subject to the legal rate of interest plus two percent. OTS St. 1, pp. 17-18.

PPL Electric believes that the normal provision for symmetrical interest, consistent with Section 1308(d), should apply in this proceeding. It is not appropriate to use the asymmetrical interest advocated by OTS. There are only two instances in which utilities have been required to apply asymmetrical interest rates. PPL Electric St. 4-R, pp. 2-3. The first is in natural gas utility purchased gas cost (“PGC”) proceedings where asymmetrical interest rates are required by statute. *See* 66 Pa. C.S. § 1307(f). The second instance is in an electric distribution company default service plan proceedings, where it is required by the Commission’s regulations. 52 Pa. Code § 54.187(f). There is no statute or regulation that requires asymmetrical interest for Act 129 cost recovery. PPL Electric St. 4-R, pp. 2-3. OTS witness Wilson confirmed on cross examination that there is no provision in Act 129 that requires asymmetrical interest rates and that Act 129 does not reference Section 1307(f) of the Public Utility Code. Tr. 267. Absent such a directive, PPL Electric believes that the normal provision for symmetrical interest, consistent

with Section 1308(d), should apply to overcollections and undercollections, as proposed in PPL Electric Exhibit JMK-1.

Moreover, as a policy matter, asymmetrical interest is not appropriate in this proceeding. The rationale for asymmetrical interest rates presumably is to reduce any incentive for utilities to overestimate their costs and overcollect through automatic adjustment clauses. This policy may have merit when a gas or electric utility is estimating the future cost of gas in a Section 1307(f) proceeding or when an EDC is estimating the cost of acquiring POLR supply. In the context of Act 129, however, the cost of the program is known, *i.e.*, two percent (2%) of annual revenues, and there is no incentive or ability to overestimate costs.

C. CSP ISSUES

1. Cadmus is a CSP

Mr. Epstein asserts that the Cadmus Group has never registered as a CSP. Epstein St. 1, p. 10. This assertion is incorrect. As noted above, the Cadmus Group was hired to assist in preparation of the Plan. The Cadmus Group is listed in the registry of CSPs who meet the Commission's minimum qualifications to provide consultation, design, administration, management or advisory services to an electric distribution company regarding energy efficiency and conservation plans required under Act 129. This list is available on the Commission's website. http://www.puc.state.pa.us/electric/electric_CSP_registry.aspx

2. Hiring and Recruiting

ACORN maintains that PPL Electric should encourage CSPs to hire low-income and unemployed workers and evaluate CSP bids on the basis of the CSP's plan to hire unemployed persons. ACORN St. 1, pp. 9 -10. PPL Electric declines to formally adopt the recommendations of ACORN; at this time, however it will discuss the matter with CSPs. On March 2, 2009, PPL Electric filed a standard form CSP contract for review by the Commission staff. After review,

Commission staff raised several concerns. As acknowledged in a Secretarial letter dated April 17, 2009, at Docket No. M-2009-2093216, all concerns of Commission staff have been addressed in the modified CSP contract. The approved CSP contract did not include provisions relating to the hiring of unemployed and low-income workers. PPL Electric awarded a contract to a CSP for the Appliance Recycling Program on June 22, 2009. See PPL Electric Exhibit 1, Appendix C. At this time, PPL Electric does not propose to revise the approved CSP to include the hiring criteria proposed by ACORN because such a change may require Commission staff review. Staff review is required for any future CSP contracts that are materially different from the standard form contract approved on April 17, 2009. Moreover, it would be inappropriate to place ACORN's recommended hiring criteria on CSPs without further discussing the matter with current CSPs and potential CSP bidders. PPL Electric will take ACORN's recommendation under advisement and will discuss potential hiring criteria with CSPs, however, it declines to formally adopt ACORN's recommendation.

3. Affiliate CSP

Mr. Epstein avers that the PPL Electric affiliated companies, such as H.T. Lyons, should be prohibited from performing any work related to the Commercial and Industrial Custom Incentive Program, as well as the HVAC Tune-Up Program. Epstein St. 1, p. 24. Act 129 defines a conservation service provider as an entity that "provides information and technical assistance on measures to enable a person to increase energy efficiency or reduce energy consumption *and that has no direct or indirect ownership, partnership or other affiliated interest with an electric distribution company.*" 66 Pa.C.S § 2806.1(m) (emphasis added). Therefore, Act 129 already prohibits PPL Electric affiliated companies from being a CSP under PPL Electric's EE&C Plan.

D. IMPLEMENTATION AND EVALUATION ISSUES

1. Implementation Issues

a. Continue Stakeholder Process

PPL Electric anticipates periodic stakeholder meetings during the term of the EE&C Plan. PPL Electric will solicit formal and informal input from stakeholders periodically throughout the Plan delivery period to improve programs. PPL Electric St. 1, p. 15. Moreover, EE&C Plan, PPL Electric will inform customers, stakeholders, and the general public about the results of the energy efficiency programs and progress toward Plan goals. PPL Electric St. 1, p. 225. PPL Electric will make its quarterly and annual EE&C Evaluation Reports available to stakeholders and to any interested party.

PPL Electric does not believe that a formal, prescriptive schedule is necessary for stakeholder meetings as it intends to meet with stakeholders a minimum of twice per year to review overall status. Additionally, more frequent meetings will be held with applicable stakeholders, or the full group, to discuss problems or issues if they arise.

b. Criticism of Stakeholder Process

Mr. Epstein's general criticisms of the PPL Electric's stakeholder process concerning the EE&C Plan are unwarranted. Epstein St. 1, p 4. Throughout the preparation of its EE&C Plan, PPL Electric pursued multiple opportunities to inform stakeholders of the Company's progress and to solicit their input. PPL Electric St. 1, p. 8; PPL Electric Exhibit 1, § 1.2.1.5. Both formal and informal communication was maintained with many parties, including other investor-owned utilities; consumer advocates; environmental advocates; chambers of commerce; state, local, and private economic development organizations; community-based organizations; trade associations; governmental organizations; trade allies; market partners; and CSPs. *Id.* There were three large group meetings, focus group meetings, and numerous one-on-one meetings and

teleconferences. PPL Electric St. 1, pp. 8-9; *see* Table 2 in PPL Electric Exhibit 1, § 1.2.1.5. PPL Electric also conducted surveys and interviews with customers to better understand their knowledge of and preferences related to energy efficiency. PPL Electric St. 1, p. 9. PPL Electric believes that stakeholder participation resulted in a more creative and robust portfolio than would have been possible otherwise. PPL Electric Exhibit 1, § 1.2.1.5. Finally, PPL Electric plans to solicit formal and informal input from stakeholders periodically throughout the Plan implementation period in order to continue to improve programs. PPL Electric St. 1, p. 9. Notably, no other party in this proceeding criticized PPL Electric's stakeholder process.

c. Certifications for Contractors

DEP recommends that PPL Electric require certification standards for its contractors. DEP St. 1, p. 28. PPL Electric notes that it will require various standards and certifications for its Conservation Service Providers who will be under contract with PPL Electric. PPL Electric St. 1-R, p. 11. Trade Allies, such as appliance and HVAC equipment dealers, engineering companies, energy services companies, and equipment installers are not under contract with PPL Electric. *Id.* Because Trade Allies are hired directly by the customer, PPL Electric supports a customer's ability to select his/her preferred provider of these products and services. *Id.* PPL Electric does not believe that it should develop and maintain a list of "approved Trade Allies." *Id.*

2. Monitoring and Reporting Issues

a. Revision of Customer Incentives

As part of the EE&C Plan PPL Electric proposes that Plan activities will be monitored and the results will be tracked and reported to the Commission using an Energy-efficiency Management Information System. PPL Electric Exhibit 1, § 5. OSBA, however, recommends

that PPL Electric should also be required to provide an annual detailed justification for the magnitude of its customer incentives. OSBA St. 1, p. 11.

As noted above and in the EE&C Plan, PPL Electric intends to monitor and review the progress of its program regularly to determine its effectiveness. Progress evaluation is a part of this process and will have as one of its elements the effectiveness of incentive amounts to motivate customers to participate in programs offered under the Plan. PPL Electric St. 2-R, p. 5. If incentive amounts are found to be a barrier to participation, PPL Electric expects to be able to make the necessary adjustments, subject to the budget constraints imposed by Act 129. *Id.* If the analysis indicates that incentive amounts are too high, then the incentives may be adjusted downward as long as they do not impede participation. *Id.* Therefore, because of the tracking and reporting mechanism contained in the EE&C plan, and the understanding that the review process evaluates the effectiveness of the incentives OSBA's request for further justification is unnecessary and should be rejected.

b. Monitoring Low-Income Programs

ACORN generally approves of PPL Electric's "outreach and marketing strategy for the Low-Income Program, particularly the use of the full LIURP WRAP model as the basis for the Act 129 activities, the coordination with other services, and the commitment to new marketing strategies." ACORN St. 1, p. 13. However, ACORN acknowledges that it "can be quite difficult explaining services to low-income individuals in a manner which invites their confidence and leads to participation, even where the service seems a clear benefit to the household." ACORN St. 1, p. 7. ACORN, therefore requests that PPL Electric monitor the results of its Act 129 low-income marketing strategy and if it is not meeting its goals, the Company should increase its marketing efforts. ACORN St. 1, p. 13.

As noted in § 3.2.1 of the EE&C Plan regarding low-income programs and consistent with § 1.6.3, there will be ongoing monitoring of all EE&C program activities, including low-income programs. Furthermore, each program in the Plan will have an impact assessment and a process analysis. PPL Electric Exhibit 1, § 1.6.4. Moreover, as noted in § 1.6.5, the Company expects that some revisions to particular elements of various programs may be necessary as new information becomes available through ongoing monitoring and management of the Plan, and through the process and impact evaluation activities. PPL Electric Exhibit 1, § 1.6.5. PPL Electric believes that the monitoring, evaluation and revision process contained in the EE&C Plan, noted above, addressed ACORN's concern's regarding monitoring the results of the Plan's low-income marketing strategy.

E. OTHER ISSUES

1. The ACR Should Be Included in the Distribution Charge

PPL Electric proposes that the cost recovery mechanism of the EE&C Plan, the Act 129 Compliance Rider ("ACR"), be applied to the distribution charges for each customer class, rather than appear as a separate line item on customers' bills. PPL Electric St. 4, p. 7. OSBA argues that the ACR should be shown as a separate line item on customers' bills.²⁹ OSBA St. 1, p. 8. This request should be rejected.

PPL Electric proposed the ACR as a rider to be included in the distribution charges on customers' bills, in the same manner as the Company's Universal Service Rider ("USR") is included in the distribution charges on residential customers' bills, for several reasons. First, PPL Electric's bills have become very complicated over the past several years adding another line item to the bill may unnecessarily confuse customers. PPL Electric St. 4-R, p. 5. Most of PPL Electric's customers prefer simpler bills with fewer line items. *Id.* Second, the estimated

²⁹ Mr. Epstein also does not support the inclusion of the ACR in the distribution charge. Epstein St. 1, p. 11.

level of the ACR is small and no purpose would be served by placing a separate line item for such a small amount on customers' bills (\$2 per month). *Id.*, see PPL Electric Exhibit JMK-4. Third, the Company's proposed approach is consistent with the Commission-approved approach it currently is following with other Section 1307 (e) cost recovery mechanisms such as the USR, Remand Rider-1 and Remand Rider-2. *Id.* Fourth, a number of stakeholders indicated their preference to reflect this relatively small charge as part of the Company's distribution rates. *Id.* Moreover, OCA agrees with PPL Electric, that it is acceptable to recover the cost of the EE&C plan in distribution rates. OCA St. 1, p. 15. It is also important to note that it is less costly for PPL Electric to include the Act 129 charge as part of the distribution rate because it avoids reprogramming costs for the billing system at a time when the Company's information technology resources will be stretched to implement other changes such as many new rate tariffs and the expiration of rate caps. Therefore, it is appropriate for the ACR to be included in the distribution charges and the line item approach advanced by OSBA should be rejected.

2. EE&C Plan Updates

PPL Electric's development of a well-balanced plan within the confines of Act 129 was a complex process, which relied on a large number of technical, economic and market assumptions. Over the life of the Plan, PPL Electric expects that many of these assumptions will have to be revisited, refined, and, where necessary, revised to reflect updated market conditions, variations from the Plan's estimates, customer preferences, experience in Pennsylvania or other states, cost-effectiveness, new technologies and practices, new state or federal energy standards, and for other factors. PPL Electric Exhibit 1, pp. 23-24. To the extent to which such revisions may be called for and whether they will have a material effect on the design and outcomes of programs in the Plan are difficult to predict. However, the Company intends to use the results of its ongoing monitoring, management, and process analysis to identify

program aspects that work well or do not, and to adjust program features as warranted. Therefore, PPL Electric expects refinements to its EE&C Plan will be necessary including, refinements to its proposed programs, adjustments to projected participation levels or to introduce new measures and programs within the parameters of Act 129, if market conditions warrant.

Several parties suggest that PPL Electric provide a more-specific process and criteria for updating the Plan, including stakeholder input and Commission approval of changes. In response to these requests PPL Electric proposes the following process to provide PPL Electric with the flexibility it needs but ensuring stakeholder and Commission involvement:

PPL Electric will be permitted to modify a measure or program, *e.g.*, adjust incentive levels, estimated participation levels, delivery details, add/delete/modify measures, redirect resources from underperforming measures/programs to more successful measures/programs, and other program elements, to achieve EE&C Plan objectives. For minor changes, PPL Electric will be permitted to adopt these changes without prior Commission approval, but PPL Electric will notify the Commission and stakeholders of these changes through its quarterly and annual EE&C report to the Commission. For major changes, PPL Electric will notify stakeholders and the Commission, discuss these changes with stakeholders and seek appropriate Commission approval. For purposes of this proposal, a major change is defined as one that will increase the cost of the program by more \$5 million or more than 10%, whichever is greater. Cost changes adopted pursuant to this process will be fully recoverable by PPL Electric through the ACR.

VI. PROPOSED ORDERING PARAGRAPHS

1. PPL Electric's EE&C Plan satisfies the requirements of Act 129, 66 Pa.C.S. § 2806.1, and the *Energy Efficiency and Conservation Program Implementation Order*, Docket

No. M-2008-2069887, entered on January 16, 2009, Reconsideration Order entered May 2, 2009 and is approved.

2. The individual programs listed in the EE&C Plan are approved.

3. The cost recovery mechanism proposed by PPL Electric is approved.

4. The *pro forma* Act 129 Compliance Rider to Tariff Electric - Pa. P.U.C. No. 201 is approved.

5. PPL Electric shall file appropriate tariff supplements in accordance with the EE&C Plan and this Order, to be effective upon one day's notice.

6. PPL Electric's request to apply the cost cap on a total EE&C Plan basis is approved.

7. PPL Electric is permitted to recover the incremental cost incurred to design, create, and obtain Commission approval of the EE&C Plan. Consistent with the Commission Order and Docket No. P-2009-2091818, entered on May 28, 2009, PPL Electric is permitted to defer such plan development costs on its balance sheet as a regulatory asset. PPL Electric's request to amortize and recover those deferred costs ratably over the 42-month life of the EE&C Plan (*i.e.*, December 1, 2009 through May 31, 2013) is approved.

8. PPL Electric is permitted enter into contracts with CSPs that extend beyond May 31, 2013.

9. PPL Electric's request to allow retroactive eligibility for those customers who install, or commit to install, qualifying equipment and services for applicable programs between July 1, 2009 and Commission approval of the EE&C Plan is approved.

10. The proceeding at Docket No. M-2009-2093216 shall be marked closed.

VII. CONCLUSION

WHEREFORE, for all the foregoing reasons, the Energy Efficiency and Conservation Plan of PPL Electric Utilities Corporation, with the modifications noted, should be approved.

Respectfully submitted,



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