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| **PENNSYLVANIA**  **PUBLIC UTILITY COMMISSION**  **Harrisburg, PA 17105-3265** | |
| Public Meeting held March 14, 2013 | |
| Commissioners Present:  Robert F. Powelson, Chairman  John F. Coleman, Jr., Vice Chairman  Wayne E. Gardner  James H. Cawley  Pamela A. Witmer | |
| Petition of PPL Electric Utilities Corporation for Approval of its Act 129 Phase II Energy Efficiency and Conservation Plan | M-2012-2334388 |

**OPINION AND ORDER**

**BY THE COMMISSION:**

Before the Pennsylvania Public Utility Commission (Commission) for consideration and disposition is the Petition of PPL Electric Utilities Corporation (PPL or the Company) for Approval of its Act 129 Phase II Energy Efficiency and Conservation (EE&C) Plan (Petition), filed on November 15, 2012. As discussed, *infra,* the Company filed a revised EE&C Plan on February 7, 2013. In accordance with the Commission’s Order in *Energy Efficiency and Conservation Program*, Docket Nos. M-2012-2289411 and M-2008-2069887 (Order entered August 3, 2012) (*Phase II Implementation Order*), Administrative Law Judge (ALJ) Dennis J. Buckley certified the record in this proceeding on February 13, 2013. For the reasons fully delineated herein, we will grant PPL’s Petition, in part, and deny it, in part.

# I. Background

On October 15, 2008, House Bill 2200 was signed into law as Act 129 with an effective date of November 14, 2008. Among other requirements, Act 129 directed that Energy Efficiency and Conservation (EE&C) Programs be developed by each of the Commonwealth’s largest electric distribution companies (EDCs) and be approved by the Commission. Specifically, Act 129 required each EDC with at least 100,000 customers to adopt a plan to reduce energy demand and consumption within its service territory. Initially, the Act required each affected EDC to adopt a plan to reduce electric consumption by at least one percent of its expected consumption for June 1, 2009 through May 31, 2010, by May 31, 2011. By May 31, 2013, the total annual weather-normalized consumption was to be reduced by a minimum of three percent. Also, by May 31, 2013, peak demand was to be reduced by a minimum of four-and-a-half percent of each 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.

On January 15, 2009, the Commission adopted an Implementation Order at Docket No. M-2008-2069887 (*Phase I Implementation Order*), which established the standards each plan must meet, and which provided guidance on the procedures to be followed for submittal, review and approval of all aspects of the EE&C plans. The Commission subsequently approved an EE&C plan (and, in some cases, modifications to the plan) for each affected EDC.

Another requirement of Act 129 directs the Commission to evaluate the costs and benefits of the adopted EE&C Program by November 30, 2013, and every five years thereafter. The Act provides that the Commission must adopt additional incremental reductions in consumption and peak demand if the benefits of the EE&C Program exceed its costs. In accordance with that directive, the Commission issued a Secretarial Letter on March 1, 2012, at Docket No. M-2012-2289411 seeking comments on several issues related to the design and implementation of any future phase of the EE&C Program, and whether additional incremental consumption and peak demand reduction targets would be adopted. On May 10, 2012, in response to the comments received pursuant to the Secretarial Letter, the Commission issued a Tentative Implementation Order (*Phase II* *Tentative Implementation Order*) to begin the process of evaluating the costs and benefits of the initial EE&C Plans and the possible establishment of new reduction targets. In the *Phase II* *Tentative Implementation Order*, the Commission found that the benefits of a Phase II Act 129 Program will exceed the costs. Therefore, the Commission proposed the adoption of additional required incremental reductions in consumption for another program term and sought additional comments on its specific proposals.

Subsequently, in response to the comments filed pursuant to the *Phase II* *Tentative Implementation Order*, on August 2, 2012, the Commission adopted the *Phase II Implementation Order* that established the standards each plan must meet (including the additional incremental reductions in consumption that each EDC must meet) and provided guidance on the procedures to be followed for submittal, review and approval of all aspects of EDC EE&C plans. Within the *Phase II Implementation Order*, the Commission tentatively adopted EDC-specific consumption reduction targets as set forth in Table 1 in Section A.2.c.1 of that Order. The targets varied from a high of 2.9% for PECO to a low of 1.6% for West Penn Power Company. The consumption reduction target adopted for PPL was 2.1%. The *Phase II Implementation Order* provided that these targets would become final for any covered EDC that did not petition the Commission for an evidentiary hearing by August 20, 2012.

On August 20, 2012, Metropolitan Edison Company, Pennsylvania Electric Company, Pennsylvania Power Company and West Penn Power Company (collectively, FirstEnergy) filed Petitions for Reconsideration and Clarification of the *Phase II Implementation Order.* Also, on August 20, 2012, PPL filed a Petition for Reconsideration of the *Phase II Implementation Order*. On August 30, 2012, the Commission granted the Petitions filed by FirstEnergy and PPL pending further review of, and consideration on, the merits. The Office of Consumer Advocate (OCA) filed separate Answers to the FirstEnergy and PPL Petitions on August 30, 2012, and on the same date, the Coalition for Affordable Utility Services and Energy Efficiency in Pennsylvania (CAUSE-PA) filed a Response to PPL’s Petition.

Also on August 20, 2012, PPL filed a Petition for an Evidentiary Hearing on the Energy Efficiency Benchmarks Established for the Period June 1, 2013 through May 31, 2016 (Benchmark Petition). This matter was assigned to the Office of Administrative Law Judge with a certified record deadline of November 2, 2012. Petitions to intervene were filed by the following Parties: (1) the Community Action Association of Pennsylvania; (2) CAUSE-PA; (3) the Clean Air Council and the Sierra Club (CAC/SC); (4) Comverge, Inc. (Comverge); (5) Citizens for Pennsylvania’s Future (PennFuture); (6) the Sustainable Energy Fund of Central Eastern Pennsylvania (SEF); and (7) the PPL Industrial Customer Alliance (PPLICA). By Order Certifying the Record dated November 1, 2012, ALJ Elizabeth H. Barnes provided a history of the proceeding; delineated the transcripts, statements and exhibits admitted into the record; and certified the record to the Commission for our consideration and disposition.

On September 4, 2012, PECO filed a Motion for Leave to File a Motion for Reconsideration and a Petition for Reconsideration of the *Phase II Implementation Order.* On September 13, 2012, the Commission adopted an Order granting PECO’s Motion for Leave to File a Motion for Reconsideration. On September 19, 2012, the Clean Air Council and the Sierra Club (CAC/SC) filed an Answer to PECO’s Petition for Reconsideration.

By Reconsideration Order entered September 27, 2012, at Docket Nos.   
M-2012-2289411 and M-2008-2069887 (*Phase II Reconsideration Order*), the Commission denied the Petitions for Reconsideration and Clarification filed by FirstEnergy and the Petitions for Reconsideration filed by PPL and PECO.

By Opinion and Order entered February 14, 2013, at Docket No.   
P-2012-2320369 (*PPL Phase II Benchmark Order*), the Commission*, inter alia*, denied PPL’s Benchmark Petition and reaffirmed that PPL’s Phase II consumption reduction target shall remain at 2.1%.

# II. Procedural History

In the *Phase II Implementation Order,* we adopted an EE&C plan approval process that included the publishing of a notice of each proposed plan in the *Pennsylvania Bulletin* within twenty days of the filing of the plan, as well as posting of each proposed plan on the Commission’s website. Answers, along with comments and recommendations, were to be filed within twenty days of the publication of the notice in the *Pennsylvania Bulletin*. Each plan filed in November, 2012 was to be assigned to an ALJ for an evidentiary hearing within sixty-five days after the plan was filed, after which, the parties had ten days to file briefs. The EDC then had ten days to submit a revised plan or reply comments or both. The ALJ was directed to then certify the record to the Commission. The Commission will then approve or reject all or part of a plan at public meeting within 120 days of the plan filing. *Phase II Implementation Order* at 61 and 62.

In the *Phase II Implementation Order,* the Commission reaffirmed that EDCs were to file their Phase II EE&C plans by November 1, 2012. *Phase II Implementation Order* at 63. On November 1, 2012, the Commission issued a Secretarial Letter notifying EDCs that it would accept Phase II EE&C plans on either November 1, 2012, or November 15, 2012, due to the impact of Hurricane Sandy and the need for EDC personnel to focus on storm response duties.

On November 15, 2012, PPL filed its Petition requesting approval of the Company's Phase II EE&C Plan (Phase II Plan or Plan). PPL asserted that its Phase II Plan includes a broad portfolio of energy efficiency programs, conservation practices and energy education initiatives that are designed to meet the goals established by Sections 2806.1 and 2806.2 of Act 129, and the Commission’s *Phase II Implementation Order*. Petition at 1. PPL averred that its Phase II Plan is in the public interest and in compliance with the requirements of Act 129 and all of the Commission’s applicable Act 129 Orders. *Id*. at 21. PPL requested that the Commission approve its Phase II Plan, and all attachments thereto, on or before March 14, 2013. *Id*. at 22.

On December 3, 2012, UGI Utilities, Inc. – Gas Division, UGI Penn Natural Gas, Inc., and UGI Central Penn Gas, Inc. (collectively, UGI) filed a Petition to Intervene in this case. On December 5, 2012, the Office of Small Business Advocate (OSBA) filed a Notice of Intent to participate in this proceeding and a Public Statement. On December 6, 2012, the following entities each filed a Petition to Intervene in this case: CAUSE-PA, the Commission on Economic Opportunity (CEO), PennFuture, the PPL Industrial Customer Alliance (PPLICA), and Wal-Mart Stores East, L.P. and Sam’s East, Inc. (collectively, Walmart). Also on December 6, 2012, the OCA filed a Notice of Intent to participate in this proceeding and a Public Statement. On December 7, 2012, the Sustainable Energy Fund (SEF) filed a Petition to Intervene in this case.

A Prehearing Conference was held on Monday, December 10, 2012. That hearing was convened to discuss procedural issues relative to the Commission’s *Phase II Implementation Order*, to determine the further course of this proceeding, and to rule on the various Petitions to Intervene submitted up to that date.

On December 19, 2012, Comverge filed a Petition to Intervene in this case. On January 16, 2013, an evidentiary hearing was held in Harrisburg, Pennsylvania. The hearing was attended by PPL, OCA, OSBA, PennFuture, PPLICA, UGI, CAUSE-PA, WalMart, SEF, CEO and Comverge.

Main Briefs were filed on January 28, 2013, by PPL, PPLICA, Comverge, OCA, CAUSE-PA, CEO, SEF, and UGI. Walmart and OSBA each filed a letter stating that it would not be filing a brief. On February 7, 2013, PPL filed its Reply Comments and the Revised Phase II EE&C Plan (Revised Plan).[[1]](#footnote-1) Reply Briefs were filed on February 7, 2013, by PPL, PPLICA, Comverge, the OCA, SEF, and UGI.

By Order Certifying the Record dated February 13, 2013, ALJ Buckley provided a history of the investigation into PPL’s Phase II Plan; delineated the transcripts, statements, exhibits and briefs admitted into the record; and certified the record to the Commission for consideration and disposition.

**III. Description of the Plan**

The *Phase II Implementation Order* established a Phase II consumption reduction target for PPL of 2.1% of its expected load as forecasted by the Commission for the period of June 1, 2009 through May 31, 2010, or 821,072 MWh, over a three-year period from June 1, 2013 through May 31, 2016. *Phase II Implementation Order* at 24. PPL explains that it selected a comprehensive portfolio of thirteen energy efficiency programs for its Phase II Plan that are tailored for its residential, small commercial and industrial (small C&I), large commercial and industrial (large C&I), and government/educational/non-profit (GNI) customers. Petition at 9-10. PPL states that these programs are key components of a comprehensive electric energy efficiency initiative designed to achieve the required 821,072 MWh/yr.[[2]](#footnote-2) of reduced energy consumption. *Id*. at 6. Of these thirteen programs, seven are existing programs continued from Phase I, with modifications, while six are newly created programs. *Id*. at 10. PPL provides the following summary of its EE&C programs in its Revised Plan:[[3]](#footnote-3)

**Residential Appliance Recycling Program.** This program providescustomers with a rebate for recycling inefficient refrigerators, freezers and room air conditioners. The program offers free pick-up and recycling of inefficient appliances. Eligible appliances must be plugged in and functioning when picked up. All units are decommissioned on site and disposed of in an environmentally responsible manner.[[4]](#footnote-4)

**Residential Retail Program.** This program provides a comprehensive program grouping together energy-efficiency products used by residential customers and found in retail stores. Participating customers will be able to purchase a variety of energy-efficient light bulbs at a discount and in some instances, receive free CFLs. Customers will also be able to receive rebates for energy-efficient equipment and receive smart strips.[[5]](#footnote-5)

**Residential Home Comfort Program.** This new program provides a comprehensive energy-efficiency program for new home construction and for existing homes. This program includes three components: incentives for home builders; audits, surveys and insulation rebates for existing home customers; and customer rebates for ENERGY STAR® rated equipment.[[6]](#footnote-6)

**Residential Energy-Efficiency & Education Program.** This program provides high-usage residential customers with a series of “report cards” comparing their usage to comparable customers. These reports will include energy savings recommendations. This program focuses on educating customers on ways they may implement free or low-cost measures and behaviors that reduce energy consumption or demand.[[7]](#footnote-7)

**Residential Student and Parent Energy-Efficiency Education Program.** This program is a new program that contains five components. Participants in all components will receive an energy-efficiency kit and educational materials. Three of the components provide school-based workshops for children of varying ages. The fourth provides teachers with training and classroom materials. The fifth component targets schools in low-income communities and provides incentives to Parent Teacher Organizations for inviting parents to participate in an interactive energy-efficiency workshop.[[8]](#footnote-8)

**Residential Prescriptive Equipment Program.** This program provides measures and services which are available to farmers, as some farms in the PPL territory have a residential rate class.[[9]](#footnote-9)

**Residential Low Income WRAP Program.** This program offers qualified low-income customers with what is known as “baseload” WRAP and/or the installation of an energy-efficient heat pump water heater, if needed. There is no cost to participating customers.[[10]](#footnote-10)

**Residential Low Income E-Power Wise Program.** This program provides low income customers with energy-efficiency kits and educational materials by two methods: direct mail and Customer Based Organization. This program includes train-the-trainer sessions for CBO staff and energy education workshops.[[11]](#footnote-11)

**Residential Low Income Energy-Efficiency Behavior & Education Program.** This new program provides qualified low income customers with a series of “report cards” comparing their usage to comparable customers. These reports will include energy savings recommendations specifically designed to help low-income customers. This program focuses on educating customers on ways they may implement free or low-cost measures and behaviors that reduce energy consumption or demand.[[12]](#footnote-12)

**Small C&I Prescriptive Equipment Program.** This program provides rebates and incentives from a list of specific energy-efficiency measures and services. This program also offers a Direct Discount component which is designed to make it easier and more economical for small businesses and institutions to install energy-efficient lighting and commercial refrigeration upgrades. Audits and measures specific to farms are included in this program.[[13]](#footnote-13)

**Small C&I Custom Incentive Program.** This program offers customers flexibility in their choice of energy-efficiency projects and is intended for energy-efficient measures not covered by other Phase II Programs. This program provides financial incentives to customers installing individual equipment measures or systems not covered by the Prescriptive Equipment Program. An incentive is based on kWh reduced or project cost and customers must agree to pre- and post-testing to verify savings.[[14]](#footnote-14)

**Large C&I Prescriptive Equipment Program.** This program provides rebates and incentives from a list of specific energy-efficiency measures and services. This program also offers a Direct Discount component which is designed to make it easier and more economical for businesses to install energy-efficient lighting and commercial refrigeration upgrades. This program includes technologies such as customer owned LED street and LED area lighting.[[15]](#footnote-15)

**Large C&I Custom Incentive Program.** This program offers customers flexibility in their choice of energy-efficiency projects and is intended for energy-efficient measures not covered by other Phase II Programs. This program provides financial incentives to customers installing individual equipment measures or systems not covered by the Prescriptive Equipment Program. An incentive is based on kWh reduced or project cost and customers must agree to pre- and post-testing to verify savings.[[16]](#footnote-16)

**Government/Educational/Non-Profit Prescriptive Equipment Program.** This program provides rebates and incentives from a list of specific energy-efficiency measures and services. This program also offers a Direct Discount component which is designed to make it easier and more economical for small businesses and institutions to install energy-efficient lighting and commercial refrigeration upgrades. This program includes technologies such as customer owned LED street and LED area lighting.[[17]](#footnote-17)

**Government/Educational/Non-Profit Custom Incentive Program.** This program offers customers flexibility in their choice of energy-efficiency projects and is intended for energy-efficient measures not covered by other Phase II Programs. This program provides financial incentives to customers installing individual equipment measures or systems not covered by the Prescriptive Equipment Program. An incentive is based on kWh reduced or project cost and customers must agree to pre- and post-testing to verify savings.[[18]](#footnote-18)

**Government/Educational/Non-Profit Master Metered Low-Income Multifamily Housing Program.** This new Phase II program provides eligible customers with an audit and rebates for installing energy-efficiency measures. Replacing and recycling inefficient refrigerators is a large component of this program. This program targets non-profit master metered multifamily low-income housing buildings. This program provides financial incentives to qualified buildings to offset the incremental cost differences between high-efficiency and baseline measures.[[19]](#footnote-19)

**Government/Educational/Non-Profit School Benchmarking Program.** This new program will be offered to up to twenty-five schools per Program Year [(PY)] whereby the [Conservation Service Provider (CSP)] will work with school administrators to evaluate total building energy use. This program will provide school administrators with information they can use to evaluate short and long term energy-efficiency goals and payback for energy-efficiency investment opportunities. The program is designed to provide schools with the opportunity to benchmark their schools’ energy use and cost with those of similar schools and assist them in developing action plans to reduce their consumption.[[20]](#footnote-20)

**Government/Educational/Non-Profit Continuous Energy Improvement Program.** This new program will be offered to ten school districts to be identified mid-year PY6. Each district will select a school or facility to participate in developing a Sustainable Energy Management Plan to implement throughout the entire district during PY7. At the end of the program, each district will have an energy reduction goal, a methodology for measuring energy savings and a plan to continually improve energy performance.[[21]](#footnote-21)

As noted, *supra,* PPL submitted its Revised Plan on February 7, 2013. The significant changes of the Revised Plan from the Company’s originally-filed Plan are summarized as follows:

* The addition of a Fuel Switching Pilot with a limit of 100 units to the Residential Retail, Residential Home Comfort, Small C&I Prescriptive Equipment Program, Large C&I Prescriptive Equipment Program and the GNI Prescriptive Equipment Program.[[22]](#footnote-22)
* Clarification of start dates for the Residential Energy-Efficiency & Education Program, the Low Income Energy-Efficiency & Education Program and the Continuous Energy Improvement Program.[[23]](#footnote-23)
* Various minor clarifications with footnotes and insertions; and minor corrections.

**IV. Discussion**

**A. Legal Standards**

The Company has the burden of proof in accordance with 66 Pa. C.S.   
§ 332(a). Courts have held that “[a] litigant’s burden of proof before administrative tribunals as well as before most civil proceedings is satisfied by establishing a preponderance of evidence which is substantial and legally credible.” *Samuel J. Lansberry, Inc. v. Pa. PUC*, 578 A.2d 600, 602 (Pa. Cmwlth. 1990), *alloc. denied,* 529 Pa. 654, 602 A.2d 863 (1992). That is, the Company’s evidence must be more convincing, by even the smallest amount, than that presented by the other Parties. *Se-Ling Hosiery, Inc. v. Margulies*, 364 Pa. 45, 48, 70 A.2d 854, 856 (1950). Additionally, this Commission’s decision must be supported by substantial evidence in the record. More is required than a mere trace of evidence or a suspicion of the existence of a fact sought to be established. *Norfolk & Western Ry. Co. v. Pa. PUC,* 489 Pa. 109, 413 A.2d 1037 (1980).

We note that any issue that we do not specifically address has been duly considered and will be denied without further discussion. It is well settled that the Commission is not required to consider, expressly or at length, each contention or argument raised by the parties. *Consolidated Rail Corporation v. Pa. PUC*,

625 A.2d 741, 744 (Pa. Cmwlth. 1993); *see also*, *generally*, *University of Pennsylvania v.*

*Pa. PUC*, 485 A.2d 1217 (Pa. Cmwlth. 1984).

**B. Phase II Conservation Requirements**

**1. Overall Conservation Requirements**

As noted, *supra*, the *Phase II Implementation Order* established a Phase II energy consumption reduction target of 821,072 MWh for PPL, which was based on a 2.1% reduction in the Company’s expected load as forecasted by the Commission for the period of June 1, 2009 through May 1, 2010. *Phase II Implementation Order* at 23-24. PPL projects that the three-year total energy savings generated by the thirteen Phase II programs will be 841,953 MWh, and that the Company will thus achieve 103% of its required energy savings from its Phase II programs. Revised Plan at 16.

In the *Phase II Implementation Order,* the Commission determined that EDCs that have achieved their three percent Phase I target before the end of Phase I could continue the Phase I programs as long as those EDCs had Phase I funds available. The Commission also determined that the EDCs could credit the Phase I energy savings above the three percent target toward their Phase II targets. PPL estimates that 110,000 MWh of energy savings will be carried over from Phase I. *Id*. at 12, 16.

Combining the energy savings projected for the thirteen Phase II programs with the savings carried over from Phase I, PPL estimates that its total savings for Phase II will be 951,953 MWh. This represents a 2.49% consumption reduction, and will result in PPL achieving 116% of its required energy savings goal. *Id*. at 16. Therefore, we find that PPL’s Plan complies with the *Phase II Implementation Order* in that it exceeds the overall conservation requirements established for PPL.

**2. Requirements for a Variety of Programs Equitably Distributed**

Act 129 requires that the Commission’s EE&C Program must include “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.” 66 Pa. C.S. § 2806.1(a)(5). Each EDC is required to demonstrate that its plan “provides a diverse cross section of alternatives for customers of all rate classes.” 66 Pa. C.S. § 2806.1(b)(1)(i)(I).

In the *Phase II Implementation Order*, the Commission stated that, beyond the specific carve-outs for the low-income and GNI sectors, the EDCs should develop plans to achieve the most energy savings per expenditure. The Commission also stated that the EDCs must offer a well-reasoned and balanced set of measures that are tailored to usage and to the potential for savings and reductions for each customer class. The Commission noted that it is entirely possible that the most cost-effective energy efficiency programs may not come proportionally from each customer class. *Phase II Implementation Order* at 87. The Commission further explained:

The Commission believes that all classes of customers will benefit from a general approach because it has the best potential to impact future energy prices. The Commission will not require a proportionate distribution of measures among customer classes. However, the Commission directs that each customer class be offered at least one energy efficiency program. The Commission believes that, as with Phase I, the initial mix and proportion of energy efficiency programs should be determined by the EDCs, subject to Commission approval. The Commission expects the EDCs to provide a reasonable mix of energy efficiency programs for all customers.

*Id*. at 88.

**a. Positions of the Parties**

Based on its reading of 66 Pa. C.S. § 2806.1(a)(5) and the *Phase II Implementation Order,* PPLICA avers that it is important that customer classes neither receive a disproportionate share of EE&C Plan benefits nor bear a disproportionate burden of the costs in relation to the overall plan. PPLICA submits that comparing the parity between the overall revenue received by an EDC from a customer class and the Phase II EE&C Plan budget allocated to the same customer class provides a useful metric. PPLICA MB at 8-9.

PPLICA avers that while the large C&I customer class comprises 23% of the Company’s revenues, PPL is proposing to allocate approximately 27.5% of its Phase II costs to this class. PPLICA states that, in comparison, the residential class is allocated 41% of the Phase II costs while contributing 45% of the Company’s revenues, and the small C&I class is allocated 30% of the Phase II costs, while contributing 32% of the Company’s revenues. *Id*. at 9. Nevertheless, PPLICA concludes that, while some disparity exists between the large C&I and residential projections, PPL’s overall budget allocation reflects a reasonable effort to achieve parity among the customer classes. *Id*.

The OCA states that it does not dispute PPLICA’s conclusion that PPL’s Phase II budget appears to be reasonably proportioned among the customer classes, but contends that Act 129 does not require any type of proportionality in the allocation of EE&C program costs. OCA RB at 6. The OCA argues that, with respect to the distribution of EE&C programs, Act 129 requires only that the Commission put in place standards to ensure that each EE&C plan includes a variety of energy efficiency and conservation measures and will provide the measures equitably to all classes of customers; and that an EE&C plan must be cost effective under the Commission’s total resource cost (TRC) test and must provide a diverse cross section of alternatives for customers of all rate classes. *Id*., citing 66 Pa. C.S. § 2806.1(a)(5) and 66 Pa. C.S.   
§ 2806.1(b)(1)(i)(I). The OCA also argues that the purpose of the EE&C provisions of Act 129 is to reduce electricity usage, not revenues, and thus, PPLICA’s suggestion that the proportionality of EE&C measures and costs should be based on class revenue contributions ignores this fundamental fact. *Id*. at 7.

**b. Disposition**

We reject PPLICA’s implication that the allocation of PPL’s Phase II Plan costs should be based on the overall revenue received from the customers of a particular class, or that the share of Plan costs allocated to the large C&I class may be unreasonable as compared to revenues received from this class. As discussed, *supra*, in the *Phase II Implementation Order*, we stated that the EDCs should develop plans to achieve the most energy savings per expenditure, and that it is entirely possible that the most cost-effective energy efficiency programs may not come proportionally from each customer class.

We note that, of the thirteen programs proposed to be included in PPL’s Phase II Plan, seven are available to the residential class, five are available to the small C&I class, four are available to the large C&I class, seven are available to the GNI class, and six are available to low-income customers. Revised Plan at 31. PPLICA has provided no evidence to suggest that PPL has failed to provide a variety of energy efficiency and conservation measures in its Plan, or that the proposed measures will not be offered equitably to all classes of customers in violation of 66 Pa. C.S. § 2806.1(a)(5). Moreover, we note that the overall TRC test benefit-cost ratio for PPL’s Phase II Plan is projected to be 1.73. *Id*. at 15. Thus, we find that PPL has demonstrated that its Plan is cost-effective, and that it provides a diverse cross section of alternatives for customers of all rate classes, in conformance with 66 Pa. C.S. § 2806.1(b)(1)(i)(I).

In addition, the *Phase II Implementation Order* requires EDCs to include at least one comprehensive EE&C measure for residential and small commercial rate classes in their EE&C plans going forward. *Phase II Implementation Order* at 20. In this regard, we note that PPL’s Phase II Plan includes a Residential Home Comfort Program, which provides a comprehensive energy-efficiency program for new home construction and for existing homes. Revised Plan at 49-55. The Prescriptive Equipment Program also includes free energy audits and a comprehensive choice of measures for small businesses and farms. *Id*. at 88-98. PPL also states that customers can implement other comprehensive measures through its Custom Incentive Program. PPL St. No. 1 at 15. Thus, we find that PPL has met the requirement to include at least one comprehensive EE&C measure for its residential and small commercial rate classes in its Phase II Plan.

**3. Ten Percent Government/Non-profit Requirement**

For the Phase I EE&C Plans, Act 129 required that such plans obtain a minimum of ten percent of all consumption and peak demand reduction requirements from units of the federal, state and local governments, institutions of higher education and nonprofit entities (*i.e*., GNI customers). 66 Pa. C.S. § 2806.1(b)(1)(i)(B). In the *Phase II Implementation Order,* the Commission prescribed a ten percent energy reduction requirement for this sector from the EDCs’ Phase II EE&C Plans. *Phase II Implementation Order* at 45*.* For PPL, this ten percent energy savings carve-out to be achieved from its GNI customers is 82,107 MWh.

In its Phase II Plan, PPL’s Prescriptive Equipment Program and Custom Incentive Program will both be applicable to GNI customers. The Prescriptive Equipment Program is projected to result in total energy savings of 73,653 MWh from the GNI sector, while the Custom Incentive Program is projected to result in total energy savings of 9,120 MWh from this sector. Revised Plan at 130, 136. The total combined energy savings projected from these two programs equates to 82,773 MWh over the three years of the Phase II Plan.

PPL has further proposed new Phase II programs such as the Master Metered Low-Income Multifamily Housing Program, the School Benchmarking Program and the Continuous Energy Improvement Program for the GNI sector, which are projected to produce an additional 10,062 MWh of combined energy savings. Revised Plan at 144, 149, 154. Therefore, we find that PPL’s Phase II Plan is designed to achieve a total of 92,835 MWh in energy savings from its GNI customers’ participation in these programs, and that PPL has thus, satisfied its requirement to submit a plan that demonstrates compliance with the ten percent energy reduction requirement for GNI customers.

To ensure compliance with the ten percent energy reduction requirement for the GNI sector, we will require PPL to report the actual savings from this sector as part of its annual reporting on its Phase II Plan. *See, Phase II Implementation Order* at 77-78.We also note that PPL may propose to make subsequent modifications to its programs for GNI customers if necessary to achieve the ten percent target.

**4. Low-income Program Requirements**

With regard to EE&C Plan requirements for low-income customers, Section 2806.1(b)(1)(i)(G) of Act 129 provides as follows:

The plan shall include specific energy efficiency measures for households at or below 150% of the Federal poverty income guidelines. The number of measures shall be proportionate to those households' share of the total energy usage in the service territory. The electric distribution company shall coordinate measures under this clause with other programs administered by the commission or another Federal or State agency. The expenditures of an electric distribution company under this clause shall be in addition to expenditures made under 52 Pa. Code Ch. 58 (relating to residential low income usage reduction programs).

66 Pa. C.S. § 2806.1(b)(1)(i)(G). In addition to these requirements, the *Phase II Implementation Order* requires that at least 4.5% of an EDC’s required energy consumption savings be obtained from the low-income sector. *Phase II Implementation Order* at 54.

PPL states that at least 9.95% of its energy efficiency measures will be available for low-income customers, thus meeting the requirement that the number of measures provided to the low-income sector be proportionate to those households' share of the total energy usage in the Company’s service territory. PPL MB at 18. In addition, PPL states that it designed its Phase II Plan to achieve savings of 22,091 MWh/yr. from low-income customers through its low-income programs, and 49,192 MWh/yr. from low-income customers’ participation in its general residential programs. PPL asserts that the total expected savings from the low-income sector will amount to 8.68% of the total required reductions, which exceeds the compliance requirement of 4.5% for low-income customers. PPL MB at 18, n. 28.

PPL’s Phase II Plan includes the following programs designed specifically for low-income customers:

* Low-income WRAP Program (Revised Plan at 69-75);
* E-Power Wise Program (Revised Plan at 76-81);
* Low-income Energy-Efficiency Behavior & Education Program (Revised Plan at 82-87); and
* Master Metered Low-income Multifamily Housing Program (Revised Plan at 137-144).

**a. Programs for Low-income Customers – General**

**i. Positions of the Parties**

A number of Parties have concerns regarding PPL’s intention to achieve a significant portion of its low-income consumption savings through the use of general residential programs, rather than through programs targeted specifically at the low-income sector. The OCA states that, while it acknowledges that PPL may count low-income customer participation in general residential programs toward its 4.5% reduction target, it does not believe this is in the best interest of low-income customers. The OCA argues that low-income customers will pay more by participating in general residential programs because the income-qualified programs have no participation cost, while the standard residential programs provide incentives covering part of the cost. OCA St. No. 1 at 13; MB at 11. The OCA recommends that PPL increase marketing of the low-income programs by informing all participants in the general residential programs about the low income programs, and by renaming the programs “income-qualified” rather than “low-income” to eliminate the possible stigma customers may perceive regarding the latter term. OCA MB at 12.

Similarly, CEO also believes that PPL’s plan to achieve a significant amount of its low-income consumption savings through general residential programs rather than specific low-income programs is not in the best interest of low-income customers because they would be paying for services they would otherwise be eligible to receive without cost. CEO contends that claiming low-income energy savings from general residential programs would defeat the purpose of the statutory carve-out and the *Phase II Implementation Order*. CEO MB at 2-3. CEO argues that PPL should achieve its entire 4.5% low-income savings requirement directly from measures targeted at confirmed low-income customers. *Id*. at 3.

CEO also takes issue with PPL’s use of a telephone survey to confirm whether a customer who participated in a general residential program was a low-income customer, rather than relying on the normal eligibility process it would use if a customer applied for universal services. *Id*. CEO argues that, if PPL is permitted to claim low-income savings obtained from customer participation in general residential programs, it should only be allowed to do so upon confirmation that those customers are low-income through the Company’s established procedures for determining low-income eligibility. CEO further argues that once such customers are confirmed as low-income, they should then be referred to other low-income programs, and PPL should be required to report such confirmation and referral to the Commission and to stakeholders on a semi-annual basis. *Id*. at 3, 5-6. CEO further contends that PPL should be required to utilize community based organizations (CBOs) in the implementation of its Phase II Plan in the service territories served by those organizations. *Id*. at 5.

Like the OCA and CEO, CAUSE-PA also believes that low-income households should be encouraged to participate in specific low-income programs first, and that their participation in general residential programs should only be an ancillary means for these households to achieve energy savings. However, CAUSE-PA asserts that low-income customers who do choose to participate in general residential programs should be referred by PPL to those specific low-income programs that are available to them at no cost, as well as to PPL’s universal service programs. CAUSE-PA MB at 15-16.

PPL responds to these arguments by asserting that the level of participation in its Phase II low-income programs will be over three times that of low-income customer participation under its Phase I EE&C Plan. PPL MB at 29-30. PPL argues that further action to increase low-income participation is neither necessary nor desirable as it would increase costs without producing any additional energy savings, and would reduce the number and extent of programs available to non-low-income customers. PPL RB at 14. As for the OCA’s recommendation to rename the low-income programs, PPL states that the OCA has provided no evidence that the name of the program has or would make a difference in participation levels. PPL notes that both the *Phase II Implementation Order* and the Phase II plan template use the term “low-income” to describe programs for the low-income sector. *Id*.

With regard to CEO’s position, PPL contends that the Commission has previously rejected the recommendation that the Company achieve all of its required low-income energy savings through specific low-income programs. PPL states that its proposal is consistent with Commission precedent and sound public policy, and asserts that it is appropriate to record and account for the savings achieved by low-income customers through their participation in non-low-income programs. PPL MB at 30-31. PPL also avers that its proposed survey methodology for determining low-income participation in non-low-income programs was used and approved by the statewide evaluator (SWE) in Phase I, and reaffirmed by the Commission in *2012 PA Total Resource Cost (TRC) Test*, Docket No. M-2012-2300653 (Order entered August 30, 2012) (*2012 TRC Order*). *Id*. at 31; RB at 16. PPL argues that the Commission’s decision on this issue is fair and appropriate because income verification as proposed by CEO would be intrusive and burdensome to all residential customers, would cause delays in customer rebate payments as well as in recording and reporting savings, and would increase the costs of the Company’s Phase II Plan. PPL MB at 32.

As for CEO’s recommendation that PPL be required to report to the Commission and stakeholders on a semi-annual basis regarding the confirmation and referral of low-income customers, PPL asserts that this proposal is not appropriate. PPL states that this information would not be available on a semi-annual basis because the Company does not verify the low-income status of customers participating in non-low-income programs until the evaluation process, which is completed after a program year. PPL RB at 49. PPL also argues that CEO does not provide a basis or rationale for its proposal, nor does it explain what the Commission or stakeholders would do with such information. *Id*.

Regarding the use of CBOs, PPL asserts that it has successfully worked with CBOs during its Phase I EE&C Plan, and will continue to do so during Phase II. PPL points out that CBOs are key components in its WRAP and E-Power Wise programs. PPL MB at 32; RB at 17. PPL asserts that the Company and its CSPs will work with those CBOs that are determined to be in the best position to communicate with the target market for a particular EE&C program, and any attempt by CEO to restrict the CBOs that PPL can use in a given service area is inappropriate and should be rejected. PPL RB at 17-18.

Finally, with regard to recommendations that PPL refer low-income customers who participate in its Act 129 programs to other low-income programs, PPL states that it will continue its practice of referring customers who self-verify as low income to all of its low-income and universal service programs. PPL MB at 33; RB at 15, 18. In addition, PPL states that its WRAP contractors routinely provide information to low-income customers about the availability of its other universal service programs. PPL MB at 33.

**ii. Disposition**

Initially, we note that PPL’s Phase II Plan contains fourteen measures targeted specifically at low-income customers, out of a total of seventy-five portfolio measures. Revised Plan at Appendix E. Thus, we find that over 18% of PPL’s total Phase II Plan measures are available specifically to low-income customers, exceeding the 9.95% of total portfolio measures that PPL is required to offer to these customers in order to meet the requirement that energy efficiency measures available to low-income households be proportional to these households’ share of total energy use in PPL’s service territory. In addition, the total Phase II savings that PPL will obtain from low-income customers through its designated low-income programs as well as low-income households’ participation in general residential programs is estimated to be 71,283 MWh. We find that this level of projected savings represents 8.68% of PPL’s required Phase II reduction target of 821,072 MWh, and thus exceeds the requirement that at least 4.5% of required energy consumption savings be obtained from the low-income sector. Revised Plan at 192-193.

We do not agree with the OCA, CEO, and CAUSE-PA that PPL should be required to achieve a larger portion of its energy consumption savings through programs targeted specifically at low-income households. In order for PPL to achieve 4.5% of its total required consumption reduction from the low-income sector, it must obtain savings of 36,948 MWh (4.5% x 821,072 MWh) from that sector. PPL projects that it will obtain 22,091 MWh of savings from the low-income sector through programs targeted specifically at this sector. Revised Plan at 192. While this amount of savings represents approximately 31% of the total savings the Plan will achieve from the low-income sector, it represents nearly 60% of the 36,948 MWh needed for PPL to meets its 4.5% low-income savings target. Thus, we find that PPL will achieve the majority of its required low-income savings from programs targeted specifically at low-income households.

While PPL would then need to achieve an additional 14,857 MWh in low-income savings through its general residential EE&C programs in order to meet its overall 4.5% target, PPL estimates that it will achieve this, plus an additional 34,335 MWh through low-income participation in general residential programs. Thus, after achieving 60% of its required low-income savings through specifically-targeted low-income programs, PPL will obtain over twice the amount of the remaining needed savings through its general residential programs. Accordingly, we find that PPL’s Phase II Plan will not only exceed its 4.5% low-income savings requirement, but will do so through a reasonable mix of specific low-income programs and general residential programs.

In addition, we consider the ability of low-income customers to participate in PPL’s general residential EE&C programs to be critical to the Company’s ability to identify previously unconfirmed low-income customers, and represents another way for the Commission to gauge the effectiveness of PPL’s programs. According to the Commission’s 2011 Report on Universal Service Programs & Collections Performance, the number of *confirmed* low-income customers within PPL’s service territory is 153,487, which accounts for 71.5% of the total *estimated* number of low-income customers in PPL’s service territory. 2011 Report on Universal Service Programs & Collections Performance at 9-10. The remaining 28.5% of low-income customers in PPL’s service territory are unconfirmed or unknown. Such unconfirmed low-income customers can only be identified by the Company when they participate in PPL’s Act 129 general residential programs and are verified through the SWE-approved surveying method, or when they seek a payment arrangement or participate in any other Universal Service program such as CAP, LIURP or LIHEAP. Traditionally, it has been very difficult to market to this segment of customers, and the only way they may receive the benefits of the Act 129 low-income programs for which they are income-eligible is by being identified by the Company when they participate in the general residential programs.

With regard to PPL’s use of CBOs, we agree with the Company that it has successfully worked with CBOs during the implementation of its Phase I EE&C Plan, and trust that it will continue that practice during Phase II. We believe that PPL and its CSPs should work with those CBOs that it determines to be in the best position to communicate with the target market for any given EE&C program, and do not find it necessary to dictate which particular CBOs PPL should utilize.

Finally, with regard to the referral of low-income customers to other programs, we encourage PPL to utilize all collaborative resources to achieve the maximum effectiveness and reach of its low-income programs, and we direct PPL to continue its practice of referring all customers who self-verify as low income to all of its low-income and universal service programs. However, we reject CEO’s recommendation to require PPL to report to the Commission and to stakeholders regarding the confirmation and referral of low-income customers on a semi-annual basis.

**b. Low-income WRAP Program**

The Low-income WRAP (Winter Relief Assistance Program) Program offered by PPL under its Phase II Plan is one of two WRAP programs available to PPL’s customers, the other being its Low-income Usage Reduction Program (LIURP) WRAP program. The LIURP program is a Commission-approved component of PPL’s Universal Service & Energy Conservation Plan programs, and is not part of PPL’s EE&C Plan. However, PPL states that, in its efforts to provide direct energy efficiency measures to its low-income customers, it included a WRAP component in its Phase I EE&C Plan, which it proposes to continue, with modifications, in its Phase II Plan. PPL MB at 27.

In general, PPL’s WRAP programs consist of three types of services: baseload, low-cost, and full-cost.[[24]](#footnote-24) Under PPL’s Phase II Plan, the Low-income WRAP Program will include baseload WRAP jobs, but not low-cost or full-cost WRAP jobs. The program will also include the installation of an energy-efficient heat pump water heater, if needed. Low-income WRAP, which is available to eligible customers at no cost, is managed by PPL in conjunction with its LIURP. Services offered under this program are provided by CBOs and contractors. Revised Plan at 69.

PPL states that it will continue to encourage CBOs and WRAP contractors to combine Act 129 funding with federal, state, or other human services funding to provide a whole-house energy-efficiency solution. Baseload jobs are offered to customers who have the potential to receive and benefit from energy-saving measures. Such measures include the following:

* Energy education
* Installation of Compact Fluorescent Lights (CFLs)
* Refrigerator replacement
* Air conditioner replacement
* Dehumidifier replacement
* Changing or cleaning of heating/cooling filters
* Dryer venting (electric dryer)
* Power Strips/Smart Plugs

In addition, PPL Electric will offer a heat pump water heater replacement component to qualified low-income customers with electric water heating at no cost. *Id*. at 72.

PPL states that it will perform periodic reviews of its programs at least annually, and may adjust measures, rebate levels, performance criteria and/or eligibility ratings in the future as market conditions change. *Id*.

PPL also states that it may design and implement a “neighborhood blitz” program identifying low-income neighborhoods that may benefit from WRAP services. Qualified customers would receive any of the three types of WRAP jobs offered by PPL. *Id*. at 70. Baseload jobs for customers at or below 150% of Federal poverty income guidelines would be credited to PPL’s Phase II Plan, while low-cost and full-cost jobs would be credited to PPL WRAP (LIURP). *Id*.

**i. Determination of Appropriate WRAP Jobs**

**(a). Positions of the Parties**

CAUSE-PA is generally supportive of PPL’s Low-income WRAP program, and commends PPL for its planned “neighborhood blitz” program. CAUSE-PA MB at 8‑9. However, CAUSE-PA states that, in conducting this outreach, it is imperative that PPL provide the types of WRAP jobs that are needed for the community. Thus, CAUSE-PA asserts that the CBOs working through the WRAP program must have the discretion to determine whether a household is in need of a low-cost or full-cost WRAP job in addition to baseload WRAP. *Id*. at 10. CAUSE-PA indicates that, in rebuttal testimony and in response to discovery, PPL clarified its intention to allow such discretion through close coordination between its LIURP and its Act 129 program. CAUSE-PA asserts that PPL’s Phase II Plan “should be amended to reflect these clarifications and specifically state that while it may prioritize baseload WRAP within Act 129, where appropriate and where other sources of funding are not available, it will fund low-cost and full-cost WRAP jobs through Act 129.” *Id*.

In addition, CAUSE-PA recommends that PPL’s Phase II Plan include a commitment to coordinate its low-income WRAP services with natural gas distribution companies (NGDCs) in the Company’s service territory. *Id*. at 14, 19. As argued by CAUSE-PA witness Thu B. Tran:

Many of the NGDCs may well use the same community based organizations to run their LIURP programs. If a CBO is in the home of a low-income household for a PPL audit and sees measures that could be funded through an NGDC’s LIURP (or vice versa) the CBO should be required to make a referral back to PPL or the NGDC for approval to install appropriate remedial measures. This may require a closer level of coordination so that a single audit is performed rather than multiple audits. From the perspective of a low-income household this degree of coordination will reduce the fatigue associated with multiple audits and multiple home visits from the CBO.

CAUSE-PA St. No. 1 at 12.

In response to CAUSE-PA’s concerns, PPL states that it decided to focus its Phase II Plan Low-income WRAP program on baseload job types in order to maximize savings and minimize costs. PPL MB at 26. However, PPL states that it has not eliminated all low-cost or full-cost WRAP jobs in its Phase II EE&C WRAP program, noting that it plans to provide approximately 600 low-cost heat pump water heaters for low-cost WRAP jobs during its three-year Phase II Plan. *Id*. at 26-27. PPL states that while it is reducing the number of low-cost and full-cost jobs in its Act 129 EE&C WRAP program, it will correspondingly increase the number of low-cost and full-cost WRAP jobs undertaken in its non-Act 129 LIURP WRAP program, Thus, PPL asserts that the total number and category of jobs will be approximately the same. *Id*. at 27. For these reasons, PPL contends that CAUSE-PA’s concerns are misplaced. *Id*.

With regard to the coordination of its WRAP programs with those of NGDCs, PPL asserts that it is willing to set up to three conference calls with the NGDCs that operate in the Company’s service territory during the first year of its Phase II Plan to discuss coordination of WRAP jobs. PPL states that it will then determine if further meetings are needed. *Id*. at 29; CAUSE-PA Cross Examination Exh. 1 at 5.

**(b). Disposition**

We encourage the leveraging and coordination of PPL’s WRAP program with other similar state and federal weatherization programs such as LIURP, as well as with programs offered by NGDCs, as long as all appropriate and reasonable measures identified by the premise audit are installed. We anticipate that a situation could arise where a household that is eligible for full-cost measures may receive only baseload measures under PPL’s Act 129 WRAP, and we agree with CAUSE-PA that there would be reason for concern under such a scenario. Thus, we will direct PPL to provide additional detail to staff of the Commission’s Bureau of Consumer Services (BCS) and Bureau of Technical Utility Services (TUS) regarding the Company’s plans for the coordination of Act 129 WRAP services with LIURP WRAP services, in order to ensure that all eligible customers receive all available and appropriate measures under the two programs.

In addition, we have some concerns regarding PPL’s assertion that low-cost and full-cost WRAP jobs will increase under its non-Act 129 LIURP WRAP as they decrease under its Act 129 WRAP. We find that while this appears to be a sound idea in theory, it creates the potential for difficulties in separating and aligning the measures and corresponding costs on jobs that “blend” multiple programs. Therefore, we will require PPL to provide assurances that proper accounting between its two WRAP programs will occur, and to detail the precautions it will take to avoid under-counting or double-counting the costs and savings relating to such “blended” jobs. Accordingly, we will direct PPL to meet with the BCS and TUS in order to provide staff with more detail regarding the coordination of the Company’s two WRAP programs.

**ii. Heat Pump Water Heaters**

**(a). Positions of the Parties**

Under PPL’s Phase II Plan, the Company intends to install 200 heat pump water heaters per program year to eligible customers under its Low-income WRAP program, amounting to a total of 600 water heaters over the three-year duration of the Phase II Plan. Revised Plan at 74. CEO believes that PPL’s Phase II Plan should provide for the installation of a greater number of water heaters. CEO asserts that, pursuant to a Federal grant, it was able to successfully install 260 units of an earlier generation model heat pump water heater in Northeastern Pennsylvania over the last two years. CEO MB at 4. CEO avers that, based on its experience in conducting the Federal program, and considering the availability of newer and easier to install heat pump water heaters, it could install between 300 and 400 units per year in Northeastern Pennsylvania alone. *Id*. at 5. Thus, CEO opines that PPL should be able to install approximately 500 heat pump water heaters per year under its Low-income WRAP program. CEO St. No. 1 at 12.

CAUSE-PA states that it fully supports PPL’s decision to include heat pump water heaters in its Phase II Plan. CAUSE-PA MB at 10. CAUSE-PA notes that in rebuttal testimony, PPL clarified that when heat pump water heaters are installed, households would also receive all available WRAP measures. *Id*., citing PPL St. No. 1R at 25. CAUSE-PA asserts that this clarification should be reflected in PPL’s Phase II Plan. CAUSE-PA MB at 10.

In response, PPL states that it derived its estimate of 200 heat pump water heaters from the SWE’s Market Potential Study, which was used by the Commission to determine the remaining level of opportunities for cost-effective energy savings in Pennsylvania. PPL MB at 28. PPL argues that CEO’s speculation that there is sufficient market potential to support the installation of 500 heat pump water heaters per year directly conflicts with the SWE Market Potential Study, and was not otherwise supported by CEO. However, PPL states that should it find that the potential exists for the installation of additional heat pump water heaters under its Low-income WRAP program, it will consider revising its estimate. *Id*.

**(b). Disposition**

We commend PPL’s decision to include the installation of heat pump water heaters as part of its Low-income WRAP program, and we do not agree with CEO that there is sufficient evidence to warrant ordering PPL to increase the number of these installations beyond the 200 per year that PPL is proposing. PPL states that it considered information set forth in the SWE Market Potential Study in making its initial determination regarding the number of heat pump water heaters to be installed, and asserts that it will revise its estimate should it find that the potential exists for the installation of additional heat pump water heaters. Thus, we decline to adopt CEO’s recommendation on this issue.

**iii. Equipment Repair and Space Heaters**

**(a). Positions of the Parties**

CAUSE-PA asserts that PPL has made significant commitments to address the repair or replacement of heating systems, and to begin the process of remediating the problem of inefficient and dangerous electric space heaters used by low-income households. CAUSE-PA MB at 14. As CAUSE-PA states:

In response to interrogatories, PPL clarified that as a part of its LIURP WRAP it will “replace or repair a customers [sic] central electric heating system (or individual baseboard units) as part of WRAP,” and will refer customers who have a natural gas furnace in need of repair of [sic] replacement to the local NGDC for repair and replacement through their low income programs. Furthermore, PPL committed to consider a pilot program to address more intractable electric space heating concerns in conjunction with its proposed 2014-2016 Universal Service and Energy Conservation Plan.

*Id*. (footnotes omitted). CAUSE-PA states that it supports this approach and commends PPL for committing to begin the process of addressing this issue. *Id*. CAUSE-PA asserts that PPL should amend its Phase II Plan to clarify that it will begin addressing this issue through LIURP and its other universal service programs. *Id*. at 14-15.

In response, PPL states that it does not have a process or procedure in place to repair or replace gas equipment. Moreover, PPL asserts that repairing or replacing a gas heating unit does not, in and of itself, result in incremental reductions in the use of electricity. PPL MB at 28. In addition, PPL contends that CAUSE-PA provided no cost, budgeting, or savings analysis regarding this proposal, nor did it identify how this proposal would impact the Company’s ability to meet its Act 129 compliance target. *Id*. at 29.

As for the issue of electric space heaters, PPL responds as follows:

. . . the Company supports the removal of electric space heaters as a general policy, but this is a complex matter that presents substantial and competing public policy issues that should be addressed through a broader statewide process and not in an individual EDC’s EE&C Plan proceeding. PPL Electric Main Brief, p. 28. To address the issue, however, the Company has committed to consider a pilot program to address space heater issues in conjunction with its proposed 2014-2016 Universal Plan. See CAUSE-PA Cross-Examination Exhibit 1. PPL Electric does not support CAUSE-PA’s request to amend its Phase II EE&C Plan to reflect the above commitment because the issue is best addressed in the universal service proceeding. Any potential pilot program would not be part of the Phase II EE&C Plan, and the Company does not want to confuse customers and give the impression the pilot program is part of the Act 129 Plan or that Act 129 funds will be spent on the pilot program.

PPL RB at 12-13.

**(b). Disposition**

PPL indicated that it will replace or repair a customer’s central electric heating system or individual baseboard units as part of its LIURP WRAP. CAUSE-PA Cross-examination Exh. No 1 at 3. PPL further stated that if, during the course of completing a LIURP WRAP home assessment, it determines that a customer has a natural gas furnace in need of repair or replacement, it will refer the customer to the local NGDC for heating unit repair or replacement through the NGDC’s low-income programs. *Id*. In addition, PPL stated that it intends to address the electric space heater issues through a pilot program in conjunction with its proposed 2014-2016 Universal Plan. Thus, we find that PPL is appropriately addressing these issues through programs outside of its Act 129 EE&C Plan, and we will not require the Company to amend its Phase II Plan to clarify measures that will not be part of that Plan.

**iv. Additional WRAP Measures**

**(a). Positions of the Parties**

CEO asserts that PPL’s Low-income WRAP program should include more direct measures for the low-income sector, as opposed to providing education measures. CEO contends that the lack of direct measures targeted at low-income customers under the program differs from the many and substantial direct measures offered to the other customer sectors under the Company’s Phase II Plan. CEO MB at 4. In addition to recommending the installation of a greater number of heat pump water heaters than that proposed by the Company (addressed above), CEO also recommends other direct measures be targeted at low-income customers. These include NEST “learning thermostats,” infrared guided air sealing, smart strips, and energy information displays. *Id*.

In response, PPL provides reasons as to why none of CEO’s proposed measures should be adopted. With regard to the NEST thermostat, PPL asserts that it evaluated this device, but determined that it was not configured to work properly with air source heat pumps. PPL MB at 34. Moreover, PPL contends that the SWE and the Commission have maintained that the TRM does not allow heating mode savings for any type of programmable thermostat with an air source heat pump. *Id*.; PPL St. No. 1R at 26. PPL identifies further technical and operational issues regarding the NEST thermostat that would render it an inappropriate measure to include in its Phase II Plan. PPL MB at 33-34; PPL St. No. 1R at 26-27.

With regard to infrared guided air sealing, PPL asserts that this measure would be cost prohibitive, and would not be part of the Company’s baseload WRAP job. PPL MB at 35; PPL St. No. 1R at 27-28. As for smart strips, PPL asserts that the installation of such devices is already included as part of baseload WRAP jobs. PPL MB at 35; PPL St. No. 1R at 28.

Finally, with respect to energy information displays, PPL states that it conducted a nine-month pilot program with such a device in 2010, and that the results were mixed. According to PPL, while the device provided customers with certain benefits, the overall purchase and installation were costly, and pilot participants found it challenging to get the unit to function properly. Moreover, PPL asserts that the TRM currently does not provide for any savings for these devices, requiring the Company to treat it as a custom measure. PPL MB at 36; PPL St. No. 1R at 28-29. However, PPL states that it will continue to evaluate these devices for possible future inclusion. PPL St. No. 1R at 29; MB at 36.

**(b). Disposition**

For the reasons expressed by the Company, we do not find it appropriate to direct PPL to include CEO’s recommended additional measures in its Low-income WRAP Program. However, we encourage PPL to continue to evaluate additional direct-install measures for inclusion in the program as technology evolves and the costs of such measures decline.

**c. E-Power Wise Program**

The E-Power Wise program provides low-income customers with energy-efficiency kits and educational materials. The kits (which may include CFLs, faucet aerators and high-efficiency shower heads) are distributed by CBOs at workshops, and by direct mail. Revised Plan at 76-77. The educational materials will focus on the following:

* Typical energy use in the home
* How energy efficiency translates into lower costs
* Practical behaviors that can reduce energy consumption
* Information and installation guidance regarding the contents of E-Power Wise kits
* Additional sources for energy efficiency assistance and for assistance for payment troubled customers
* Additional topics recommended by participating CBOs

PPL St. No. 1R at 32.

**i. Positions of the Parties**

CAUSE-PA questions the effectiveness of PPL’s E-Power Wise program in significantly lowering customers’ electric bills. CAUSE-PA contends that, while the education component of the program may yield countable, inexpensive kWh savings that are sizeable in the aggregate, the impact on an individual customer’s bill is likely to be small, and not very meaningful to the customer. CAUSE-PA MB at 11. CAUSE-PA avers that PPL’s Independent Evaluator recognized this in its evaluation of the program for Phase I, plan year 3, when it stated:

Because of the relatively small savings impact of the program compared to the overall consumption of the participant group, savings for measure installations and behaviors were estimated using engineering calculations rather than using a billing analysis. (That is, because savings are small, it is likely that they cannot be seen in customer billing histories.)

*Id*., quoting from PPL’s Final Annual Report to the Pennsylvania Public Utility Commission for the Period June 1, 2011 through May 31, 2012, Program Year 3 (November 15, 2012) at 85 (emphasis added by CAUSE-PA). CAUSE-PA asserts that countable savings for PPL must be balanced with measures that are meaningful to the ratepayers who pay for these programs. MB at 10-12. Accordingly, CAUSE-PA recommends “that PPL scale back its E-Power Wise Program in which it proposes to spend in excess of $2 million over the three year period and funnel the program dollars into its Act 129 WRAP program which provides economically meaningful savings for individual low-income households.” CAUSE-PA St. No. 1 at 15.

In response, PPL states that its proposed budget for its E-Power Wise Program is $735,000, not $2 million as CAUSE-PA asserts. PPL MB at 23. Furthermore, PPL asserts that all savings resulting from its Phase II Plan are meaningful, and states that the projected savings from its E-Power Wise program at the proposed budget of $753,000 result in a TRC of 3.09, which is the highest TRC of any of its proposed low-income programs. PPL MB at 24. PPL contends that CAUSE-PA’s citation to PPL’s Final Annual Report for program year 3 of Phase I does not support CAUSE-PA’s position. According to PPL, the referenced statement from that report describes why an engineering calculation was the appropriate method to use to determine the savings for this measure, rather than a billing regression analysis. *Id*. As PPL states:

A billing regression analysis is not an appropriate method to estimate savings for the E-Power Wise program because it is not possible to isolate or discern the impact of the individual measures of that program from all of the other unrelated changes to a customer’s bill. For similar reasons, engineering calculations (equations or fully stipulated “deemed” savings) are specified by the TRM for the measures provided as part of E-Power Wise and for most measures in other programs such as a [sic] CFLs, heat pumps, low flow showerheads, and many other measures. PPL Electric St. 1-R, P. 34.

*Id*.

**ii. Disposition**

We note that PPL’s E-Power Wise Program was successfully implemented in its Phase I EE&C Plan, and while there were initial concerns regarding the installation rates of the E-Power Wise kits, those concerns were addressed during evaluation by the SWE. PPL proposes to continue the E-Power Wise Program in its Phase II Plan, and the Company projects a favorable TRC ratio of 3.09 for this program. Accordingly, we find no reason to direct PPL to revise the program as CAUSE-PA recommends.

**d. Energy Efficiency Behavior & Education Programs**

In its Phase II Plan, PPL includes a Residential Energy Efficiency Behavior & Education Program, as well as a Low-income Energy Efficiency Behavior & Education Program. Under these programs PPL will provide approximately 110,000 high-usage residential customers and 50,000 eligible low-income customers with a series of “report cards” comparing their usage to that of comparable customers. Revised Plan at 56, 82; PPL MB at 20. These reports are meant to encourage customers to adopt energy-efficient behaviors, to install energy-efficiency measures, and to become more aware of how their behavior and practices affect their energy usage. PPL MB at 20. In addition, the programs will educate customers about free or low-cost measures and behavior changes that may reduce their energy consumption. *Id*. The program for high-usage residential customers is a continuation from PPL’s Phase I Plan, while the program for low-income customers is new for Phase II. *Id*. at 19.

PPL explains that the expected measure life of these programs is one year, which means that the achieved savings for the programs will expire after one year, and are therefore not cumulative for each year of operation toward the May 31, 2016 compliance target. *Id*. at 20. PPL states that, for this reason, it has proposed that the programs begin in PY6, with savings recorded in PY7. *Id*. at 21.

**i. Positions of the Parties**

The OCA opines that the savings achieved from these programs could persist beyond the one-year measure life if the behavior modification message provided by the programs was continued over a long enough time period for the message to become ingrained. OCA St. No. 1 at 10; MB at 13. Thus, the OCA recommends that the program from Phase I continue without interruption into Phase II, and that both programs operate continuously over a long enough time period to allow the messaging to become ingrained. *Id*.

The OCA further argues that savings from these programs could persist if customers were provided with energy savings tips based on hardware improvements and internet links to other PPL energy efficiency programs. OCA St. No. 1 at 10; MB at 14. Noting that PPL confirmed through rebuttal testimony that it intends to provide such links to customers, the OCA submits that PPL should be required to include this commitment in its revised Phase II Plan. OCA MB at 14.

PPL opposes the OCA’s recommendation regarding the continuous operation of its programs. As PPL argues:

If these programs were operated continuously for the three-year Phase II Plan, PPL Electric would incur the annual costs to operate the programs for those three years, but would not receive credit for any additional savings for these additional expenditures. Any savings realized in PY5 would expire in PY6 and would not count toward PPL Electric’s compliance target at the end of PY7. Similarly, any savings realized in PY6 would expire in PY7, before the May 2016 compliance date. Thus, the continuous operation of these programs for the entirety of the Company’s Phase II EE&C Plan would essentially triple the programs’ cost, without producing any additional savings that PPL Electric can count toward meeting its Phase II consumption reduction target.

It is the Company’s view that such expenditures are not reasonable in the context of its Phase II EE&C Plan. Moreover, the OCA has not attempted to quantify these costs, identify the source of the funds in the Company’s Plan to pay for these costs, or assessed the potential impact that such expenditures would have upon the Company’s ability to comply with its Act 129 requirements.

PPL MB at 21 (citations omitted).

PPL also contends that the OCA provided no support or quantification regarding its argument that customers’ behavior would become ingrained if the program were operated continuously during the course of Phase II. PPL asserts that, contrary to the OCA’s conclusion, there is no evidence that savings persist once the program measures stop. PPL RB at 9.

Regarding the OCA’s recommendation that PPL provide internet links to its other programs, PPL states that it intends to do this in Phase II of the Plan. PPL MB at 21; RB at 9.

CAUSE-PA asserts that the Low-Income Energy Efficiency Behavior & Education Program should not be funded, or that funding should be significantly scaled back for this program. CAUSE-PA argues that low-income customers tend to live in older and less well-maintained housing, with older and less-efficient heating and cooling systems, and thus simply educating these customers regarding energy efficiency practices may not lead to meaningful energy savings. CAUSE-PA MB at 12. CAUSE-PA submits that the money budgeted for this program should be directed towards the WRAP program or other programs that involve installed measures such as heat pump water heaters or weatherization that will provide meaningful bill impact to low-income households. *Id*. at 13. CAUSE-PA also asserts that energy education offered to low-income households should be more closely aligned with the installation of energy efficiency measures. *Id*. at 12.

In response, PPL asserts that transferring money from one program to another would substantially reduce savings, increase costs, and increase the risk of non-compliance with Act 129. PPL MB at 22. As PPL further argues:

Based upon PPL Electric’s experience in operating the EE&C Plan Low-income WRAP Program and the Residential Energy-Efficiency Behavior & Education Programs in its Phase I EE&C Plan, the program acquisition costs (program expenditures per annualized savings) for EE&C Plan Low-income WRAP is $1.39/kWh and the program acquisition cost for the behavior program is $0.14/kWh. PPL Electric St. 1-R, p. 17. Therefore, $1 of program funds for the behavior program provides approximately ten times the savings as $1 would for the Low-income WRAP Program. *Id*. If PPL Electric eliminated the Low-Income Energy-Efficiency & Behavior program and its 8,335 MWh/yr. savings and $1.2 million cost as recommended by CAUSE-PA, and transferred the funds for use in the Low-income WRAP Program, it would cost $11.6 million to achieve those 8,335 MWh/yr. savings in the Low-income WRAP Program, a cost increase of $10 million for no change in overall savings. CAUSE-PA’s proposal would reduce the savings to be obtained under the Company’s Phase II EE&C Plan and risk non-compliance with the reduction targets.

*Id*. at 22-23.

PPL also contends that, while CAUSE-PA’s proposal may produce a meaningful bill impact for a small number of customers, the Company must consider its overall Act 129 requirements and the costs and benefits provided to the various customer sectors overall. PPL RB at 11. PPL further argues that the educational components of its Phase II Plan are even more important now that the Commission has eliminated all funding for its existing Consumer Education Plan in the Company’s recent base rate proceeding. PPL MB at 23, citing *Pennsylvania Public Utility Commission et al. v. PPL Electric Utilities Corporation*, Docket No. R-2012-2290597 (Opinion and Order entered December 28, 2012) at 54. PPL concludes that this educational program has merit and should be included in Phase II, and that the Company has fully supported its inclusion. PPL RB at 11.

**ii. Disposition**

We note that PPL’s proposed Low-income Energy Efficiency Behavior & Education Program is a modification of the Residential Energy Efficiency Behavior & Education Program that the Company proposes to continue from Phase I. However, we have a number of concerns with the low-income version of this program. First, while we believe that education is a key component in promoting energy efficiency, and that changes in customer behavior can result in energy savings, PPL has not shown what modifications will be made to the existing residential program in order to tailor it specifically to low-income customers. For example, PPL provided no details as to how it will address the distinction between homes with electric heating and homes without electric heating when comparing customer usage in the “report cards” it provides to low-income customers who participate in the program. Nor has PPL addressed the issue of how low-income customers will pay for the installation of any energy efficiency measures recommended under the program. Moreover, PPL has failed to indicate the number of “report cards” that participating low-income customers will receive during the course of their participation in the program.

Additionally, since the expected measure life of this program is only one year, we are concerned that there may be little or no reinforcement of the behavioral message communicated to customers under the program, as the OCA asserts, and that there will be limited opportunity to leverage and coordinate this program with other EE&C programs as recommended by CAUSE-PA.

We note that the TRC for the Low-income Energy Efficiency Behavior & Education Program is 0.92, and the estimated amount of savings under this program is 8,335 MWh/yr. Revised Plan at 87. This amount of expected savings represents approximately 23% of the total 36,948 MWh/yr. necessary for PPL to achieve its 4.5% Phase II low-income carve-out requirement. This is a significant portion of PPL’s required low-income savings to be attributed to a program that is so lacking in key design details. Moreover, while the participation target of 50,000 low-income customers is commendable, we are concerned with PPL’s budgeting of $1.184 million for a program that it has not fully explained.

PPL already has other proven, cost effective programs available to low-income customers that incorporate EE&C education into their overall design. Thus, we are concerned that PPL’s proposed Low-income Energy Efficiency Behavior & Education Program may simply duplicate those education efforts without providing meaningful usage comparisons, or other, more substantial EE&C measures. For these reasons we will reject the Low-Income Energy Efficiency Behavior & Education Program as proposed in PPL’s Phase II Plan, and will direct PPL to either reallocate the amount budgeted for this program to other Phase II low-income programs, or to submit a modified version of the Low-income Energy Efficiency Behavior & Education Program that sets forth all pertinent details of the program’s design. This modified version of the program must include, *inter alia*, an explanation of how the program will be customized to apply specifically to low-income households, and must address the other concerns enumerated above.

**e. Master Metered Low-income Multifamily Housing Program**

The Master Metered Low-Income Multifamily Housing program targets energy-efficiency improvements in non-profit master-metered multifamily low-income housing buildings. In securing participation, this program combines marketing with the active recruitment of qualified master-metered multifamily buildings. The program will provide free basic walkthrough audits for master-metered multifamily buildings, followed by general analyses and reports of potential savings for building owners through direct installation and prescriptive efficiency measures. Revised Plan at 138.

**i. Positions of the Parties**

The OCA asserts that PPL’s Master Metered Low-Income Multifamily Housing program is well-designed, but that there are certain elements of the program that could be improved. OCA MB at 16. Specifically, the OCA contends that the program does not include LED lighting as an eligible measure beyond exit signs, and recommends that PPL add additional highly efficient LED lighting technology to this program’s list of measures. *Id*. at 16-17. The OCA notes that PPL indicated it was amenable to approving the installation of some LED lighting in common areas, or outside lighting which would have long hours of use. *Id*. at 17. The OCA requests that PPL include these additional lighting features in its revised Phase II Plan. *Id*.

In addition, the OCA asserts that PPL’s Phase II Plan failed to provide an explanation of how the Company and its CSP will educate building owners and tenants regarding energy efficiency under this program. The OCA states that through rebuttal testimony, PPL explained that the CSPs bidding to operate this program will submit a proposed education plan to be used in the program. Based on this information, the OCA recommends that PPL share the education plan with the stakeholder group, once such a plan is selected. MB at 17.

In response to the OCA’s request regarding the inclusion of certain LED lighting measures in its Phase II Plan, PPL states that it will revise its Plan to add LED lighting measures for hard-to-reach common areas, or for some outside applications that would have long hours of use, as the OCA requested. PPL RB at 20. In addition, PPL states that it also agrees to share the education plan for this program with stakeholders at a stakeholder meeting, once a CSP is selected. *Id*. at 20-21.

**ii. Disposition**

We commend PPL for including a low-income multifamily housing program in its Phase II Plan. Such a program will help to address EE&C issues for the often underserved segment of low-income customers who reside in master-metered, multifamily residences. Accordingly, we will approve PPL’s proposed modification to this program to include the installation of additional LED lighting measures as noted above, and we direct PPL to share its education plan for this program with the stakeholder group as it has agreed to do, once the CSP for this program is selected.

**5. Proposals for Improvement of the EDC’s Plan**

**a. Prescriptive Equipment Programs**

PPL offers Prescriptive Equipment Programs for its residential (Revised Plan at 67), small C&I (Revised Plan at 88-98), large C&I (Revised Plan at 106-114), and GNI (Revised Plan at 122-130) customer sectors. These programs offer rebates and incentives to participating customers, promoting the purchase and installation of a wide range of high-efficiency equipment, including technologies appropriate to specific building types for the applicable customer class. The programs provide customers with financial incentives to offset the higher purchase costs of energy-efficient equipment, and offer information on the features and benefits of such equipment.

The Prescriptive Equipment Program for residential customers is targeted specifically at residential agriculture customers, and is managed through the Small C&I Prescriptive Equipment Program, which includes measures and services available to farms. Although the program will be managed under the small C&I program, the savings and costs resulting from the program will be credited to the residential sector. EE&C Plan at 67.

**i. Lighting Measures**

**(a). Positions of the Parties**

The OCA raised concerns regarding PPL’s proposal to provide customer incentives for the installation of certain types of lighting technologies under its Prescriptive Equipment Programs. Specifically, the OCA opines that PPL should not offer rebates for standard T-8 lamps or fixtures, but instead, should offer them for high performance T-8 and T-5 technologies. OCA MB at 19. As OCA witness Geoffrey C. Crandall argued:

In my experience working in the Illinois Collaborative for the past several years, I am aware that the Commonwealth Edison Lighting program promotes energy efficiency improvements typically by requiring T-8 lamps to be either high performance or reduced wattage in order to qualify for their incentives. In terms of providing rebates on bulbs, PPL should encourage customers to purchase the most efficient bulbs available.

OCA St. No. 1 at 17.

The OCA also expressed concern with the possibility that PPL may provide customer incentives for Energy Independence and Security Act (EISA) compliant incandescent lighting. OCA MB at 19. According to OCA witness Crandall, such lighting is far less efficient than CFL and LED bulbs that are readily available on the market, and providing rebates for EISA compliant incandescent lighting would encourage customers to make a less efficient choice. *Id*.; OCA St. No. 1 at 17.

In response to the OCA’s recommendations, PPL asserts that the projected savings included in its proposed Plan are based on the savings method specified in the TRM, *i.e*., the difference in consumption between the customer’s existing light fixtures (including T-12 bulbs) and the new fixtures (including T-8 bulbs). PPL MB at 26. PPL states that T-8 bulbs are not considered the baseline measure in the 2013 TRM, and are therefore eligible for savings and rebates. *Id*. Furthermore, PPL states that there is no evidence on the record as to the effect of the OCA’s proposal on PPL’s ability to meet its reduction requirements. *Id*.

The OCA counters that, while the T-8 and EISA technologies are allowable measures under the 2013 TRM, more efficient lighting technology exists, and PPL should be striving to promote the most energy efficient technologies available. OCA RB at 5.

**(b). Disposition**

Based on the evidence of record, we find that the lighting technologies included in PPL’s proposed Prescriptive Equipment Programs represent allowable measures in accordance with the 2013 TRM, and should result in measureable savings. Therefore, we will reject the OCA’s recommendation on this issue.

**ii. Residential Farms**

**(a). Positions of the Parties**

SEF takes issue with PPL’s Prescriptive Equipment Program for residential farms. SEF contends that farms are businesses, and that incentives for business equipment should not be offered to low-income residential ratepayers. According to SEF, it is unfair for residential customers to bear the cost of rebates for business equipment used in farming. SEF asserts that PPL should encourage farms to switch to a small C&I rate class and remove all business equipment rebates from the low-income portion of its Phase II Plan. However, SEF asserts that the residence on the farm should be treated like any other low-income residence, and should have access to incentives that are limited to residential applications. SEF MB at 16-17.

PPL responds that it is appropriate for farms that receive service under residential rate schedules, and pay a portion of the EE&C costs via the Act 129 Compliance Rider, to receive rebates as part of a residential program. PPL MB at 33-34; RB at 19. Furthermore, PPL contends that switching residential farms to small C&I rate schedules would be poor public policy, because these customers would then no longer qualify for low-income programs, which are only available to customers served under residential rate schedules. PPL RB at 19. PPL states that it does not believe that low-income farmers should be denied access to incentives offered under residential programs just because the equipment purchased may be used for business purposes. *Id*.

**(b). Disposition**

We agree with PPL that it is appropriate for farms that receive electric service under a residential rate schedule to be eligible for incentives as part of a residential program. We see no reason why those residential farm customers who qualify as low-income customers should not be eligible for the incentives relating to farm equipment offered under the Residential Prescriptive Equipment Program. Therefore, we will reject SEF’s proposal.

**b. Programs for Data Centers**

**i. Positions of the Parties**

The OCA is concerned that, while PPL’s Phase II Plan includes programs that offer rebates and incentives that are available to data centers, the Plan does not include a comprehensive program targeted specifically at data centers. The OCA asserts that data centers have become essential for the daily operations of businesses, schools, and government due to the increased reliance on digital information, and contends that data centers are prime candidates for energy efficiency programs. OCA MB at 18. As OCA witness Crandall argued:

In a report to Congress, the U.S. Department of Energy (DOE) stated that the energy used by the nation’s servers and data centers is significant and that the energy use of the nation’s servers more than doubled between 2000 and 2006. U.S. DOE indicated that energy use for servers was forecasted to double again between 2006 and 2011. The U.S. DOE expected consumption of more than 100 billion kWh/year in 2011 costing approximately $7.4 billion annually in electricity costs. The U.S. DOE indicated that data center space can consume up to 100 to 200 times as much electricity per square foot as standard office spaces. With such large power consumption, these customers are prime targets for energy efficiency design measures that could reduce electricity use and save money. This is a high-growth sector driven by increased reliance on cell phones, digital data, and enhanced communication systems.

OCA St. No. 1 at 6 (footnote omitted).

Accordingly, the OCA recommends that PPL be directed to work with the stakeholder group to develop a data center program with the goal of beginning the program by September, 2013. OCA St. No. 1 at 8.

PPL responds that it does not support the development of a specific program for data centers as its Phase II Plan already addresses the types of load represented by these facilities in its Prescriptive Equipment Programs, which offer rebates for all types of buildings and space types, including data centers. In addition, PPL states that to the extent that more efficient servers replace the energy intensive servers currently in place at data centers, such servers could qualify for incentives under the Company’s Custom Incentive Program. PPL MB at 37. PPL contends that “adding a new program specifically for data centers, which would include the same measures available to all other building/space types, would unnecessarily increase administrative costs.” Id. at 38.

PPLICA agrees with the Company that PPL’s Customer Incentive Program already provides the necessary framework for a data center to participate in its Phase II Plan. PPLICA RB at 9. As PPLICA asserts:

Considering the resources available to data centers through PPL’s existing programs, the potential for increased administrative costs, and the reasonableness of PPL’s initially proposed program budgets, the Commission should deny OCA’s proposal or, alternatively, order PPL to accommodate the additional program only to extent [sic] possible without further increasing the initial Large C&I Phase II EE&C budget allocation.

*Id*. at 10.

**ii. Disposition**

We find that PPL’s Phase II Plan already includes programs and measures that are applicable to the types of loads represented by data centers, and see no reason to direct PPL to establish an additional program to address these loads. We agree with PPL and PPLICA that adding a new program to duplicate already existing EE&C measures would unnecessarily increase the administrative costs of PPL’s Phase II Plan. For these reasons we will reject the OCA’s proposal.

**c. Fuel Switching**

**i. Use of Alternative Fuels in Residential Programs**

**(a). UGI’s Position**

UGI argues for a number of proposals to introduce fuel switching measures into some of PPL’s Phase II residential EE&C programs. Specifically, UGI contends that PPL should include measures that promote the use of natural gas appliances as an alternative option for residential and low-income customers who participate in PPL’s Residential Retail and Prescriptive Equipment Programs, as well as its Low-income WRAP Program. UGI also proposes related changes to PPL’s customer education measures as well as its monitoring and reporting requirements. UGI MB at 8-9.

UGI contends that natural gas water heaters and natural gas furnaces both offer significant energy savings over comparable electric appliances. UGI argues that the use of natural gas for water heating yields almost twice the electricity savings of an electric heat pump water heater. Similarly, UGI contends that using gas furnaces and efficient central air conditioning could produce annual increases in electricity savings of 1200% to 3100% over that achieved by an electric air source heat pump. *Id*. at 14-15.

UGI avers that the TRC result of PPL’s Low-income WRAP program is a “barely cost-effective benefit/cost ration of 1.03,” and that the addition of natural gas water heaters to the program would triple the cost effectiveness of the program, yielding a TRC benefit/cost ration of 3.09. *Id*. at 15-16. UGI further asserts that the inclusion of gas water heaters in the Residential Retail Program would produce a TRC benefit/cost ratio of 3.09, approximately double that calculated by PPL. *Id*. at 16. Similarly, UGI contends that the substitution of natural gas furnaces for electric air source heat pumps (combined with efficient central air conditioning units) in PPL’s EE&C programs would produce a TRC benefit/cost ratio at PPL’s assumed participation levels that is three to four times greater than that of the comparable electric appliance. *Id*. at 16-17. UGI asserts that no evidence was introduced to rebut these calculations or savings determinations, and they are therefore undisputed. *Id*. at 17.

Accordingly, UGI recommends that the Commission direct PPL to modify its Phase II Plan’s residential programs to add the installation of an efficient natural gas water heater to the incentives available under the Residential Retail and Low-income WRAP Programs to those customers who have natural gas service in the home; and to provide an incentive for the installation of a natural gas furnace or boiler in the Residential Home Comfort and Prescriptive Equipment Programs in place of, or as an alternative to, air source heat pump technologies. *Id*. at 17-18. UGI details these recommendations as follows:

* Residential Retail Program – Under UGI’s recommended modification, PPL would provide the same $300 incentive available to customers who install an electric HPWH to every customer who installs a natural gas water heater with an energy factor (“EF”) greater than 67%, the efficiency of an Energy Star® natural gas water heater.
* Low-Income WRAP Program – Under UGI’s recommended modification to this program, which as drafted by PPL provides a free HPWH to income-qualified customers, PPL would install, at no cost to the customer, a natural gas water heater with an EF greater than 67% in homes where natural gas is available.
* Residential Retail Program and Prescriptive Equipment Incentive Program – Under UGI’s recommended modification, PPL’s incentive of $100 for a SEER 15 ASHP would be replaced or augmented by a PPL incentive of $1,400 for the installation of a natural gas furnace with an annual fuel use efficiency (“AFUE”) greater than 95% and a SEER 15 electric central air conditioning unit. In lieu of, or at least as an alternative to the SEER 16 ASHP measure, PPL would pay an incentive of $2,500 to every customer who installs a natural gas furnace with AFUE greater than 95% and a SEER 16 electric central air conditioning unit.

*Id*. at 18 (footnotes omitted).

In addition to proposing the above modifications to PPL’s residential EE&C programs, UGI asserts that PPL’s Phase II Plan must include appropriate outreach, education and awareness efforts as applicable to all other measures. Therefore, UGI recommends that the Commission direct PPL “to modify its Plan’s customer education, awareness and outreach programs to inform PPL’s customers of the true savings that would be achieved by employing natural gas water heating and space heating measures and to give such measures the same level of exposure as other efficient equipment measures.” *Id*. at 18-19.

Finally, UGI notes that, in approving PPL’s Phase I EE&C Plan, the Commission directed the Company to report the frequency of customers switching to electric appliances from natural gas appliances. UGI recommends that this reporting requirement be modified to include the reporting of instances when a natural gas customer has been provided a rebate as an incentive to install an electric heat pump. UGI asserts that it is not possible to develop a full and complete TRC evaluation of the unintended impacts of gas-to-electric fuel switching as a result of EE&C program offerings without this detailed reporting data. *Id*. at 26.

**(b). SEF’s Position**

Similar to UGI, SEF also faults PPL’s Residential Retail Program for its failure to offer measures that include non-electric heat pump water heating technologies. Thus, SEF also recommends that UGI modify its Phase II Plan to include a fuel switching component. However, SEF asserts that fuel switching measures should be fuel neutral, *i.e*., they should include options for the use of a number of different alternative technologies such natural gas, oil, propane, and solar thermal energy. SEF MB at 5-6.

SEF contends that solar and natural gas water heaters offer greater annual consumption savings than electric water heaters. As SEF argues:

The solar water heater has annual consumption savings at the high end of the range for the heat pump water heater (1,623 kWh versus the range of 1,474 – 1,689 kWh) as delineated in the 2013 Technical Reference Manual (“TRM”), while the natural gas water heater has annual consumption savings significantly greater than the heat pump water heater (3,191 kWh versus the range of 1,474 – 1,689 kWh) as delineated in the 2013 TRM.

*Id*. at 7. Given these energy savings, SEF recommends that PPL modify its Residential Retail Program measures to offer water heating technologies that utilize the alternative energy sources listed in Tier 1 of Act 213, as well as natural gas. *Id*.

In developing rebate amounts to be offered to customers in relation to the alternative fuel technologies recommended by SEF, SEF proposes that PPL establish such rebates based on the proportional energy savings provided by each fuel source. Using PPL’s proposed rebate amounts of $200 – $300 for the installation of heat pump water heaters in conjunction with the projected savings for this measure as set forth in the TRM, SEF’s expert witness, John Costlow, developed proportional rebate amounts for other fuel source technologies based on the projected savings for those technologies. *Id*. at 9-10; SEF St. No. 1 at 5-6. Based on his calculations, Mr. Costlow determined that rebate amounts should be based on a cents-per-kWh range of 13.5¢/kWh to 20.3¢/kWh for alternative fuel measures. SEF MB at 10; SEF St. No. 1 at 6. SEF argues that, since these proposed incentives are proportionally based on PPL’s existing proposal, the cost per kWh range would remain constant regardless of technology and energy source, and would not increase the incentive or the program costs. SEF MB at 10.

**(c). The OCA’s Position**

The OCA asserts that PPL should not install electric heat pump water heaters under its Low-income WRAP program in households that already have natural gas service, as it will likely cost more over time to operate a heat pump water heater than a natural gas water heater. OCA MB at 14. The OCA argues that, because the heat pump water heaters would be installed in eligible households for free under PPL’s proposed WRAP program, a low-income customer will likely accept a heat pump water heater, even if the home is able to accommodate a natural gas water heater, and even if a natural gas water heater would be in the customer’s long-term economic interest. *Id*. at 15. The OCA contends that including the installation of a heat pump water heater as a no-cost option for low-income customers would allow PPL to decide for the customer how water should be heated in the home, allowing PPL to retain water heating load at the home, even if it results in higher operating costs for the low-income customer. OCA St. No 1 at 20-21; MB at 15.

**(d). PPL’s Response**

In response to these Parties’ fuel switching proposals, PPL argues that neither Act 129 nor the Commission’s related implementation Orders require EDCs to include fuel switching in their EE&C plans. PPL also asserts that the Commission has recognized that EDCs should be given substantial discretion in designing their EE&C programs, because it is the EDC who has the obligation to meet its Act 129 requirements with a hard cost cap, or face substantial civil penalties. PPL MB at 40-41. Moreover, PPL contends that the Commission has already determined that fuel switching would not be mandated. *Id*. at 41-42, citing *The Act 129 Fuel Switching Working Group Staff Report*, Docket No. M-00051865 (April 30, 2010) at 6, and Secretarial Letter dated May 21, 2010, Docket No. M-00051865. In addition, PPL notes that the Market Potential Study provided by the SWE did not include any fuel switching measures, and asserts that, if the Commission had intended EDCs to include fuel switching measures in their EE&C plans, the Market Potential Study would have estimated potential savings from such measures, and included them in each EDC’s savings target. PPL RB at 27. Accordingly, PPL states that “EDCs should not be required to expend the time, expense and effort to repeatedly relitigate issues that have been resolved by the Commission. PPL MB at 42.

PPL also argues that Act 129 was designed to reduce electric consumption through conservation measures, and was not designed to promote the use of one type of fuel over another. PPL asserts that requiring reductions in electric consumption by promoting the increased use of natural gas runs counter to the public policy goal of promoting natural gas conservation, as set forth in the Public Utility Code (Code). *Id*. at 43-44. PPL avers that achieving the proper balance between natural gas conservation goals and promoting the increased use of natural gas is a major policy issue that goes far beyond the proper scope of this proceeding. *Id*. at 44.

In addition, PPL contends that it would be unfair to require its customers to fund measures that would promote fuel switching, especially since the lost revenues as a result of such fuel switching would be recovered from electric customers through higher rates. PPL MB at 44. PPL asserts that, if it were concluded that increased use of natural gas is in the public interest, the cost of fuel switching measures should be paid for by natural gas companies or their customers, not by PPL’s customers, especially since less than half of PPL’s customers have access to natural gas. *Id*. at 44-45; RB at 26.

PPL also avers that UGI overstates the benefits to be achieved by its proposals because it emphasizes the TRC ratios of measures rather than programs. PPL argues that doubling or tripling the TRC of a measure does not double or triple the TRC of the program. PPL RB at 28-29. PPL asserts that air source heat pumps and heat pump water heaters represent a relatively small portion of the savings and costs of its WRAP Program, and that doubling or tripling the TRC of those measures would not significantly change the TRC of the program. *Id*. at 29-30. Furthermore, according to PPL, the TRC benefits that UGI states would result from adoption of its proposals amount to an approximate 40% improvement in total TRC benefits. However, PPL contends that it is not feasible for UGI’s proposed gas furnaces and gas water heating measures to improve the total TRC benefits of the Company’s programs by that much because those fuel switching measures account for a relatively small portion of the overall measures in the programs, especially compared to residential lighting. *Id* at 30-31.

With regard to the rebate amounts established by UGI and SEF for the fuel switching measures they propose, PPL notes that these rebate amounts are substantially higher than those the Company has established for the installation of high-efficiency electric appliances. PPL contends that UGI’s and SEF’s proposed rebates should be rejected because they unfairly favor natural gas and solar technologies over electricity, and they make no mention of other rebates that may be available, as noted above. *Id*. at 47. Moreover, PPL asserts that UGI and SEF determined their rebate amounts based on expected savings rather than on the incremental cost of the application. PPL avers that this approach is inconsistent with PPL and electric industry practice for determining the proper level of incentive payments, and results in excessive and unnecessarily large rebates. *Id*. at 47-48.

With regard to SEF’s promotion of solar technologies, PPL states that, although it offered incentives for solar thermal and solar photovoltaic systems in its Phase I EE&C Plan, it is not proposing such rebates in Phase II because it has determined that these technologies are not cost effective. PPL contends that the payback period for these technologies exceeds the life of the equipment, and that it is therefore imprudent to use ratepayer funds to encourage customers to install such equipment. PPL MB at 48. PPL also asserts that the TRC ratio for solar thermal water heaters is only 0.28, and the TRC ratio for solar photovoltaic systems is only 0.33. *Id*. at 48-49.

In response to the OCA’s recommendation that PPL not install electric heat pump water heaters in low-income households that have natural gas service, PPL argues that there are two problems presented by this proposal. First, PPL avers that, if it were to replace an existing inefficient or inoperable natural gas water heater with an efficient natural gas water heater, it would achieve no electric savings for Act 129. PPL RB at 34-35. Second, PPL states that, if it were to replace an existing electric water heater with an efficient natural gas water heater, it would be forcing the customer to use natural gas. *Id*. at 35. PPL contends that it is more appropriate to allow the customer to decide what type of fuel he or she prefers to use, and that it would be anticompetitive for PPL to select natural gas for the customer to the exclusion of other fuels. PPL MB at 50; RB at 35.

PPL also opposes UGI’s recommendation that the Company’s education, awareness and outreach programs be modified to include information about the savings that can be achieved by employing natural gas water heating and space heating measures. PPL states that the objective of its Phase II outreach and education is to implement the appropriate marketing and education to achieve the Plan’s results for each program and the portfolio as a whole. PPL asserts that it is neither necessary nor appropriate for UGI or the Commission to mandate detailed requirements for the Company’s marketing strategies, methods and documents. PPL RB at 36-37.

Finally, with regard to UGI’s recommendation that PPL be required to report instances when a natural gas customer has been provided a rebate to install an electric heat pump, PPL asserts that it is unclear what would be gained from such a requirement. PPL argues that its proposed $200-$300 rebate incentive for an efficient heat pump would not be sufficient to encourage a customer to switch from gas to electric heat if the customer had an operational gas furnace that provided more efficient heat than an air-source heat pump. If the gas furnace were *not* operational, PPL contends that it would be the customer’s decision to use a single device (the air source heat pump) for both air conditioning and heat, and thereby avoid the need to spend money on both a new gas furnace and a new central air conditioner. PPL MB at 51. PPL also contends that this additional reporting and tracking requirement would require customers to provide more information with their rebate application, and would impose more administrative costs on the Company. *Id*. PPL states that, if specified by the Commission, the Company will continue to report the estimated number of customers who receive a rebate for an efficient electric device that replaces an existing gas device. *Id*.

**(e). Disposition**

Upon consideration of the evidence and arguments presented by each of the parties on this issue, we will reject all proposals to require PPL to include measures that encompass full-scale fuel switching in its Phase II Plan. As an initial matter, we note that nothing in Act 129 or the *Phase II Implementation Order* requires an EDC to include fuel switching measures in its EE&C Plan. Also, as PPL points out, in our Secretarial Letter dated May 21, 2010, we adopted the Commission staff’s recommendations set forth in *The Act 129 Fuel Switching Working Group Staff Report*, which stated that while fuel switching measures should be available to EDCs and their stakeholders, fuel switching programs should not be mandated. PPL has demonstrated that it will be able to meet its consumption reduction targets in a cost-effective manner through the mix of programs and measures it is proposing in its Phase II Plan. Thus, we do not believe it is appropriate for this Commission to require PPL to adopt fuel switching measures that would require the Company to significantly alter an EE&C plan that is already designed to meet its Act 129 requirements.

Moreover, we agree with PPL that, while Act 129 was intended to promote the reduction of electric consumption and demand, it was not designed to promote the use of one type of fuel over another. Thus, we question the propriety of requiring an electric utility—and its ratepayers—to pay for comprehensive fuel switching measures that would clearly promote the large-scale use of natural gas, or other alternative fuels, over that of electricity.

In addition, we find that PPL has raised valid questions regarding the actual level of savings to be achieved by adopting the fuel switching proposals of UGI and SEF, as well as the determination of appropriate rebates to be applied to the various fuel switching measures. Thus, we are not convinced that the record supports the incorporation of full-scale fuel switching into PPL’s Phase II Plan at this time.

We also reject the OCA’s recommendation that PPL refrain from installing electric heat pump water heaters in low-income households that have natural gas service. As we stated, *supra*, we support PPL’s decision to include the installation of heat pump water heaters as part of its Low-income WRAP Program, and we do not believe it would be appropriate for PPL to withhold the availability of rebates to low-income customers for these appliances simply because the customer has natural gas service in the home. The customer should be afforded the opportunity to decide what type of appliance he or she wishes to use, and should be permitted to take advantage of rebates offered under PPL’s Low-income WRAP Program if the customer chooses to install an electric water heater. This is particularly true if the customer’s existing gas water heater is in need of repair, or is completely inoperable. Under these circumstances, we do not believe it should be PPL’s responsibility to replace the water heater with another natural gas appliance, as the Company would achieve no energy savings under its Plan. The only other alternative under the OCA’s proposal would be for PPL to do nothing to remedy the situation, an option that we find clearly unacceptable. Therefore, we reject the OCA’s position on this issue.

Finally, we reject UGI’s proposals to modify PPL’s education and outreach programs, as well as its fuel switching reporting requirements. As already discussed, *supra*, we do not support UGI’s full-scale fuel switching proposals, and thus, we find no reason to require PPL to modify its education programs to include extensive information about fuel switching measures. As for the reporting requirements, we will direct PPL to continue to report the frequency of customers switching to electric appliances from gas appliances or to gas appliances from electric appliances, and to provide data on replacement appliances and systems, as the Company was required to do in Phase I. *See, Petition of PPL Electric Utilities Corporation for Approval of its Energy Efficiency and Conservation Plan*, Docket No. M-2009-2093216 (Opinion and Order entered October 26, 2009) at 90. We further clarify that PPL is to report instances in which electric heat pumps have been installed on premises where an existing natural gas furnace was previously installed, or where a heat pump rebate was paid to an existing natural gas customer.

**ii. PPL’s Fuel Switching Pilot Program**

**(a). Positions of the Parties**

PPL states that it carefully considered the fuel switching proposals presented by the other Parties in this proceeding, and based upon that review, as well as its experience with fuel switching during Phase I, it has voluntarily proposed to establish a pilot fuel switching program within its Home Comfort and Prescriptive Equipment Programs. PPL MB at 51-52; RB at 40. Under its proposed pilot program, PPL will offer rebates to a limited number of residential customers (up to 100), on a first come, first served basis, who elect to install qualifying water heaters and furnaces that use fossil fuels. PPL MB at 51-52; PPL St. No. 4-R at 9. PPL proposes the following participation guidelines associated with this pilot program:

* Residential and non-residential customers will be eligible.
* Efficiency levels and other eligibility requirements will be determined by PPL (see Exh. METG-2R), and will be subject to existing TRM requirements or subject to the Commission’s approval of new non-electric fuel switching measures to the TRM (such as adding residential protocols for oil and propane, and for adding protocols for all non-residential fuel switching). PPL will offer rebates only if the measure provides Act 129 electricity savings as permitted by the Commission/SWE.
* Rebates will be the same as those for the comparable electric device (*e.g*., heat pump water heater, air source heat pump) because the incremental cost of the efficient measure is the same (*i.e*., the rebate will be based on a percentage of the incremental costs of the measure).
* Customers will be eligible for a rebate only if their existing equipment is electric. Otherwise, PPL cannot claim Act 129 electricity savings. Thus, customers cannot receive a rebate for replacing existing gas/oil/propane equipment for new construction.

*Id*. at 52; PPL St. No. 4-R at 10. PPL also stated in testimony that any and all Act 213 Tier I technologies (such as solar thermal, wind, low-impact hydropower, geothermal energy, biologically derived methane gas, fuel cells, biomass, and coal mine methane) could apply for custom incentives if they offset existing electric use and meet program eligibility requirements. PPL St. No. 4-R at 13. PPL states that it will use this pilot program to learn more about the potential for fuel switching in its service territory by evaluating market reaction, achieved savings and cost effectiveness. PPL MB at 52.

UGI criticizes PPL’s proposed fuel switching pilot program as being “too little, too late.” UGI RB at 13. UGI asserts that the limited 100 rebates that PPL will offer under this program represents less than 0.01% of PPL’s 1.4 million ratepayers, and less than 0.7% of the 14,700 rebates that PPL will provide for the installation of heat pump water heaters and air source heat pumps. UGI MB at 24. UGI contends that any increase in cost effectiveness and customer benefits resulting from this program will be negligible. *Id*. at 24-25. UGI argues that, since the merits of electric to natural gas fuel switching have already been proven through the work of the Fuel Switching Working Group, there is no need to test the efficacy of fuel switching through a pilot program. *Id*. at 25; UGI RB at 14. UGI avers that, while PPL’s proposed pilot program cannot provide the benefits afforded by UGI’s own proposed fuel switching measures, it does discredit PPL’s objections to the inclusion of fuel switching measures in its Phase II Plan. UGI MB at 25-26.

UGI also objects to PPL’s exclusion of low-income customers from its pilot program, calling such an exclusion “particularly objectionable and discriminatory.” UGI RB at 14. UGI argues that low-income customers will benefit enormously from switching fuels, and that it is not in the public interest for these customers to use electric alternatives that are far less cost effective and energy efficient. *Id*.

SEF also objects to PPL’s proposed fuel switching pilot program, asserting that the program is insufficient. First, SEF expresses some confusion over the fact that PPL’s witness indicated that this program would include rebates for Tier I technologies, while PPL seems to limit the program to fossil fuels in its main brief. SEF RB at 8-9. Furthermore, SEF echoes UGI’s concern regarding the limitation in the number of customers that can participate in the program, as well as UGI’s assertion that there is no need for a pilot program to test the efficacy of fuel switching. *Id*. at 9.

**(b). Disposition**

Although we agree with UGI and SEF that PPL’s proposed fuel switching pilot program will be limited in scope and effect, we will adopt this proposal. While we rejected the proposals for full-scale fuel switching for the reasons discussed, *supra*, we find that a limited pilot program such as this will allow PPL, as well as the Commission, “to learn more about the potential for fuel switching in [PPL’s] service territory by evaluating market reaction, achieved savings and cost effectiveness,” as PPL stated. Information gained from this program can assist the Commission and all stakeholders in further assessing the effectiveness of fuel switching measures as a viable means of achieving electricity savings, while limiting the costs to PPL and its ratepayers.

**d. Combined Heat and Power Projects**

PPL’s Custom Incentive Programs for its small C&I (Revised Plan at 99-105), large C&I (Revised Plan at 115-121), and GNI (Revised Plan at 131-136) customer classes provide financial incentives to customers installing individual equipment measures or systems not covered by the Prescriptive Equipment Programs, extensive energy-efficiency projects, retro-commissioning, repairs, equipment optimization, and operational and process improvements that result in cost-effective energy-efficiency savings. These programs include incentives for, *inter alia*, combined heat and power (CHP) projects.

**i. Positions of the Parties**

UGI notes that under PPL’s Custom Incentive Programs, CHP projects must meet a TRC ratio of 1.25 to qualify for the incentive, while other types of projects must achieve a TRC ratio of 1.00 to qualify. UGI also notes that the incentive offered for CHP projects is $0.05/kWh based on verified savings, while the incentive applicable to other types of projects is $0.08.kWh. UGI MB at 27. UGI complains that the higher TRC threshold and lower incentive applicable to CHP projects discriminate against these types of projects, and discourage investment in proven energy efficient natural gas technologies relative to other energy efficiency technologies. *Id*. UGI further contends that this discrimination against CHP projects also contravenes federal energy policy, which promotes CHP technology. *Id*. at 27-28.

UGI asserts that PPL failed to provide any rational reasons for discriminating against CHP projects, arguing that there is no evidence that the energy savings from these projects are any more or less uncertain than any other custom projects. *Id*. at 28-29. UGI argues that reducing the incentive for CHP projects will cause customers to choose other types of custom projects, not because they are more efficient than CHP, but because PPL’s incentive levels artificially reduce their cost to the end user. Thus, funds budgeted to the Custom Incentive Programs will tend to be used to install less efficient devices. *Id*. at 29.

Accordingly, UGI recommends that the Commission direct PPL to modify its Custom Incentive Programs to provide for the same TRC qualification threshold (1.00) and customer incentive ($0.08/kWh) for CHP projects as are included for other types of projects. UGI asserts that this modification should result in no budget impact, but will simply induce customers to consider and develop more CHP projects in PPL’s service territory. *Id*. at 28.

Comverge generally agrees with UGI that PPL’s proposed higher TRC threshold and lower incentive payments for CHP projects relative to other projects unfairly discriminate against CHP projects. Comverge MB at 12-21. Comverge thus supports UGI’s recommendation that PPL treat CHP projects in a manner equivalent to other measures under the Custom Incentive Programs by providing for an $0.08/kWh incentive, and applying a TRC threshold of 1.00. *Id*. at 17.

In response, PPL asserts that its proposed 1.25 TRC threshold and $0.05/kWh incentive level for CHP projects are appropriate. With respect to the TRC requirement, PPL argues as follows:

[PPL witness Peter D.] Cleff explained, based on actual experience during Phase I, that the TRC for CHP projects is far less certain than for other projects and is subject to very substantial variation based on slight changes in major inputs such as estimated operating hours, estimated fuel cost, equipment efficiency, and other factors. PPL Electric St. 4-R, p. 15. It also takes substantial time to verify savings for CHP projects. *Id*. Importantly, CHP projects generally are quite large, and the differences between the estimated cost and savings when PPL Electric approves the CHP project compared to the actual results could have a significant impact on the TRC for the Custom Incentive Program as a whole.

*Id*. at 16. For these reasons, it is critical to build in a reasonable margin of error for this type of uncertainty when approving CHP projects.

PPL MB at 38.

UGI questions this argument, contending that incentives would only be paid when savings are verified, so that if a CHP project’s savings are too uncertain to be verified, it will not receive a rebate. UGI MB at 28-29. However, PPL states that, consistent with its Phase I Custom Incentive Program, it will pay a portion of the incentive—usually 80%—upon the installation of the CHP project based upon the estimated claimed savings, and will pay the remaining 20% upon verification of savings, which may occur six to twelve months after the project is in service. PPL RB at 23. Therefore, PPL asserts that, if the verified savings are less than 80% of the claimed savings, it would have overpaid the rebate. *Id*.

With respect to the level of incentive payments, PPL asserts that CHP projects are much larger than other Custom Incentive projects, and that even a few CHP projects can use up a substantial amount of the dollars budgeted for Custom Incentive projects. *Id*. at 39. PPL contends that it would be unfair to allow a few CHP projects to consume a substantial portion of the total budget for the Custom Incentive Programs and leave no money for other smaller projects. PPL avers that, based on this concern and recommendations received during stakeholder meetings, it has proposed to reduce the incentive payment and cost cap for CHP projects in order to help ensure that EE&C incentives are available to all interested customers on an equitable basis. *Id*.

To this argument, UGI responds that allowing CHP projects to consume an inordinate amount of the program budget is only a problem if the CHP projects produce less energy conservation and customer cost benefits. UGI contends that, if CHP projects produce more energy savings and customer cost reductions than other types of custom projects, it would be a waste of PPL’s customers’ money to use program funds to provide greater incentives for the less cost-effective projects. UGI MB at 29.

**ii. Disposition**

We reject the recommendations of UGI and Comverge on this issue. PPL’s witness explained that the TRC for CHP projects is far less certain than that for other types of projects, and is subject to substantial variation based on slight changes in major inputs. The witness further stated that it takes time to verify savings for CHP projects, and that the difference between the estimated cost and savings at the time PPL approves the project compared to the actual results could have a significant impact on the TRC for the Custom Incentive Program. Thus, PPL asserts that a reasonable margin of error must be built into the TRC threshold to account for this uncertainty when approving CHP projects. We find this argument persuasive, particularly since PPL asserts that it typically pays a substantial portion of the incentive based on the estimated claimed savings upon installation of the CHP project, which may occur six to twelve months before the savings are verified. Thus we find that PPL has justified the higher TRC threshold for CHP projects.

In addition, we find that the lower incentive payment proposed by PPL for CHP projects is reasonable, given the scope of CHP projects relative to other Custom Incentive projects, and the amount of program dollars these projects may potentially consume. We note that both large and small customers—commercial, industrial, and GNI—pay the costs of PPL’s Customer Incentive Programs, and we believe that those customers who are more inclined to undertake smaller but still cost-effective projects under these programs should have reasonable access to the available incentives. Therefore, we believe it is entirely appropriate for PPL to offer a somewhat lower incentive payment for CHP projects, in order to ensure that the money budgeted for its Custom Incentive Programs is not entirely consumed by these projects, and that incentives are available to all interested customers on an equitable basis. Moreover, neither UGI nor Comverge provided any evidence that PPL’s proposed incentive levels for CHP projects were not high enough to promote the development of such projects. For these reasons, we reject the recommendations of UGI and Comverge to require PPL to adjust its proposed incentives for CHP projects under the Custom Incentive Programs.

**C. Cost Issues**

Section 2806.1(g) of Act 129 provides that the total costs of any EE&C plan cannot exceed two percent of the EDC’s total annual revenues as of December 31, 2006. 66 Pa. C.S. § 2806.1(g). PPL indicates that its total annual revenues for calendar year 2006 were approximately $3 billion ($3,075,068,825), and that two percent of this amount is approximately $61.5 million ($61,501,376). PPL MB at 53. Accordingly, PPL states that the two percent expenditure cap for its Phase II Plan equates to an average of approximately $61.5 million per year, and approximately $184.5 million for the three-year Phase II Plan.[[25]](#footnote-25) *Id*. PPL states that, in some program years, its EE&C costs may be greater than the annual two percent cost cap, while in other program years, they may be less than the cap. However, PPL asserts that over the three program years, the total costs of the Phase II Plan for all customer classes will not exceed $184.5 million. Petition at 17.

PPL states that it will spend most of the $184.5 million to implement its Phase II Plan, and that this total amount will include the costs that it incurred to develop its Plan. *Id*. PPL also states that, in accordance with the *Phase II Implementation Order*, it will defer its Phase II development costs incurred during Phase I until June 1, 2013 (the start of Phase II), and will amortize and recover those deferred costs ratably over the thirty-six month life of the Phase II Plan. PPL states that the amortization of those costs will be included within its total spending cap. *Id*. at 53-54.

**1. Cost Allocation Issues**

Section 2806.1(a)(11) of Act 129 requires that EE&C measures must be financed by the same customer class that receives the energy and conservation benefits of those measures. 66 Pa. C.S. § 2806.1(a)(11). In addition, the *Phase II Implementation Order* provides that those costs that relate to measures that are applicable to more than one class, or that can be shown to provide system-wide benefits, must be allocated using reasonable and generally acceptable cost of service principles as are commonly utilized in base rate proceedings. *Phase II Implementation Order* at 110-111. PPL states that it will follow the direct assignment approach where possible. However, for those costs that relate to measures that are applicable to more than one customer class or that provide system-wide benefits, PPL states that it will assign these costs using an allocation factor equal to the percentage of the EE&C costs directly assigned to all customer classes. PPL will also assign general administrative costs using this allocation methodology. Revised Plan at 21.

**a. Costs for Appliance Recycling and Residential Retail Programs**

**i. Positions of the Parties**

The OCA is concerned about an alleged cross-subsidy between the residential and small C&I customer classes relating to PPL’s Residential Appliance Recycling Program and Residential Retail Program. Specifically, the OCA avers that while PPL is proposing to allocate the costs of these two programs to the residential customer class, these programs are actually available to all classes, and PPL’s Plan anticipates that commercial customers will participate to some degree in the programs. OCA MB at 21-22, citing PPL Revised Plan at 27, Table 5a., and PPL Revised Plan at 34, 40. The OCA contends that, even though PPL has explained that the actual costs and savings will be assigned to any non-residential class that participates in these programs, and that PPL will reconcile any difference between actual costs and planned costs, such a reconciliation will not occur until the conclusion of Phase II. OCA MB at 22, referencing OCA Exh. GCC-9, which describes this reconciliation process. Thus, the OCA concludes that residential ratepayers will be subsidizing non-residential ratepayers for more than three years before the actual costs are determined and the rates are adjusted. OCA MB at 22. Accordingly, the OCA recommends that PPL be directed to allocate one percent of the costs of the Appliance Recycling and Residential Retail Programs ($57,600 and $257,600, respectively) to the small C&I customer class. OCA MB at 22‑23. In addition, the OCA recommends that the Commission incorporate the reconciliation process described in OCA Exh. GCC-9 into the formal approval of PPL’s Phase II Plan. *Id*. at 23.

In response to the OCA’s concerns, PPL states that it did not include any estimated costs for non-residential customers that may participate in the Appliance recycling and Residential Retail Programs because it expects that non-residential participation will be less than one percent of the total costs for these programs. PPL asserts that if any non-residential customers participate in these programs, PPL will charge the actual costs to the same customer class as the participant, and the reconciliation process at the end of Phase II will account for any difference between the actual costs incurred for each customer sector and the actual revenues collected from each sector. PPL MB at 55. Therefore, PPL states that it “does not believe that it is appropriate to revise the EE&C Plan to include these very minor estimated costs as it would require revisions to every table and chart in the EE&C Plan that includes costs for these programs or customer sectors.” *Id.* PPL asserts that it will incorporate these non-residential cost estimates in its Phase II Plan if and when it modifies the Plan for other reasons during the course of Phase II. *Id*.

**ii. Disposition**

Since PPL expects that non-residential customer participation in its Residential Appliance Recycling Program and Residential Retail Program will be less than one percent of the total costs for these programs, we will not require the Company to modify its proposed cost allocation to assign one percent of the costs of these programs to the small C&I customer class as the OCA recommends. However, we will direct PPL to ensure that the reconciliation process undertaken at the end of Phase II will account for any difference between the actual costs incurred for each customer class and the actual revenues collected from each class, as set forth in OCA Exh. GCC-9.

**b. Monitoring and Adjustment of Cost Allocations**

**i. Positions of the Parties**

PPLICA observes that PPL’s customer class cost projections for Phase II were based on findings and assumptions from the SWE’s Market Potential Study, and states that these class budgets appear to be reasonable. PPLICA MB at 9, 11. However, PPLICA notes that during Phase I of PPL’s EE&C Plan, the Company’s actual acquisition costs for the large C&I class proved to be lower than what PPL had originally projected. *Id*. at 10-11. Therefore, PPLICA argues that the Commission must monitor PPL’s actual acquisition costs through Phase II, and must be prepared to impose mid-stream adjustments to PPL’s Phase II cost allocations in order to prevent significant over- or under-collections. *Id*. at 12-13. In addition, PPLICA asserts that the Commission must impose modifications to PPL’s Phase II Plan portfolio and cost allocations based on the results of the final TRC test for Phase I. *Id*.

In response, PPL asserts that PPLICA’s requests should be rejected. PPL describes the process it will use to monitor program costs and savings, and correct any misalignment of estimated and actual costs, as follows:

As in Phase I, PPL Electric plans to closely monitor actual program costs and savings for each sector (and program) compared to the estimated values in the Phase II EE&C Plan. Similar to Phase I, if there are material changes between actual and estimated values, PPL Electric will propose changes to its EE&C Plan. Specifically, in addition to the annual reconciliation, PPL Electric proposes to make “mid-course” corrections in the cost recovery mechanism, subject to Commission review and approval, to reflect any major changes to any of its EE&C programs. PPL Electric St. 3, p. 10; Phase II EE&C Plan, Sections 1.7, 7.4. Finally, at the end of the three-year Phase II EE&C Plan, the Company will reconcile, subject to Commission review and approval, total revenue collected for each customer sector to its total actual expenditures for each customer sector for the three-year Phase II EE&C Plan. PPL Electric St. 3, p. 10.

PPL RB at 45-46.

PPL contends that PPLICA offered no evidence that the Company’s proposed costs are unreasonable or not prudent, and asserts that the Commission will be able to review the overall revenues received by PPL from a customer class via the mechanism described above. *Id*. at 46. Thus, PPL argues that the Commission will have the requisite oversight requested by PPLICA. As for making mid-course corrections, PPL notes that it already plans to do so, and therefore, there will be no need for the Commission to impose the mid-stream adjustment process requested by PPLICA. *Id*. Finally, PPL states that it will reconcile total revenue collected to its total actual expenditures, and thus, the Company has fully addressed PPLICA’s concerns regarding over-collections based on budget amounts. *Id*.

**ii. Disposition**

We agree with PPL that the process described by the Company to monitor program costs and savings, and to make mid-course adjustments to its cost recovery mechanism where necessary, is adequate to address the concerns expressed by PPLICA. We note that this process will include annual reconciliation of costs and revenues, as well as Commission review and approval of any revisions to PPL’s cost allocations or cost recovery mechanism proposed by the Company. Therefore, we see no reason to establish any additional provisions for monitoring or revising PPL’s class cost allocations.

**c. Incentive Versus Non-incentive Costs**

**i. Positions of the Parties**

PPLICA raises a concern regarding the ratio of incentive costs to non-incentive costs in PPL’s Phase II budget.[[26]](#footnote-26) PPLICA notes that PPL anticipates providing customer incentives totaling $91.8 million, while spending $95.0 million on non-incentive costs. PPLICA MB at 15; PPL Revised Plan at 174. PPLICA states that, on a percentage basis, customer incentives amount to 49% of PPL’s Phase II expenditures, and asserts that of the remaining 51% of EEC& dollars collected from customers, the majority of these expenditures are paid to CSPs. PPLICA MB at 15. PPLICA contends that:

Because PPL’s proposed ratio of incentive to non-incentive costs tilts toward the entities benefitting from non-incentive costs (i.e., third-party providers), further and ongoing evaluation of PPL’s Plan should occur in an attempt to reduce PPL’s non-incentive costs so that implementation of Phase II achieves the most efficient benefits for PPL customers.

*Id*. at 14.

PPLICA avers that while PPL’s Phase II Plan may achieve the mandated reductions and perform adequately under the TRC test, these metrics do not fully measure the cost impact to customers. PPLICA MB at 17. Accordingly, PPLICA concludes:

Although not the sole purpose of Act 129, the General Assembly indicated that program efficiency should be considered as a separate analysis from cost-effectiveness. See 66 Pa. C.S. § 2806.1(b)(1)(i)(I); cf. 66 Pa. C.S.

§ 2806.1(b)(1)(i)(K). Additionally, Act 129 programs should be reviewed within the context of the Commission’s overall duty to ensure that all rates charged by jurisdictional utilities are just and reasonable. 66 Pa. C.S. § 1301. For the above reasons, the Commission should closely monitor the customer benefits and efficiency of PPL’s Phase II Plan rather than relying on the TRC analysis.

*Id*.

In response, PPL asserts that PPLICA’s requests should be rejected, contending that PPLICA offered no suggestions for specific changes to the Company’s Phase II programs, cited no areas of non-compliance with any of the Commission’s Phase II requirements, or presented any evidence that PPL’s projected ratio of incentive to non-incentive costs is inappropriate. PPL RB at 40.

PPL explains that incentives will be a lower percentage of the total costs in Phase II than in Phase I because the incremental cost[[27]](#footnote-27) of many measures, on which program rebates are based, has decreased. *Id*. at 41. In addition, PPL states that some incentives are based on savings ($/kWh saved), and because the TRM changes, the savings for many of these measures have decreased compared to Phase I. Therefore, the dollar amount of the incentive will decrease in Phase II, even if the $/kWh rebate is the same. *Id*. Furthermore, PPL asserts that the non-incentive costs required to deliver the Act 129 programs have not decreased in Phase II compared to Phase I. Therefore, if the incentives decrease and the non-incentives remain the same or increase, the ratio of incentives to non-incentives will increase. *Id*.

PPL argues that if it simply increases incentives for a measure in order to increase the ratio of incentives to non-incentives, PPL would be overpaying incentives, and would have to reduce the number of measures rebated—and hence, the total savings—in order to absorb the additional costs. *Id*. at 41-42. PPL states that it believes the ratio of Phase II incentives to non-incentives is reasonable based on the mix of measures and programs in its EE&C Plan, but will closely monitor its incentive and non-incentive costs to ensure they are appropriate, and will propose changes to its Phase II Plan if necessary. *Id*. at 42.

Finally, with regard to PPLICA’s conclusion that the Commission not rely on the TRC analysis to evaluate PPL’s Phase II Plan, PPL asserts that this request should be rejected because it is inconsistent with Act 129 and Commission precedent. PPL notes that Act 129 directs the Commission to use a TRC test to analyze the benefits and costs of the EE&C plans, and that the Commission’s *Phase II Implementation Order* affirms this requirement. *Id*. at 43.

**ii. Disposition**

We agree with PPL that PPLICA provided no evidence in this proceeding to support a conclusion that PPL’s projected ratio of incentive to non-incentive costs is inappropriate. While PPLICA avers that PPL’s slightly higher level of incentive costs relative to non-incentive costs suggests an inefficient allocation of dollars between customer incentives and CSP payments, PPLICA has failed to provide any evidence to challenge the specific methodology used by PPL in assessing the cost-effectiveness of the individual Phase II programs proposed by the Company, or of the Phase II Plan as a whole. Furthermore, as PPL argues, PPLICA offered no suggestions for specific changes to the Company’s Phase II programs, and cited no areas of non-compliance with any of the Commission’s Phase II requirements. Therefore, we reject PPLICA’s broad challenge of PPL’s Phase II Plan based on the overall ratio of incentive to non-incentive costs, as well as its suggestion that the Commission not rely on the TRC analysis to evaluate the Plan.

**2. Cost Recovery Issues**

Section 2806.1(k)(1) of Act 129 authorizes an EDC to recover all reasonable and prudent costs of its EE&C plan through a reconcilable adjustment clause under Section 1307 of the Code. 66 Pa. C.S. § 2806.1(k)(1). In addition, the *Phase II Implementation Order* provides as follows:

The Phase II cost recovery mechanism is to be a separate cost recovery mechanism from that used for Phase I. Such a mechanism shall be designed to recover, on a full and current basis, without interest, from each customer class, all prudent and reasonable EE&C costs that have been assigned to each class. When the EE&C plans to be offered by EDCs will benefit both shopping and non-shopping customers, the cost recovery mechanism shall be non-bypassable, and structured such that it will not affect the EDC’s price-to-compare.

*Phase II Implementation Order* at 118.

PPL has provided pro forma tariff pages setting forth its Act 129 Compliance Rider (ACR), which contains a non-bypassable mechanism to recover EE&C costs from its customer classes. Revised Plan at 21; Revised Plan at Appendix G. For residential customers, the cost recovery mechanism will be applied as a levelized cents/kWh component included in the distribution charge. For small C&I customers, the cost recovery mechanism will be applied as a levelized cents/kWh charge that will be a separate line item on the customer’s bill. For large C&I customers, the cost recovery mechanism will be applied as a $/kW charge, as a separate line item on the customer’s bill, where the demand (kW) is the customer’s PJM Interconnection, LLC Peak Load Contribution, which may change yearly. Revised Plan at 21-22; Revised Plan at Appendix G. PPL states that it is not including any capital costs as part of its Phase II cost recovery rider, nor will any capital costs be placed into rate base outside of a base rate proceeding. Revised Plan at 22.

Although costs will vary from year to year, PPL states that it proposes to recover those costs on a levelized basis as the preference of stakeholders. Annual budget amounts for each customer class will be developed on a levelized basis for the three years of the Plan. The costs PPL incurs to pay for the SWE, as well as costs relating to the Company’s net-to-gross evaluations, are not included in the 2% cost cap.  *Id*.

For each customer class, PPL proposes to separately reconcile the revenues collected under the cost recovery mechanism with the adjusted budget amounts for that year. This reconciliation, which will be performed on an annual basis, will primarily reflect variations in actual sales from forecast sales. *Id*. PPL states that it does not propose to reconcile the revenues collected under the cost recovery mechanism to its actual spending levels in each year since those spending levels can vary from year to year. *Id*. PPL does not propose to collect or pay interest on under- or over-collections. *Id*.

In addition to the annual reconciliation, PPL will make mid-course corrections in the cost recovery mechanism to reflect major changes to any of its EE&C programs. At the end of the three-year Plan, PPL will reconcile total revenue collected to its total budget for the three-year Plan. This final reconciliation, as well as the annual reconciliations and mid-course corrections will be subject to Commission review and approval. *Id*. PPL states that it is not proposing an expiration date for the cost recovery mechanism, as it will be needed to refund any over-collection or recover any under-collection existing at the end of the three-year Plan, and for the purpose of any ongoing program cost recovery. *Id*.

Based on our review of PPL’s cost recovery mechanism as contained in its pro forma tariff pages set forth in Appendix G of its Revised Plan, we are concerned that this mechanism may not fully comply with our directive that the Phase I and Phase II cost recovery mechanisms be completely separate. Furthermore, we find that PPL’s pro forma tariff pages contain statements regarding its cost recovery mechanism that may require further clarification. Therefore, we will reject PPL’s pro forma tariff pages and proposed cost recovery mechanism, and will direct PPL to consult with the Commission’s Bureau of Audits within thirty days of the entry date of this Opinion and Order in order to develop a revised cost recovery mechanism that complies with the provisions set forth in the *Phase II Implementation Order*. We will further direct that PPL submit a tariff supplement containing the revised cost recovery mechanism with its revised Phase II Plan, based on its consultation with the Commission’s Bureau of Audits.

**3. Cost Effectiveness/Cost-Benefit Issues**

Act 129 requires an analysis of the costs and benefits of each EE&C plan, in accordance with a TRC test approved by the Commission. *See* 66 Pa. C.S.   
§ 2806.1(a)(3). The Act also requires an EDC to demonstrate that its plan is cost-effective using the TRC test, and that the plan provides a diverse cross-section of alternatives for customers of all rate classes. *See* 66 Pa. C.S. § 2806.1(b)(1)(i)(I). The Act defines the total resource cost test as “a standard test that is met if, over the effective life of each plan not to exceed 15 years, the net present value of the avoided monetary cost of supplying electricity is greater than the net present value of the monetary cost of energy efficiency conservation measures.” 66 Pa. C.S. § 2806.1(m).

The purpose of using the TRC test to evaluate the EDCs’ specific programs is to track the relationship between the benefits to customers and the costs incurred to obtain those benefits. The TRC test has historically been a regulatory test. Sections 2806.1(c)(3) and 2806.1(d)(2), 66 Pa. C.S. §§ 2806.1(c)(3) and (d)(2), as well as the definition of the TRC test in Section 2806.1(m), 66 Pa. C.S. § 2806.1(m), provide that the TRC test be used to determine whether ratepayers, as a whole, received more benefits (in reduced capacity, energy, transmission, and distribution costs) than the implementation costs of the EDCs’ EE&C plans. *See Phase II Implementation Order* at 79.

PPL’s Phase II Plan shows a cost-benefit ratio of 1.73 on a whole plan basis. Revised Plan at 15. Therefore, we find that PPL’s Phase II Plan, as a whole, is cost-effective.

**D. Conservation Service Provider Issues**

The Commission’s EE&C Program must include a requirement for the participation of CSPs in the implementation of all or part of a plan. 66 Pa. C.S. § 2806.1(a)(10). The Commission is required to establish procedures requiring EDCs to competitively bid all contracts with CSPs. 66 Pa. C.S. § 2806.1(a)(7). The Commission is also required to establish procedures to review all proposed contracts with CSPs prior to the execution of the contract. 66 Pa. C.S. § 2806.1(a)(8). The Commission has the authority to order the modification of a contract to ensure that plans meet consumption reduction requirements. *Id*.

As the EDCs had competitively bid the contracts with current CSPs in Phase I, the Commission only required the EDCs to competitively bid CSP contracts in Phase II for new programs or measures that were not implemented in Phase I and for any new CSP to perform services for a program or measure that was implemented in Phase I and retained in Phase II. The Commission also required the EDCs to submit, for Commission approval all Phase II CSP contracts, including those contracts for CSPs the EDC is retaining from Phase I. Any contract for a CSP that is being retained must include a justification for retaining the CSP and the costs associated with the contract. *Phase II Implementation Order* at 98.

PPL states that it expects to utilize CSPs to deliver services in support of its EE&C programs, with some CSPs operating as turnkey program delivery contractors, and other providing specific program functions across multiple programs. PPL MB at 57. PPL further states that it is choosing to retain its Phase I Appliance Recycling CSP, JACO Environmental, Inc. *Id*. at 58; Revised Plan at 164. PPL submitted the re-negotiated contract and justification for retaining that CSP with its Phase II Plan.[[28]](#footnote-28) *Id*. PPL states that it is also in negotiations with a number of other Phase I program CSPs that merit consideration based on their performance in Phase I,[[29]](#footnote-29) and asserts that all other program CSPs for Phase II are being selected via a competitive bid process. *Id*.

No CSP issues were raised by any party in this proceeding. However, we note that in our *Phase I* *Implementation Order*, we delegated to the Commission staff the authority to review and approve contracts between EDCs and CSPs. *Phase I* *Implementation Order* at 40. Therefore, consistent with the other contracts between PPL and CSPs that have been reviewed by the Commission, the contract submitted by PPL as part of its Phase II Plan has been assigned to the Commission staff for its review, and will not be addressed in this Opinion and Order. Pursuant to the *Phase I Implementation Order*, Staff has forty-five days to review the contract, and the staff review shall begin upon entry of this Opinion and Order. Staff’s determination will be communicated in a Secretarial Letter, and the determination is appealable to the full Commission within twenty days of its issuance, per 52 Pa. Code § 5.44. *Phase I* *Implementation Order*   
at 27, 40.

**E. Implementation and Evaluation Issues**

PPL’s Program Management and Implementation Strategies are contained in Section 4 of its Revised Plan. PPL states that its implementation strategy relies on a broad range of CSPs, partners, trade allies, community-based organizations, and other entities engaged in energy-efficiency to promote, deliver, and support the effective deployment of programs. PPL asserts that its programs depend on trade allies and other market partners to engage customers, promote programs, evaluate projects, furnish and install energy-efficient equipment, and provide energy-efficiency services. PPL states that its objective is to achieve a reasonable balance of cost, ratepayer value (portfolio benefit-to-cost ratio), customer choice, quality service, and accountability for results with energy savings. In addition, PPL asserts that its Plan will utilize contractors and trade allies where appropriate in recognition of the expertise available from local labor and resources, as well as the importance of stimulating the local economy and providing more choices to customers. Revised Plan at 155.

Two issues relating to the implementation of PPL’s Phase II Plan were raised in this proceeding, which we will address, *infra*. However, we find that in general, the implementation and management strategies contained in Section 4 of PPL’s Revised Plan are reasonable and in compliance with Act 129.

However, we believe it would be beneficial for PPL to set reasonable deadlines for the submission of all incentive applications following the in-service date of a measure during Phase II, and any future phases of the EE&C Program. Therefore, we will direct PPL to establish reasonable deadlines as part of its Phase II incentive application process, if it has not already done so.

**1. Transition from Phase I to Phase II**

**a. Positions of the Parties**

PPLICA asserts that the Commission must ensure that PPL provides a smooth transition for customers from Phase I to Phase II of the Company’s EE&C Plan. PPLICA MB at 18. As PPLICA argues:

In order to ensure that customers are aware of the funding opportunities available through Phase II, it is imperative that PPL alert customers to the extended EE&C Plan as soon as possible, as well as provide a streamlined process by which customers can apply for such funds. Although PPL’s portfolio remains substantially similar to the Phase I Plan, particularly with regards to Large C&I programs, information regarding the continued availability of EE&C programs must be comprehensively distributed so customers can readily claim available incentives.

*Id*.

In response, PPL states:

PPL Electric welcomes the opportunity, as PPLICA suggests, to inform and educate customers of the Phase II programs as soon as possible, and to take other steps to ensure a smooth and quick transition from Phase I to Phase II. However, as required by the *2012 Implementation Order*, PPL Electric cannot launch, (*i.e*., pay rebates) the Phase II EE&C Programs earlier than June 1, 2013, measures cannot be commercially operable before June 1, 2013, and PPL Electric cannot market the Phase II programs until the Commission has approved the EE&C Plan (expected in March 2013). *See, e.g., 2012 Implementation Order*, p. 114.

PPL RB at 48.

PPL asserts that it is in the process of negotiating contracts with CSPs, and making arrangements to continue programs to ensure a seamless and quick transition from Phase I to Phase II. *Id*. Specifically, PPL notes that it is continuing the programs directed at the large C&I customers, such as the Prescriptive Equipment and Customer Incentive Programs. *Id*. at 49. PPL states that “[t]he continuation of the Large C&I programs from Phase I to Phase II, negotiating the applicable contract with a CSP, and the fact that one CSP will be a ‘one stop’ shop for customers will ensure timely notification and direct communication with customers.” *Id*.

**b. Disposition**

We agree that information regarding PPL’s Phase II programs should be made available to customers as soon as reasonably possible, and that all steps to ensure a smooth and quick transition from Phase I and Phase II should be taken. However, we find no evidence to suggest that PPL is unprepared to timely inform and educate its customers regarding its proposed Phase II programs, or that it will fail to effectuate a smooth transition between its Phase I and Phase II Plans. Therefore, we find no reason to direct PPL to take any additional steps in this regard beyond those it is already taking.

**2. Stakeholder Meetings**

**a. Positions of the Parties**

PPL states that, consistent with the Commission’s Order approving the Company’s Phase I EE&C Plan, PPL held a minimum of two stakeholder meetings per year. PPL notes that, in advance of each meeting, it circulated materials for review and discussion by stakeholders to ensure that the meetings were productive. PPL asserts that it found the process to be both informative and productive, and that, based upon the feedback received, the stakeholders agree. PPL MB at 58. In its Phase II Plan, PPL states that input from the participating stakeholders resulted in a more creative and robust portfolio than would have otherwise been possible, and that such a collaborative process increased the likelihood of success in implementing the portfolio. Revised Plan at 12-13. PPL intends to continue to meet with stakeholders as needed, but not less than twice annually until May 31, 2016. *Id*. at 13.

The OCA asserts that PPL’s Phase II Plan will benefit greatly from the continuation of stakeholder meetings, but recommends that the Commission direct PPL to hold such meetings at least quarterly rather than twice annually. OCA MB at 24-25; RB at 9-10.

PPL does not agree with the OCA’s proposal, contending that the stakeholder process utilized during Phase I and in the preparation of Phase II was very successful. PPL asserts that a minimum of two stakeholder meetings per year, plus the Company’s quarterly Act 129 EE&C reports, are sufficient to keep stakeholders informed of the progress of PPL’s EE&C programs, particularly since both the Company and stakeholders have become familiar with the Commission’s Act 129 processes, and have significant experience regarding the operation of the Company’s Plan. PPL MB at 59. Moreover, PPL states that, if the Company proposes significant changes to its EE&C Plan during Phase I or Phase II, stakeholders will have the ability to discuss or comment on the changes through the stakeholder process or before the Commission, as applicable. *Id*. In addition, PPL argues that additional meetings would only serve to increase administrative costs, and would take PPL staff time away from implementing the Phase II Plan. *Id*.

**b. Disposition**

We agree that PPL’s proposed semi-annual stakeholder meetings plus its quarterly Act 129 EE&C reports will be sufficient to keep stakeholders informed of PPL’s progress in the implementation of its Phase II Plan, and do not believe the OCA has provided sufficient reason to justify increasing the frequency of stakeholder meetings. Therefore, we reject the OCA’s recommendation to direct PPL to hold stakeholder meetings more than twice annually, as the Company proposes.

**V. Conclusion**

For the reasons set forth, *supra*, we will: (1) grant, in part, and deny, in part, PPL’s Petition; (2) approve, in part, and reject, in part, PPL’s Phase II Plan; (3) reject PPL’s Low-income Energy Efficiency Behavior & Modification Program as filed; and (4) reject the cost recovery mechanism set forth in PPL’s proposed Act 129 Compliance Rider contained in the pro forma tariff pages supplied with PPL’s Phase II Plan; **THEREFORE,**

**IT IS ORDERED:**

1. That the Petition of PPL Electric Utilities Corporation for Approval of its Act 129 Phase II Energy Efficiency and Conservation Plan is granted, in part, and denied, in part, consistent with this Opinion and Order.

1. That PPL Electric Utilities Corporation’s Phase II Energy Efficiency and Conservation Plan is approved, in part, and rejected, in part, consistent with this Opinion and Order.
2. That PPL Electric Utilities Corporation shall file with this Commission and serve on all Parties of record in this proceeding a revised Phase II Energy Efficiency and Conservation Plan consistent with the modifications directed in this Opinion and Order, within sixty (60) days of the entry date of this Opinion and Order. Interested parties will have ten (10) days to file comments on the revised portions of the Phase II Energy Efficiency and Conservation Plan, with reply comments due ten (10) days thereafter. The Commission will approve or reject the revised portions of the Phase II Energy Efficiency and Conservation Plan at a public meeting within sixty (60) days of the date of the filing of the revised plan.
3. That PPL Electric Utilities Corporation is permitted to implement any portion of its Phase II Energy Efficiency and Conservation Plan that was approved without modification by this Opinion and Order.
4. That PPL Electric Utilities Corporation shall demonstrate, as part of its Annual Reports to the Commission on its Phase II Energy Efficiency and Conservation Plan, that at least ten percent of the energy savings generated by the Plan have been derived from government, educational and non-profit customers.
5. That PPL Electric Utilities Corporation shall continue its practice of referring all households that it identifies as having income at or below 150% of the Federal poverty income guidelines, to all of its low-income and universal service programs.
6. That within sixty (60) days of the entry date of this Opinion and Order, PPL Electric Utilities Corporation shall meet with the Commission’s Bureaus of Consumer Services and Technical Utility Services to address improvements in the coordination of the Low-income WRAP Program with specific ongoing conservation programs, and to address accounting issues that may arise as a result of the implementation of multiple conservation programs.
7. That the Low-income Energy Efficiency Behavior & Modification Program included in PPL Electric Utilities Corporation’s Phase II Energy Efficiency and Conservation Plan is rejected as filed, and that PPL Electric Utilities Corporation is directed to either: (a) eliminate the program and reallocate the funds budgeted for the program to other Phase II Energy Efficiency and Conservation Plan programs targeted at low-income customers; or (b) submit a revised Low-income Energy Efficiency Behavior & Modification Program with its revised Phase II Energy Efficiency and Conservation Plan that addresses the issues enumerated within the body of this Opinion and Order.
8. That PPL Electric Utilities Corporation is directed to revise the Master Metered Low-income Multifamily Housing Program contained in its Phase II Energy Efficiency and Conservation Plan to include the additional LED lighting measures discussed in the body of this Opinion and Order.
9. That PPL Electric Utilities Corporation is directed to share, with the Act 129 stakeholder group, the education plan relating to the Master Metered Low-income Multifamily Housing Program contained in its Phase II Energy Efficiency and Conservation Plan, once that education plan has been developed by the conservation service provider operating the program.
10. That the fuel switching proposals presented in this proceeding by UGI Utilities, Inc. – Gas Division, UGI Penn Natural Gas, Inc., and UGI Central Penn Gas, Inc., as well as by the Sustainable Energy Fund of Central Eastern Pennsylvania, are hereby rejected.
11. That PP Electric Utilities Corporation shall report all instances of customers switching to electric appliances from gas appliances or to gas appliances from electric appliances, and shall provide data on replacement appliances and systems installed. Such reporting shall include instances in which electric heat pumps have been installed on premises where an existing natural gas furnace was previously installed, or where a heat pump rebate was paid to an existing natural gas customer.
12. That the pilot fuel switching program proposed by PPL Electric Utilities Corporation to be included in its Phase II Energy Efficiency and Conservation Plan is hereby approved.
13. That PPL Electric Utilities Corporation shall ensure that the Act 129 Compliance Rider reconciliation process utilized at the end of its Phase II Energy Efficiency and Conservation Plan will account for any difference between the actual costs incurred for each customer class and the actual revenues collected from each class.
14. That the proposed pro forma tariff pages and cost recovery mechanism set forth in the Act 129 Compliance Rider as contained in PPL Electric Utilities Corporation’s Phase II Energy Efficiency and Conservation Plan are hereby rejected, and that PPL Electric Utilities Corporation shall consult with the Commission’s Bureau of Audits within thirty (30) days of the entry date of this Opinion and Order, in order to develop a revised cost recovery mechanism that complies with the provisions set forth in the Commission’s *Phase II Implementation Order*. PPL shall submit a tariff supplement containing the revised cost recovery mechanism with its revised Phase II Plan.
15. That the contract between PPL Electric Utilities Corporation and JACO Environmental, Inc., filed by PPL Electric Utilities Corporation as part of its Phase II Energy Efficiency and Conservation Plan, is hereby referred to the Commission’s Law Bureau and Bureau of Technical Utility Services for review, consistent with our Opinion and Order entered January 16, 2009, at Docket No. M-2008-2069887, *In re: Energy Efficiency and Conservation Program.*
16. That within sixty (60) days of the entry date of this Opinion and Order, PPL Electric Utilities Corporation shall establish maximum time periods for the submission of incentive applications for conservation service measures following the in-service date of a measure. These deadlines shall be established as part of PPL Electric Utilities Corporation’s application process for incentives under its Phase II Energy Efficiency and Conservation Plan.
17. That any directive, requirement, disposition or the like contained in the body of this Opinion and Order, which is not the subject of an individual Ordering Paragraph, shall have the full force and effect as if fully contained in this part.

**BY THE COMMISSION,**

Rosemary Chiavetta

Secretary

(SEAL)

ORDER ADOPTED: March 14, 2013

ORDER ENTERED: March 14, 2013

1. PPL’s Revised Plan was filed in redline form, and reflects changes and clarifications made during the proceeding. [↑](#footnote-ref-1)
2. PPL annualized all energy savings in its Revised Plan. As a result, it expressed all savings reductions as MWh/yr. [↑](#footnote-ref-2)
3. We note that of the thirteen programs included in PPL’s Phase II Plan, two of them—the Prescriptive Equipment Program and the Custom Incentive Program—are available to multiple customer classes, and are separately described in the Revised Plan for each applicable customer class. Thus, the program summary set forth herein describes eighteen individual programs. [↑](#footnote-ref-3)
4. Revised Plan at 34-39. [↑](#footnote-ref-4)
5. *Id.* at 40-48. [↑](#footnote-ref-5)
6. *Id*. at 49-55. [↑](#footnote-ref-6)
7. *Id.* at 56-60. [↑](#footnote-ref-7)
8. *Id.* at 61-66. [↑](#footnote-ref-8)
9. *Id.* at 67. [↑](#footnote-ref-9)
10. *Id.* at 69-75. [↑](#footnote-ref-10)
11. *Id.* at 76-81. [↑](#footnote-ref-11)
12. *Id.* at 82-87. [↑](#footnote-ref-12)
13. *Id.* at 88-98. [↑](#footnote-ref-13)
14. *Id.* at 99-105. [↑](#footnote-ref-14)
15. *Id.* at 106-114. [↑](#footnote-ref-15)
16. *Id.* at 115-121. [↑](#footnote-ref-16)
17. *Id.* at 122-130. [↑](#footnote-ref-17)
18. *Id.* at 131-136. [↑](#footnote-ref-18)
19. *Id.* at 137-144. [↑](#footnote-ref-19)
20. *Id.* at 145-149. [↑](#footnote-ref-20)
21. *Id.* at 150-154. [↑](#footnote-ref-21)
22. *Id.* at 45, 52, 92, 95, 111 and 126. [↑](#footnote-ref-22)
23. *Id.* at 58, 85, 152 and 156. [↑](#footnote-ref-23)
24. Baseload WRAP jobs are performed on homes that do not have electric heat or hot water, and include lighting and appliance replacement and recycling. Low-cost jobs are performed on homes with electric hot water, and include all baseload measures as well as other measures such as the installation of a heat pump water heater and faucet aerators. Full-cost jobs are performed on homes with installed electric heat, and include all baseload and low-cost services, plus insulation and, where appropriate, the installation or repair of a central heating system. Under all three WRAP job types, the services and measures installed by contractors depend on the customer’s use of electricity and the result of a home assessment. PPL St. No. 1R at 20. [↑](#footnote-ref-24)
25. PPL states that, in addition to the $184.5 million cost cap, the Company expects to incur approximately $3 million for activities that the Commission determined are not subject to the cost cap, including PPL’s share of the SWE’s costs, and PPL’s cost to conduct net-to-gross evaluations each year. PPL St. No. 3 at 5, note 1. [↑](#footnote-ref-25)
26. Incentive costs are those program costs that are paid directly to, or on behalf of participating customers, while non-incentive costs are those program costs that are not paid directly to customers. PPLICA MB at 15; Tr. at 63. [↑](#footnote-ref-26)
27. PPL states that incremental cost, as used in the TRC and the design of rebates, is the difference between the total cost (EDC and participant costs) of the energy efficiency measure and the total cost of the baseline measure. PPL RB at 41, note 5. [↑](#footnote-ref-27)
28. The contract between PPL and JACO Environmental, Inc. is set forth in Confidential Appendix B of PPL’s Revised Plan. [↑](#footnote-ref-28)
29. A list of Phase I CSPs that PPL expects to retain in Phase II can be found in PPL’s Revised Plan at 165. [↑](#footnote-ref-29)