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February 7, 2013

Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street, 2nd Floor North
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Harrisburg, PA 17105-3265

Re: Petition of PPL Electric Utilities Corporation for Approval of an Energy Efficiency and Conservation Plan - Docket No. M-2012-2334388

Dear Secretary Chiavetta:

Enclosed for electronic filing is the Reply Brief of PPL Electric Utilities Corporation for the above-referenced proceeding. Copies have been provided as indicated on the certificate of service.

Respectfully submitted,

David B. MacGregor

DBM/jl
Enclosures

cc: Honorable Dennis J. Buckley
Certificate of Service

CERTIFICATE OF SERVICE

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

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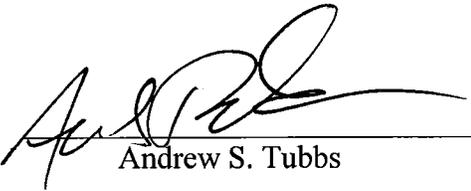
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Andrew S. Tubbs

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Petition of PPL Electric Utilities Corporation :
for Approval of an Energy Efficiency and : Docket No. M-2012-2334388
Conservation Plan :
:

**REPLY BRIEF
OF
PPL ELECTRIC UTILITIES CORPORATION**

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I. INTRODUCTION

On January 28, 2013, pursuant to the schedule established by Administrative Law Judge Dennis J. Buckley (the “ALJ”), PPL Electric Utilities Corporation (“PPL Electric” or the “Company”), the Office of Consumer Advocate (“OCA”), the Coalition for Affordable Utility Services and Energy Efficiency in Pennsylvania (“CAUSE-PA”), the Commission on Economic Opportunity (“CEO”), PP&L Industrial Customer Alliance (“PPLICA”), Sustainable Energy Fund of Central Eastern Pennsylvania (“SEF”), Comverge, Inc. (“Comverge”), and UGI Utilities, Inc., UGI Penn Natural Gas, Inc. and UGI Central Penn Gas, Inc. (collectively, “UGI”) filed Main Briefs in this proceeding. In its Main Brief, PPL Electric explained its positions on the issues pending before the Pennsylvania Public Utility Commission (“Commission”) concerning PPL Electric’s Phase II Energy Efficiency and Conservation Plan (“EE&C Plan” or “Plan”). In so doing, PPL Electric anticipated and, to a very large degree, responded to many of the arguments raised by the other parties in their Main Briefs. As to certain issues, however, some further response is required.

II. PROCEDURAL HISTORY

On November 15, 2012, pursuant to Act 129 of 2008 (“Act 129”), P.L. 1592, 66 Pa.C.S. §§ 2806.1 and 2806.2, and the Pennsylvania Public Utility Commission’s (“PUC” or the “Commission”) Implementation Order, *Energy Efficiency and Conservation Program*, Docket Nos. M-2012-2289411, M-2008-2069887, 2012 Pa. PUC LEXIS 1259 (Order Entered August 3, 2012)(“*2012 Implementation Order*”), PPL Electric filed a Petition with the Commission requesting approval of its Phase II (June 1, 2013 – May 31, 2016) Energy Efficiency and Conservation Plan (“Phase II EE&C Plan” or the “Plan”). The Phase II EE&C Plan includes a broad portfolio of energy efficiency programs, conservation practices and energy education initiatives designed to meet the goals established by Sections 2806.1 and 2806.2 of Act 129 and

the Commission's *2012 Implementation Order*. For the reasons set forth below, PPL Electric respectfully requests that the Commission approve, with the modifications discussed herein, its Phase II EE&C Plan. A full summary of the procedural history of this proceeding is contained in PPL Electric's Main Brief, pp. 1-4.

III. DESCRIPTION OF PPL ELECTRIC'S PHASE II EE&C PLAN

PPL Electric's Phase II EE&C Plan is described in detail in the petition filed in this proceeding on November 15, 2012, and in PPL Electric's Main Brief, pp. 4-10. Moreover, the Plan was admitted into evidence in this proceeding as PPL Electric Exhibit 1.

IV. SUMMARY OF ARGUMENT

It is undisputed that PPL Electric's Phase II EE&C Plan meets or exceeds all of the requirements of Act 129 and the Commission's 2012 Implementation Order. It therefore should be approved. The various proposals presented by opposing parties are either: (1) inconsistent with controlling Commission precedent and practice, and/or (2) focused on an individual party's narrow self-interest without any consideration or regard for the impact of their proposals on other PPL Electric customers or PPL Electric's ability to comply with the various requirements of Act 129 and related orders. On this basis, the opposing party positions should be summarily rejected, and PPL Electric's Phase II EE&C Plan should be approved.

CEO opposes low-income customers' participation in general residential EE&C programs and opposes PPL Electric's survey method of confirming the income status of such participants. Both issues have already been addressed and decided in PPL Electric's Phase I EE&C Plan and in the 2012 PA Total Resource Cost ("TRC") Test, where the Commission affirmed PPL Electric's survey methodology. CEO has provided no basis for re-litigating these issues in this proceeding.

CAUSE-PA has withdrawn several proposals based on PPL Electric's agreement to consider these issues in other, more relevant proceedings. CAUSE-PA continues to maintain, however, that PPL Electric should terminate its low-income education programs and redirect the funding for these programs to the low-income WRAP Program. PPL Electric has explained that its low-income education program is roughly 10 times more efficient than the low-income WRAP Program. As a result, to achieve the same level of savings, PPL Electric would have to provide 10 times the level of funding. CAUSE-PA does not explain where these dollars would come from without exceeding the 2% cost cap and does not explain how PPL Electric could possibly meet its Act 129 requirements under this scenario.

OCA proposes a special program for data centers, but provides no information as to how much such a program would cost, what savings would be produced, where the money would come from, what other programs would be cut and by how much, and how PPL Electric would meet its Act 129 requirements if this proposal were adopted. OCA also proposes that PPL Electric continuously operate its Residential Efficiency Behavior & Education Program throughout the Phase II program. PPL Electric has fully explained that doing so would triple the cost of the program and produce no additional savings. This obviously would not be an efficient or cost effective use of customer-supplied funds.

UGI and Comverge object to PPL Electric's proposal to place certain limitations on combined heat and power ("CHP") projects. PPL Electric has fully explained that CHP projects are large projects and that a few such projects could consume a disproportionate share of dollars budgeted to custom projects and leave insufficient funding available for smaller projects proposed by other smaller customers. PPL Electric seeks to assure that available funds are equitably distributed among customers and customer classes. UGI and Comverge, advancing

their own narrow self-interests, simply ignore this concern and the impact their proposals may have on other customers.

Finally, UGI proposes that PPL Electric be required to implement an aggressive and wide ranging fuel switching program. As PPL Electric has fully explained, the Commission has previously determined that it will not mandate that electric distribution companies (“EDCs”) adopt fuel switching measures as part of their EE&C Plans. UGI offers no response to this argument except to characterize it as “irrelevant.” To the extent that PPL Electric may have been anything less than clear on this point, PPL Electric offers the following summary: (1) The Commission unanimously rejected mandatory fuel switching in PPL Electric’s Phase I EE&C proceeding and referred the matter to a Fuel Switching Working Group; (2) after fully considering the issue the Commission’s Staff concluded and the Commission adopted the following position on mandatory fuel switching:

“Staff finds the position put forth by OCA, OSBA, FirstEnergy, Allegheny and PPL to be persuasive and believes that fuel switching measure should be available to EDCs and their stakeholders when considering the best means of achieving energy efficiency goals. However, just as no other particular energy efficiency program or measure has been mandated for implementation, fuel switching programs should not be mandated either.”

(3) PPL Electric asks that the Commission follow (1) and (2) above in this proceeding and summarily reject UGI’s mandatory fuel switching proposal.

UGI’s remaining arguments are fully addressed below and in PPL Electric’s Main Brief with the following exception. UGI, at some length, extols the benefits of fuel switching and presents some impressive figures as to how fuel switching allegedly could improve the efficiency of PPL Electric’s Phase II EE&C Plan and individual programs within the Plan. As explained below, a number of these claims are substantially overstated and in some instances are mathematically impossible. Moreover, if fuel switching is as beneficial as UGI contends, then it

would not seem necessary to adopt large rebates and incentives to encourage fuel switching. Substantial incentives and rebates for such programs would produce nothing but “free riders”, which is clearly inefficient and inconsistent with Commission policy. And, in any event, if substantial incentives and rebates are to be offered, PPL Electric submits that they should be provided by UGI and its customers, who will see the benefits of fuel switching, and not by PPL Electric’s customers, particularly where the majority of PPL Electric’s customers do not have access to natural gas.

For these reasons and as more fully set forth below, PPL Electric’s Phase II EE&C Plan should be approved.

V. ARGUMENT

A. PROCEDURAL/EVIDENTIARY ISSUES

In its Main Brief, Comverge maintains, without further explanation or argument, that the ALJ’s decision to deny Comverge’s Petition for Admission *Nunc Pro Tunc* for Admission of Direct Testimony was “incorrect.” Comverge Main Brief, p. 10. As explained in the Company’s Main Brief, the ALJ heard extensive oral argument, carefully examined this issue and, in a well-reasoned decision, properly denied Comverge’s Petition. Fifth Prehearing Order, p. 8. Importantly, even if Comverge were correct on the merits, it waived any opportunity to enter its testimony into the record when, without any explanation, failed to produce its witness for cross-examination, thereby denying PPL Electric any opportunity for cross-examination. As the ALJ correctly found this would have resulted in a “flagrant violation of PPL right to due process.” *Id.* There is no lawful basis for the admission of Comverge’s testimony in this proceeding.

B. ACT 129 CONSERVATION REQUIREMENTS

1. Overall Conservation Requirements

The Company's proposed Phase II EE&C Plan is designed to achieve over 841,000 MWh/year, meeting the Commission established three-year consumption reduction target of 2.1% or 821,072 MWh/yr. *2012 Implementation Order*, p. 24; *see also*, Phase II EE&C Plan, Section 9.1.2; PPL Electric St. 1, pp. 5-6; PPL Electric St. 2, p 5-6. No party has challenged this conclusion.

2. Requirements for a Variety of Programs Equitably Distributed

The Company's proposed Phase II EE&C Plan includes a variety of energy efficiency and conservation measures and will provide the measures equitably to all classes of customers. *See* PPL Electric Main Brief, pp. 16-17. No party has challenged this conclusion. Moreover, PPLICA stated that, "PPL [Electric]'s overall budget allocation reflects a reasonable effort to achieve parity among the customer classes." PPLICA Main Brief, p. 9.

3. 10% Government/Non-Profit Requirement

The Company's proposed Phase II EE&C Plan is designed to achieve a minimum of 10% of the required reductions in consumption from units of federal, state and local government, including municipalities, school districts, institutions of higher education and nonprofit entities, *i.e.*, GNI customers as required by the Commission. PPL Electric Main Brief, p. 17. No party has challenged this conclusion.

4. Low-Income Program Requirement

Act 129 provides that the Company's EE&C Plan include specific energy efficiency measures for households at or below 150% of the federal poverty income guidelines. Specifically, 66 Pa.C.S. § 2806.1(b)(i)(G) requires that the number of measures offered in the Company's EE&C Plan shall be proportionate to those households' share of the total energy

usage in the service territory. As detailed in PPL Electric’s Main Brief, the Company has designed its Act 129 programs to achieve 8.68% of its required energy consumption from the low-income sector, which is well in excess of the Commission’s minimum 4.5% requirement. In addition, 19% of its energy efficiency measures will be available for low-income customers, which is well above the Commission’s minimum 9.95% requirement. PPL Electric Main Brief, pp. 18-19; Phase II EE&C Plan, Section 9.1.3.

Despite this “over compliance,” several parties propose substantial changes to the Company’s low-income programs. Furthermore, parties also offered proposals to amend some of the low-income programs proposed by the Company. The issues raised by the parties are discussed in full below. *See* Section V.C.1.

5. A Comprehensive Measure for Residential and Small Commercial Customers

Consistent with the Commission’s *2012 Implementation Order*, PPL Electric’s Phase II EE&C Plan includes a comprehensive measure for residential and for small commercial rate classes. PPL Electric Main Brief, p. 19. No party has challenged this aspect of the Company’s proposed Phase II EE&C Plan.

C. ISSUES RAISED BY THE PARTIES REGARDING INDIVIDUAL CONSERVATION PROGRAMS

1. Residential and Low-Income Programs

a. Residential and Low-Income Energy Efficiency Behavior Program

i. Continuous Operation of the Residential and Low-Income Energy Efficiency Behavior Program is Not Appropriate

PPL Electric has proposed to continue the operation of its Residential Energy-Efficiency Behavior & Education Program that was included in the Company’s Phase I EE&C Plan. PPL

Electric St. 1, p. 8; PPL Electric Main Brief, p. 19. OCA maintains that PPL Electric's current Residential Energy-Efficiency Behavior & Education Program should operate continuously from Phase I into and throughout Phase II. OCA Main Brief, p. 13. OCA further states that the measure life in these programs could be extended if these programs lasted over a long enough time for the behavior to become ingrained. OCA Main Brief, p. 13; OCA St. No. 1, p. 10.

For the reasons discussed in PPL Electric's Main Brief, as supplemented below, OCA's proposal should be rejected. PPL Electric Main Brief, p. 20. OCA has acknowledged that behavior modification programs produce tangible energy reductions for participating customers. *See* OCA St. 1, p. 9. PPL Electric expects to achieve approximately 32,000 MWh/yr. in savings for the Residential Efficiency Behavior & Education Program and 8,300 MWh/yr. in savings for the Low-Income Efficiency Behavior & Education Program. PPL Electric St. 1-R, p. 15. However, the expected measure life of these programs is only one year and this means that the achieved savings for these programs expire after one year. PPL Electric St. 1-R, p. 16. Therefore, the savings are not cumulative for each year of operation toward the May 31, 2016 compliance target. Because of this PPL Electric proposed that the programs begin in program year ("PY") 6 with savings recorded in PY7. If the Residential Efficiency Behavior & Education Program and the Low-Income Efficiency Behavior & Education Program 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 not receive credit for any additional savings for these additional expenditures. Thus, if OCA's continuous operation proposal was implemented for the entirety of the Phase II, the program's cost would increase, without producing any additional savings that PPL Electric could count toward meeting its Phase II consumption reduction target. *Id.*

Furthermore, OCA provides no support for, or quantification of, its argument that the behavior would become ingrained if the program were operated continuously during the course of Phase II. PPL Electric determines the actual savings of this program from a billing regression analysis of participants and a control group. Contrary to OCA's conclusion, the program CSP confirmed in Phase I, there is no evidence that savings persist once the measure (the program's report cards and education to participants) stops. PPL Electric's EE&C Plan is designed to achieve the real targets set by the Commission, based on supported measures. The Company cannot speculate or take the risk of including unsupported measures in its EE&C Plan when there are significant civil penalties for failure to achieve the reduction targets.

ii. Information in the Report Cards

OCA also requests that PPL Electric be directed to include the commitment that its report cards contain information needed to aid customers in modifying their behaviors to reduce their energy usage in its revised Plan. OCA Main Brief, p. 14. PPL Electric has already done so. The home energy report provided to customers who participate in this program will include internet addresses to the Company's other programs, which provide extensive information on how to modify consumption habits and reduce energy usage. PPL Electric St. 1-R, p. 19; PPL Electric Main Brief, p. 21.

iii. Elimination of the Home Energy Reports is Not Appropriate

As part of the Residential and Low-Income Energy Efficiency Behavior Programs the Company will provide home energy reports. PPL Electric EE&C Phase II Plan, pp. 56, 82. CAUSE-PA maintains that the home energy reports should be eliminated or significantly scaled back and that the funding for this measure should be redirected to Act 129 WRAP or other such programs. CAUSE-PA Main Brief, p. 12. For the reasons stated in PPL Electric's Main Brief,

pp. 22-23, CAUSE-PA's proposal should be rejected because it would increase the costs and would jeopardize the Company's ability to meet its reduction target. *Id.* Furthermore, CAUSE-PA's Main Brief does not specifically support how, under its proposal, PPL Electric should spend the funds it proposes to take away from the Low-Income Energy Efficiency Behavior Programs. Therefore, its proposal should be rejected.

CAUSE-PA argues that PPL Electric's proposals may result in some savings but not enough to make any material difference in a low-income customer's electric bill. CAUSE-PA Main Brief, p. 13. Specifically, CAUSE-PA states that funding for the Low-Income Behavior and Education Program should be redirected because it "would be more effectively used to provide additional heat pump water heaters and/or other appropriate directly installed measures through Act 129 WRAP eligible services." CAUSE-PA Main Brief, p. 13. CAUSE-PA's proposal should be rejected. PPL Electric does not support CAUSE-PA's recommendation as it would significantly increase the cost to achieve low-income savings and would seriously jeopardize PPL Electric's ability to meet its overall consumption reduction target and possibly its low-income set-aside target. PPL Electric St. 1-R, p. 17. Spending more on Act 129 WRAP programs would not be more cost effective than the Low-Income Behavior and Education Program and CAUSE-PA does not dispute or offer evidence to the contrary. PPL Electric Main Brief, pp. 22-23.

CAUSE-PA also criticizes the Low-Income Energy Efficiency Behavior Program (and E-Power Wise Program) because they may not produce a "meaningful impact" on an individual customer's bills. This argument is without merit. Act 129 is an energy savings program and EDCs have to achieve minimum savings or face significant civil penalties. Act 129 requires that each plan include a variety of energy efficiency and conservation measures and provide the

measures equitably to all classes of customers. 66 Pa.C.S. § 2806.1(a)(5). Therefore, the Plan, among other things, offers a mix of energy efficiency programs for all customers including low-income customers. While CAUSE-PA's proposal may produce a "meaningful bill impact" for a small number of customers, the Company must be cognizant of its overall Act 129 requirements (and the reduction targets) and must look at the costs/benefits provided to the various customer sectors overall. Specifically, as explained in the Company's Main Brief, \$1 of programs funds for the behavior program provides approximately ten times the savings as \$1 would for the Low-Income WRAP Program. PPL Electric Main Brief, p. 22. The Company believes that this educational program has merit and should be included in Phase II and has fully supported its inclusion. PPL Electric Main Brief, pp. 22-23.

b. E-Power Wise Program

In its testimony, OCA identified concerns with the installation rates for the E-Power Wise Program's energy-efficiency kits. OCA St. 1, p. 18. PPL Electric provided additional detail on this issue in its Main Brief. PPL Electric Main Brief, pp. 23-25. Based on this information, the OCA has concluded that the installation rates are sufficient and that this issue need not be further addressed in the revised Plan. OCA Main Brief, p. 16; PPL Electric St. 1-R, pp. 7-8.

c. Residential Retail Program and Prescriptive Equipment Program

OCA recommends that PPL Electric not provide an incentive for standard T-8 lighting or fixtures, and EISA compliant incandescent bulbs. OCA Main Brief, p. 19. For the reasons stated in PPL Electric's Main Brief, pp. 25-26, OCA's proposal should be rejected. In summary, the projected savings in the proposed Plan are based upon the savings method specified in the Commission's 2013 Technical Reference Manual ("TRM"). PPL Electric St. 1, p. 35. That method determines projected savings based on the difference in consumption between the

customer's existing light fixtures (including T-12 bulbs) and the new fixtures (including T-8 bulbs). Under the 2013 TRM, T-8s are eligible for savings and rebates. *Id.* Moreover, there is no evidence in the record as to the effect of OCA's proposal on PPL Electric's ability to meet its reductions requirements. Its proposal therefore should be rejected.

d. Low-Income WRAP Program

i. Baseload WRAP Jobs

No party raised any issues regarding PPL Electric's proposal for baseload WRAP jobs. CAUSE-PA supports PPL Electric's efforts with regard to the Low-Income WRAP Program. CAUSE-PA Main Brief, pp. 8-10.

ii. Heat Pump Water Heaters

CEO argues that PPL Electric's Phase II EE&C Plan should increase the installation of Heat Pump Water Heaters ("HPWH") in its Low-Income WRAP program from 200 to 500 per year. CEO Main Brief, pp. 4-5. CEO's proposal should be rejected. PPL Electric fully responded to CEO's proposal in its Main Brief, pp. 27-28. OCA and CAUSE-PA also raised concerns with regard to HPWHs, and these issues are addressed in the fuel switching section below. *See* Section V.C.5, below; PPL Electric Main Brief, Section V.C.7.

iii. Electric Space Heaters

CAUSE-PA requests that the Company revise the Plan to include matters in the Company's view are more appropriately addressed in its next Universal Service proceeding. On that basis, PPL Electric has made various commitments to address CAUSE-PA's concerns regarding electric space heaters. *See* PPL Electric Main Brief, p. 29. CAUSE-PA requests that the Company amend its Phase II Act 129 Plan to clarify that it will begin addressing issues related to electric space heaters through LIURP and its other universal service programs. As explained in PPL Electric's Main Brief, 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 Service 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.

iv. Natural Gas Distribution Company Coordination

No party raised concerns about the PPL Electric's proposal regarding natural gas distribution company coordination. Notably, CAUSE-PA commended PPL Electric's efforts with regard to natural gas distribution company coordination. CAUSE-PA Main Brief, p. 14.

e. Low-Income Participation Levels

OCA recommends that the Company do more to attract low-income customers to its low-income programs. OCA Main Brief, p. 11. OCA recommends that PPL Electric increase the 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." OCA Main Brief, p. 12. OCA's proposal should be rejected.

As fully discussed in PPL Electric's Main Brief, pp. 29-30, the Phase II EE&C Plan already has sufficient low-income participation levels. In Phase I, 20,978 low-income customers participated in PPL Electric's energy efficiency programs. *Id.* As proposed, the Phase II EE&C

Plan will achieve participation by 69,100 low-income customers (9,500 EE&C Low-Income WRAP, 50,000 energy reports, and 9,600 participants in E-Power Wise), an increase of over three times the Phase I level. Further action to increase low-income participation is not necessary or desirable as it would simply increase costs without producing any additional energy savings and would reduce the number and extent of programs available to non-low-income customers.

Regarding informing all participants in the general residential programs about the low-income programs, PPL Electric agrees that all EE&C Plan participants should be informed of any program that might be applicable. The programs in the Phase II EE&C Plan contain various marketing strategies designed to ensure the customers are aware of all available programs. No additional efforts should be required.

Finally, OCA's proposal to rename the low-income programs should be rejected. The *2012 Implementation Order* and the Phase II plan template both use the term "low-income" to describe the programs for the low-income sector. *See 2012 Implementation Order*, p. 53. Moreover, OCA has not provided any evidence that its name change proposal would make any difference in participation levels. There is no evidence that the name of the program has had any effect on participation levels. In fact, as discussed above, PPL Electric already has excellent low-income participation in its Phase I EE&C Plan. It is important to note that the proposed Phase II EE&C Plan is intended for all customers; and not exclusively for low-income customers. However, it is important for customers to understand what programs may be available, and the Company has named its programs accordingly.

f. Low-Income Participation in General Residential Programs

As discussed in PPL Electric's Main Brief, pp. 30-32, it is appropriate and consistent with Commission precedent for low-income customers to participate in general residential

EE&C programs. Furthermore, the proposed survey methodology for determining low-income participation in non-low-income programs was approved by the SWE as part of PPL Electric's Phase I EE&C Plan, and was reaffirmed by the Commission in the *2012 TRC Order* for use in Phase II EE&C Plans. *2012 PA Total Resource Cost (TRC) Test*, Docket Nos. M-2012-2300653 (Order Entered August 30, 2012) ("*2012 TRC Order*"), pp. 49-50. OCA has acknowledged in this proceeding that the Company may count low-income customer participation in the general residential programs towards its reduction target of 4.5% from the low-income sector. OCA Main Brief, p. 11. Additionally, CAUSE-PA recognizes that some low-income customers may participate in the general residential programs. CAUSE-PA Main Brief, p. 15.¹

Moreover, PPL Electric has committed to refer customers that self identify as low-income to other Company low-income programs, including PPL Electric's Act 129 low-income programs and the Company's Universal Service programs. PPL Electric St. 1, p. 10; CAUSE-PA Cross Examination Exhibit 1.

In its Main Brief, p. 2, CEO argues that the Company should be required to meet its low-income carve-out with direct measures specifically targeted to confirmed low-income customers. CEO argues that the Company is "attempting to meet low-income targets with little reliance on low-income programs targeted to confirmed low-income customers." CEO Main Brief, p. 2. CEO asserts that PPL Electric's proposed survey method "would defeat the purpose of the statutory carve-out and PUC Implementation Order and such practice is not likely in the best

¹ CAUSE-PA also states that low-income households should be encouraged to participate in low-income programs first and that participation in general residential programs should only be an ancillary means that these household achieve energy savings. CAUSE-PA Main Brief, p. 15. As discussed in the Phase II EE&C Plan, the Company will engage in targeted marketing efforts to ensure that customers are aware of the low-income programs. Phase II EE&C Plan, p. 28. These efforts should encourage customers into the appropriate program. However, the Company does not verify income until the evaluation process, a low-income customer could purchase, for example, a CFL in a store for a discount and the Company would not have a way of knowing about it until after the fact.

interests of low-income customers in that they will be paying for services that they would otherwise be eligible to receive without cost.” CEO Main Brief, pp. 2-3.

As discussed in PPL Electric’s Main Brief, CEO’s proposal should be rejected. PPL Electric Main Brief, pp. 30-32. The issue of low-income customer participation in general residential programs was settled by the Commission in the *2012 TRC Order*. CEO’s arguments are nothing more than an attempt to reargue the Commission’s prior determinations. As discussed in Section 9.1.3 of the Phase II EE&C Plan, PPL Electric designed its Plan to achieve 22,091 MWh/yr. from the low-income sector from low-income programs. In addition, PPL Electric estimates it will achieve 49,192 MWh/yr. from low-income participation in general residential programs. Therefore, the total savings expected from the low-income sector is 71,283 MWh/yr. which is 8.68% of the total required reductions (821,072 MWh/yr. compliance target) which exceeds the 36,948 MWh/yr. compliance requirement for the low-income sector. In the *2012 Implementation Order* the Commission stated the low-income reporting methodology to be used in Phase II will be decided in the final TRC Order. *2012 Implementation Order*, p. 80. In its *2012 TRC Order*, the Commission stated that EDCs can estimate low-income savings from non-low-income programs using a survey method approved by the SWE. The Commission further stated that by addressing this issue in its *2012 TRC Order*, it intended to standardize how EDCs determine low-income savings in non-low-income programs. *2012 TRC Order*, pp. 49-50. Therefore, requiring PPL Electric to meet its low-income carve-out with only direct low-income measures, as requested by CEO, is inconsistent with the Commission’s prior determinations and should be rejected. The Commission has already addressed this issue on a statewide basis and it should not be re-litigated in the proceeding.

g. Role of Community Based Organizations

As explained in its Main Brief, p. 32, PPL Electric has successfully worked with the community based organizations (“CBOs”) in its service territory during the Company’s Phase I EE&C Plan and will continue to meet and work with those CBOs during Phase II. Those CBOs are responsible for delivering PPL Electric’s WRAP programs (LIURP and Act 129) and for identifying customers for CFL giveaways and E-Power Wise eligibility. *Id.* CEO requests that the Plan also include a requirement that the Company use CBOs located “in those service territories served by those organizations.” CEO Main Brief, p. 5.

CEO’s request to restrict the CBOs PPL Electric can use to implement its Plan is unnecessary and should be rejected. The Phase II EE&C Plan relies on the support and efforts of CBOs, and PPL Electric and its CSPs will work with those CBOs that they have determined are in the best position to communicate with the target market for the applicable EE&C program, *e.g.*, low-income customers in PPL Electric’s service territory. PPL Electric’s low-income programs, for example, will be supported by several market partners, collectively termed CBOs, which provide energy-efficiency services directly to income-qualified customers. Phase II EE&C Plan, p. 160. As part of its Phase II implementation strategy PPL Electric will leverage its existing relationship with CBOs to expand and enhance its programs as appropriate. *Id.* The CBO market partners are independent market participants that may provide conservation products and services to PPL Electric customers and may be supported by funding from the Company, but are not under contract to PPL Electric. *Id.*

As explained with regard to the low-income E-Power Wise Program, the CSP administering the program will build relationships with CBOs, and the CBOs will be recruited and trained by the summer of 2013 to assist with the program. Phase II EE&C Plan, p. 78. Moreover, the program will be marketed to community groups and human services organizations

that interact with low-income customers. *Id.* These efforts are designed to facilitate the overall goal of the low-income E-Power Wise program, which is to provide low-income customers with energy-efficiency kits and education materials. These energy-efficiency kits and education materials will, in part, be distributed by CBOs. Phase II EE&C Plan, p. 76. Since the goal of this program is to provide low-income customers with energy-efficiency kits and education materials, the CBOs chosen to assist in this program will be those in the best position to communicate with low-income customers in PPL Electric's service territory. The CBOs chosen to assist in this program may already serve a target area or customer group. The Company or the CSP will select the best CBO for the desired task. That CBO may or may not be in the immediate area. It would not be appropriate for the Commission to require PPL Electric to work with a CBO simply because it is located in a particular geographic area where another CBO might do a better job. In addition, the CEO proposal seems to assume only one CBO serves a given area. That is not the case, as several CBOs serve any given area. The Company and the CSPs need to be free to select the best CBO. CEO's request is an effort to misuse the regulatory process to protect its own market position. This is clearly inappropriate. As discussed above and in the Phase II EE&C Plan, the Company and CSPs will work with CBOs that can reach the EE&C program's target market and therefore, the restriction requested by CEO is unnecessary and should be rejected.

h. Referrals to Other Universal Service Programs

PPL Electric proposed to refer all customers who participate in surveys and self-verify as low-income to PPL Electric's Act 129 low-income programs and to the Company's Universal Service programs. *See* CAUSE-PA Cross-Examination Exhibit No. 1; PPL Electric Main Brief, p. 33. No party has challenged this conclusion.

i. Low-Income Businesses

SEF argues that certain equipment incentives in the Phase II EE&C Plan should not be available to low-income farms served under residential rate schedules. SEF Main Brief, p. 16. SEF also states that PPL Electric should encourage farms to switch to a Small C&I rate schedule for the farming portion of their electric usage. SEF Main Brief, p. 17. For the reasons discussed in PPL Electric's Main Brief, pp. 33-34, SEF's proposal should be rejected. Under the proposed Phase II EE&C Plan the only "businesses" that would be eligible for any of PPL Electric's low-income residential programs are farms that are served under a residential rate schedule and meet the low-income qualification requirement. PPL Electric St. 1-R, p. 13. PPL Electric believes that it is appropriate for these customers to receive rebates as part of a residential program because they receive service under residential rate schedules (and meet the low-income requirements). These farm customers pay a portion of the cost of the EE&C programs via the Act 129 Compliance Rider as residential customers. Therefore it is appropriate for them to receive residential incentives.

Furthermore, SEF's proposal to switch farms to the Small C&I rate schedules would be poor public policy. If the farms were switched to Small C&I rate schedules, then they would no longer qualify for the low-income programs, which are only available to customers served under residential rate schedules. This would defeat PPL Electric's efforts to provide these farms with incentives or services available to other low-income customers. The Company does not believe that low-income farmers should be denied access to incentives under the residential programs just because the equipment purchased may be used for business purposes. The farms receive service under residential rate schedules and therefore should receive incentives under the residential EE&C programs.

j. Additional Direct Measures for Low-Income Customers Recommended by the Parties

CEO argues that PPL Electric's EE&C Plan should include more direct low-income measures. CEO Main Brief, p. 3. CEO's proposal should be rejected. PPL Electric fully responded to CEO's proposal in its Main Brief, pp. 34-36.

2. Commercial

a. Master Metered Low-Income Multifamily Housing Program

PPL Electric's proposed Master Metered Low-Income Multifamily Housing Program currently includes a measure for LED exit sign lighting. *See* Phase II EE&C Plan, p. 137. OCA requested that the Commission direct PPL Electric to add a general LED lighting measure (interior and exterior). OCA St. 1, pp. 15-16. As explained in its Main Brief, PPL Electric is amenable to approving the use of LED lighting on a case-by-case basis, such as hard to reach common areas or for some outside lighting applications which would have long hours of use. PPL Main Brief, p. 36. OCA accepted PPL Electric's proposal, and requests that PPL Electric include these additional LED lighting features in its revised Plan. OCA Main Brief, p. 17. PPL Electric agrees to revise the Plan accordingly.

In its testimony, OCA also expressed concerns regarding the educational component of the Master Metered Low-Income Multifamily Housing Program for building owners and tenants. OCA St. 1, pp. 15-16. PPL Electric addressed these concerns in its rebuttal testimony, where it explained that its multifamily program will be operated by a turnkey CSP who will be required, as part of its bid, to submit a proposed education program for use with this program. PPL Electric St. 1-R, p. 37. Based on this information, OCA recommends in its Main Brief that PPL Electric share the education program with its stakeholders once it has selected the educational

plan. OCA Main Brief, p. 17. PPL Electric agrees to share the educational plan with stakeholders at a stakeholder meeting once a CSP is selected.

b. Data Center Energy Efficiency Program

OCA recommends that the Company include a comprehensive data center energy efficiency program in its revised Plan. OCA Main Brief, p. 18. OCA's proposal should be rejected for the reasons set forth in PPL Electric's Main Brief, pp. 37-38.

c. PPL Electric's Proposal for Combined Heat and Power Projects is Reasonable and Should be Approved

UGI and Comverge aver that PPL Electric's Custom Incentive Program unreasonably discriminates against combined heat and power ("CHP") projects: (1) by requiring that CHP Projects demonstrate a projected TRC of 1.25; and (2) by offering a \$0.05/kWh incentive payment for CHP Projects as compared to the \$0.08/kWh incentive payment offered for improvements to a commercial and industrial customer's equipment, project or process. UGI Main Brief, p. 27; Comverge Main Brief, p. 9. UGI and Comverge propose that all Custom projects in the Company's Phase II EE&C Plan, including CHP projects, should qualify based on a projected TRC of 1.0 or higher, and should receive an incentive payment of \$0.08/kWh. *Id.* As explained in the Company's Main Brief, pp. 38-39, and addressed further below, the arguments of UGI and Comverge ignore the record in this proceeding and should be rejected.

As explained by Mr. Cleff, PPL Electric's proposal for CHP Projects in its Phase II EE&C Plan include: (1) a 1.25 TRC requirement; (2) an incentive per kWh saved at five cents; and (3) capping the rebate to \$250,000. PPL Electric St. No. 4-R, pp. 16-17. Contrary to the assertions of UGI and Comverge, the Company's proposal relative to CHP Projects is reasonable and appropriate. The 1.25 TRC requirement is appropriate for the following reasons: (1) the uncertainty associated with calculating the benefit-to-cost ratio for these types of projects; (2) the

fact that it often takes six months or more of post-installation operating data to verify the savings for a CHP project; and (3) the size of CHP projects is typically much larger than other custom projects and as a result, one large CHP project with a low TRC can have a disproportionate impact on the TRC of the Custom Program as a whole. PPL Electric Main Brief, pp. 38-39.

The lower incentive payment and cap are needed to address the concerns raised by stakeholders that Act 129 funding for the large C&I and GNI sectors will be concentrated in just a few large projects or with just one energy efficiency measure. PPL Electric St. No. 4-R, p. 17.

The Customer Incentive Program is available to all small and large C&I customers. All of these customers will pay for this program and it should be reasonably available to all customers who are interested. As explained by Mr. Cleff, in PPL Electric's Phase I EE&C Plan, six (6) CHP projects have received incentives (4) or are under construction (2). Five of those projects received (or will qualify for) the \$500,000 custom incentive rebate cap in place in Phase I. The rebates for those six custom projects will account for 15% of the total Custom Incentive Program budget for large C&I and institutional customers and, on average, cover about 19% of the total project costs (as reported by the customers). PPL Electric St. 4-R, pp. 16-17. Therefore, based upon the Phase I experience, PPL Electric agreed with some stakeholders' recommendations that the incentive per kWh and the rebate caps should be adjusted for CHP projects in Phase II, but still remain meaningful, so that funds would be available to more customers in these sectors, rather than concentrated in a fewer number of large projects. Setting the incentive per kWh saved at five (5) cents and reducing the rebate cap to \$250,000 retains a meaningful level of funding for CHP projects in Phase II while making funds available for other projects.

UGI avers that PPL Electric's lower incentives for CHP projects are unwarranted. Specifically, UGI challenges PPL Electric's claim that these are uncertainties related to the savings to be achieved by CHP projects. UGI Main Brief, pp. 28-29. Further, UGI avers that if PPL Electric cannot verify savings, no incentive is awarded because if a CHP project's savings are too uncertain to be verified, it will not receive a rebate. *Id.* UGI's averments are without merit. Consistent with its Phase I EE&C Plan Customer Incentive Program, PPL Electric will pay a portion of the incentive (usually 80%) upon the installation of the CHP project based on the estimated "claimed savings." The remaining 20% of the incentive is paid upon verification of savings which may occur 6 to 12 months after the project is in-service. Therefore, if the verified savings are less than 80% of the claimed savings, PPL Electric would have overpaid the rebate.

Moreover, neither UGI nor Comverge assert that the proposed parameters will discourage CHP projects from participating in the Company's Phase II EE&C Plan. Indeed, at the incentive level of five cents per kWh saved and project caps proposed for Phase II, five of the six Phase I projects would reach the Phase II cap of \$250,000, and, on average, the incentive they receive would equal about 10% of the project costs (as reported by the customers) as custom incentives. PPL Electric St. No. 4-R, p. 17. For these reasons, the Commission should approve PPL Electric's proposal without modification.

3. Industrial Customer Programs

No party has challenged PPL Electric's Phase II EE&C Plan proposals regarding the industrial customer programs. The cost issues raised by PPLICA are discussed below. *See*, Section V.E., below.

D. FUEL SWITCHING

UGI and SEF aver that PPL Electric should include specific programs and measures in its Phase II EE&C Plan that encourage customers to convert from electric to natural gas or solar appliances. UGI Main Brief, pp. 14-26; SEF Main Brief, pp. 5-16. PPL Electric responded to these proposals at length in its Main Brief (pp. 40-49) and will provide further argument below.

As an initial matter, it is important to point out that UGI and SEF do not assert that PPL Electric's Phase II EE&C Plan will fail to meet the Act 129 requirements without the proposed fuel switching program(s) or measures. UGI and SEF have not and cannot challenge the fact that PPL Electric's Phase II EE&C Plan comports with the requirements of Act 129 and the Commission's *2012 Implementation Order*. Indeed, PPL Electric has clearly demonstrated that its Phase II EE&C Plan meets all of the Act 129 and Commission requirements, including the overall target, the overall budget, cost-effectiveness of the portfolio, low-income and government set-aside target, equitable distribution of programs and costs across customer sectors, etc. UGI and SEF apparently agree since they offer no evidence of non-compliance. Instead, these parties argue that if the Plan encouraged direct end use of natural gas and solar it would improve the Plan under the Commission's *2012 TRC Order*. UGI Main Brief, pp. 16-19; SEF Main Brief, p. 7. Despite prior Commission determinations to the contrary, UGI and SEF advocate that the Commission mandate that PPL Electric substantially revise its Phase II EE&C Plan to include broad based fuel-switching programs. As fully explained in PPL Electric's Main Brief, pp. 40-43, the Commission has expressly declined to mandate that fuel switching programs be included in an EDC's EE&C Plan. Indeed, the Commission has never mandated that an EDC include any program or measure in an EE&C Plan. UGI and SEF improperly seek to overturn the Commission's prior determination in the context of a single EDC's EE&C Plan.

For the reasons set forth in the Company's Main Brief and as further explained below, the Commission should once again reject the arguments of UGI and SEF and approve PPL Electric's Phase II EE&C Plan, as modified by its rebuttal testimony.

1. Fuel Switching is not a Required Component of EDC Act 129 EE&C Plans

As addressed in the Company's Main Brief (pp. 4-43), Act 129 does not require that an EDC's EE&C Plan include any specific program or measure. Indeed, Act 129 and the Commission's orders implementing it require that EDCs achieve the required consumption reduction target and identified carve-outs for low-income and GNI customers. The Commission has recognized that it is the EDCs that have the obligation to meet the requirements of Act 129. Therefore, the Commission has properly determined that EDCs should have discretion over the method by which to comply with the requirements.² Moreover, the Commission has specifically addressed and declined to mandate that an EDC's EE&C Plan include fuel switching programs. Specifically, the Commission stated that:

Staff finds the position put forth by OCA, OSBA, FirstEnergy, Allegheny and PPL to be persuasive and believes that fuel switching measure should be available to EDCs and their stakeholders when considering the best means of achieving energy efficiency goals. However, just as no other particular energy efficiency program or measure has been mandated for implementation, fuel switching programs should not be mandated either.

² See, e.g., *Petition of PPL Electric Utilities Corporation for Approval of its Energy Efficiency and Conservation Plan*, Docket No. M-2009-2093216, 2009 Pa. PUC LEXIS 2009 (Order Entered December 28, 2009), p. *8 ("Act 129 establishes certain requirements that must be met by electric distribution companies (EDCs), but gives the EDCs discretion (subject to Commission review) over the method by which the EDC will comply with those requirements."); *Petition of PECO Energy Company for Approval of its Act 129 Energy Efficiency and Conservation Plan and Expedited Approval of its Compact Fluorescent Lamp Program*, Docket No. M-2009-2093215 (Order Entered October 28, 2009) p. *88 ("Act 129 does not dictate how EDCs must meet these goals, only that they must meet them."); *Petition of PPL Electric Utilities Corporation for Approval of its Energy Efficiency and Conservation Plan*, Docket No. M-2009-2093216, 2009 Pa. PUC LEXIS 2242 (Order Entered October 26, 2009), p. *131 ("We are mindful, however, that PPL is the Party that bears the risk of penalties in the event of non-compliance with the mandates of Act 129. We will not micro-manage the Company's compliance efforts.").

The Act 129 Fuel Switching Working Group Staff Report, Docket No. M-00051865 (April 30, 2010), p. 6. The Commission, by Secretarial Letter, adopted the conclusions contained in the Staff Report, including the no mandate recommendation.

Through their continued advocacy of natural gas and solar fuel switching measures, UGI and SEF have not provided any evidence that their proposals are required in order for PPL Electric to meet its Act 129 and Commission set requirements for its Phase II EE&C Plan. Instead, UGI and SEF advocate proposals that will serve their own self-interests. If switching from electric to natural gas water heaters and electric heat is as compelling and cost-effective as UGI avers, then UGI is free to encourage customers to switch by offering their own incentives or by developing ways to expand UGI's distribution system to reach the thousands of PPL Electric customers that currently do not have access to natural gas service.

PPL Electric recognizes that there are likely many possible combinations of energy efficiency measures, programs, estimated customer participation levels, etc. to cost-effectively meet its Phase II Act 129 requirements. None of these combinations is expected to be viewed as the "perfect solution" by every stakeholder, and it is impractical to include every possible additional measure in its Plan or for PPL Electric to continue to iterate/evaluate various combinations of measures and programs. This is especially true where a substantial change is proposed by a party advancing its own narrow self-interest.

That is exactly what is at issue in this proceeding. UGI and SEF have presented no evidence to suggest that PPL Electric's Phase II EE&C Plan will not achieve its Act 129 requirements. However, UGI and SEF vigorously defend their individual proposals, but do not and presumably cannot explain how their proposals would address all of the highly integrated relationships in the portfolio in a way that would permit PPL Electric to comply with Act 129,

maintain or increase the cost-effectiveness (benefit-to-cost ratio) of the Plan, and/or satisfy all other stakeholders. Consistent with the Commission-adopted Fuel Switching Working Group recommendation, the Commission should again reject the arguments in favor of mandating that a specific program or measure be included in PPL Electric's EE&C Plan. This is particularly important when the parties have presented no evidence to suggest that the PPL Electric's EE&C Plan will not achieve its Act 129 requirements.

In its Main Brief, UGI's frequently states that the Commission highly recommends fuel switching (electric to natural gas) measures as part of Act 129 EE&C Plans. UGI Main Brief, pp. 11-12. UGI's statement is incorrect. Consistent with the Commission's adoption of the Fuel Switching Working Group recommendations, the Commission has identified that natural gas measures are an option for EDCs to include in their Phase II EE&C Plans. However, the Commission has not mandated that electric to natural gas fuel switching measures be included in an EDC's Phase II EE&C Plan. In fact, the Commission's recent baseline (market penetration) study and Market Potential Study did not include any fuel switching measures. If the Commission had intended EDC's to include fuel switching, the Commission's Market Potential Study would have estimated the potential savings from fuel switching and included those in each EDC's savings target.

Moreover, PPL Electric's Phase I EE&C Plan included fuel switching measures and the Company has again proposed to include fuel switching measures such as combined heat and power projects, as well as a pilot for switching from an electric device to a high-efficiency non-electric water heater or a high-efficiency non-electric central heater in its Phase II EE&C Plan. PPL Electric St. No. 4-R, pp. 9-11. No party has objected to PPL Electric's offer to include combined heat and power or a fuel switching pilot program in its Phase II EE&C Plan. Instead,

certain parties assert that the combined heat and power and/or the pilot program does not go far enough. However, as further addressed below, the Company's proposal is reasonable and will serve to permit the Company to evaluate fuel switching during the operation of its Phase II EE&C Plan.

2. UGI Overstates the Benefits to be Achieved by its Proposed Modifications to PPL Electric's EE&C Plan

Throughout its Main Brief, UGI states that its recommended changes will significantly improve the cost-effectiveness of PPL Electric's programs, and infers their changes will also significantly improve the cost-effectiveness of PPL Electric's portfolio as a whole. UGI's statements are incorrect. UGI frequently confuses the TRC of measures with the TRC of a program. In its Main Brief, UGI requests that the Commission modify PPL Electric's Phase II EE&C Plan because certain measures do not have a TRC above 1.0. Specifically, UGI states that the Company's proposed SEER 15 and SEER 16 ASHP measures are "precisely the type of measure the Commission should reject". UGI Main Brief, p. 17. However, the Commission has determined that an EDC's EE&C Plan, *i.e.*, as a whole, must be found to be cost-effective, *i.e.* TRC of 1.0 or greater. 2012 TRC Order, pp. 5-6. In addition, the Commission has stated that the Commission may "reject any program with a low TRC ratio" (emphasis added).³ However, the Commission has not and should not modify individual measures included in an EDC's EE&C Plan. Indeed, PPL Electric's Phase II EE&C Plan contains hundreds of measures. While the majority of these measures have a cost-benefit ratio greater than 1.0, several, like the SEER 15 and 16 ASHP, do not. However, PPL Electric believes it is important to include SEER 15 and 16 ASHPs because they are often part of more-extensive, comprehensive energy efficiency

³ *In re: 2012 Total Resource Cost (TRC) Test*, Docket Nos. M-2012-2300653, M-2009-2108601, at pp.12-13 (August 30, 2012).

improvement packages implemented by customers, and will help to transform the market for more-efficient HVAC equipment.

Moreover, the doubling or tripling the TRC of a measure (such as a water heater or a central heater) does not double or triple the TRC of the program.⁴ In fact, if the TRC of a measure doubles and that measure is a relatively small portion of the program's savings and costs, then the TRC of the program would change very little. That is the case with all of UGI's recommended changes. Heat pump water heaters (or natural gas water heaters as UGI suggests) and air source heat pumps (or high efficiency gas furnaces as UGI suggests) are a relatively small portion of the savings and costs in PPL Electric's Residential Retail Program and WRAP Program. For example, UGI's claim that "[t]he addition of natural gas water heaters to PPL's Residential Retail Program nearly doubles the potential TRC benefit/cost ratio calculated by PPL" is simply not possible. UGI Main Brief, p. 2. PPL Electric's estimated TRC for the Residential Retail Program is 4.57 as submitted in its EE&C Plan, and heat pump water heaters and air source heat pumps, combined, are a relatively small portion of that program's savings and costs. Residential lighting measures account for the vast majority of that program's savings, costs, and TRC. It is mathematically impossible for the TRC of that program to double to approximately 9.0 if PPL Electric substitutes the natural gas water heaters and natural gas furnaces for electric heat pump water heaters and air source heat pumps respectively. The same is true for UGI's claim that "the addition of natural gas water heaters [to PPL's Low-Income

⁴ PPL Electric notes that UGI claims the TRC of a natural gas water heater is 3.1 compared to PPL Electric's estimated TRC of 2.2 for a heat pump water heater (2.2 is also the TRC, as determined by the Commission's Market Potential Study for a heat pump water heater). Assuming that UGI's stated TRC value for a natural gas water heater is correct, then it is approximately 40% greater than the TRC for a heat pump water heater, not 100% greater or "double" as UGI states. However, it is unclear from the record in this proceeding how UGI estimated the TRC for natural gas water heaters. In particular, it is unclear if UGI's estimated incremental cost for a natural gas water heater includes additional natural gas piping or venting. Presumably, if the customer has natural gas available to the home but has an existing electric water heater, that customer likely does not have gas piping or venting at the location of the electric water heater.

WRAP Program] triples the potential cost effectiveness of the program.” UGI Main Brief, p. 15. The 600 heat pump water heaters in PPL Electric’s WRAP Program represent only approximately 4% of that program’s total cost and approximately 6% of that program’s savings. Therefore, substituting natural gas water heaters for the heat pump water heaters as suggested by UGI cannot possibly triple the TRC of the WRAP program.

Another apparent error in the support offered by UGI for its proposals appears on page 16 of UGI’s Main Brief. UGI states that, “[t]he inclusion of gas water heaters in PPL’s Residential Retail program will produce a TRC benefit/cost ratio (3.09) that is approximately double that calculated by PPL and generate a potential \$4,439,540 of additional TRC benefits for PPL’s customers.” UGI Main Brief, p. 16. PPL Electric’s Phase II EE&C Plan clearly states in Table 5a, Table E6, and Table 7A, that PPL Electric’s estimated TRC for the Residential Retail Program is 4.57 without the additional fuel switching measures, not 3.09 as UGI claims.

Further, the additional TRC benefits claimed by UGI are seriously overstated. On pages 16 and 17 of UGI’s Brief, UGI claims that their fuel switching measures would increase TRC benefits by approximately \$70 million (\$4 million for gas water heaters, \$30 million for substituting gas furnaces for SEER 15 air source heat pumps, and \$36 million for substituting gas furnaces for SEER 16 air source heat pumps). UGI Main Brief, pp. 16-17. The additional \$70 million of TRC benefits for fuel switching measures appears to be grossly overstated. The total TRC benefits for all measures (as filed in the EE&C Plan, without fuel switching) in the Residential Retail Program and the Home Comfort Program combined is approximately \$188 million. It is not feasible for a relatively small number of fuel switching measures (gas water heaters and gas furnaces) to improve the total TRC benefits of these programs by almost 40% (70/188) because those fuel switching measures account for a relatively small portion of the

measures (by quantity and total savings) in those programs, especially compared to residential lighting. This apparent discrepancy is one reason why PPL Electric proposed a fuel switching pilot. PPL Electric would use its proposed fuel switching pilot to determine the actual cost effectiveness of fuel switching, to gauge customer interest, and to gather additional technical and market data to estimate the market potential for fuel switching.

Further, UGI's proposals, if adopted, would require Commission evaluation of PPL Electric's EE&C Plan at a level of granularity that is clearly at odds with Commission precedent. The Commission has been clear that it is PPL Electric, not the Commission or the parties to these proceedings, that has the obligation to ensure that its Act 129 requirements are met. PPL Electric has developed, with the input of its stakeholders, its Phase II EE&C Plan. This plan represents an integrated plan that should not be subject to changes requested by one party that could negatively impact the preferences of another party. PPL Electric strongly believes that absent "fatal flaws," (such as non-compliance with the objective requirements of Act 129), it is not in the public interest nor necessary to continue to iterate, "fine-tune," and rebalance the Plan at this time.

3. The UGI and SEF Proposals for Higher Rebates are Inappropriate and Calculated Incorrectly

UGI and SEF aver that the Commission should mandate that PPL Electric modify its proposed Phase II EE&C Plan to include specific incentives for fuel switching measures that would be substantially higher than those offered by PPL Electric for electric applications. Specifically, in its Main Brief, UGI requests that the Commission modify the Company's Residential Retail and Prescriptive Equipment Incentive programs to replace or augment PPL Electric's incentive of \$100 for a SEER 15 air source heat pump ("ASHP") with 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. UGI Main Brief, pp. 14-15. Further, UGI proposes that the Commission direct PPL Electric to further modify these programs to replace or augment the incentive provided for installation of a SEER 16 ASHP with a PPL incentive of \$2,500 for the installation of a natural gas furnace with AFUE greater than 95% and a SEER 16 electric central air conditioning unit, as compared to PPL Electric’s proposed \$25 to \$100 rebate. Similarly, SEF proposes a rebate of \$220 to \$330 for solar hot water heaters as opposed to the \$200 to \$300 proposed by PPL Electric for high-efficiency electric hot water heaters. SEF St. 1, p. 5. These proposals should be rejected for the following reasons.

First, UGI and SEF do not assert that any of PPL Electric’s Phase II EE&C Plan programs are not cost-effective. Indeed, UGI’s proposals relate to the Company’s Residential Retail and Prescriptive Equipment Incentive programs. PPL Electric’s Residential Retail Program has a projected TRC of 4.57; its Prescriptive Equipment Incentive. GNI has a projected TRC of 1.54. PPL Electric Exhibit 1, p. 31. Despite these TRC values, throughout its Main Brief, UGI espouses the significant improvement to the cost-effectiveness of PPL Electric’s EE&C Plan if the Commission were to mandate the inclusion of electric to natural gas measures in these programs. Specifically, UGI asserts that the adoption of its identified natural gas measures could double, triple or even quadruple TRC benefits to PPL Electric’s customers. UGI Main Brief, pp. 15-17. However, in presenting its projected results, UGI fails to state that the potential TRC benefits to be gained by its proposals are at the individual measure level. UGI has not, and indeed cannot assert that its proposals to modify discrete measures will significantly improve the cost-effectiveness of the PPL Electric’s Residential Retail, Home Comfort and Prescriptive Equipment Incentive programs or the Company’s Phase EE&C Plan as a whole.

Second, the proposed incentives recommended by UGI and SEF are inappropriate. As detailed in the Company's Main Brief (pp. 47-48), UGI's recommendation for a \$1,400 and \$2,400 incentives for natural gas furnaces and SEF's proposed rebates for solar hot water heaters should be rejected. These proposals are discriminatory and unfairly favor natural gas and solar over electricity and other fuels and have no place in a properly designed EE&C Plan; they make no mention of other rebates that may be offered by others, e.g., NGDCs or the government, for installation of high-efficiency gas furnaces or solar hot water heaters; and are improperly calculated as the incentives are not based on the incremental cost of the measure resulting in excessive incentives. For common residential measures such as water heaters and central heaters, PPL Electric bases the incentive on a reasonable portion of the incremental cost of the measure. That incentive is intended to offset some of the higher cost and encourage the customer to select the more-efficient equipment. The incremental cost is the difference between the total cost (material and labor) of the efficient measure and the standard (baseline) measure. PPL Electric believes a natural gas water heater (that replaces a standard electric water heater) and a heat pump water heater (that replaces a standard electric water heater) have approximately the same cost and have the same baseline (a standard electric water heater) and, therefore, have approximately the same incremental cost. Similarly, a high efficiency natural gas heater and a high efficiency ASHP have approximately the same incremental cost. Therefore, it is appropriate for a natural gas water heater to have the same incentive as a heat pump water heater, even if the savings are different. Similarly, it is appropriate for a natural gas furnace to have the same incentive as an ASHP. For these reasons, the rebates proposed by UGI and SEF should be rejected.

4. Solar Thermal Storage and Solar PV

In its Main Brief, SEF notes that the Company offered a renewable energy program in Phase I, and that it requested to close this program early due to the fact that it was fully subscribed earlier than expected. SEF Main Brief, p. 15. SEF further notes that PPL Electric has eliminated this program in its Phase II Plan. *Id.* SEF does not propose that PPL Electric include a renewable program in its Phase II Plan, but instead relies upon the absence of such a program to support its argument that rebates for non-electric resources should be based upon energy savings equivalent for Tier I Act 129 resources. For the reasons set forth in the Company's Main Brief (pp. 47-49) and those set forth above, SEF's proposal should be rejected.

5. Proposals for Low-Income Fuel Switching Programs Should be Rejected

UGI requests that the Commission require PPL Electric to modify its Low-Income WRAP program to install, at no cost to the customer, a natural gas water heater with an energy efficiency greater than 67% in homes where natural gas is available. UGI Main Brief, p. 18. For the reasons explained in the Company's Main Brief (pp. 49-50) and those set forth above, mandated fuel switching measures should not be adopted in this proceeding. Further, if fuel switching is implemented, it should not be limited to a specific fuel type. See PPL Electric St. 4-R, pp. 12-13. However, UGI's recommendations are not fuel neutral as required by the Commission's Fuel Switching Working Group. UGI's recommendations are limited to natural gas and would be anti-competitive to measures that operate on oil, propane, or other non-electric energy sources.

In addition, the proposals for PPL Electric to include natural gas water heaters as part of its WRAP program poses substantial implementation issues. Specifically, if PPL Electric implemented natural gas water heaters in WRAP, that would create two problems. First, if the

WRAP customer has an existing inefficient or inoperable natural gas water heater that is replaced with an efficient natural gas water heater, there would be no electric savings for Act 129. Under this scenario, PPL Electric would incur a significant cost to replace gas equipment with more efficient gas equipment, while not achieving any energy (electricity) savings toward the Act 129 compliance target. Second, if the customer has an existing electric water heater and PPL Electric replaces it with an efficient natural gas water heater, PPL would be “forcing” the customer to use natural gas. As explained by Mr. Cleff, it is more appropriate for a customer to decide how to heat their home, e.g., with gas, electric, oil, propane, or other energy sources. As PPL Electric determines the work that will be done in a WRAP participant’s home, it would be anti-competitive and inappropriate to select natural gas and exclude other fuels such as oil or propane. Further, it is not appropriate for PPL Electric to select a fuel source on behalf of the WRAP customer because that could be perceived as “forcing” the customer to use a specific fuel which could have more volatile pricing than electricity over time. PPL Electric St. 4-R, p. 12. Moreover, requiring PPL Electric to evaluate all other energy sources and determine which is “best” for each WRAP customer would delay the installation of energy efficiency measures for the customer and could lead to inconsistencies or “competition” between the Act 129 WRAP Program and the LIURP WRAP Program which would significantly and unnecessarily confuse low-income customers. PPL Electric St. 4-R, p. 13. For these reasons, the requests for low-income fuel switching measures and restrictions should be rejected.

6. Consumer Education Related to Fuel Switching is Unnecessary and is Inappropriate

In its Main Brief, UGI requests that Commission direct PPL Electric to modify its Act 129 customer education, awareness and outreach programs to inform PPL Electric’s customers of the savings that could 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. UGI Main Brief, p. 18. Consistent with its opposition to the requests that the Company's EE&C Plan be used to promote broad based fuel switching programs, PPL Electric opposes the use of its EE&C Plan to market the expansion of natural gas.

As addressed in the Company's Main Brief, Act 129 requires the Commission to "adopt an energy efficiency and conservation program to require electric distribution companies to adopt and implement cost-effective energy efficiency and conservation plans to reduce energy demand and consumption within the service territory of the electric distribution company in this Commonwealth." 66 Pa.C.S. § 2806.1. Mr. Cleff explained that, "fuel conversion contradicts the notion of improving energy efficiency because it would result in customers reducing their electric use, but increasing their consumption of natural gas." PPL Electric St. 4, p. 4. Act 129 is not a fuel switching bill. It was not intended to promote the use of one type of fuel over another as a means of reducing electric consumption. It was designed to reduce electric consumption through conservation measures. In PPL Electric's view, extensive fuel switching measures have no place in a properly designed EE&C Plan. Therefore, UGI's request that PPL Electric's ratepayers fund efforts to expand the use of natural gas should be rejected.

In its Main Brief, UGI requests the Commission to "modify the [Phase II EE&C] 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." UGI Main Brief, p. 18. This request should be rejected. The objective of PPL Electric's 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. Therefore,

PPL Electric plans to implement the appropriate marketing and education to ensure customers and trade allies are aware of the programs and measures (including fuel switching measures) associated with the programs in order to help PPL Electric achieve the desired results of those programs. It is neither necessary, nor appropriate, for UGI or the Commission to mandate detailed requirements for PPL Electric's marketing strategies, methods and documents. Those are clearly detailed implementation requirements that are PPL Electric's responsibility to ensure it achieves the desired results from its EE&C Plan.

7. The Fuel Switching Proposals of UGI and SEF are Incomplete and Cannot be Meaningfully Evaluated on this Record

The proposals submitted by UGI and SEF deal primarily with incentives offered by PPL Electric for installation of high-efficiency electric water heaters and space heaters. UGI and SEF contend that PPL Electric should offer incentives for solar water heaters or high-efficiency gas water heaters or space heaters, in order that solar and gas and solar applications be on equal footing with electric applications. As addressed by the Company in its Main Brief, the proposals offered by UGI and SEF do not address the fact that: (1) there already may be rebates offered by natural gas companies or others for customers who switch to natural gas or solar applications; and (2) the proposals of UGI and SEF are not fuel neutral, as they would exclude rebates for alternative sources, including oil, propane, and wood; therefore, absent information related to the potential incentives currently available or scheduled for the future and the availability of those incentives to all fuel sources, no conclusion can be drawn as the fuel neutrality of PPL Electric's EE&C Plan. PPL Electric St. 4-R, p. 8.

UGI requests that the Commission ignore the issues raised by PPL Electric's relative fuel switching, including: (1) the appropriateness of encouraging consumers to conserve electricity, by encouraging the use of natural gas; (2) the potential ramifications of promoting inter-fuel

competition; (3) the need to evaluate other potential funding for all alternative fuels; and (4) the need to review and decide these issues in a statewide proceeding. UGI Main Brief, pp. 19-24. UGI avers that these issues are “irrelevant.” For the reasons set forth in PPL Electric’s testimony, Main Brief and Reply Brief, UGI is wrong.

PPL Electric’s EE&C Plan is not the proper forum to reconsider the Commission’s adoption of the fuel switching working group’s recommendations. Indeed, to properly evaluate fuel switching requires that all interested parties participate, including EDCs, natural gas distribution companies, independent oil and gas representatives, and customer representatives. In addition to discussing the existence of existing rebates and fuel neutrality, the evaluation should also address the appropriateness of inter-fuel competition and the potential ramification of such competition on utility customers and utility operations. For these reasons, the arguments presented by UGI and SEF should be rejected.

8. Reporting of Electric to Natural Gas Fuel Switching

In its Main Brief, UGI maintains that PPL Electric should be required to modify the monitoring and reporting requirements related to electric to natural gas fuel switching to include instances when an electric heat pump rebate has been paid to an existing natural gas customer. UGI Main Brief, p. 26. In support of its position, UGI states that “[w]hile PPL [Electric] is reporting instances where fuel switching has occurred, it is not clear that PPL [Electric]’s reporting effort captures all instances of fuel switching.” UGI Main Brief, p. 26. UGI’s request should be rejected for several reasons.

First, UGI offers no support for requiring PPL Electric to undertake additional administrative cost to track, verify and evaluate the detail requested by UGI. Indeed, the basis for UGI’s request is speculation that PPL Electric’s current reporting may not be “capturing all instances of fuel switching.” Second, the additional reporting would require customers to

provide more information with their rebate application, possibly discouraging their participation, especially if the additional information is mandatory in order to process the rebate. PPL Electric St. No. 4R, pp. 17-18. Third, as detailed by Mr. Cleff, UGI's proposal for additional reporting would not provide any benefits. *Id.* As explained by Mr. Cleff, if a customer with an operational gas furnace elects to use an air source heat pump instead of their gas furnace, and the gas furnace provides more-efficient heat than an air-source heat pump, PPL Electric's \$200-\$300 incentive for an efficient heat pump will not be sufficient to encourage a customer to switch from gas to electric heat. Further, if the gas furnace were not operational, it was the customer's decision to use a single device (the ASHP) for air conditioning and heat and thereby avoid spending \$5,000 +/- on a new gas furnace in addition to \$5,000 +/- for a new central air conditioner. PPL Electric St. 4-R, p. 18.

Again, as noted by the Company in its Main Brief, if specified by the Commission as in Phase I, PPL Electric will continue to report the estimated number of customers who receive a rebate for an efficient electric device that replaces an existing gas device (such as a heat pump water heater that replaces a gas water heater, or an air source heat pump that replaces a gas furnace).

9. PPL Electric's Voluntary Fuel Switching Pilot Program for Residential Customers Presented in its Rebuttal Testimony Should be Approved

As noted above, no party has advocated for the denial of PPL Electric's proposal to include a pilot program within its Home Comfort, Residential Retail and Prescriptive Equipment programs which will offer rebates to a limited number of customers, on a first come first served basis, who elect to install qualifying water heaters and furnaces which use a fossil fuel. PPL Electric St. 4-R, p. 9. UGI criticizes PPL Electric for offering this program at the "last minute" and states that by offering this program PPL Electric has undermined its opposition to fuel

switching. However, as explained by Mr. Cleff, PPL Electric 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 Electric St. 4-R, pp. 9-10. Further, PPL Electric made this proposal based upon the Company's experience with fuel switching during its Phase I EE&C Plan which did not have a large number of participants, as well as the actual fuel switching participation in PECO's Phase I Plan. (Tr. 56.) Therefore, the Company's proposal to again offer fuel switching, is supported by the Company's experiences in Phase I and will provide another opportunity for the Company to evaluate the potential benefits to be achieved from fuel switching.

E. COST ISSUES

1. Plan Cost Issues

PPLICA requests that the Commission evaluate whether PPL Electric's ratio of incentive to non-incentive costs results in the appropriate amount of benefits from energy conservation measures flowing directly back to customers, or whether the dollars from these programs are actually providing greater benefit to third-party providers. PPLICA Main Brief, pp. 7, 14 and 19. PPLICA questions whether this ratio of incentive costs to non-incentive costs is consistent with the intent of Act 129. PPLICA Main Brief, p. 15. PPLICA also requests that the Commission closely monitor the customer benefits and efficiency of PPL Electric's Phase II Plan rather than relying on the TRC analysis. PPLICA Main Brief, p. 14. PPLICA's requests should be rejected.

Overall, PPLICA offers no suggestions for specific changes to programs within the Phase II EE&C Plan and cites no areas of non-compliance with any of the Commission's Phase requirements. On the issue of the ratio of incentive to non-incentive costs, PPLICA has not presented any evidence that the projected ratio is inappropriate.

During the design of its Phase II EE&C Plan, PPL Electric carefully reviewed the proposed incentives for each measure and the ratio of incentives to non-incentives and determined its ratio in the Phase II EE&C Plan is appropriate. PPLICA does not challenge the appropriateness of the Plan; however, it asserts that declining incentive payments raises important questions about the overall customer benefits realized through the Plan. PPL Electric has explained that incentives will be a lower percentage of the total costs in Phase II than in Phase I. Tr. 68-69. The incremental cost⁵ of many measures (particularly lighting) decreased compared to Phase II because baselines increased. Tr. 68. PPL Electric generally designs its rebates to be a percentage of the incremental cost; therefore, if the incremental cost decreases, it is usually appropriate to decrease the rebate. *Id.* Otherwise, PPL Electric would be paying an excessive rebate, *i.e.*, the rebate would be higher than necessary to incent a customer to select the more-efficient measure over the less efficient (baseline) measure, thereby wasting money. Also, some incentives, such as non-residential lighting retrofits and custom projects, are based on savings (*i.e.*, \$/kWh saved) and, because of 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 compared to Phase I, even if the \$/kWh rebate is the same. Second, the non-incentive costs required to deliver the Act 129 programs have not decreased in Phase II compared to Phase I. Tr. 69. Although there are likely some lessons learned that could reduce some program delivery costs slightly, many of the program delivery costs such as PPL Electric's and CSPs' implementation costs have remained the same or have increased compared to Phase I. *Id.* Therefore, if the incentives decrease and the non-incentives stay the same (or increase), the ratio of incentives to non-incentives will increase. *Id.* If PPL Electric simply increases

⁵ The 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 efficient measure and the total cost of the baseline measure.

incentives for a measure in order to increase the ratio of incentives to non-incentives as PPLICA suggests, PPL Electric would be overpaying incentives, as described earlier, and PPL Electric would have to reduce the number of measures rebated (and reduce total savings) to absorb the additional incentive costs. If this was required, PPL Electric would exceed the Act 129 cost cap.

As in Phase I, PPL Electric will closely monitor its Phase II incentive and non-incentive costs to ensure they are appropriate and, if required, will propose changes to its Phase II EE&C Plan. PPL Electric believes the ratio of Phase II incentives to non-incentives are reasonable based on the mix of measures and programs in the EE&C Plan and are reasonably comparable to the ratio in other Pennsylvania EDC's Phase II EE&C Plans.

PPLICA also avers that the ratio of participant contribution ("participant costs" as used for the TRC) to incentive payments (a portion of the "EDC costs" as used for the TRC) is out of line with other customer sectors. *See* PPLICA Main Brief, p. 16, Table II. There is a valid reason for this difference. The Prescriptive Equipment and Custom Programs tend to have higher savings and total project costs *i.e.*, participant costs incurred by the customer, as compared to the Small C&I and Residential sectors. PPL Electric's programs generally have rebate caps based on a fixed dollar amount or a maximum percentage of total project cost, or a maximum rebate per customer or per parent company each year. However, the rebate for Large C&I projects, such as lighting retrofits and custom measures, often are based on dollars per kWh saved. PPL Electric Phase II EE&C Plan, pp. 110-111. Large C&I projects reach a program's rebate cap more often than other sectors and have a higher total project cost, *i.e.*, participant cost. Therefore, the rebate amount for these large, Large C&I projects will be a lower percentage of the total project cost, *i.e.*, participant cost than other customer sectors. For these reasons, the ratio of participant contribution to incentive payments is appropriate.

As stated above, PPLICA also requests that the Commission not rely on the TRC analysis to evaluate the Plan. PPLICA Main Brief, p. 14. This request should be rejected because it is inconsistent with Act 129 and Commission precedent. Act 129 directs the Commission to use a TRC test to analyze the benefits and costs of the EE&C plans that certain electric distribution companies are required to file. 66 Pa.C.S. §§ 2806.1(b)(1)(i)(I), 2806.1(c)(3) and 2806.1(d)(2); *2012 TRC Order*, p. 1. The purpose of using the TRC test to evaluate EE&C programs is to track the relationship between the benefits to customers and the costs incurred to obtain those benefits. *2012 TRC Order*, p. 2. In the *2012 TRC Order*, the Commission explained that the TRC test has historically been a regulatory test and Act 129 provides 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 EE&C plans. *Id.* Therefore, PPLICA's request that the Commission not use the TRC is inconsistent with Act 129 and should be rejected.

2. Cost Effectiveness/Cost-Benefit Issues

PPLICA requests that the Commission require that PPL Electric adjust the Phase II EE&C Plan program portfolio in conformance with any relevant cost/benefit findings from the Commission's final review of PPL Electric's Phase I EE&C Plan. PPLICA Main Brief, p. 19. PPLICA's request should be rejected. PPL Electric's Phase II EE&C Plan is separate and distinct from the Phase I Plan. The Phase II EE&C Plan has different savings targets than the Phase I Plan, different program acquisition costs than the Phase I Plan, different low-income carve-out targets and funding requirements than the Phase I Plan, different rules (such as those applicable to multifamily housing customers) than the Phase I Plan, and a different mix of measures, programs, costs and savings for customer sectors, savings per measure, incremental costs, avoided costs, etc. than the Phase 1 EE&C Plan. Therefore, it is not reasonable to directly

compare the Phase I TRC to the Phase II TRC, and require changes to the Phase II EE&C Plan based on actual Phase I TRC results. PPL Electric should have the discretion to demonstrate the Phase II EE&C Plan and its actual results meet all of the Commission's Phase II requirements independent of any finding with regard to Phase I.

3. Cost Allocation Issues

a. Residential Retail and Residential Appliance Recycling Programs Cost Allocation

OCA requests that the Commission direct PPL Electric to allocate 1% of the cost of the Appliance Recycling and Residential Retail Programs to the Small C&I sector. OCA Main Brief, p. 23. Additionally, OCA requests that the Commission incorporate PPL Electric's reconciliation process as described in OCA Exhibit GCC-9 into the formal approval of PPL Electric's EE&C Plan. As discussed fully in PPL Electric's Main Brief, the Company's Residential Retail and Residential Appliance Recycling Programs are available to all customers; however, the EE&C Plan did not include any estimated costs for non-residential customers in these programs because the non-residential participation is expected to be less than 1% of the total costs for these programs. PPL Electric St. 3-R, p. 2; PPL Electric Main Brief, p. 55. If any non-residential customers participate in these programs, PPL Electric will charge those actual costs to the same customer sector as the participant, and the ACR reconciliation at the end of Phase II will account for any differences between the actual costs incurred for each customer sector and the actual revenues collected from each sector. *Id.* PPL Electric does not believe that it is appropriate to revise the EE&C Plan as requested by OCA 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. PPL Electric St. 3-R, p. 2. PPL Electric

has committed to incorporate these non-residential cost estimates when and if it modifies its Phase II EE&C Plan for other reasons during the course of Phase II. *Id.*

4. Commercial and Industrial Cost Allocation

PPLICA requests that the Commission review the Company's Phase II EE&C Plan to ensure that PPL Electric's proposed costs are reasonable and prudent, as well as to determine whether these costs reflect an appropriate parity between the overall revenues received by PPL Electric's from a customer class and the Phase II EE&C Plan budget allocated to the same customer class. PPLICA Main Brief, p. 6. PPLICA requests that the Commission monitor PPL Electric's actual acquisition costs and impose mid-stream adjustments to minimize significant under or over collections. PPLICA Main Brief, p. 12. According to PPLICA the Commission should not allow PPL Electric to continually recover revenues based on original projections if actual acquisition costs fall materially below such projections. PPLICA Main Brief, p. 13.

PPLICA's requests should be rejected. As discussed more fully in PPL Electric's Main Brief, the Company proposes to separately calculate the applicable EE&C costs for each of the three major customer classes on its system, *i.e.*, (1) residential, (2) small C&I, and (3) large C&I. PPL Electric St. 3, p. 7; Phase II EE&C Plan, Sections 1.7, 7.4; PPL Electric Main Brief, pp. 56-57. Although costs will vary year-to-year, PPL Electric proposes to recover those costs on a levelized basis. PPL Electric St. 3, p. 8; Phase II EE&C Plan, Sections 1.8, 7.4. Annual budget amounts for each customer class will be developed on a levelized basis for the three years of the Company's proposed Phase II EE&C Plan. *Id.* 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.

First, PPLICA has offered no evidence that the Company’s proposed costs are unreasonable and not prudent, therefore, any such contention is unsupported and should be rejected. Second, the Commission will be able to review the overall revenues received by PPL Electric’s from a customer class via the mechanism discussed above. Therefore, the Commission will have the requisite oversight requested by PPLICA. Third, PPL Electric has already proposed to make “mid-course” corrections in the cost recovery mechanism, therefore there is no need for the Commission to impose the mid-stream adjustment process as requested by PPLICA. Finally, PPL Electric will reconcile total revenue collected to its total actual expenditures, and as such, the Company has fully addressed PPLICA’s concerns regarding over collections based on the budgeted amounts.

5. Cost Recovery Issues

Except as discussed above, no party raised cost recovery issues in the Main Briefs filed in this proceeding.

F. CONSERVATION SERVICE PROVIDERS ISSUES

No party raised CPS issues in the Main Briefs filed in this proceeding.

G. IMPLEMENTATION AND EVALUATION ISSUES

1. Stakeholder Meeting Issues

As explained in the Phase II EE&C Plan, PPL Electric intends to meet with stakeholders as needed, but not less than twice annually until May 31, 2016. PPL Electric Phase II EE&C Plan, p. 13. In its Main Brief, OCA requests that the Company be required to hold quarterly stakeholder meetings. OCA Main Brief, p. 24. PPL Electric fully explained in its Main Brief why mandatory quarterly meetings are unnecessary and why it does not agree with OCA's proposal. PPL Electric Main Brief, pp. 58-59. First, the stakeholder process used during Phase I, and in the preparation of its Phase II EE&C Plan, was very effective and the proposal in Phase II is based on the success of the Phase I process. PPL Electric St. 1-R, p. 6. Second, the two formal stakeholder meetings (at minimum) per year, in addition to the Company's Quarterly Act 129 EE&C Reports, will sufficiently keep stakeholders informed of the EE&C plans progress. *Id.* Third, if PPL Electric proposes changes to its Phase II EE&C Plan during the course Phase II, stakeholders will have the ability to discuss and/or comment on proposed changes via the stakeholder process or before the Commission, as applicable. *Id.* Finally, it takes considerable time and effort to prepare and conduct formal stakeholder which increases various administrative costs and take PPL Electric staff time away from implementing the Phase II EE&C Plan. *Id.* For these reasons, PPL Electric opposes OCA's proposal.

2. Quality Assurance/Quality Control Issues

No party raised quality assurance/quality control issues in the Main Briefs filed in this proceeding.

3. Monitoring and Reporting Issues

No party raised monitoring and reporting issues in the Main Briefs filed in this proceeding.

4. Evaluation Issues

No party raised evaluation issues in the Main Briefs filed in this proceeding

H. OTHER ISSUES

a. Notification to Customers

In its Main Brief PPLICA requests that the Commission require PPL Electric to engage in timely notification and direct communication with customers to ensure a smooth transition from Phase I to Phase II of its EE&C Plan. PPLICA Main Brief, pp. 7 and 18. PPLICA states that it is imperative that PPL Electric 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. PPLICA Main Brief, p. 18. PPL Electric is committed to a smooth transition from Phase I to Phase II. PPL Electric has closely managed its Phase I budget for all sectors to minimize the time between exhausting a sector's Phase I budget and the start of Phase II. This reduces the likelihood that sectors will "go dark" for extended periods of time. 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 Electric is in the process of negotiating contracts with CSPs, as well as making arrangements to continue programs to ensure a seamless and quick transition from Phase I to Phase II. *See* PPL Electric St., 1, pp. 10-11. As noted above and discussed in its Main Brief, PPL Electric will continue some of its Phase I programs and CSPs for Phase II. PPL Electric St.

1, p. 20; PPL Electric Main Brief, pp. 57-58. This is expected to provide a relatively seamless transition for customers and trade allies for some programs, and will help to mitigate some of the normal “ramp rate” limitations in the first program year of Phase II. PPL Electric St. 1, p. 20.

Specifically, PPL Electric is continuing the programs directed at Large C&I customers, such as the Prescriptive Equipment and the Custom Incentive Programs. As explained in the Phase II EE&C Plan, a CSP will be engaged to manage and coordinate the Prescriptive Equipment and Custom Incentive Program. PPL Electric Phase II EE&C Plan, p. 106. The CSP will be responsible to provide a call center and rebate processing services. *Id.* One CSP serving all non-residential sectors provides synergy savings and a “one stop” service for customers. *Id.* The 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. Therefore, PPLICA’s request should be rejected as unnecessary.

b. Reporting on Low-Income Customers

CEO states that the Company should be required to report to the Commission and stakeholders, on a semi-annual basis, those customers that it has confirmed as low-income and referred to the Company’s other low-income programs. CEO Main Brief, p. 5-6. This request is not appropriate and should be rejected. PPL Electric does not verify low-income status of customers participating in non-low-income residential Act 129 programs until the evaluation process, which is completed after a program year. The Company, therefore, would not have this information on a semi-annual basis and could not report it to the Commission as proposed by CEO. Furthermore, CEO does not provide a basis or rationale for its request or what the Commission or stakeholders would do with the information gathered; therefore, its request should be rejected.

VI. CONCLUSION

WHEREFORE, for all the foregoing reasons discussed in this Reply Brief and the Company's Main Brief, the Energy Efficiency and Conservation Plan of PPL Electric Utilities Corporation should be approved.

Respectfully submitted,



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