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File #: 2507/140069

November 22, 2013

VIA ELECTRONIC FILING

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

Re: Petition of PPL Electric Utilities Corporation for Approval of its Act 129 Phase II Energy Efficiency and Conservation Plan
Docket No. M-2012-2334388

Dear Secretary Chiavetta:

Enclosed please find the Petition of PPL Electric Utilities Corporation for Approval of Changes to its Phase II Act 129 Energy Efficiency and Conservation Plan in the above-referenced proceeding. Copies will be provided as indicated on the Certificate of Service.

Respectfully submitted,

Andrew S. Tubbs

AST/skr
Enclosure

cc: Certificate of Service
Office of Administrative Law Judge

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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Date: November 22, 2013

Andrew S. Tubbs

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Petition of PPL Electric Utilities Corporation for Approval of its Act 129 Phase II Energy Efficiency and Conservation Plan	: : : :	**Docket No. M-2012-2334388**

PETITION OF PPL ELECTRIC UTILITIES CORPORATION FOR APPROVAL OF CHANGES TO ITS PHASE II ACT 129 ENERGY EFFICIENCY AND CONSERVATION PLAN

I. INTRODUCTION

PPL Electric Utilities Corporation ("PPL Electric" or the "Company"), by and through its attorneys, hereby petitions the Pennsylvania Public Utility Commission ("Commission"), pursuant to Section 5.41 of the Commission's Rules of Administrative Practice and Procedure, 52 Pa. Code § 5.41, for permission to modify its Phase II Energy Efficiency and Conservation Plan ("EE&C Plan") approved by the Commission on July 11, 2013. *Petition of PPL Electric Utilities Corporation for Approval of its Phase II Act 129 Energy Efficiency and Conservation Plan*, Docket No. M-2012-2234388 (Order Entered July 11, 2013) ("*July 2013 Order*").

By this Petition, PPL Electric requests Commission approval of 40 modifications to its Phase II EE&C Plan. The proposed modifications consist of both "minor" and "non-minor" changes as defined in the Commission's expedited review process.[1] Although the Commission's 2009 *Minor Plan Change Order* established a bifurcated process for approving minor and non-minor EE&C Plan modifications, PPL Electric is submitting a single petition to ensure that the

[1] *See Energy Efficiency and Conservation Program*, Final Order at Docket No. M-2008-2069887 (entered on June 10, 2011) ("*Minor Plan Change Order*").

Commission and interested parties have a complete representation of all the proposed changes in a single black-line EE&C Plan[2] and a single supporting petition. A single petition and black-line EE&C Plan better illustrates the collective impacts of all of the changes proposed by the Company.

One of the significant changes being proposed is to phase out compact fluorescent lights ("CFLs") in all of the Company's Phase II EE&C Plan programs by Program Year 6, and instead to provide incentives for light-emitting diodes ("LEDs"). CFLs have been a successful component of PPL Electric's Phase I and Phase II EE&C Plan to date. However, CFLs are becoming the norm in the Company's service territory and the Company has determined that it has an opportunity to promote the expanded use of LEDs, which, although more expensive than CFLs, will provide deeper, longer-lived savings. In addition, PPL Electric is proposing to discontinue and add measures, to shift measures from one program to another, to change forecasted participation levels for some measures and programs, and to increase the projected Phase I carryover (over compliance).

The aggregate impact of the proposed changes, if approved, will not impact the Company's overall Phase II EE&C Plan budget.[3] However, the modifications will result in increasing the long-term benefits largely to the Residential, Low-income and government, non-profit and institution ("GNI") customer sectors. In addition, the proposed modifications will result in a net increase in the cost to the Residential, Low-income and the GNI customer sectors to recognize the need for an upfront investment to attain such savings. Conversely, the proposed restructuring of the Company's program investments will decrease the costs to the small

[2] The black-line Phase II EE&C Plan is attached to this Petition as Appendix A. Included with the appended black-line EE&C Plan is a total resource cost test analysis for each program and for the entire EE&C plan portfolio to ensure that the Act 129 of 2008 mandates are being fulfilled in a cost effective manner.
[3] Table 5a, included in Appendix B, summarizes the aggregate impact of the proposed charges.

commercial and industrial ("Small C&I") and the large commercial and industrial ("Large C&I") customer sectors.

PPL Electric requests that this Petition and the proposed EE&C Plan modifications be reviewed under the procedural schedule established in the *Minor Plan Change Order* for "non-minor" EE&C Plan changes – comments, and answers or both are to be filed within 30 days of service and all parties will have 20 days to file replies. Recognizing the compressed time frame for PPL Electric to achieve its Act 129 of 2008 Phase II requirements, as well as the lead time the Company needs to implement certain of the proposed changes,[4] the Company respectfully requests that the Commission resolve issues, if possible, on the basis of comments and replies to comments on the proposed modifications.[5] To the extent no party opposes a proposed change or the comments fail to raise any legitimate issues of law or fact with regard to the modifications discussed herein, such changes should be approved by the Commission and not referred to an Administrative Law Judge for hearings and a recommended decision, consistent with the Commission's actions in a similar electric distribution company ("EDC") EE&C Plan proceeding.[6] For all changes that cannot be resolved based upon comments and replies, PPL Electric respectfully requests that the Commission approve the proposed changes to the EE&C Plan as quickly as is practically possible so that PPL Electric can be in a position to implement the modifications as soon as practicable.

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[4] In particular, the Company needs four to six months to change the lighting product mix (from CFLs to LEDs) on store shelves and desires that mix be in place starting on June 1, 2014 to coincide with the beginning of Program Year 6. The Company also needs approximately four to six months to extensively revise its tracking system to reflect changes proposed for the 2014 Technical Reference Manual ("TRM").

[5] *See Petition of West Penn Power Company for Amendment of the Orders Approving Energy Efficiency and Conservation Plans and Petition for Approval of its Amended Energy Efficiency and Conservation Plans*, Docket No. M-2009-2093218 (Interim Order and Opinion Entered October 28, 2011) (The Commission stated that any delay in ruling on the proposed EE&C Plan changes would further limit the time the company had to implement the revisions. The Commission approved certain elements of the petition and referred the remaining elements to the Office of Administrative Law Judge for the issuance of a Recommended Decision on an expedited basis).

[6] *Id.*

In support of this Petition, PPL Electric states as follows:

II. BACKGROUND

On November 15, 2012, PPL Electric filed its Phase II EE&C Plan with the Commission pursuant to Act 129 of 2008[7] ("Act 129") and various related Commission orders. PPL Electric's EE&C Plan included a broad portfolio of energy efficiency and energy education programs and initiatives. PPL Electric's portfolio of programs was designed to provide customer benefits and to meet the energy reduction goals set forth in Act 129. The EE&C Plan included a range of energy efficiency programs that included every customer segment in PPL Electric's service territory. These programs are the key components of a comprehensive electric energy efficiency initiative designed to achieve the 821,072 MWh/yr. of reduced energy consumption as established by the Commission.[8]

Following a thorough examination of the Company's Phase II EE&C Plan and an evidentiary hearing, the Commission approved PPL Electric's Phase II EE&C Plan, with modifications, on March 14, 2013.[9] Pursuant to the *March 2013 Order*, on May 13, 2013, PPL Electric submitted a compliance filing. The Commission approved PPL Electric's compliance filing on July 11, 2013 ("*Phase II EE&C Plan Order*").

III. PROPOSED MODIFICATIONS TO THE EE&C PLAN

PPL Electric's Phase II EE&C Plan represents a comprehensive electric energy efficiency initiative designed to achieve the required 821,072 MWh/yr.[10] of reduced energy consumption. PPL Electric researched and developed the Phase II EE&C Plan between August and October

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[7] Act 129 of 2008, P.L. 1592, 66 Pa.C.S. §§ 2806.1 and 2806.2.

[8] *Energy Efficiency and Conservation Program*, Docket Nos. M-2012-2289411, M-2008-2069887, p. 24, 2012 Pa. PUC LEXIS 1259, *36 (August 3, 2012) ("*2012 Implementation Order*").

[9] *Petition of PPL Electric Utilities Corporation for Approval of its Act 129 Phase II Energy Efficiency and Conservation Plan*, Docket No. M-2012-2334388 (March 14, 2013) ("*March 2013 Order*").

[10] The savings (consumption reductions) discussed herein are expressed as an annualized number (MWh/yr.) regardless of whether it is an annual target or a cumulative target, *i.e.*, a three year target. This is because the savings occur every year the measure is installed.

2012 and filed its Phase II EE&C Plan in November 2012 using the most current data available at the time, including an initial evaluation of what savings were achieved in the Company's Phase I EE&C Plan and an identification of new programs and measures for consideration in Phase II. As explained in Section 1.2.5 of the Company's Phase II EE&C Plan, PPL Electric developed its Phase II EE&C Plan to exceed its Phase II consumption reduction target by approximately 2.5%, without consideration for any Phase I carryover, in order to provide a reasonable margin of error to reflect various risks and uncertainties. At that time, PPL Electric estimated a carryover of 110,000 MWh/yr. from Phase I. The Company stated that the projected over-compliance and carryover would provide flexibility to accommodate lower per-measure savings or to provide additional savings to customers. Phase II EE&C Plan, p. 11.

It has been more than a year since the Company finalized the key assumptions and the mix of measures and programs for its Phase II EE&C Plan. The Company has benefited from another year of program delivery experience, another year of market information, and an additional two years of Phase I EE&C Plan evaluation results.[11] This has provided the following new information and insights that can be utilized to revise and improve the Company's Phase II EE&C Plan:

- Standard CFLs are becoming the market norm for screw-in sockets in the Company's service territory and market saturation for standard CFLs is nearly at its maximum.
- Prices for LED bulbs and fixtures have dropped significantly and the quality of lighting has improved. Thus, consumer acceptability is increasing.
- T-8 linear fluorescent bulbs are becoming the market norm in non-residential applications and market saturation in the Company's service territory is nearly at its maximum.

[11] The Program Year 3 Final Evaluation was completed after the Phase II EE&C Plan was prepared and the Program Year 4 Final Evaluation was completed on November 15, 2013.

- ENERGY STAR® appliances have become the norm in retail stores in the Company's service territory and market saturation is very high.

- The Company completed Program Year 4 of its Phase I EE&C programs, completed the Program Year 3 Final Annual Evaluation, and completed the Program Year 4 Final Annual Evaluation for Phase I EE&C program performance. These evaluations identified new information about the performance and results (such as gross savings, net-to-gross ratios, process evaluation recommendations, and market information and benchmarking to other utilities' EE&C programs) of the Company's programs that will help to improve Phase II programs.

- Phase I carryover (over-compliance) is substantially greater than the expected, which provides an opportunity for the Company to add or change certain measures and programs as proposed in this Petition.

- The Commission finalized the 2013 TRM[12] and proposed changes to the 2014 TRM. Modifications to the savings, technical eligibility requirements, and data/information requirements for many TRM measures must be reflected as changes in the Company's EE&C Plan.

- All of the Company's proposed Phase II Conservation Service Providers ("CSP") contracts were awarded, the Company completed its detailed Phase II program design, and the Company has launched most of its Phase II programs. This has provided the Company with a more accurate estimate of program costs, the mix of measures, and program implementation details than were available during the preparation of the Phase II EE&C Plan.

Based upon a review of all of these factors, PPL Electric is proposing to modify its Phase II EE&C Plan. The proposed changes are both reasonable and necessary and will enable the Company to meet its Phase II compliance targets within its Phase II budget, to provide an enhanced mix of measures and programs, to promote more efficient emerging technologies, to comply with the updated TRMs, and to improve the market infrastructure, all of which will provide deeper and longer-lived savings. In short, based on updated information, PPL Electric is proposing to provide its customers with new opportunities to save energy by channeling investments into newer technologies, while recognizing that the market forces are allowing some

[12] The Company used the draft 2103 TRM when preparing its Phase II EE&C Plan. The Commission issued the final 2013 TRM after the Company filed its Phase II EE&C Plan. There were differences between the draft and final versions of the 2013 TRM.

energy efficiency measures from Phase I to move forward without the Company's continued intervention.

As explained in detail below, PPL Electric is proposing 40 modifications to its Phase II EE&C Plan. As stated above, the Company is requesting that the Commission review all of the proposed modifications under the "non-minor" procedures set forth in the *Minor Plan Change Order*. This will enable the Commission and interested parties to assess the total impact of all of the proposed charges on the total plan budget and total energy savings. PPL Electric has provided detailed support for all of the changes below. In addition, appended to this Petition is a black-line version of the Company's Phase II EE&C Plan, which illustrates all of the modifications proposed in this Petition. All of the changes discussed herein were identified by the Company through its experience; input from stakeholders, trade allies, CSPs, and program participants; process evaluation recommendations from PPL Electric's independent evaluator; and through the Company's ongoing coordination activities with other Pennsylvania electric distribution companies. In addition, it is important to note that many of the changes proposed in this Petition were previously requested by stakeholders, but were not adopted in the Company's Phase II EE&C Plan because of budget constraints at that time. PPL Electric discussed these proposed modifications to the Phase II EE&C Plan at its October 16, 2013 stakeholder meeting, and the changes were widely supported.

As demonstrated below, if the Company's proposed changes are implemented, the Company expects to meet its compliance target, within the funding cap, with a distribution of programs, costs, and savings to customer sectors that is reasonable and equitable.

Following are the proposed changes to the Phase II EE&C Plan.

A. PROPOSED CHANGES

PPL Electric proposes 40 modifications to its EE&C Plan. As described above and detailed below, the proposed changes to the Company's Phase II EE&C Plan are both reasonable and necessary.

1. Phase Out CFLs and Promote LEDs

The Company proposes to phase out CFLs in all Phase II EE&C Plan programs by Program Year 6, and instead to provide incentives for LEDs or free LEDs (such as in kits, direct install programs, and limited-time give-away promotions). The energy savings associated with the installation of CFLs was a key component of PPL Electric's Phase I EE&C Plan, and the Company's Phase II EE&C Plan continued to rely on CFLs. However, the market saturation and market practices for CFLs have substantially changed, and as a result, CFLs are becoming the norm in the Company's service territory. For the reasons set forth below, the Company believes that it now has the opportunity to phase out CFLs in its Phase II EE&C Plan and move to LEDs which will provide better operational performance and deeper, longer-lived savings:

- The 2012 Pennsylvania Statewide Residential End-Use and Saturation Study reported residential socket saturation of 20% for PPL Electric.[13] This is a relatively high saturation rate considering the Company had been discounting CFLs for less than two years at the time the study data were obtained. Further, the Company's 2013 Residential Lighting Survey estimates residential CFL saturation is approximately 30%. The Company's studies have shown that the CFL saturation has held relatively steady at about 30% for the last three years, indicating that even with strong marketing push and incentives, the saturation of CFLs has largely reached its maximum. A maximum saturation of 30% is similar to the saturation levels achieved by electric utilities in other states, which have promoted CFLs over a longer period of time than PPL Electric.

- Based on results from PPL Electric's recent Program Years 3 and 4 Impact Evaluations, it appears that PPL Electric's customers are purchasing CFLs on their own volition and that further promotion through the Phase II EE&C Plan is no longer necessary.

[13] GDS Associates, Inc. 2012 "Pennsylvania Statewide Residential End-Use and Saturation Study." Prepared for the PA PUC. Available at: http://www.puc.state.pa.us/electric/pdf/Act129/PA_Residential_Baseline_Report2012.pdf. Please note that the data for this study were obtained in late 2011. Also, please note that this result (CFL saturation rate) is statistically valid at the statewide level but not for specific EDCs such as PPL Electric.

- The Company's recent 2013 market research indicates that 70% of customers would select a CFL bulb type if they were at the store and needed to purchase an indoor 60 watt equivalent bulb for a lamp in their family room. Seventeen percent said they would purchase an incandescent and 13% would purchase an LED. Similarly, 77% of the survey respondents said they plan to purchase a CFL in the next 12 months. That figure is relatively unchanged since 2012.
- The rate at which CFLs replace other CFLs is another indicator that CFLs are becoming the "norm." The Company's 2013 market research determined that 76% of customers would replace a burned-out CFL with another CFL. Only 18% would replace the burned-out CFL with an incandescent and 11% with an LED.

Based upon these factors, the Company has determined that further incentives for CFLs are no longer necessary as the market (customers and trade allies) appear to have adopted CFLs as normal practice. Therefore, the Company is proposing to shift the current focus of its Phase II EE&C Plan from CFLs to LEDs.

Today, LEDs are generally regarded as the next generation of lighting and CFLs will likely be phased out as the price for LEDs drops, more LEDs are available on retail store shelves, and consumers become more familiar and accepting of LED technology. LEDs offer considerable technical and performance advantages compared to CFLs. Specifically, LEDs: (a) offer greater energy savings and a much longer life; (b) provide full brightness instantly; (c) provide a better quality of light and can control the direction of lighting better than CFLs (less "wasted" lumens); (d) operate much better in dimming application; (e) do not have the spiral shape that many consumers dislike; and (f) do not contain mercury therefore negating the need for special handling when being disposed. It is these operational disadvantages of CFLs which prevent them from achieving higher socket saturations.

The primary factors holding back the rapid growth of LEDs are consumer awareness and a significant purchase price disadvantage compared to CFLs. Through this Petition, PPL Electric proposes to help remove these constraints by increasing customer awareness of LEDs and assisting to make LEDs more accessible and affordable to consumers. The price of LEDs is dropping significantly. However, the price is still too high for widespread acceptance by consumers. PPL Electric believes that with the proposed EE&C Plan incentives and consumer education, the cost of LEDs can be lowered further and the presence of LEDs on store shelves will increase, stimulating consumer awareness and acceptance of this emerging, efficient technology.

There is not a significant difference in annual energy savings (the basis of the Act 129 energy reduction compliance target) between LED and CFL bulbs. However, LEDs have more than double the measure life per manufacturer's ratings and the Commission's TRM (14.7 years for LEDs compared to 6.8 for CFLs). Therefore, LEDs will provide more than double the lifetime savings as compared to CFLs. The program acquisition cost (program funding per annualized energy savings) for an LED is approximately 5 times that of a CFL.[14] PPL Electric is holding the cost budget fairly constant for the upstream discount portion of the Company's current Phase II EE&C Plan Residential Retail program. Due to the higher program acquisition costs and maintaining the current budget, PPL Electric will discount fewer bulbs and, therefore, result in fewer annualized savings for that portion of the EE&C Plan. Also, it is likely that consumers would purchase fewer discounted LEDs than discounted CFLs because of the higher price (even with the discount, the LEDs will be more costly than CFLs) and because of general lack of familiarity with LED technology. The Company proposes to absorb this loss of annualized savings by using a portion of the Phase I carryover savings (described in Change 34), the additional savings from cross-sector sales (described in Change 36), and adjustments to the mix of measures described in other changes to mitigate the impact of a lower LED adoption rate (compared to the current CFL adoption rate) until the prices for LEDs decrease and consumers

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[14] For example, for upstream discounted bulbs, a typical LED incentive is approximately $5 per bulb compared to $1 typical incentive for a CFL. Also, the full cost of a standard A-line LED is $15 in an energy efficiency kit compared to $3 for a CFL.

become more familiar with the technology. Ultimately, much like what occurred in Phase I, the Company believes that is has an opportunity to once again provide a catalyst to spur on technologies that will result in an improved mix of energy savings.

In addition, by promoting LEDs, PPL Electric and Pennsylvania will be on the leading edge nationally with consumer education and discounts for LEDs, further accelerating consumer interest.

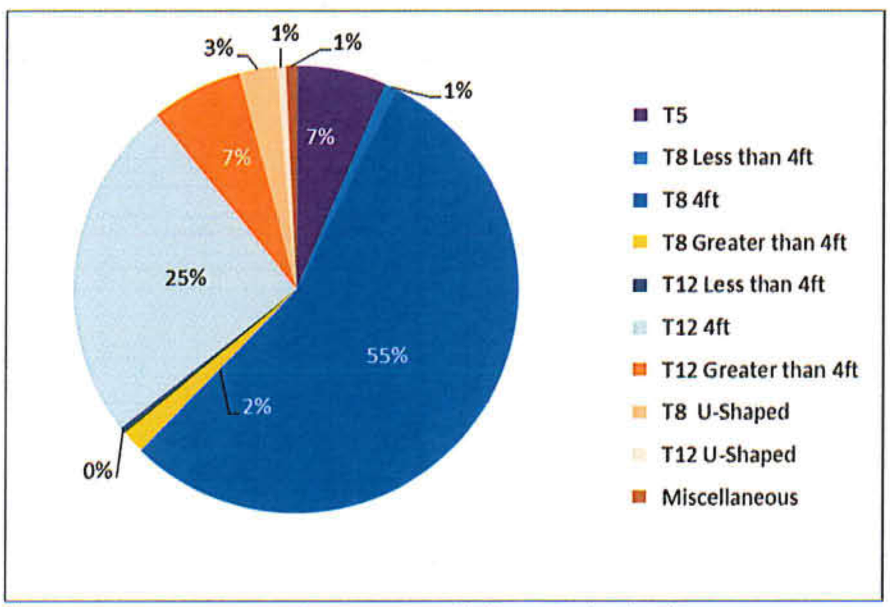
For the reasons identified above, PPL Electric requests approval to phase out CFLs in all Phase II EE&C Plan programs starting no later than by Program Year 6, and to provide incentives for LEDs.

2. Phase Out Incentives for T8 Linear Fluorescent Lighting

Starting by Program Year 6, the Company proposes to discontinue incentives for "regular" T8 lighting and promote the more-efficient "high-performance" T8 and T5 measures instead. The proposed phase out of "regular" T8s is two years earlier than required in the Commission's 2013 TRM, which provides that T8s will become the baseline in June 2016. The reason for this change is the high market saturation of T8s in the Company's territory. T8s, like CFLs, are becoming the "norm," and the Company believes it is no longer necessary to provide incentives for a measure that the market (customers and trade allies) have adopted as normal practice in the Company's service territory. Discontinuing incentives for T-8 lighting is expected to lead to a reduction in the estimated number of lighting projects because certain customers may choose not to pursue more costly T-5s and high performance T-8s. Therefore, the Company has reduced the estimated participation and savings for this program to reflect these lower participation levels. In addition, the estimated participation and savings had to be reduced to accommodate other changes and to stay under the cost cap.

A lighting market characterization study conducted by United States Department of Energy ("DOE") found that T8s (all sizes) accounted for approximately 60% of the linear fluorescent share across the country.[15] In the case of PPL Electric, T8s have an even higher saturation, accounting for about 76%.[16] The Company's T8 saturation is also much higher than the Pennsylvania statewide average of 53% from the Nexant study. Figures 1 and 2 compare the Company's fluorescent lighting distribution with the national averages. Table A compares the Company with other states. "T8 plus" refers to high performance T8s and reduced wattage T8s. While an apples-to-apples comparison is challenging due to different measurement parameters for each study, the data shows that the Company's market saturation is high for T8s. The high saturation rate in the Company's territory indicates that T8s appear to have become the "norm."

Figure 1. National Distribution of Linear Fluorescent Lamps*



*Source: Department of Energy, Building Technologies Program. Jan. 2012. "2010 U.S. Lighting Market Characterization."

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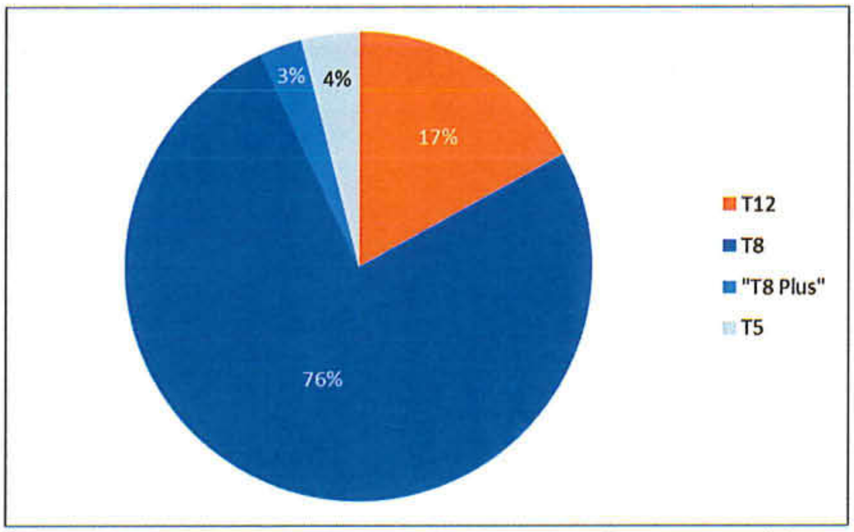
[15] Department of Energy, Building Technologies Program, Jan. 2012, "2010 U.S. Lighting Market Characterization."

[16] Nexant, 2012 "Pennsylvania Statewide Commercial & Industrial End Use and Saturation Study," prepared for the Pennsylvania Public Utility Commission. Please note that data was gathered for this study in 2011/2012 and saturation rates likely increased since then.

Figure 2. PPL Electric's Distribution of Linear Fluorescent Lamps*



*Source: Nexant, 2012. "Pennsylvania Statewide Commercial & Industrial End Use and Saturation Study," prepared for the Pennsylvania Public Utility Commission. (Data for PPL's territory.)

Table A- Linear Fluorescent Bulb Saturation by State

Utility or State	Total Linear Fluorescents	T8	T8 Plus	T5	Measurement Parameter	Year of Study	Sectors Covered
PPL Electric[17]	76%	76%*	3%*	4%*	% of floor space**	2012	Nonresidential-Existing Buildings
PA[18]	77%	53%*	0.3%*	6.9%*	% of floor space**	2012	Nonresidential-Existing Buildings
DE[19]	90%	43%*	3%*	23%*	% of all installed lighting	2012	C&I – Existing Buildings
VT[20]	77%	44%	20%	30%	% of floor space**	2009	Commercial – New Construction
MI[21]	87%	14%	7%	24%	% of all installed lighting	2011	Commercial – Existing Buildings

*Percent of total fluorescent share
**Weighted according to square footage

[17] Nexant, 2012 "Pennsylvania Statewide Commercial & Industrial End Use and Saturation Study.
[18] *Id.*
[19] Nexant. 2012. "Delaware Statewide Commercial & Industrial End Use & Saturation Study," Submitted to the Delaware Department of Natural Resources and Environmental Control.
[20] KEMA. 2009. "Business Sector Market Assessment and Baseline Study: Commercial New Construction, Vol " Prepared for the Vermont Department of Public Service. Available at: http://publicservice.vermont.gov/sites/psd/files/Topics/Energy_Efficiency/EVT_Performance_Eval/VT%20New%20Com%20Report%20Vol1%20-%20Final%207Oct2009.pdf
[21] Cadmus. 2011. "Michigan Baseline Study 2011: Commercial Baseline Report." Prepared for the Michigan Public Service Commission, available at: https://www.michigan.gov/documents/mpsc/Michigan_Commercial_Baseline_Study_367665_7.pdf

3. Discontinue Incentives for Metal Halide and Induction Lighting

The Company proposes to discontinue incentives for metal halide and induction lighting by Program Year 6. This change is due to relatively low participation for these incentives in the Company's Phase I EE&C Plan and to encourage customers and trade allies to install more-efficient measures such as LEDs.

4. Discontinue Incentives for Direct-Install Smart Strips in the Residential Retail Program

The Company proposes to discontinue direct-install smart power strips as an eligible measure in the Residential Retail Program once the current inventory is depleted (expected approximately December 2013). In its proposed 2014 TRM, the Commission significantly decreases the savings of smart strips from 184 kWh/yr. to between 49 and 75 kWh/yr., depending on the number of outlets and type of equipment plugged into the smart strip. Based upon the Commission's proposal to lower savings, coupled with the relatively high administrative and labor costs experienced by the Company to furnish and install smart strips, the Company has determined that it should discontinue direct-install smart power strips in its Residential Retail Program because of the resulting high program acquisition cost of this direct-install measure. However, the Company plans to continue to include smart strips as part of its Student and Parent Energy Efficiency Education Program and the E-Power Wise Program. In these two programs, the smart strips are still justified because the smart strips are included in the kits, and although savings will be reduced, there are no direct-install costs.

5. Discontinue Mid-Stream Incentives for ENERGY STAR® Televisions

The Company proposes to discontinue the mid-stream incentive for ENERGY STAR® televisions in its Residential Retail Program effective the first quarter of 2014. This measure is a mid-stream incentive paid to the retail store for promoting the most efficient electronics.

Therefore, the elimination of this measure from the Phase II EE&C Plan will likely not be visible to customers.

The Company's recommendation to discontinue this measure is based on two primary factors. First, the Company's evaluator issued the following recommendation in the Program Year 4 Process Evaluation related to the upstream television measure:

> "Maintaining a high net-to-gross-ratio will depend on the ability to influence retailers to carry more high-efficiency [television] models than they would have without the incentive. Maintaining an understanding of the rapidly changing market for this measure [televisions] has proven difficult for other utilities."

Final Annual Report for Year 4 of PPL Electric's Act 129 Plan (Docket No. M-2009-2093216). Based upon this, the Company has determined that it is not practical to closely and reliably monitor the rapidly changing market for televisions to ensure that the incented models are the most efficient. In addition, the Company believes that most customers will select their new television based on factors other than energy efficiency, such as brand and features.

Second, in order to accommodate the addition of LEDs and other, higher cost, more-efficient, longer-lived measures in the Company's Phase II EE&C Plan, while staying within the statutory budget cap, the Company must reduce or eliminate other measures that are less critical to the success of the portfolio. Therefore, the Company is proposing to discontinue this measure.

6. Discontinue the Incentive for 2-Speed Pool Pumps

The Company proposes to discontinue the incentive for 2-speed pool pumps based upon the Commission's proposal to eliminate the measure from the 2014 TRM due to lack of savings.

7. Discontinue Incentive for Strip Curtains

The Company offered this incentive as part of its Phase I EE&C Plan and maintained it as a component of its current EE&C Plan. However, due to low customer participation, the Company is proposing to discontinue the measure at this time.

8. Discontinue "Standard" TRM Measures in the Custom Program

The Company proposes to discontinue incentives for "standard" measures (*i.e.*, those measures included in the TRM) in the Custom Incentive Program. If a customer/trade ally requests a standard measure that is not in the Company's EE&C Plan, the Company will evaluate the new measure and, if appropriate, add it to one of its other programs such as the Prescriptive Equipment Program.

In the Company's Phase I EE&C Plan and Phase II EE&C Plan, "standard" measures such as new construction lighting, LEDs, motors, and certain variable frequency drives that did not have prescriptive rebates were eligible for custom incentives if the project passed the cost-effectiveness screening and other Custom Program eligibility requirements. In those cases, the savings for the "standard" measure were determined in accordance with the TRM protocol, but the incentive would be based on the Custom Incentive Program. The Company now believes it is more appropriate for the Custom Program to cover only those measures that are truly custom, and to offer "standard" measures only through prescriptive programs with set rebate amounts that will not take away program funding from custom measures.

9. Change the Eligibility Requirements for Refrigerator Rebates

The Company proposes to change the eligibility requirements in its Residential Retail Program for refrigerator rebates from ENERGY STAR® to ENERGY STAR® "Most Efficient" and/or other established criteria such as Consortium of Energy Efficiency ("CEE") Tier 3 or Top Ten USA for most efficient refrigerators starting in Program Year 6. ENERGY STAR® has become the "norm" in the market, and the Company believes it is no longer necessary to provide incentives for a measure that the market has adopted as normal practice in the Company's territory. Conversely, there are much fewer ENERGY STAR® "Most Efficient" refrigerators stocked in stores. ENERGY STAR® "Most Efficient" refrigerators have higher savings than ENERGY STAR® refrigerators, and the Company wants to provide incentives for ENERGY STAR® "Most Efficient" refrigerators in order to "raise the bar" and increase consumer awareness and adoption of more efficient appliances.

10. Increase the Bonus Incentives for the Energy Assessment & Weatherization Component of the Home Comfort Program

The Company proposes to increase the current rebate to customers who complete an audit and install insulation and infiltration measures that were recommended by the audit. In addition, the Company proposes to require that those measures recommended by the audit must be installed within 180 days of the audit in order to qualify for the bonus rebate. The enhanced rebate will provide customers with an additional incentive to complete an audit and to implement audit recommendations. Customers would also be eligible for rebates for installing weatherization measures covered by the program

11. Increase the Direct Discount Incentives for Schools

The Company proposes to increase the incentive for schools in the direct discount component (primarily lighting) of the Prescriptive Rebate Program from $0.17 per annual kWh saved to $0.33. By increasing the incentive, schools will be encouraged and better positioned to implement energy-efficient measures at a lower out-of-pocket, front-end cost. Many schools districts are experiencing growth, have constrained funding, and a long funding cycle. Trade allies have found that working with school districts' funding practices is a deterrent in promoting the best energy-efficiency measures. Because of these obstacles, an increased incentive is being offered to ensure participation.

12. Increase the Incentive and the Incentive Cap for Custom Projects

The Company proposes to increase the custom incentive from $0.08 per annual kWh saved to $0.10. This change is based on input from customers and trade allies that the current incentive is too low to encourage custom projects. The Company's current custom incentive is lower than the $0.10 incentive offered by the Company in its Phase I EE&C Plan. In addition, the Company proposes to increase the incentive cap for custom projects from $250,000 to $500,000. However, the Company will maintain the current corporate (parent) cap at $1 million. The increased incentive and cap will provide a total incentive that is more in line with the total project cost (customer's cost) for larger energy efficiency projects.

13. Increase the Incentives for Heating and Cooling Measures for Rate RTS Residential Service – Thermal Storage ("RTS") Customers

The Company proposes to increase the incentives for RTS customers who install eligible air source heat pumps and/or ductless heat pumps. The thermal storage systems currently in use by PPL Electric's customers were installed 30 years ago and are inefficient[22] and obsolete/costly to repair/replace. By increasing this rebate, the Company's Phase II EE&C Plan will provide RTS customers with a better incentive to use more energy-efficient options such as a high-efficiency air source heat pumps and ductless heat pumps.

14. Increase the Minimum Required TRC for Custom Projects

The Company proposes to increase the minimum Total Resource Cost ("TRC") from 1.0 to 1.1 (except for Combined Heat and Power projects whose minimum TRC will remain at 1.25) for projects in the Custom Incentive Program. Projects below that minimum TRC threshold would not be eligible for a custom incentive. The increase in the minimum TRC will provide a

[22] RTS systems were designed to shift usage from peak times to off-peak times, but use more energy overall than other systems that are currently available.

reasonable margin to account for uncertainties (such as actual savings less than expected or actual costs greater than expected when the project was screened for TRC) and will help to increase the likelihood that the overall TRC for the program will be greater than 1.0. In addition, the higher TRC threshold will encourage custom projects that have greater savings relative to their costs.

15. Add Free LED Exit Signs to School Benchmarking Program

The Company proposes to offer free LED exit signs to schools participating in the School Benchmarking Program. This provides an additional incentive for schools to participate in the program, brings attention to the benefits of the program, and provides additional energy savings for schools. The free LED exit signs are included in the budget for the Prescriptive Equipment Program, along with other LED exit signs.

16. Provide a Rebate for Conversion of Municipal Owned Street Lights to LED

The Company proposes to add LED street lights as an eligible measure in the C&I Prescriptive Equipment Program. Adding this rebate will encourage municipalities to convert exiting street lights to LEDs. This change will help municipalities implement more energy-efficient measures to help control their costs.

17. Add a Manufactured Homes Component to Home Comfort Program

The Company proposes to add ENERGY STAR® manufactured homes as an eligible measure in the Home Comfort Program. This will provide incentives to customers who purchase ENERGY STAR® rated manufactured homes and an additional incentive for the installation of an energy-efficient heating system. This change also enriches the "comprehensive program" requirement in this program and provides an incentive for customers who choose energy efficient housing that is not covered by the program's "new construction" component.

18. Add Ductless Heat Pumps as an Eligible Measure

The Company proposes to add ductless heat pumps as an eligible measure in the Home Comfort Program for residential customers and in the Prescriptive Equipment Program for commercial and agricultural customers. This measure was unintentionally omitted from the Company's Phase II EE&C Plan and will give customers more options to implement energy efficiency measures, especially for homes/rooms that have no ducting and therefore are not candidates for other measures such as air source heat pumps.

19. Add Ground Source Heat Pumps as an Eligible Measure for GNI Customers

The Company proposes to add ground source heat pumps ("GSHP") as an eligible measure for GNI customers in the Prescriptive Equipment Program. Based on Phase I results and input from GNI customers and trade allies, GSHPs are a popular measure for GNI customers. GSHPs were included in Phase I and the budget was quickly exhausted. GSHPs were not included in the original Phase II EE&C Plan because of budget constraints. However, because of the combined impact of all of the proposed changes, PPL Electric now believes it is feasible to promote GSHPs under its Phase II EE&C Plan budget and provide the benefit of energy savings from this measure to the Company's GNI customers. GSHPs typically have a longer return on investment, however, GNI customers still find them attractive from an operational cost standpoint and for the savings they provide.

20. Add Compressed Air Training for Trade Allies and C&I Customers

The Company proposes to add DOE compressed air systems training for maintenance personnel (trade allies and customers) as part of the Prescriptive Equipment Program. This training will not yield direct savings, however, the training will assist trade allies and customers improve the energy efficiency of their compressed air systems by improving operation and maintenance practices. This training is an investment for the future that will help the market (customers and trade allies) implement better and more sustained energy efficiency awareness and practices.

21. Add Building Operator Certification Training for Trade Allies and C&I Customers

The Company proposes to add Building Operator Certification training for facility managers and building operators (trade allies and customers) in targeted GNI groups such as schools, colleges, non-profit/not-for-profit hospitals, and government buildings. This will be provided through the Prescriptive Equipment Program. Although there are no direct savings, the training will assist trade allies and customers to improve the energy efficiency of their buildings by improving operation and maintenance practices. In addition, the training will aid the market (customers and trade allies) to implement better and more sustained energy efficiency awareness and practices, increasing a network of people who have the training and credibility to recommend cost-effective energy efficiency improvements to their organization.

22. Add Trade Ally Certification for HVAC and New Homes

As part of the Home Comfort Program, the Company proposes to add training for HVAC contractors and new home builders that will lead to independent certification of their knowledge and abilities to install/build to high energy efficiency standards. Although there are no direct savings, this training will provide trade allies with additional information for residential HVAC and new construction and, in turn, improve their competency, skills, and credibility to promote energy efficiency to their customers. This will also assist the market (customers and trade allies) to implement better and more sustained energy efficiency awareness and practices.

23. Add Whole Building Approach for Master Metered Low-Income Multifamily Housing Program

The Company proposes to target up to three all-electric buildings for a "comprehensive" approach as a pilot incentive. A mix of building styles and sizes (number of residential units) will be selected to provide broad feedback about the savings, cost-effectiveness, logistics, and other components of a whole building approach. These buildings would receive incentives to upgrade equipment such as cooling, heating, and lighting, above and beyond the standard measures provided by this program. This change will provide a comprehensive energy retrofit for the selected pilot buildings and will provide the Company with cost and savings data that can be used to evaluate the merits of expanding the whole building approach further.

24. Add Funding for a School Energy Champion in the Continuous Energy Improvement Program ("CEI")

The Company proposes to partially offset the salary of the School Energy Champions by removing the funding barrier that most school districts may have to participate in CEI. The program CSP estimates that 300 person hours of work per school year by the Energy Champion is required to drive CEI results. The Company will establish milestones within the CEI process that will trigger payments for the work at a standard hourly rate for all participating school districts. This change should make the program more attractive to school districts in the pilot incentive and encourage their participation in the program. The Company does not expect to offset the school district salary costs further beyond the pilot incentive. The "proof of concept" from the pilot incentive should confirm the savings and financial benefits school districts will realize by participating in future CEI offerings.

25. Add a Thermography Pilot

The Company proposes to conduct a pilot initiative to evaluate the merits of thermography as a tool to encourage customer participation in energy efficiency programs. The

Company would use thermography on selected homes, neighborhoods, or regions to help customers identify homes with potentially high heat loss. The thermography results will be available to customers on the PPL Electric website and serve to inform customers about the thermal integrity of their homes. Armed with this information, it is expected that customers will be encouraged to have an energy audit or survey, and subsequently take the final step of installing insulation and weatherization measures. The cost of this pilot initiative is included as a marketing common cost and will be assigned to the residential sector only.

26. Add Thermal Imaging Guns and Training

The Company proposes to provide thermal imaging guns to Building Performance Institute ("BPI") certified trade allies to be use when providing residential home energy efficiency audits as part of the Home Comfort Program. The Company will work with the CSP to identify the performance criteria for contractors to be eligible to receive the thermal imaging guns. The thermal imaging guns will provide auditors with a way to identify and to visually show a customer where there is heat loss in the home with the intent of increasing the number of customers that implement insulation and/or infiltration measures proposed in the audit.

27. Add an Incentive for non-ENERGY STAR® and non-Design Lights Consortium LED Lamps to the Prescriptive Equipment Programs

The Company proposes to provide a rebate for non-ENERGY STAR® and non-Design Lights Consortium LED lamps as a pilot incentive. Pre-approval will be required and there will be a 10 bulb per customer limit. This change will provide customers with the opportunity to experiment with new LEDs, tested by a laboratory. The Company will be able to learn more about unique applications for LEDs through the pilot incentive and the evaluation process. As part of this change, the Company will ask participants to provide feedback on the lighting they select. This data will help the Company make more informed decisions about which LEDs may be most applicable for specialty applications in restaurants and retail stores.

28. Change Pre-Approval Requirements for C&I Measures in the Prescriptive Equipment Program and the Custom Program

The Company proposes to change the pre-approval requirements for C&I measures in the Prescriptive Equipment and Custom Programs. The current Phase II EE&C Plan requires customers to obtain pre-approval of custom projects before their project goes in-service. The Company proposes to require pre-approval of custom projects before the customer orders their efficient equipment. In addition, the Company proposes to require pre-approval of C&I prescriptive measures before the customer orders their efficient equipment.

This process change will provide the Company with more advanced notice of possible projects which should significantly help the Company manage this program and customer sector budgets (costs and savings) more closely. This change also provides the opportunity for better and earlier coordination among the Company, trade allies, and customers. In addition, this change will assist trade allies in their sales process and should help customers by confirming rebate eligibility earlier (subject to the project meeting program eligibility requirements and installation by May 31, 2016) so the customer can make a more informed decision about project costs and benefits before committing to their project. In addition, this change should reduce free-ridership. Free-ridership was fairly high (approximately 50%) in the Phase 1 Custom Program, partly because customers could request a rebate well after their equipment was ordered or installed.

This change will be fully communicated to customers and trade allies before it is implemented. The pre-approval stage will require customers/trade allies to provide basic information about their projects. The estimated energy savings for the project does not need to be confirmed at pre-approval but must be confirmed once the project is implemented.

29. Change the Projected Participation and Savings in the Appliance Recycling Program

The Company proposes to reduce the projected number of recycled refrigerators, freezers, and window air conditioners in the Appliance Recycling Program. The measure life of a recycled refrigerator is 7 or 8 years, depending on whether it is replaced with an ENERGY STAR® refrigerator. The measure life of a recycled air conditioner is 4 years. One of the key drivers in developing the proposed changes to the Company's Phase II EE&C Plan was evaluating measures with a longer measure life. For example, LEDs have a measure life of over 14 years. This change will reduce the program savings from 30,551 MWh/yr. to 26,243 MWh./yr. and will reduce costs from $5,763,000 to $5,189,000.

30. Decrease the Estimated Number of Participants in the Student and Parent Energy Efficiency Program

As noted above, LEDs are more costly than CFLs. In light of the Company's proposal to include LEDs instead of CFLs in the energy efficiency kits, the cost of this program would increase unless the Company reduces the number of kits (participants). Therefore, the Company is proposing to reduce the estimated participation in this program from 79,000 to 65,000 in order to stay within the original budget and savings target.

31. Add the Cost of the E-Power Team to Common Costs (Marketing)

The Company inadvertently excluded the $1.3 million cost of its E-Power team from the marketing cost estimate in the Phase II EE&C Plan. The E-Power team is vital to successfully disseminate information to residential customers, especially to inform customers about the benefits of LEDs.

32. Discontinue Incentives for Bulk CFLs and add Incentives for Bulk LEDs

Consistent with its proposal to phase out CFLs, the Company is proposing to phase-out incentives for bulk CFLs and add incentives for bulk LEDs in its C&I Prescriptive Equipment Program by Program Year 6. These incentives are for the bulk purchase of LED bulbs from an electrical equipment supplier that are not part of the Company's upstream lighting component of the Residential Retail Program.

33. Add an Incentive for New Construction Lighting

The Company is proposing to add an incentive for new construction lighting[23] in the Prescriptive Equipment Program. These incentives were previously covered by the Company's Custom Incentive Program (see Change # 8- Discontinue "Standard" TRM Measures in the Custom Program). The TRM has separate protocols and savings eligibility requirements for "new construction" and "retrofit" lighting. The Company's rebates for lighting retrofit do not apply to new construction applications. This change is required to provide rebates for customers installing efficient lighting in new buildings or in existing buildings (or spaces within a building) that are renovated.

34. Increase the Estimated Phase 1 Carryover Savings

The Company is increasing the estimated Phase I carryover savings from 110,000 MWh/yr. to approximately 551,000 MWh/yr. There are three primary reasons for the increase. First, the Phase I CFL cross sector sales adjustment was not identified when the Company prepared its Phase II EE&C Plan. The Company's independent evaluator determined the Phase I cross sector sales adjustment in September 2013, during the Program Year 4 impact evaluation.

[23] In accordance with the TRM "new construction" lighting applies to new buildings, new spaces, and to major renovations of existing spaces/buildings where the lighting must meet code requirements for lighting power density.

The Phase I cross sector sales adjustment added approximately 157,000 MWh/yr. to the Phase I savings and is described further in Change 36.

Second, there was a large, unexpected rush of rebate applications during the final few months of Phase I that added approximately 135,000 MWh/yr. of Phase I savings. As required by the Commission, PPL Electric continued its Phase I EE&C Plan program through May 31, 2013. *2012 Implementation Order*, p. 60. In addition, customers were given two months to submit their rebate application as long as the measure was in-service by May 31, 2013. The large, unexpected rush of rebate applications was received May through July 2013.

The third factor is slightly higher realization rates in Program Years 3 and 4 than the Company expected when it prepared its Phase II EE&C Plan more than a year ago. The Company monitors reported (ex-ante) savings in near real time but the verified savings (ex-post) results are not known until the Company's independent evaluator issues the Final Annual Report in November. The PY3 Final Annual Report (November 15, 2012) and the PY4 Final Annual Report (November 15, 2013) were not available when the Company prepared its Phase II EE&C Plan. The realization rates (the ratio of verified savings to reported savings) determined by the Company's independent evaluator were slightly higher than the Company's assumptions when it prepared the Phase II EE&C Plan. This increased the verified savings (and, therefore, the Phase I carryover) compared to the assumption in the Phase II EE&C Plan.

35. Modifications to the Low-Income WRAP

The Company proposes to make a number of modifications to its existing Phase II EE&C Plan Low-Income WRAP. First, the Company proposes to add approximately 400 "full cost" WRAP jobs. These are additional "full cost" jobs, not a reallocation from LIURP WRAP. "Full cost" jobs provide additional measures in homes with electric water heaters and electric space heating. This will increase low-income savings. Second, PPL Electric is proposing to phase out direct-install CFLs and to install LEDs instead as replacements for incandescent bulbs. This is consistent with the Company's portfolio-wide approach (explained earlier) to introduce LEDs as CFLs become the market "norm" in the Company's service territory.

Third, the Company proposes to increase the estimated cost to furnish and install, at no cost to Low-Income WRAP participants, heat pump water heaters ("HPWHs"). After reviewing actual Phase I WRAP cost data from Program Years 3 and 4, the Company determined that its Commission-approved Phase II EE&C Plan underestimated the cost to provide and install heat pump water heaters. The estimated full cost per heat pump water heater was $1,300 in the Phase II EE&C Plan and the Company's revised estimate is $1,700. The increase in cost is due to three primary factors: (1) certain townships and municipalities in the Company's service territory require installation permits for the HPWHs; (2) many homes require that a condensate drain be added by WRAP contractors when installing a HPWH; and (3) additional funds are necessary so WRAP contractors can provide follow-up and education so customers understand how to clean the HPWH filter. Therefore, the Company proposes to increase the estimated cost to furnish and install HPWHs for Low-Income WRAP participants.

These changes will increase the projected cost of the program from $13.3 million to $15.6 million and increase the projected savings from 9,554 MWh/yr. to 10,519 MWh/yr. Funds for this increase, in part, were offset by the overestimation of direct utility costs in the Company's projections for its Phase II EE&C Plan, in which costs for EDC staff were inadvertently double-counted.

36. Reflect Cross-sector Sales

The Company is proposing to reflect cross-sector sales associated with lighting purchased from the upstream discount portion of the Phase II EE&C Plan Residential Lighting Program. Estimated residential savings will decrease approximately 21,000 MWh/yr., and estimated Small C&I savings will increase approximately 60,000 MWh/yr. Estimated residential cost will decrease approximately \$3.5 million and estimated Small C&I cost will increase approximately \$3.5 million.

When the Company prepared its Phase II EE&C Plan, it assumed that all upstream lighting sales were to residential customers who installed the bulbs in homes, consistent with the practice in Phase I. However, during Program Year 4 after the Company submitted its Phase II EE&C Plan, the Company (and all other Pennsylvania EDCs) determined, with the concurrence of the Commission staff and the Statewide Evaluator that it must determine if any of the upstream lighting was sold to non-residential customers and installed in non-residential applications. If the lighting was installed in non-residential applications, the savings and costs associated with those "cross sector" sales must be properly allocated to the customer class that received the benefit of those bulbs. Accounting for these cross sector sales prevents cross-subsidization of costs and savings between customer sectors, as required by Act 129. 66 Pa. C.S. § 2806.1(a)(11).

Consistent with the Commission's/SWE's direction in Phase I, the Company's independent evaluator will determine the actual cross-sector sales during the Phase II impact evaluations and the result (savings and costs) will be treated as an ex-post adjustment at the conclusion of each program year. Therefore, since this adjustment will be made to the actual, verified savings and costs, it is important to reflect it in the estimated savings and costs in the

EE&C Plan (because the EE&C Plan is intended to reasonably predict the actual performance of programs). In the proposed EE&C Plan revision, PPL Electric is applying the actual cross-sector sales value determined at the end of Program Year 4 (12% of bulb sales) and the average Small C&I lighting hours-of-use (approximately 9 hours per bulb) for planning purposes when determining the estimated cross sector adjustment for the revised Phase II EE&C Plan. The actual cross-sector sales value will be determined by PPL Electric's independent evaluator during the Phase II impact evaluations.

37. Discontinue Incentives for Beverage/Snack Machine Controls

Beverage/ snack machine "vendmizers" were a custom measure in Phase I. There was little customer response. The incentive was then changed in our Phase II plan from being a custom measure to a fixed incentive, and there has not been any customer response. Beverage/snack machines are usually not owned by the customer who has the machine on their premises. The issue of ownership complicates measure implementation. For these reasons, PPL Electric proposes to eliminate this rebate.

38. Delete Non-Electric Water Heaters and Add Non-Electric Central Heat to C&I Prescriptive Rebate Program

This change corrects an inadvertent error in the Company's Phase II EE&C Plan wherein it included rebates for non-electric water heaters under the C&I Prescriptive Rebates Program. The Company's Phase II EE&C Plan does not provide incentives for water heating under the C&I Prescriptive Rebate Program (electric or non-electric). However, incentives are provided for both electric and non-electric energy efficient central heating equipment. This proposed change corrects this error by identifying that rebates are available for energy efficient central heating equipment.

39. <u>Process Incentives for VSD Air Compressors Through the Custom Program Instead of the Prescriptive Equipment Program</u>

The Company proposes to process rebates for variable-speed drive ("VSD") air compressors through the Custom Incentive Program instead of the Prescriptive Efficient Equipment Program. The rebate amount will be unchanged ($0.10 per annual kWh saved). The Company is proposing this change because the equipment is too complex to process through a simple, prescriptive rebate program. VSD air compressors have fairly complex technical eligibility requirements and savings calculations that are better handled through the Custom Program where there is more focus on individual projects.

40. <u>General text revisions, primarily for clarity.</u>

As set forth in the Appendix A to this Petition, the Company has made a number of ministerial revisions to the text of the Phase II EE&C Plan.

B. AGGREGATE IMPACT OF PROPOSED CHANGES:

Following is summary of the aggregate impact of the proposed changes on each sector, each program, and the portfolio.

Table 1- Savings by Sector and Portfolio (MWh/yr):

	Original Plan Savings (MWh/yr.)	Revised Plan Savings (MWh/yr.)
Residential	377,675	253,487
Low-Income	22,091[24]	22,223[25]
Total Residential + Low-Income	**399,766**	**275,710**
Small C&I	157,774	144,386
Large C&I	191,583	107,417
GNI	92,835	88,184
Total Non-Residential	**442,192**	**339,987**
Total Phase II Savings (all sectors, excluding carryover)	**841,957**	**615,697**
Estimated Phase I Carryover Savings	**110,000**	**551,704**
Total Phase II Savings including Carryover[26]	**951,957**	**1,167,401**
Phase II Compliance Target	**821,072**	**821,072**
Phase II Over-compliance	**130,885**	**346,329**
Estimated benefit-cost ratio per the TRC	**1.73**	**1.75[27]**

[24] Low-income programs only. There is a total of 71,283 MWh/yr. including low-income participation in general residential.

[25] Low-income programs only. There is a total of 55,176 MWh/yr. including low-income participation in general residential.

[26] The commission has determined that an EDC is permitted to use Phase I carryover savings toward its Phase II EE&C Plan compliance target. *2012 Implementation Order*, pp. 58-59.

[27] The revised benefit-cost ratio of the portfolio did not materially change compared to the Phase II EE&C Plan because, although the annualized incremental Phase II savings (Phase II transactions excluding Phase I carryover) decreased, the lifetime savings (the basis for the TRC) increased due to longer measure lives for proposed measures such as LEDs.

Table 2- Savings by Sector (% of portfolio savings):

	Original Plan	Revised Plan
Residential	44.9%	41.2%
Low-Income	2.6%	3.6%
Total Residential + Low-Income	**47.5%**	**44.8%**
Small C&I	18.7%	23.5%
Large C&I	22.8%	17.4%
GNI	11.0%	14.3%
Total Non-Residential	**52.5%**	**55.2%**

Table 3- Savings by Program (MWh/yr.).
Measures installed in Phase II only; excludes Phase 1 carryover:

Program	Original Plan	Revised Plan
Appliance Recycling	30,551	26,243
Residential Retail	284,815	229,276
Residential Home Comfort	15,359	12,739
Residential Behavior & Education	32,193	32,205
WRAP	9,544	10,519
Low-Income Behavior & Education	8,335	8,325
E-Power Wise	4,212	3,378
Prescriptive Equipment	357,073	205,116
Custom	76,361	65,660
Student & Parent Energy Efficiency Education	13,453	12,199
Master Metered Low-Income Multifamily	6,562	6,886
Continuous Energy Improvement	3,500	3,150
School Benchmarking	-	-

Table 4- Total Costs (Direct & Common) by Sector ($1,000):

	Original Plan	Revised Plan
Residential	$58,125	$66,224
Low-Income	$18,417	$21,896
Small C&I	$43,292	$32,544
Large C&I	$38,184	$25,063
GNI	$28,710	$40,393
Total	**$186,728**	**$186,121**

Table 5-- Total Costs (Direct & Common) by Sector (% of portfolio cost):

	Original Plan	Revised Plan	% of Total Customer Revenue
Residential	31.1%	35.6%	
Low-Income	9.9%	11.7%	
Total Residential	**41%**	**47.3%**	**45%**
Small C&I	23.2%	17.5%	32%
Large C&I	20.4%	13.5%	23%
GNI	15.4%	21.7%	Included in Small and Large C&I above
Total Non-Residential	**59%**	**52.7%**	**55%**

As shown in Table 5 above and in Table 5 in the revised Phase II EE&C Plan, the proportion of the Phase II EE&C Plan's budget for each customer sector is reasonably comparable to each sector's share of total PPL Electric revenue.

The Company's proposed modifications to its Phase II EE&C Plan have slightly increased the estimated common costs (primarily for marketing as described in Change 31) and the allocation of common costs to each customer sector will change because the proportion of direct costs have changed. For EE&C Plan estimating purposes, common costs for each sector are determined based on each customer sector's proportion of direct costs. For example, if residential direct costs are 37% of total direct costs, then 37% of the common costs are applied to residential. Where possible, actual common costs will be allocated to a specific customer sector when the task is associated with that sector. Actual common costs that are not specifically attributable to a customer sector will be allocated to each customer sector based on the proportion of actual direct costs.

Table 6- Total Direct Costs by Program ($1,000):

Program	Original Plan	Revised Plan
Appliance Recycling	$5,763	$5,189
Residential Retail	$25,755	$33,634
Residential Home Comfort	$8,052	$9,851
Residential Behavior & Education	$2,439	$2,389
WRAP	$13,277	$15,635
Low-Income Behavior & Education	$1,184	$1,164
E-Power Wise	$735	1,036
Prescriptive Equipment	$76,136	$58,935
Custom	$11,095	$12,585
Student & Parent Energy Efficiency Education	$5,743	$6,096
Master Metered Low-Income Multifamily	$2,265	$3,103
Continuous Energy Improvement	$585	$943
School Benchmarking	$300	$300

IV. NOTICE

As required by the *Minor Plan Change Order*, PPL Electric is serving copies of this filing on the Pennsylvania Office of Consumer Advocate, the Pennsylvania Office of Small Business Advocate, the Commission's Bureau of Investigations and Enforcement, and all other parties of record in PPL Electric's Phase II EE&C Plan proceeding (Docket No. M-2012-2234388). *See Minor Plan Change Order*, p. 19. PPL Electric will also post the black-line version of the EE&C Plan on its Act 129 website (http://www.pplelectric.com/e-power/stakeholders/index.htm).

V. CONCLUSION

WHEREFORE, PPL Electric Utilities Corporation respectfully requests that the Pennsylvania Public Utility Commission approve the proposed modifications to its Phase II EE&C Plan, as set forth in this Petition. PPL Electric also requests that the Commission resolve issues, if possible, on the basis of comments and replies to comments on the proposed modifications and for all changes that cannot be resolved based upon comments and replies, PPL Electric respectfully requests that the Commission approve the proposed changes to the EE&C Plan as quickly as is practically possible.

Respectfully submitted,

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