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File #: 158814

May 15, 2015

***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: Energy Efficiency and Conservation Program**  
**Docket No. M-2014-2424864**

Dear Secretary Chiavetta:

Enclosed for filing please find the Reply Comments of PPL Electric Utilities Corporation on the Phase III Tentative Implementation Order in the above-referenced proceeding.

Copies will be provided as indicated on the Certificate of Service.

Respectfully submitted,

A handwritten signature in black ink, appearing to be "DR" with a flourish, written over a horizontal line.

Devin T. Ryan

DTR/jl  
Enclosures

cc: Certificate of Service  
Kriss Brown (*via E-mail*)  
Megan Good (*via E-mail*)

**AMENDED CERTIFICATE OF SERVICE**  
**(Docket No. M-2014-2424864)**

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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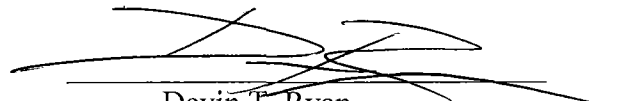
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Date: May 15, 2015



Devin T. Ryan

**BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**Energy Efficiency and Conservation Program** : **Docket No. M-2014-2424864**  
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**REPLY COMMENTS OF  
PPL ELECTRIC UTILITIES CORPORATION**

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**TO THE PENNSYLVANIA PUBLIC UTILITY COMMISSION:**

PPL Electric Utilities Corporation (“PPL Electric” or the “Company”), by and through its attorneys, in accordance with the Pennsylvania Public Utility Commission’s (“Commission”) March 11, 2015 Tentative Implementation Order,<sup>1</sup> hereby submits these Reply Comments in response to the comments filed by various parties on or about April 27, 2015.

**I. BACKGROUND**

In the Tentative Implementation Order, the Commission issued, for public comment, its proposals for implementing Phase III of the EE&C Program. The Commission requested that interested parties file written comments on the Tentative Implementation Order by April 27, 2015. PPL Electric filed its Comments on April 27, 2015. By Secretarial Letter dated May 1, 2015, the Commission extended the due date for the filing of Reply Comments with respect to the Tentative Implementation Order until May 15, 2015.

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<sup>1</sup> *Energy Efficiency and Conservation Program*, Docket No. M-2014-2424864 (Order Entered Mar. 11, 2015) (“Tentative Implementation Order”).

PPL Electric will not respond to each issue raised in the Tentative Implementation Order and the other parties' comments. Instead, PPL Electric will focus on those issues of the utmost importance to the Company.

## **II. REPLY COMMENTS OF PPL ELECTRIC**

### **A. THE COMMISSION SHOULD ELIMINATE THE DEMAND REDUCTION TARGET APPLICABLE TO PPL ELECTRIC**

The Commission proposes a demand reduction ("DR") compliance target of 92 MW for PPL Electric with suggested funding of \$15.38 million.<sup>2</sup> Tentative Implementation Order, p. 36. In its Comments, PPL Electric recommended eliminating PPL Electric's peak DR target and reallocating the proposed DR funding to energy efficiency programs that are more cost-effective. PPL Electric Comments, pp. 4, 16-17. In its Comments, PPL Electric concluded that DR would not be cost-effective if the Statewide Evaluator's ("SWE") DR Market Potential Study ("SWE's DR Study"): (1) accounted for the additional costs to over-subscribe participants to meet the target; (2) accounted for the additional costs for DR incentives necessary to attract sufficient participants; and (3) reduced the overestimated benefits of avoided capacity. PPL Electric Comments, pp. 17-21. Regardless of cost-effectiveness, PPL Electric's Comments demonstrated that it will not likely be possible to achieve the proposed DR target with the proposed DR funding and customer eligibility restriction that prevents PJM Interconnection LLC ("PJM") DR customers from participating in Act 129 DR. PPL Electric Comments, pp. 22-28.

Parties provided comments supporting the proposed DR targets for each electric distribution company ("EDC"), with some even suggesting that higher DR targets are possible. However, PPL Electric believes that those parties provided insufficient analysis to support their

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<sup>2</sup> As stated by the Commission, the "proposed allocation" between energy efficiency and DR funding "is not intended to establish spending minimums or maximums for [energy efficiency] and DR programs." Tentative Implementation Order, p. 34.

conclusions, to confirm that the proposed DR targets will likely be cost-effective, and to confirm that EDCs could recruit enough DR within the proposed DR funding budget. For instance, the Demand Response Supporters suggested that DR funding should double for all EDCs except PPL Electric (from 10% to 20% of Act 129 funds) and quadruple for PPL Electric (from 5% to 20%). Demand Response Supporters Comments, pp. 5, 30-32. But the Demand Response Supporters did not demonstrate how the increased funding (i.e., increased EDC costs for DR programs) would impact the cost-effectiveness of DR programs. Instead, the Demand Response Supporters requested, “[a]t the very least,” for “the SWE to recalculate the TRC for DR programs, after adopting the modifications proposed” in their Comments<sup>3</sup> and reevaluate “program funding allocations in light of those revised findings.” Demand Response Supporters Comments, p. 5. However, PPL Electric’s Comments already demonstrated that PPL Electric’s DR programs would not be cost-effective if DR funding were doubled or quadrupled. PPL Electric Comments, pp. 18-21.

Several parties supported allowing dual participation with PJM DR, some of which recommended allowing EDCs to count peak reductions for Act 129 if DR events are coincident with PJM DR events, while others would allow dual enrollment but not allow EDCs to count DR from coincident events. Although dual participation may prevent “competition” between PJM and Act 129 and may make it easier for an EDC to recruit enough participants/peak reductions to meet its Phase III DR target, dual participation would: (1) significantly increase the risk that customers will not meet their Act 129 commitments; (2) increase Act 129 costs (i.e., additional participants/incentives); and (3) increase free-ridership (i.e., customers are prepared to curtail for PJM regardless of Act 129) and provide two revenue streams for customers without providing

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<sup>3</sup> The Demand Response Supporters proposed certain adjustments to the TRC calculation for DR programs, which are summarized on pages 4 and 5 of their Comments.

additional capacity/incremental peak reductions to the grid. These are described below in more detail.

First, dual participation would increase the risk that customers will not implement Act 129 DR. Under the proposed Act 129 Phase III DR rules, EDCs would call an event the day before the operating day. Tentative Implementation Order, pp. 37-38. However, PJM calls its DR events during the operating day. Therefore, during hot weather or other conditions when PJM may call for DR, the customer must decide if it will implement its Act 129 DR and risk not having the load reductions to meet its PJM commitments (since the customer is already at reduced load because of Act 129 DR). When faced with this choice, a dual-enrolled customer would likely forgo its Act 129 DR because the customer will not likely face penalties for Act 129 DR but would face penalties for failure to meet its PJM DR commitments. This creates an “after-the-fact” compliance risk for Act 129 DR (similar to the 100 hour issue in Phase I)<sup>4</sup> if EDCs cannot count dual participants’ peak load reductions when PJM and Act 129 DR events coincide. EDCs would call a DR event, only to find out after-the-fact that customers did not provide Act 129 DR. To mitigate this risk, EDCs would have to oversubscribe Act 129 DR MWs, further increasing costs and reducing cost-effectiveness.

Second, dual participation would increase Act 129 costs. If dual participation is allowed, EDCs will pay incentives or “standby costs” to more participants.

Third, allowing dual participation will increase free-ridership in Act 129 DR programs because any customer who first enrolled in PJM DR is prepared to curtail (for PJM), regardless of the Act 129 DR incentive. Therefore, the Act 129 DR incentive did not influence the

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<sup>4</sup> In Phase I, EDCs implemented DR only to find out after-the-fact that some of the hours were not in the top 100 hours of highest demand and, therefore, did not count toward the peak load reduction compliance target.



customer's decision to curtail load, and the customer is merely receiving two revenue streams for without providing additional capacity/incremental peak reductions to the grid.

In addition, some parties recommended increasing the number or length of DR events, such as not limiting the maximum number of events to six per year, not limiting the events to summer months, or not limiting each event to four hours. None of these parties provided sufficient analysis to support these recommendations or to demonstrate the impact on the portfolio, including cost-effectiveness and funding. PPL Electric disagrees with increasing the number or length of DR events because any increase will increase the cost of DR, which will further decrease the cost-effectiveness of a program that PPL Electric believes is not cost-effective in the first place.

Some parties recommended reducing the minimum number of hours per event (i.e., each DR event should be up to four hours, not each event shall be four hours) if the PJM day-ahead forecast is not greater than 96% of the peak forecast in all hours. As stated in PPL Electric's Comments, the Company agrees with this recommendation. PPL Electric Comments, p. 29. This would reduce the cost of DR (i.e., improve cost-effectiveness), and PPL Electric believes a customer should not have to curtail, nor should the EDC have to pay incentives for the hours that are not in excess of the 96% of the peak forecast. Therefore, if the Commission ultimately permits dual participation, the Company respectfully requests that the Commission adopt this recommendation to reduce Act 129 DR costs.

PPL Electric has direct experience with Act 129 DR programs from Phase I. The analyses PPL Electric provided in its Comments show that the SWE's DR Study understated the costs and overstated the benefits and that Phase III DR will not be cost-effective for PPL Electric in Phase III. These findings are further supported by the Demand Response Supporters'

conclusion that much more funding is necessary for Act 129 Phase III DR programs than included in the SWE's DR Study's cost-effectiveness evaluation. The cost of DR will increase further (and cost-effectiveness will decrease further) if the Commission allows dual participation or increases the number or length of DR events.

Notwithstanding, if the Commission determines that the Phase III DR compliance targets are appropriate, PPL Electric recommends that the Commission find the following in its Final Implementation Order:

- If an EDC determines DR is not cost-effective during the initial design of its Phase III EE&C Plan or from the actual cost-effectiveness evaluation after the first year of its Phase III DR program implementation, the EDC can delete its DR programs and will have no Phase III DR compliance target, subject to Commission approval.
- If an EDC determines during the initial design of its Phase III EE&C Plan, evaluation of bids for the DR CSP(s), or the evaluation after the first year of Phase III DR program implementation that DR is cost-effective, but the EDC needs more funding than suggested in the Final Implementation Order (presumably \$15.38 million for PPL Electric), the EDC can shift funding from its energy efficiency budget to DR and reduce its energy consumption compliance target proportionally (total funding shifted from energy efficiency divided by the total portfolio program acquisition cost for energy efficiency), subject to Commission approval.

- The \$1 million to \$20 million penalty provision in Act 129 does not apply to the Phase III peak demand reduction compliance target.<sup>5</sup>

## **B. OVERALL ENERGY CONSUMPTION REDUCTION TARGETS**

Some commenters averred that overall energy consumption targets should be increased because EDCs exceeded compliance targets, were under budget, and delivered programs at a lower program acquisition cost than planned in Phase I and are trending that way in Phase II. These parties believe that the compliance targets are too low if EDCs deliver more savings at a lower cost. PPL Electric disagrees.

As PPL Electric noted in its Comments, prudent risk management practices require an EDC to exceed its savings targets and stay under the Act 129 funding cap. *See* PPL Electric Comments, pp. 35, 56. EDCs need to exceed the savings target to allow for after-the-fact evaluation adjustments to savings.<sup>6</sup> EDCs need to stay under the funding cap because it is not possible to predict actual expenditures exactly, nor time expenditures so that the EDC hits the funding cap exactly on the last day of the phase, especially when EDCs will continue to incur costs well after the end of the final program year (for evaluation, reporting, program close-out, etc.). These risk management practices will cause PPL Electric's actual program acquisition cost to be on the order of 20% lower than established in the Tentative Implementation Order. PPL Electric Comments, p. 57. Therefore, if the Commission believes an actual program acquisition

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<sup>5</sup> Under 66 Pa. C.S. § 2806.1(f)(2)(i), an EDC “shall be subject to a civil penalty not less than \$1,000,000 and not to exceed \$20,000,000 for failure to achieve the required reductions in consumption under subsection (c) or (d).” However, the peak demand reductions under subsection (d) of Section 2806.1 “shall be accomplished no later than May 31, 2017.” 66 Pa. C.S. § 2806.1(d)(2). Accordingly, Act 129’s penalty provision does not apply to the Commission’s proposed peak demand reduction targets for Phase III. *See also* FirstEnergy Companies Comments, pp. 8-9.

<sup>6</sup> EDCs determine reported gross savings in near real-time. However, verified gross savings (the basis of compliance) are determined by an EDC’s independent evaluator in November, which is six months after the end of each program year. In addition, the SWE confirms the verified savings are acceptable the following January/February, which is approximately eight to nine months after the end of each program year.

cost of \$0.18/annual kWh saved is appropriate for PPL Electric, then it should establish compliance targets based on a program acquisition cost of \$0.22/annual kWh saved.<sup>7</sup> PPL Electric Comments, p. 57.

PPL Electric recognizes that there are very disparate positions among the parties about the mix of measures (and the resulting program acquisition cost and savings compliance target) and the emphasis of savings (and costs) across customer sectors (e.g., low-income, GNI, Large C&I, Residential, Small C&I). PPL Electric believes there is not a single “right answer.” Rather than establish a one-size-fits-all solution or constrain the EE&C portfolio to a specific mix of measures or customer sectors, PPL Electric recommends that the Commission establish a “variable” overall energy consumption reduction compliance target that is in proportion to the program acquisition cost in each EDC’s Phase III EE&C Plan as explained in more detail below.

The program acquisition cost and the program potential in the SWE’s Energy Efficiency Market Potential Study (“SWE’s EE Study”) (which are the basis of the overall energy consumption reduction compliance targets proposed by the Commission in the Tentative Order) are based on a single scenario/measure mix. PPL Electric does not believe the SWE’s EE Study or the Commission intended that mix of measures and its resulting program potential (and program acquisition cost) to represent the best or only answer. For instance, the SWE’s EE Study could have evaluated the program potential and program acquisition cost of multiple scenarios (e.g., measure mix, distribution of cost/savings across customer sectors) and recommended the best one. However, by basing the overall energy consumption reduction compliance targets on that single measure mix, the Commission has effectively constrained each

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<sup>7</sup> This estimate assumes an EDC exceeds its savings target by 10% and is 10% under the funding cap, thereby resulting in a program acquisition cost that is 20% less than established in the Tentative Implementation Order (budget cap divided by compliance target).

EDC's portfolio of measures/programs to the same parameters assumed in SWE's EE Study, including the distribution of savings/costs across customer sectors and specific measures such as CFLs, televisions, office equipment, behavior programs (repeated every year), and other measures that EDCs and their stakeholders may not prefer for Phase III.

To provide EDCs and their stakeholders with the flexibility to design a Phase III EE&C portfolio that includes a different mix of measures and a different distribution of costs/savings across customer sectors than assumed in the SWE's EE Study, PPL Electric recommends that the Commission establish a "variable" overall energy consumption reduction target based on EDC-specific graphs similar to Figure 1 below.<sup>8</sup> When developing these variable overall energy consumption targets, it is important to note that the SWE's EE Study concluded that achievable potential is greater than program potential.<sup>9</sup> Therefore, the overall energy consumption reduction target is constrained by program potential. Moreover, there is a nearly linear, mathematical relationship between program acquisition cost and program potential as shown in Figure 1 below.<sup>10</sup> In short, the program potential (and the overall energy consumption target it constrains) equals an EDC's funding cap divided by program acquisition cost.

For example, if PPL Electric determines that a mix of measures with a composite program acquisition cost of \$300/annual MWh saved (\$0.30/annual kWh saved) is desirable for its Phase III EE&C Plan, its energy consumption reduction target would be 995,000 MWh/yr if its energy efficiency funding is 95% of its total funding (i.e., 95% energy efficiency, 5% DR). Similarly, if PPL Electric determines that a mix of measures with a composite program

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<sup>8</sup> PPL Electric also notes that the EDC-recommended mix of measures (and proportion of savings and budgets across customer sectors) would have broad stakeholder input and would be subject to the EE&C Plan approval process.

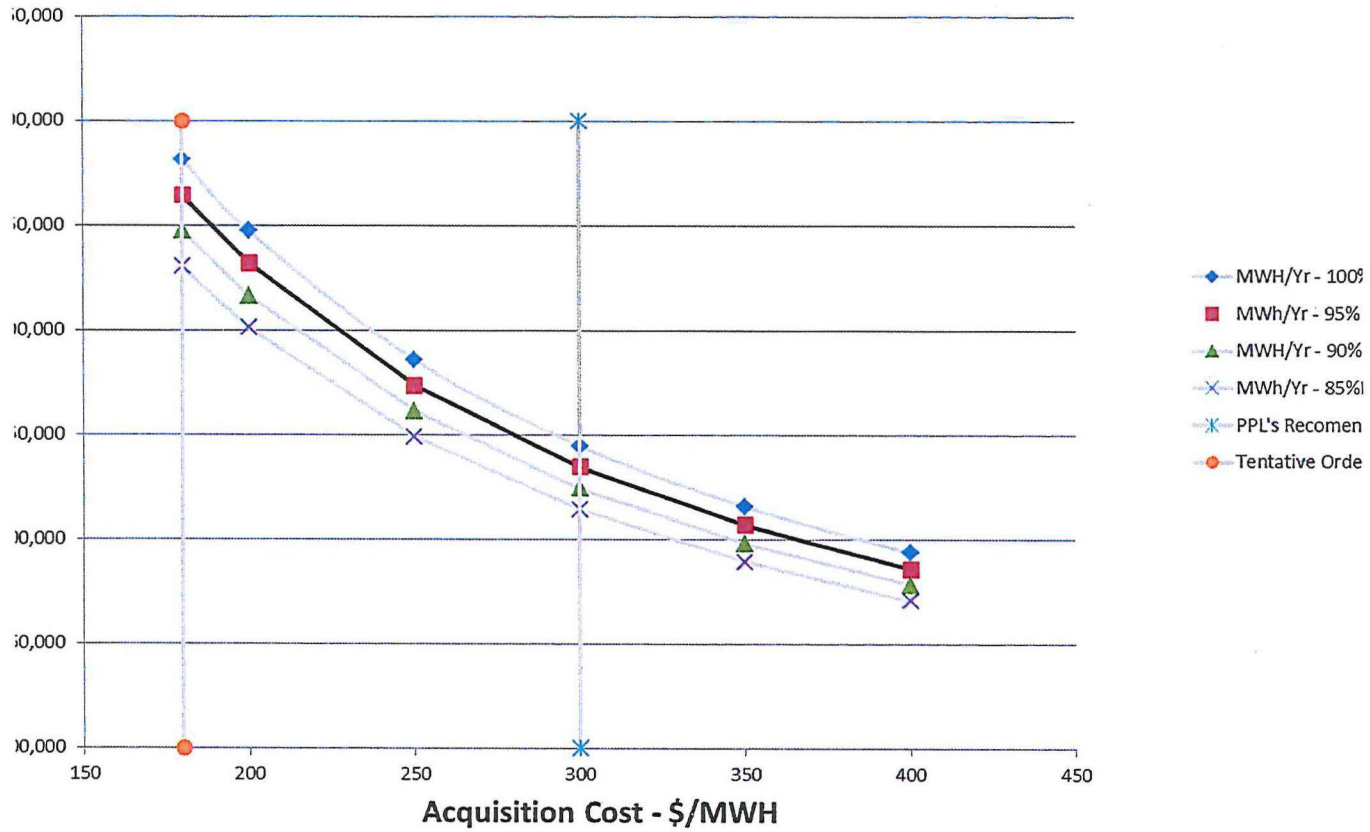
<sup>9</sup> SWE's EE Study, Table ES-3, p. 7.

<sup>10</sup> See also Figure 19 in Exhibit 1 of PPL Electric's Comments on the Tentative Implementation Order.

acquisition cost of \$200/MWh is desirable, the energy consumption reduction target would be approximately 1,450,000 MWh/yr. PPL Electric believes its recommended variable overall consumption reduction target will provide EDCs and their stakeholders with the needed flexibility to design their Phase III EE&C portfolios and will more properly reflect the relationship between program potential and program acquisition cost.

Figure 1

Relationship Between Program Acquisition Cost and Program Potential (Energy Consumption Reduction Targets)



## **C. LOW-INCOME AND GOVERNMENT/NON-PROFIT/EDUCATIONAL COMPLIANCE TARGETS AND PROGRAMS**

### **1. Low-Income Compliance Targets and Direct-Install Programs**

Parties had varying positions on the low-income compliance targets and low-income direct-install requirements. For example, some parties supported the proposed low-income compliance targets (i.e., direct-install and total low-income), while others suggested increasing the targets. Some parties suggested direct-install programs were not comprehensive enough and some parties recommended not counting low-income savings in general residential programs toward the overall low-income target. However, none of those parties provided sufficient analysis to support their recommendations and, in particular, how their recommendations would impact the costs of EE&C Plans or would affect other parts of the portfolio. For instance, increases in funding for the low-income customer sector would provide less funding, a lower program acquisition cost, and lower savings for other customer sectors.

PPL Electric generally supports the benefits of increased energy efficiency for low-income customers in Phase III compared to Phase II. However, in its Comments, PPL Electric demonstrated that it would need significantly more funds than estimated in the SWE's EE Study and, even with the additional funding, that there may not be sufficient market potential to achieve the higher low-income target. PPL Electric Comments, pp. 33-35. Since there is a budget cap on the EE&C portfolio, increasing low-income funding would decrease the funding available for non-low-income customer sectors, thereby reducing the program potential and savings targets for those non-low-income customers. PPL Electric provided documentation for the Commission to estimate the reduction in the overall savings target that is necessary to accommodate higher funding for low-income programs. *See, e.g.*, PPL Electric Comments, pp. 34-48, 62.



Regarding direct-install programs, some parties commented that direct-install programs for low-income were not comprehensive enough and recommended that the Commission define “comprehensive.” PPL Electric disagrees. PPL Electric’s Phase I, Phase II, and LIURP direct-install programs for low-income have been very comprehensive. PPL Electric implements the extensive list of measures for low-income homes shown in Table 1 below,<sup>11</sup> including life-safety and comfort measures for electric and non-electric heated homes. Thus, PPL Electric believes its direct-install low-income programs are very comprehensive.

Commenters also suggested that lighting should not count as a low-income direct install measure. However, PPL Electric believes LED lighting<sup>12</sup> is a meaningful contributor to direct-install programs because it provides real energy and peak demand savings and has a long life. In fact, for low-income homes that have non-electric water heating or non-electric space heating, efficient lighting often provides more electric savings than all other measures combined (efficient refrigerator, smart strips, etc.). Consequently, the Company believes that lighting should count as a low-income direct install measure.

In addition, as shown in Table 1 below and described in PPL Electric’s Comments, the program acquisition cost for the Company’s Act 129 Phase II direct-install low-income program (i.e., WRAP) is approximately \$1.50 per annual kWh saved, but the SWE’s EE Study estimated only \$0.61 for Phase III. PPL Electric Comments, pp. 33-34. To maintain the same mix of comprehensive measures for its low-income direct-install programs in Phase III, PPL Electric would need more than double the low-income funding estimated by the SWE’s EE Study and used by the Commission as the basis for determining the program acquisition cost and the overall

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<sup>11</sup> See Table 1, *infra* p. 15.

<sup>12</sup> PPL Electric implemented LEDs exclusively several years ago and does not offer CFLs.

savings compliance target for PPL Electric. Parties who recommended additional direct-install savings (whether or not it is a compliance target) have not provided sufficient analysis of the cost impact and how it would be offset elsewhere in the EE&C portfolio.

**Table 1- Eligible Direct-Install Measures in PPL Electric's Low-Income WRAP**

Eligible Direct Install Measures	AVG Cost per Home	No Heat & HW (Baseload WRAP Job)	Electric HW (Low Cost WRAP Job)	Electric Heat & HW (Full Cost WRAP Job)	Overall	Comments
Baseload Audit	\$75	Y	Y			
Full Cost Audit	\$140			Y		
Blower Door Test	\$150			Y		Price represents test done pre-weatherization, post weatherization, and during inspection
Appliance Monitoring	\$25	Y	Y	Y		
Water Heating Assessment	\$20	Y	Y	Y		
Mileage	\$30	Y	Y	Y		
Energy Education Session	\$45	Y	Y	Y		
LEDs	\$100-\$200	Y	Y	Y		Price represents a range.
Refrigerator Replacement	\$800	Y	Y	Y		Refrigerator replacement occurs roughly 50% of the time.
Dryer venting	\$85	Y	Y	Y		
Smart Plug	\$55	Y	Y	Y		
Dehumidifier Replacement	\$285	Y	Y	Y		
Window A/C	\$350	Y	Y	Y		
Filter Cleaning/Replacement	\$30	Y	Y	Y		
Coil Cleaning (Fridge)	\$40	Y	Y	Y		Refrigerator coil cleaning occurs roughly 50% of the time.
CO Detector	\$62	Y	Y	Y		
Aerators (Kitchen & Bath)	\$42		Y	Y		Price based on multiple units installed.
Low Flow Showerhead	\$32		Y	Y		
Pipe Insulation	\$15		Y	Y		
Water Heater Replacement (standard)	\$775		Y	Y		Replacement occurs roughly 50% of the time.
Water Heater Replacement (HPWH)	\$2,500		Y	Y		Price includes expansion tank, condensate pump, and plumbing work.
Attic Insulation	\$1,000-\$2,000			Y		Price represents a range.
Basement Insulation	\$600			Y		
Wall Insulation	\$600			Y		
Air Sealing	\$200-\$800			Y		Price represents a range.
Weather Stripping & Door Sweeps	\$80	Y	Y	Y		Done as a "comfort measure" in baseload and low cost jobs.
Caulking	\$25	Y	Y	Y		Done as a "comfort measure" in baseload and low cost jobs.
Foaming Seams & Cracks	\$40			Y		
Repairs	\$250	Y	Y	Y		
Heating System Replacement	\$6,500			Y		Replacement only done in cases where unit is damaged and/or extremely inefficient.
CAZ Testing	\$125	Y	Y	Y		
Thermostat Replacement	\$60			Y		
Municipal Permits	\$80	Y	Y	Y		Needed in certain municipalities for plumbing or electrical work.
Window Replacement (Broken/Missing)	\$400			Y		
Exhaust Fan Replacement	\$300			Y		
Replace Venting (Kitchen/Bath)	\$45			Y		
<b>PPL Avg Cost Per Job (2012-2014)</b>		<b>\$1,122</b>	<b>\$1,779</b>	<b>\$3,738</b>	<b>\$1,755</b>	
<b>Total Jobs (2012-2014)</b>		<b>7,489</b>	<b>1,150</b>	<b>2,379</b>	<b>11,018</b>	
<b>Avg kWh/yr Savings Per Job (2012-2014)</b>		<b>973</b>	<b>1,312</b>	<b>1,924</b>	<b>1,214</b>	
<b>Program Acquisition Cost Per Job \$/annual kWh save (2012-2014)</b>		<b>1.15</b>	<b>1.36</b>	<b>1.94</b>	<b>1.45</b>	

Parties also recommended that savings from low-income customers participating in general residential programs should not count toward the low-income sector compliance target. PPL Electric believes low-income savings from participation in general residential programs should count toward the low-income target as long as those savings are verified by the EDC's independent evaluator using methods reviewed by the SWE. These verified savings should be attributed to the low-income sector because these savings were actually realized by low-income customers.

Finally, as explained in its Comments, PPL Electric recommends changing the low-income direct-install portion from a compliance target to a non-mandatory goal. PPL Electric Comments, pp. 6, 50, 54-55. PPL Electric believes significant uncertainty exists about the accuracy of the market potential estimates used as the basis for compliance targets for low-income, especially when recognizing that the potential must be served by three programs in Pennsylvania (Act 129, Universal Services, and WAP). PPL Electric Comments, pp. 54-55. Further, PPL Electric provided information that shows there may not be enough households in its service territory to meet the Act 129 low-income compliance target, especially the direct-install portion. PPL Electric Comments, pp. 52-54. Importantly, no party provided sufficient analysis to confirm there is enough market potential for PPL Electric to realistically achieve its direct-install low-income savings target. Thus, the Commission should change the low-income direct-install portion from a compliance target to a non-mandatory goal.

## **2. GNI Set-Aside Target**

Parties suggested increasing the GNI set-aside target by various amounts. Some parties suggested increasing the GNI set-aside target from 3.5% to 10%, whereas others suggested increasing it to 33% of the market potential for each EDC's GNI customers. PPL Electric disagrees for several reasons.

First, no party provided sufficient analysis to demonstrate the impact of increasing GNI on program acquisition cost, cost-effectiveness, program acquisition cost, or the likelihood of compliance. Many GNI customers, particularly government and education, have long and complex budget and project/funding approval cycles. These customers also often need higher incentives to shorten their payback cycle and to encourage investment in energy efficiency. Therefore, energy efficiency programs for these customers will likely have higher program acquisition costs than comparable programs for non-GNI customers. Shifting additional funding to the GNI sector will decrease the funding for other sectors, increase the program acquisition cost of the portfolio, and reduce the program potential (and savings target) for the portfolio.

Second, PPL Electric believes that the estimate of GNI market potential for each EDC in the SWE's EE Study is neither statistically valid at the EDC level nor accurate enough to be the basis of a compliance target. In particular, the SWE's EE Study could not specifically identify customers who were actually eligible as GNI, particularly non-profits. As stated in footnote 37 on page 42 of the SWE's EE Study:

While the SWE was able to identify government and institutional buildings in the EDCs['] customer databases, no reliable data was available to identify nonprofit customers since nonprofits cut across multiple building types. Therefore, the SWE team used education and healthcare buildings as a proxy for nonprofit customers since many of these building types are occupied by nonprofits.

Therefore, the proxy utilized by the SWE's EE Study presumably included for-profit healthcare facilities that would not qualify for GNI programs. Thus, the SWE's EE Study's estimate of market potential for GNI is less accurate than for other customer sectors.

### **3. Multi-Family Set-Aside Compliance Targets**

Some parties suggested establishing multi-family set-aside compliance targets for Phase III, including requirements for direct-install and comprehensiveness. PPL Electric agrees that

multi-family EE&C is important but does not believe a multi-family set-aside target is appropriate in Phase III for several reasons.

First, imposing many prescriptive requirements would be overly restrictive. This would constrain the design of EE&C programs and make it difficult to balance often-conflicting priorities and objectives during the design and implementation of EE&C Plans. In effect, if there are a lot of prescriptive requirements (such as the measures and programs that can or cannot be included), it is equivalent to “designing EE&C Plans” and limiting the EDCs’ ability to meet compliance targets within budget.

Second, there are many categories of multi-family buildings, and no “one-size-fits-all” EE&C program could serve them all (or multiple categories). The types of EE&C measures, programs, and delivery mechanisms for these types of multi-family customers should be tailored for each EDC with input from stakeholders during the EE&C Plan design and approval process and without the mandate of specific requirements, such as savings targets, cost targets, comprehensiveness, types of measures, and incentive levels. Some of the multi-family building/ownership/occupant/rate class categories include the following:

- Master-metered, low-income occupants, GNI owned or operated. This is a commercial rate class in the GNI programs, often delivered by a non-residential CSP or a dedicated multi-family CSP with a strategy similar to business owners. Occupant is typically a renter. Building owner/operator makes decisions about energy efficient products for tenant space and common space. High incentives usually are required to induce owner to implement EE&C. EDC often pays the full cost of EE&C measures in each living unit. Owner/operator may not pass electricity savings to tenants through lower rent.

- Master-metered, non-low-income occupants, GNI owned or operated. This is a commercial rate class in the GNI programs, often delivered by a non-residential CSP or a dedicated multi-family CSP with a strategy similar to business owners. Occupant is typically a renter but could include person living in college dorm or senior housing. Building owner/operator makes decisions about energy efficient products for tenant space and common space. High incentives usually are required to induce owner to implement EE&C. Owner/operator may not pass electricity savings to tenants through lower rent.
- Master-metered, non-low-income occupants, Non-GNI owned or operated. This is a commercial rate class in the Small C&I programs, often delivered by a non-residential CSP or a dedicated multi-family CSP with a strategy similar to business owners. Occupant is typically a renter. Building owner/operator makes decisions about energy efficient products for tenant space and common space. High incentives usually are required to induce owner to implement EE&C. Owner/operator may not pass electricity savings to tenants through lower rent.
- Individually metered, low-income occupants, occupant is a renter. This is a residential rate class, low-income program, typically covered by PPL Electric's WRAP Program (i.e., Act 129, LIURP, or WAP). Building owner/operator makes decisions about energy efficient products for tenant space and common space. The decision maker acts more like a business than a residential customer. EDC pays the full cost of EE&C measures.

- Individually metered, low-income occupants, owned by occupant. This is a residential rate class, low-income program, typically covered by PPL Electric's WRAP Program (i.e., Act 129, LIURP, or WAP). Occupant (i.e., owner) makes decisions about energy efficient products for tenant space and common space. The decision maker is a residential customer. EDC pays the full cost of EE&C measures.
- Individually metered, non-low-income occupants, occupant is a renter. This is a residential rate class, residential program. Building owner/operator makes decisions about energy efficient products for tenant space and common space. However, the EDC does not know the identity of the building owner/operator. The decision maker acts more like a business than a residential customer. Very high incentives (probably close to the full incremental cost of the measure) are required to induce owner to implement EE&C because the owner does not pay the electric bill and, therefore, is unlikely to pay for more-efficient products.
- Other. This category could include treatment facilities, prisons, college dormitories, off-campus housing, etc. These are Small or Large C&I programs. Building owner/operator makes decisions about energy efficient products. Standard incentives (25% to 75% of incremental cost) are usually required.

Third, the SWE's EE Study did not assess program potential or the program acquisition costs for multi-family, especially for the categories suggested by parties (e.g., low-income multi-family, master-metered multi-family, individually metered multi-family, GNI-owned multi-



family), the additional categories listed above, or the direct-install measures in multi-family buildings. The SWE's EE Study estimated the base achievable potential for residential multi-family but did not estimate residential program potential or any type of market potential for non-residential multi-family buildings. Therefore, PPL Electric believes there is insufficient information available to determine the basis of multi-family set-aside targets of any type.

Some parties also suggested forming a statewide working group to develop recommendations for multi-family EE&C programs. PPL Electric does not believe such a working group is needed for three reasons. First, as described above, each EDC has unique multi-family building categories that should be addressed as part of its overall EE&C Plan design with EDC-specific stakeholder input. Second, PPL Electric believes multi-family EE&C should not be discussed in isolation from all of the other programs and budgets. The EE&C Plan is a complex, tightly integrated mix of programs, sectors, costs, and other requirements, and changes to one of the inputs (such as multi-family marketing, delivery method, savings, or budget) affect other sectors and programs that may not be represented in the multi-family working group. Third, input from this type of working group would have been much more useful last year to provide input to the SWE's EE Study and Tentative Implementation Order. Now, however, there likely will not be enough time to incorporate recommendations from a working group into PPL Electric's Phase III EE&C Plan and CSP contracts.

#### **D. COMPREHENSIVE PROGRAMS**

Some parties recommended defining "comprehensive" and recommended that EDCs should move away from lighting and implement more-comprehensive measures/programs. PPL Electric disagrees for several reasons.

First, it would likely be very difficult to develop a consensus definition of "comprehensive" that applies to every EDC and every customer's situation. For example, if

lighting comprises a significant portion of a customer's total electric usage, then a "comprehensive" approach may be to replace or upgrade that customer's lighting. For a different customer, another definition of "comprehensive" could be appropriate.

Second, as mentioned previously in Section II.C.3, imposing many prescriptive requirements would be overly restrictive. This would constrain the design of EE&C programs and make it difficult to balance often-conflicting priorities and objectives during the design and implementation of EE&C Plans. In effect, if there are a lot of prescriptive requirements (such as the measures and programs that can or cannot be included), it is equivalent to "designing EE&C Plans" and limiting the EDCs' ability to meet compliance targets within budget.

Third, the level of "comprehensiveness," however defined, significantly impacts the programs, cost of measures, speed to market, program delivery methods, and program acquisition cost of the portfolio. Therefore, EDCs and stakeholders should have the flexibility to account for these impacts when designing the overall portfolio and establishing the compliance targets as previously described.

Fourth, as explained in its Comments, PPL Electric believes that "a kWh/yr saved is a kWh/yr saved" and provides the customer with the same cost savings regardless of the technology or end use as long as the measure have the same life. PPL Electric Comments, p. 31. Therefore, the Commission should not discourage EDCs from focusing on lighting or any other measure type. PPL Electric believes it is important for an EDC to offer a variety of eligible measures (i.e., a "comprehensive" choice of measures) and neither to encourage nor to discourage any particular end use (including lighting) or implementation of multiple measures/end uses in a single project. In the Company's opinion, customers should be free to choose any of those measures.

Finally, the percentage of savings from lighting (i.e., screw-in light bulbs) will naturally decline significantly during Phase III due to changes in the EISA baseline,<sup>13</sup> so the Commission does not need to require EDCs to move away from lighting measures.

**E. CARRYOVER OF PHASE II EXCESS SAVINGS AND UNUSED FUNDS**

Some parties recommended increasing Phase III targets if EDCs are permitted to apply excess Phase II savings toward Phase III compliance. PPL Electric disagrees. Under this recommendation, every excess MWh/yr saved in Phase II would not reduce the amount of Phase III savings (transactions that occur during Phase III) necessary for the EDC to meet its Phase III compliance target. In other words, the excess savings from Phase II would not provide additional savings toward the Phase III compliance target; it merely would increase the Phase III target by the same amount as the excess. In contrast, if EDCs were allowed to carryover excess Phase II savings without the Phase III compliance target increasing by the same amount, EDCs would be further encouraged to continue full implementation of programs and not allow programs to “go dark.” *See* Tentative Implementation Order, p. 70. Thus, PPL Electric supports the Commission’s proposal to carryover Phase II savings to Phase III as outlined in the Tentative Implementation Order. *See* Tentative Implementation Order, pp. 69-70.

Some parties also recommended allowing EDCs to carryover unused Phase II funds (i.e., their Phase II funding cap minus actual Phase II expenditures) into Phase III. PPL Electric disagrees. PPL Electric believes most of its customers view the funding as a true “cap” (i.e., a spending maximum) and, as a result, would prefer a refund of unused funding if PPL Electric meets its compliance target at a lower cost. If the Commission determines it is appropriate to

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<sup>13</sup> As discussed in PPL Electric’s Comments, CFLs become the baseline in 2019 and LEDs will be naturally phased out of EE&C programs sometime between 2016 and 2020 because they will provide almost no savings relative to the baseline CFL. PPL Electric Comments, p. 32.

carryover unused Phase II funding to Phase III, then PPL Electric believes EDCs should have the flexibility to use that funding to provide more-comprehensive (and more-costly) measures/programs within the proposed compliance targets, not be subject to increased Phase III savings targets in proportion to the carryover funding.

### III. CONCLUSION

For the reasons set forth above, PPL Electric Utilities Corporation respectfully requests that the Commission take these Reply Comments into consideration in preparing its Final Implementation Order.

Respectfully submitted,



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Date: May 15, 2015

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