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July 15, 2013

VIA HAND DELIVERY

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

M-2009-2093216

2013 JUL 15 PM 3: 49

Re:

Quarterly Report (Preliminary Annual Report) for the Period March 2013 through May 2013 - Program Year 4, Quarter 4 of PPL Electric Utilities Corporation's Act 129 Plan

Dear Secretary Chiavetta:

Enclosed on behalf of PPL Electric Utilities Corporation ("PPL Electric") is the Quarterly Report (Preliminary Annual Report) for the Period March 2013 through May 2013, Program Year 4, Quarter 4 of PPL Electric's Act 129 Plan.

Respectfully submitted,

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AST/jl Enclosure

cc: Richard F. Spellman (GDS Associates, Inc., Act 129 Statewide Evaluator)

Quarterly Report to the Pennsylvania Public Utility Commission (Preliminary Annual Report)

For the Period

March 2013 through May 2013

Program Year 4, Quarter 4

For Pennsylvania Act 129 of 2008
Energy Efficiency and Conservation Plan

Prepared by The Cadmus Group, Inc.

For

PPL Electric

July 15, 2013

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Table of Contents

TABLE	E OF CONTENTS	
ACRO	NYMS	
	OVERVIEW OF PORTFOLIO	
1.1	SUMMARY OF ACHIEVEMENTS	<u>.</u>
1.2	PROGRAM UPDATES AND FINDINGS	11
1.3	EVALUATION UPDATES AND FINDINGS	12
2 9	SUMMARY OF ENERGY IMPACTS BY PROGRAM	14
3 9	SUMMARY OF DEMAND IMPACTS BY PROGRAM	17
4 9	SUMMARY OF FINANCES	26
4.1	PORTFOLIO LEVEL EXPENDITURES	26
4.2	Program Level Expenditures	28
APPE	NDIX A: PY4 EVALUATION ACTIVITIES	40
Рнс	DNE SURVEY ACTIVITIES	41

Acronyms

C&I Commercial and Industrial CFL Compact Fluorescent Lamp

CPITD Cumulative Program/Portfolio Inception to Date

CPITD-Q Cumulative Program/Portfolio Inception through Current Quarter

EDC Electric Distribution Company
EE&C Energy Efficiency and Conservation

EM&V Evaluation, Measurement, and Verification HVAC Heating, Ventilating, and Air Conditioning

IQ Incremental Quarter

kWh Kilowatt-hour MW Megawatt MWh Megawatt-hour

PUC Public Utility Commission

PY1 Program Year 2009
PY2 Program Year 2010
PY3 Program Year 2011

PYTD Program/Portfolio Year to Date

PY4 Program Year 2012 SWE Statewide Evaluator TRC Total Resource Cost

TRM Technical Reference Manual

1 Overview of Portfolio

Pennsylvania Act 129 of 2008 signed on October 15, 2008, mandated energy savings and demand reduction goals for the largest electric distribution companies (EDCs) in Pennsylvania. Each EDC submitted energy efficiency and conservation (EE&C) plans—which were approved by the Pennsylvania Public Utility Commission (PUC)—pursuant to these goals. This report documents the progress and effectiveness of the EE&C accomplishments for PPL Electric in the fourth quarter of Program Year 4 (PY4), defined as March 1, 2013 through May 31, 2013, as well as the cumulative accomplishments of the programs since inception. Due to rebate application processing time, PPL Electric will continue to report savings through August for measures installed before May 31, 2013. Also, costs will continue to accrue for Phase 1 rebates through September 2013 and for EM&V activities through December 2013.

The Cadmus Group, Inc. is evaluating the programs, which includes measurement and verification of the savings. The final PY4 verified savings, cumulative verified savings (for Phase 1 PY1 – PY4), and nearly final costs (all costs except for the last few months of EM&V) will be reported in the annual report to be filed November 15, 2013.

In PY4, PPL Electric's portfolio included 12 active programs:

- 1. The Appliance Recycling Program (ARP) offers customers incentives to have their outdated refrigerators, freezers, and air conditioners recycled.
- 2. The Efficient Equipment Incentive Program offers prescriptive rebates to residential and nonresidential customers.
- 3. The Custom Incentive Program offers custom incentives to nonresidential customers per kilowatt hour (kWh) saved during the first year of participation.
- 4. The Residential Lighting Program (formerly Compact Fluorescent Lighting [CFL] Campaign), an upstream program, offers incentives to manufacturers to buy down CFL costs; manufacturers and retailers then lower CFL costs to consumers.
- 5. The Renewable Energy Program encourages PPL Electric customers to install a solar photovoltaic array or ground-source heat pump through financial incentives, reducing upfront system costs. The program was closed to new participants. (The program closed to new applicants in PY3 but some projects completed in PY4.)
- The Act 129 Winter Relief Assistance Program (WRAP) provides weatherization to low-income
 customers, with Act 129 funding used to expand the existing Low-Income Usage Reduction
 Program.
- 7. The E-Power Wise Program provides low-income customers with information about energy use, along with home energy kits.
- 8. The HVAC Tune-Up Program offers services to all commercial and small industrial customers with existing split or packaged HVAC rooftop units.
- 9. The Residential Energy Assessment & Weatherization Program provides residential customers with information about their homes' energy performance, and offers recommendations regarding the most effective, highest-priority, energy-efficiency actions they can take to save energy in their homes.
- 10. The Energy Efficiency Behavior & Education Program encourages customers to take energy-savings actions, providing periodic reports with energy-saving tips and usage comparisons to other peer customers.

- 11. The Direct Load Control Program achieved demand reductions in PY4 from June 1 through September 30, 2012, the only period when peak load reductions applied under Act 129.
- 12. The Load Curtailment Program achieved demand reductions in PY4 from June 1 through September 30, 2012, the only period when peak load reductions applied under Act 129.

1.1 Summary of Achievements

PPL Electric achieved 127% of the May 31, 2013 energy savings compliance target, based on cumulative program inception to date (CPITD) reported gross energy savings¹, and 124% of the energy savings compliance target, based on CPITD gross energy savings achieved through Quarter 4 (CPITD-Q)², as shown in Figure 1-1. These savings are for energy efficiency transactions reported as of May 31, 2013. As noted earlier, PPL Electric will continue to report energy savings through August for measures installed before May 31, 2013 and that information will be in the annual report to be filed November 15, 2013.

In addition, the EM&V CSP conducted a CFL cross-sector sales study to estimate the energy and demand reductions from program-CFLs discounted through the Residential Lighting program and installed in small businesses. The results of this study will be used to calculate the portion of kWh/yr and kW savings that should be classified as commercial sector kWh and kW savings (not residential program savings). Since non-residential CFLs have greater energy savings (higher hours of use) and greater peak load savings than residential CFLs, this change is expected to increase energy savings and peak load reductions compared to the results in this Preliminary Annual Report. Results will be included in the final annual report.

1.1.1 Energy Impacts

¹ CPITD Reported Gross Savings = CPITD Reported Gross Savings through PY3 + PYTD Reported Gross Savings. All savings reported as CPITD reported gross savings are computed this way.

² CPITD-Q Gross Savings = CPITD Verified Gross Savings through PY3 + PYTD Reported Gross Savings. All savings reported as CPITD-Q gross savings are computed this way. CPITD-Q savings provide the best available estimate of savings achieved through the current quarter. CPITD Verified Gross Savings will be reported in the annual report.

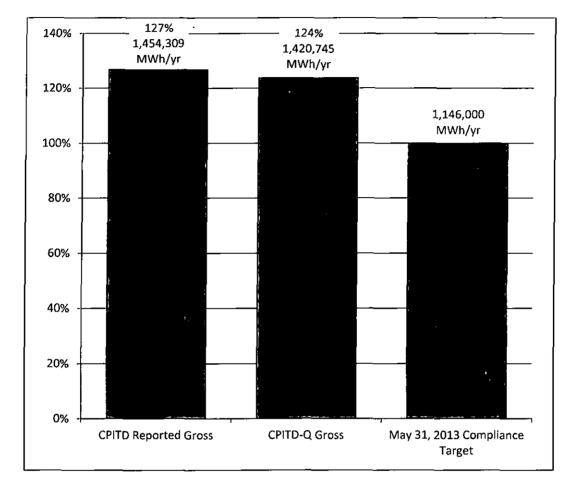


Figure 1-1: Cumulative Portfolio Inception to Date (CPITD) Energy Impacts

1.1.2 Demand Impacts

PPL Electric achieved 103% to 108% (depending on which method is used to determine Load Curtailment savings as explained below) of the May 31, 2013 demand reduction compliance target during the top 100 Hours of 2012 (based only on installations in place and generating demand reductions during those hours). These are the demand reductions that are the basis for compliance with the demand reduction target. These demand reductions are for transactions reported as of May 31, 2013. The demand reductions from demand response programs (Load Curtailment and Direct Load Control) and from energy efficiency measures through PY3 have been verified. Demand reductions from PY4 energy efficiency measures will be verified by the EM&V CSP before November 2013. In addition, the EM&V CSP conducted a CFL cross-sector sales study to estimate the energy and demand reductions from program- CFLs discounted through the Residential Lighting program and installed in small businesses. The results of this study will be used to calculate the portion of kWh/yr and kW savings that should be classified as commercial sector kWh and kW savings (not residential program savings). Since non-residential CFLs have greater energy savings (higher hours of use) and greater peak load savings than residential CFLs, this change is expected to increase peak load reductions compared to the results

in this Preliminary Annual Report. Results will be included in the final annual report.³ Also as noted earlier, PPL Electric will continue to report demand reductions through August for energy efficiency measures installed before May 31, 2013 and that information will be in the annual report to be filed November 15, 2013.

PPL believes there are multiple ways to interpret the 2012 TRM when determining peak load reductions for the Load Curtailment Program and has shown both methods below. Figures 1-2, 3-1, 3-2, 3-3, 3-4, and Tables 3-1 and Table 3-2 shows the results using the analytic method prescribed by the PUC/SWE, as well as results using the analytic method determined by PPL (results using PPL's method are labeled "Load Curtailment (Alt.)".

Section 4.0 of the 2012 TRM states:

"Hourly peak load reductions from demand response (DR) measures for Direct Load Control (DLC) and Load Curtailment (LC) will be determined in accordance with PJM measurement & verification protocols, related business rules, protocol approval processes and settlement clearing due diligence practices that will be in place during the 2012 summer period (June 1 - September 30, 2012), as verified by the EDC and reviewed by both the EDCs' independent evaluators and the SWE."

PPL followed PJM measurement and verification protocols for the Act 129 Load Curtailment Program but believes it is not possible to follow PJM's "settlement clearing due diligence practices" for the Act 129 Load Curtailment Program. PPL used PJM measurement and verification protocols (i.e. the difference between the customer's actual load and their baseline load) verbatim to determine the magnitude of the load change during each billing interval. In some of those intervals, the customer's load increased relative to the baseline, when calculated in accordance with PJM M&V protocols. In accordance with the methodology specified in PPL's Load Curtailment CSP contract, those billing intervals with a load increase are set to zero (i.e. the Load Curtailment CSP and the customer did not participate in Act 129 Load Curtailment and were not paid for load reductions in that billing interval) for settlement purposes. The PUC/SWE believe that load increases in a billing interval should offset load reductions in other billing intervals during an event day, thereby decreasing Act 129 load peak load reductions.

PPL believes its method (zeroing out load increases during billing intervals) to determine Load Curtailment savings is the correct approach for the following reasons:

 PPL's Act 129 Load Curtailment Program followed the PJM protocols for determining the magnitude of the load change (difference between the customer's baseline load and their actual load).

³ The Residential Lighting Program offered discounted CFLs in retail outlets. All savings and program costs are currently attributed to the residential sector. However, small businesses may purchase the CFLs. To estimate the non-residential market share of discounted bulbs purchased through the program, the EM&V CSP conducted a CFL cross-sector sales study. Results will be used to update reported kWh and kW savings and associated costs to correctly attribute them to the residential and small commercial sectors. Studies for other utility programs have shown discounted bulb sales to nonresidential purchasers range from 3% to 11% of sales.

- PPL believes it is impossible for the Act 129 Load Curtailment Program to follow all of the PJM
 settlement protocols/procedures. Therefore, PPL used settlement (payment) procedures
 described in its PUC-approved EE&C Plan and Load Curtailment CSP contract. Here are some
 examples of PJM settlement protocols/procedures that PPL believes are impossible to follow for
 Act 129:
 - i. PJM requires a day-ahead binding DR bid that does not fit PPL's Act 129 program requirements, does not comply with PPL's approved EE&C Plan, and does not comply with PPL's approved CSP contract. If PPL would have required a binding, day-ahead commitment from customers for 50 100 hours in its Load Curtailment Program, no CSP would have bid, or the price would have been double or triple, and it is likely that an insufficient number of customers (MWs) would have enrolled.
 - ii. PJM imposes financial penalties if the CSP/customer does not meet its day-ahead DR bid (if there is a load increase in a meter interval). That does not fit the PPL's Act 129 program requirements, does not comply with PPL's approved EE&C Plan, and does not comply with PPL's approved CSP contract. If PPL imposed penalties when the CSP/customer did not meet its binding DR (had a load increase in a meter interval), no CSP would have bid, or the price would have been double or triple, and it is likely that an insufficient number of customers (MWs) would have enrolled.
 - iii. PJM's DR payment is based on PJM's locational marginal price (LMP). PPL's Act 129 DR program is based on a competitively bid firm price.
 - iv. If the actual load reduction, compared to the desired load reduction (committed dayahead), is outside the deviation levels, PJM assesses balancing operating reserve charges. The Act 129 Load Curtailment does not have a similar charge.
 - v. PPL's contract with the Load Curtailment CSP clearly states that settlement is based on 5-minute meter intervals (hourly if the customer does not have a meter capable of 5-minute data) and any load increases (negative reductions) during a billing interval are treated as "non-participation" in that billing interval and are set to zero. In other words, if the customer does not achieve a load reduction in the 5-minute settlement period, they do not get paid, and PPL claims a zero load reduction. The same rationale would apply if the settlement period were 1 hour. If a customer achieved a negative reduction (i.e. a load increase) in an hour, the customer did not achieve a reduction, the customer would not get paid, and PPL would claim zero MW for that hour. Therefore, it does not matter if the settlement period is 5 minutes or 1 hour; a load increase in that settlement period is treated as zero (i.e. non-participation in that hour). Similarly, if PPL calls for a load reduction and the customer chooses not to participant and their load is greater than their baseline, the reduction would be treated as 0 MW.

Including demand reductions occurring in all hours (i.e. not limited to the top 100 hours), PPL Electric achieved 126% percent of the demand reduction compliance target based on CPITD gross demand reduction achieved through Quarter 4 (CPITD-Q), as shown in Figure 1-2. These CPITD and CPITD-Q

values represent the total demand reduction in all hours and are not the basis for compliance with the demand reduction target. The values in Figure 1-2 include the gross-up for line loss.⁴

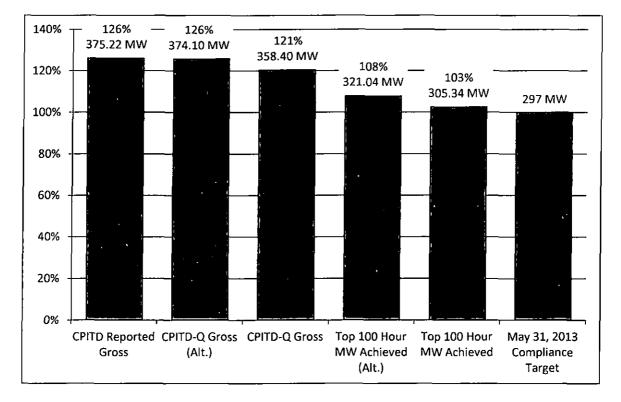


Figure 1-2: CPITD Portfolio Demand Reduction⁵

1.1.3 Low Income Sector

Act 129 mandates that the number of measures offered to the low-income sector be proportionate to the low-income sector's share of total energy usage.⁶ There are 54 measures available to the low-income sector's share of total energy usage.⁶ There are 54 measures available to the low-income sector's share of total energy usage.⁶ There are 54 measures available to the low-income sector's share of total energy usage.⁶ There are 54 measures available to the low-income sector's share of total energy usage.⁶ There are 54 measures available to the low-income sector's share of total energy usage.⁶ There are 54 measures available to the low-income sector's share of total energy usage.⁶ There are 54 measures available to the low-income sector's share of total energy usage.⁶ There are 54 measures available to the low-income sector's share of total energy usage.⁶ There are 54 measures available to the low-income sector's share of total energy usage.⁶ There are 54 measures available to the low-income sector's share of total energy usage.⁶ There are 54 measures available to the low-income sector's share of total energy usage.⁶ There are 54 measures available to the low-income sector's share of total energy usage.⁶ There are 54 measures available to the low-income sector's share of total energy usage.⁶ There are 54 measures available to the low-income sector's share of total energy usage.⁶ There are 54 measures available to the low-income sector's share of the low-income sector'

⁴ The reported gross demand reductions from PPL Electric's EEMIS reporting database are determined based at the customer meter level, while the demand reduction compliance target was determined at the system or generation level. Therefore, a gross-up was applied (1.041205% for Large C&I, and 1.0833% for all other sectors) to reported gross demand reductions to reflect transmission and distribution (T&D) losses for useful comparison to the target.

⁵ As noted in the Demand Impacts section, there are two bars for demand reductions. The bar marked "Top 100 hour MW Achieved" utilizes the analytic method prescribed by the PUC and SWE for the Load Curtailment program. The bar marked "To 100 hour MW Achieved (Alt.)" and "CPIT-Q Gross (Alt.)"utilizes PPL's analytic method for the Load Curtailment program.

income sector. This includes measures that at least one person installed. There are 146 measures available to all customer sectors. The measures offered to the low-income sector through the two low-income specific programs (WRAP and E-Power Wise) comprise 37% of the total measures offered. As required by Act 129, this exceeds 8.64%, the fraction of the electric consumption of the utility's low-income households divided by the total electricity consumption in the PPL Electric territory. These values are shown in **Table 1-1**.

Low-Income SectorAll SectorsPercent Low-IncomeNumber of Measures Offered5414636.99%Electric Consumption (MWh/yr)3,376,60639,090,1578.64%

Table 1-1: Low-Income Sector Compliance Metrics

The CPITD reported gross energy savings for low-income sector programs (excluding low-income participation in non-low-income programs) is 23,727 MWh/yr—1.63% of CPITD total portfolio reported gross energy savings. Low-income savings from participation in general residential programs will be determined as part of the PY4 impact evaluation, with results included in the PY4 Final Annual Report, to be filed on November 15, 2013.⁷ The costs associated with low-income energy savings from general residential programs will also be determined as part of the PY4 annual impact evaluation and included in the PY4 Final Annual Report.⁸

1.1.4 Government, Nonprofit and Institutional Sector

PPL Electric achieved 163% of the May 31, 2013, energy reduction compliance target for government, nonprofit and institutional sector, based on CPITD reported gross energy savings, and 158% of the target based on CPITD gross energy savings achieved through Quarter 49, as shown in Figure 1-3. These savings are for energy efficiency transactions reported as of May 31, 2013. As noted earlier, PPL Electric

⁶ Act 129 includes a provision requiring EDCs to offer a number of energy conservation measures to low-income households that are "proportionate to those households' share of the total energy usage in the service territory." 66 Pa.C.S. §2806.1(b)(i)(G). The legislation contains no provisions regarding targets for participation, or for energy or demand savings.

⁷ SWE Guidance Memo 017 states that, "[t]he estimated savings from low-income programs and from participation in non-low-income programs shall be reported in Section 1.1 ("Summary of Progress Towards Compliance Targets") of each EDC's annual report."

⁸ SWE Guidance Memo 017 states that, "in PY4 EDCs shall footnote the estimated costs of low-income savings from non-low-income programs in Section 1.1 of the annual reports."

⁹ CPITD-Q Gross Savings = CPITD Verified Gross Savings through PY3 + PYTD Reported Gross Savings. All savings reported as CPITD-Q gross savings are computed this way. CPITD-Q savings provide the best available estimate of savings achieved through the current quarter. CPITD Verified Gross Savings will be reported in the annual report.

will continue to report energy savings through August for measures installed before May 31, 2013 and that information will be in the annual report to be filed November 15, 2013.

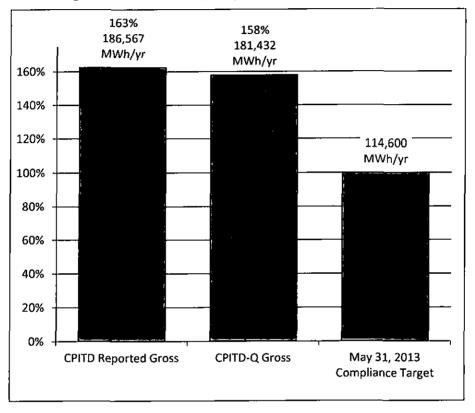


Figure 1-3: Government, Nonprofit, and Institutional Sectors

1.2 Program Updates and Findings

This section summarizes changes occurring within each program during PY4 Q4:

- ARP: No significant changes occurred in PY4 Q4.
- Residential Lighting Program: Lighting promotions with participating retailers have been ramping down during PY4, however, no significant change occurred during PY4 Q4.
- Custom Incentive Program: No significant change occurred during PY4 Q4.
- Direct Load Control Program: Events were called during PY4 Q1.
- Energy Efficiency Behavior & Education Program: No significant change occurred during PY4
 Q4.
- Efficient Equipment Incentive Program (non-lighting measures): No significant change occurred during PY4 Q4.
- Efficient Equipment Incentive Program (commercial and industrial lighting [C&I]): No significant change occurred during PY4 Q4
- E-Power Wise Program: No significant change occurred during PY4 Q4.
- Load Curtailment Program: Events were called during PY4 Q1.

- WRAP: No significant change occurred during PY4 Q4.
- Renewable Energy Program: This program closed in PY3. The program had no updates to report for PY4 Q4.
- HVAC Tune-Up Program: No significant change occurred during PY4 Q4.
- Residential Energy Assessment & Weatherization Program: No significant change occurred during PY4 Q4.

1.3 Evaluation Updates and Findings

1.3.1 PY4 Sampling Plan

PY4 sampling plans were developed early in PY4 for each program, with sampling plans guiding sample selection for each quarter. The sampling plan reflects the SWE's sampling guidelines. The guidelines were based on the five, following primary instructions:

- 1. 90/10 confidence and precision (C/P) for the Residential Portfolio.
- 2. 90/10 C/P for the Nonresidential Portfolio.
- 3. 85/15 C/P for each program, within each portfolio.
- 4. The government, nonprofit, and institutional sector, and low-income sector populations should be treated as independent program populations (and sampled at 85/15 C/P) if their contributions to the respective sector-level portfolios are more than 20%.
- 5. All C/P levels are minimums, with EDC evaluators encouraged to exceed minimum requirements.

Evaluation activities and measure verifications included (as appropriate for each program) record reviews (desk audits), participant surveys, site visits, and metering. Records reviews also played a primary role in quality assurance and quality control (QA/QC). Site visits, by their nature, included records reviews. Where metering was conducted, the sample was nested within site visits.

1.3.2 Program-Specific Evaluation Activities

This section summarizes evaluation activities occurring within each program during PY4 Q4. Results of all evaluation activities will be included in the final annual report in November 2013:

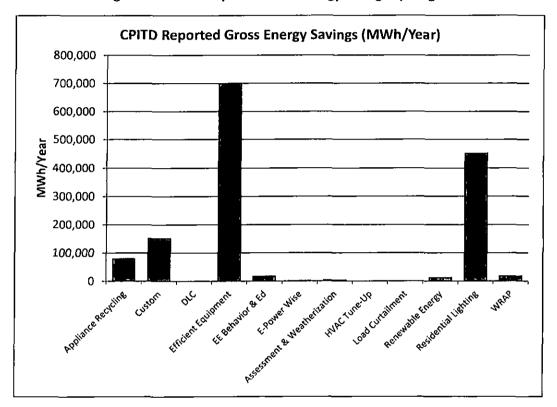
- ARP: The EM&V CSP will verify the number of records in the Energy Efficiency Management Information System (EEMIS) for PY4 Q4 by reconciling EEMIS data with the Q4 program database from JACO (the program CSP).
- Residential Lighting Program: The EM&V CSP will review a census of Q4 records exported from EEMIS and include any adjustments in the PY4 Annual Report. The EM&V CSP analyzed the customer survey results and reported the findings to PPL; a summary of these findings will be included in the PY4 Annual Report. The EM&V CSP also fielded a commercial-customer survey to estimate cross-sector sales. Survey data will be analyzed and results will be reported in the PY4 Annual Report.
- Custom Incentive Program: Ongoing evaluation of large custom projects continued in PY4 Q4.
- Direct Load Control Program: No EM&V activities occurred in Q4.

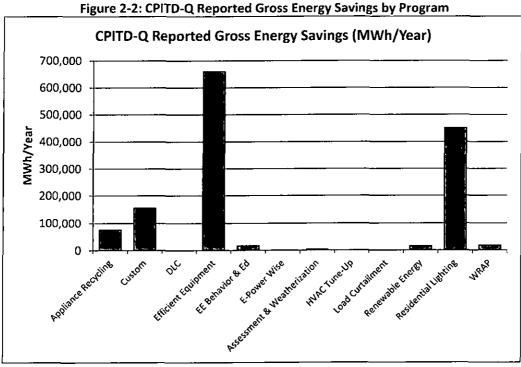
- Energy Efficiency Behavior & Education Program: No EM&V activities occurred in Q4. Energy and demand savings analyses and survey data analyses will be conducted in PY5 Q1 and reported in the final annual report.
- Efficient Equipment Incentive Program (non-lighting measures): The EM&V CSP conducted a records review and site visits for projects rebated in PY4 Q4.
- Efficient Equipment Incentive Program (C&I lighting): During PY4 Q4, the EM&V CSP conducted site visits for the PY4 Q3 sample. Results from the Q3 analysis were completed during Q4. The Q4 data collection, analysis and final determination of realization rates will be available for the final report in November 2013.
- E-Power Wise Program: The EM&V CSP conducted a review of EEMIS records from PY4 Q3.
- Load Curtailment Program: No EM&V activities occurred in Q4.
- WRAP: During PY4 Q4, the EM&V CSP conducted a QAQC review of the records submitted to the WRAP program and to EEMIS.
- Renewable Energy Program: This program closed in PY3. No EM&V activities occurred in Q4.
- HVAC Tune-Up Program: No EM&V activities occurred in Q4.
- Residential Energy Assessment & Weatherization Program: During PY4 Q4, the EM&V CSP analyzed responses to the phone survey data, calculated updated in-service rates for CFLs and faucet aerators.

2 Summary of Energy Impacts by Program

A summary of the reported energy savings by program is presented in Figure 2-1.

Figure 2-1: CPITD Reported Gross Energy Savings by Program





A summary of energy impacts by program through the PY4 Q4 is presented in Table 2-1. These savings are for energy efficiency transactions reported as of May 31, 2013. As noted earlier, PPL Electric will continue to report energy savings through August for measures installed before May 31, 2013 and that information will be in the annual report to be filed November 15, 2013.

Table 2-1: EDC Reported Participation and Gross Energy Savings by Program

·		Participan	ts	Repo	rted Gross	Impact (MW	h/Year)	Preliminary Realization
Program	IQ	PYTD	CPITD	ΙQ	PYTD	CPITD	CPITD-Q	Rate (1)
Appliance Recycling	1,765	15,215	45,986	2,664	25,193	81,459	78,258	84.4%
Custom Incentive (2)	28	81	439	10,533	41,529	153,998	157,887	103.5%
Direct Load Control (3)	0	9,431	44,391	0	0	0	0	NA
Efficient Equipment Incentive (lighting and non-lighting measures)	5,010	22,414	206,400	63,955	232,896	700,866	662,741	95.3%
Energy Efficiency Behavior & Education ⁽⁴⁾	101,936	101,936	253,404	0	19,545	19,545	19,545	100.6%
E-Power Wise	263	2,440	9,183	157	1,454	3,630	3,896	93.7%
Home Energy Assessment & Weatherization	579	1,822	4,885	1,028	3,146	6,120	5,982	100.0%
HVAC Tune-Up	0	274	1,707	0	364	1,649	1,649	100.0%
Load Curtailment (3)	0	201	299	0	0	0	0	NA
Renewable Energy	0	116	1,946	0	860	14,705	17,818	80.9%
Residential Lighting (5)	66,329	338,158	1,427,462	23,050	116,683	452,241	452,323	100.1%
WRAP	625	3,643	13,292	1,203	6,911	20,097	20,646	97.9%
TOTAL PORTFOLIO	176,535	495,731	2,009,394	102,590	448,581	1,454,309	1,420,745	97.8%

- 1. Preliminary Realization Rates have been carried over from the PY3 analysis. This value will be used as a placeholder until PY4 evaluation activities have been completed. Final PY4 Realization Rates will be included in the PY4 Final Annual Report, to be filed on November 15, 2013. Realization rates are not applicable for the Direct Load Control or the Load Curtailment programs; there are no energy savings for these programs.
- 2. The cumulative number of Custom Incentive Program participants includes: those still in the technical study phase; those in progress; and those cancelled. Participants in these three categories do not contribute to achieved savings. Excluding these three categories provides the total number of completed projects; as of PY4 Q4 there have been 248 total cumulative participants that meet these criteria.
- 3. The demand reduction programs do not have any associated energy savings. However, the participants for these programs are reported here. The participation numbers shown are based on the date each unique account number is uploaded into EEMIS. Each unique account number is counted in the period it first appears in the EEMIS extract. Therefore, the counts do not reflect customers who opted out after enrollment. For the Direct Load Control program, since counts reflect unique account numbers, participants with two metered air conditioning units are only counted once. The final reports will provide additional detail about the number of participating metered accounts, air conditioning units, and the number of opt-outs (partial participants).
- 4. Participation for the Energy Efficiency Behavior & Education program is considered to be cumulative across program years. However, since the savings associated with this program have a one year measure life, the energy savings are not cumulative, and therefore PYTD energy savings are equal to CPITD energy savings. An actual participant count (after accounting for drop-outs) will be confirmed in the annual report.
- 5. As an upstream program, exact participation in the Residential Lighting Program is not known. The EM&V CSP estimated the number of program participants by dividing the total number of bulbs discounted by a CFL-per-participant value derived from the customer telephone survey data (7.0 bulbs in PY1, 6.7 bulbs in PY2, 6.04 in PY3 and 7.80 in PY4). The CFL count reflects the total number of program bulbs, including discounted bulbs sold at retail stores and bulbs distributed at give-away events.

3 Summary of Demand Impacts by Program

A summary of the reported demand reduction¹⁰ attributable to the May 31st, 2013 compliance target (occurring within the Top 100 Hours) by program is presented in Figure 3-1.

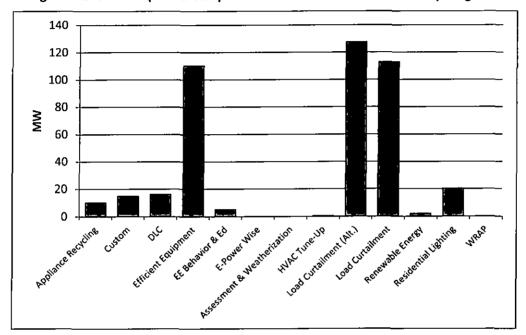


Figure 3-1: CPITD Reported Compliance Related Demand Reduction by Program¹¹

¹⁰ The CPITD MW values shown here include the gross-up to reflect T&D losses for PY1 and PY2 only. Starting in PY3, the EM&V CSP changed the methodology and began applying the gross-up as an ex ante adjustment. The change was made to match data reported in PPL Electric's EEMIS tracking database.

¹¹ As noted in the Demand Impacts section, there are two bars for demand reductions. The bar marked "Load Curtailment" utilizes the analytic method prescribed by the PUC and SWE for the Load Curtailment program. The bar marked "Load Curtailment (Alt)" utilizes PPL's analytic method for this demand reduction program.

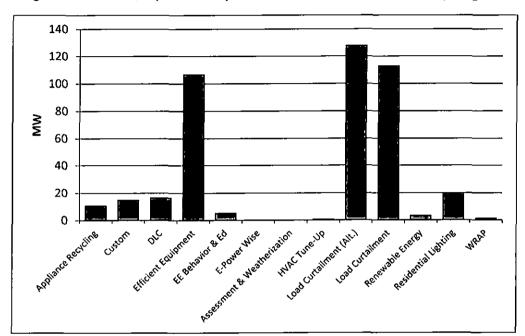


Figure 3-2: CPITD-Q Reported Compliance Related Demand Reduction by Program¹²

¹² The figure includes results as interpreted by the PUC/SWE, as well as results as interpreted by PPL labeled as "Load Curtailment (Alt.)". Refer to discussion under 'Demand Impacts' on page 6 for more information.

A summary of demand reduction impacts attributable to the May 31st, 2013 compliance target (occurring within the Top 100 Hours) by program through the PY4 Q4 is presented in Table 3-1. These demand reductions are for transactions reported as of May 31, 2013. The demand reductions from demand response programs (Load Curtailment and Direct Load Control) and from energy efficiency measures through PY3 have been verified. Demand reductions from PY4 energy efficiency measures will be verified by the EM&V CSP before November 2013. In addition, the EM&V CSP conducted a CFL crosssector sales study to estimate the energy and demand reductions from program- CFLs discounted through the Residential Lighting program and installed in small businesses. The results of this study will be used to calculate the portion of kWh and kW savings attributable to the program that should be classified as commercial sector kWh and kW savings (not residential program savings). Since nonresidential CFLs have greater energy savings (higher hours of use) and greater peak load savings than residential CFLs, this change is expected to increase peak load reductions compared to the results in this Preliminary Annual Report. Results will be included in the final annual report. Results will be included in the final annual report. Also as noted earlier, PPL Electric will continue to report demand reductions through August for energy efficiency measures installed before May 31, 2013 and that information will be in the annual report to be filed November 15, 2013.

As discussed in Section 1.1.2 (Demand Impacts), PPL believes there are multiple ways to interpret the 2012 TRM when determining peak load reductions for the Load Curtailment Program and has shown results of both methods in Table 3-1.

Table 3-1: Participation and Reported Compliance Gross Demand Reduction by Program during the top 100 hours

		Participan	ts	Repo		Demand R	eduction	Preliminary
Program	IQ	PYTD	CPITD	IQ	PYTD	CPITD ⁽³⁾	CPITD- Q ⁽⁴⁾	Realization Rate ⁽²⁾
Appliance Recycling	О	3,323	34,094	-	0.62	10.51	11.18	84.4%
Custom Incentive (5)	0	1	359	-	0.98	15.52	15.14	98.8%
Direct Load Control (6)	0	9,431	44,391	-	16.83	16.83	16.83	100.04%
Efficient Equipment Incentive (lighting and non-lighting measures)	458	9,680	193,666	0.65	14.41	110.89	107.30	92.0%
Energy Efficiency Behavior & Education (7)	101,936	101,936	253,404	5.60	5.60	5.60	5.60	Not available
E-Power Wise	0	491	7,234	-	0.02	0.55	0.52	93.7%
Home Energy Assessment & Weatherization	24	1,039	4,102	0.00	0.13	0.37	0.40	100.2%
HVAC Tune-Up	О	122	1,555	-	0.00	1.08	1.13	100.0%
Load Curtailment (8)	0	201	299	-	113.30	113.30	113.30	88.4%
Load Curtailment (Alt.) (9)	0	201	299	-	128.12	128.12	128.12	100.1%
Renewable Energy	0	103	1,933		0.23	2.53	3.84	98.0%
Residential Lighting (10)	0	71,641	1,160,945	-	1.58	20,77	20.39	87.2%
WRAP	109	1,813	11,462	0.00	0.00	0.77	1.70	108.0%
TOTAL PORTFOLIO ^(8, 2,1)	102,527	199,781	1,713,444	6.25	153.71	298.71	297.33	·
TOTAL PORTFOLIO (Alt.) (9, 11)	102,527	199,781	1,713,444	6.25	168.53	313.53	312.32	

- 1. Reported gross demand reductions here do not include the gross-up to reflect T&D losses which are included in Figure 1-2 of this Quarterly Report. The gross-up will be included as an ex ante adjustment in the Final Annual Report, to be filed November 15, 2013.
- 2. Preliminary Realization Rates have been carried over from the PY3 analysis, where available. These values will be used as placeholders until PY4 evaluation activities have been completed. Final PY4 Realization Rates will be included in the PY4 Final Annual Report, to be filed on November 15, 2013. No PY3 realization rate is available as a placeholder for the Behavior and Education program. The final realization rate is reported for the PY4 Direct Load Control program. The PY4 realization rates for each of the two methods used to determine demand reductions for the Load Curtailment program are reported.
- 3. The CPITD MW values include the gross-up to reflect T&D losses for PY1 and PY2 only. Starting in PY3, the EM&V CSP changed the methodology and began applying the gross-up as an *ex ante* adjustment. The change was made to match data reported in PPL Electric's EEMIS tracking database.
- 4. The CPITD-Q MW values consist of *ex post* verified savings for PY1 PY3, and therefore do include the gross-up for T&D losses. The PY4 reported gross demand reduction values included in the CPITD-Q value do not include the gross-up.

- 5. The cumulative number of Custom Incentive Program participants includes: those still in the technical study phase; those in progress; and those cancelled. Participants in these three-categories do not contribute to achieve savings. Excluding these three categories provides the total number of completed projects; as of PY4 Q4 there have been 248 total cumulative participants that meet these criteria.
- 6. The participation numbers shown are based on the date each unique account number is uploaded into EEMIS. Each unique account number is counted in the period it first appears in the EEMIS extract. Therefore, the counts do not reflect customers who opted out after enrollment. For the Direct Load Control program, since counts reflect unique account numbers, participants with two metered air conditioning units are only counted once. The final reports will provide additional detail about the number of participating metered accounts, air conditioning units, and the number of opt-outs (partial participants).
- 7. Participation for the Energy Efficiency Behavior & Education program is considered to be cumulative across program years. However, since the savings associated with this program have a one year measure life, the energy savings are not cumulative, and therefore PYTD energy savings are equal to CPITD energy savings.
- 8. Uses PUC/SWE methodology to determine Reported Gross Demand Reduction. Refer to discussion under 'Demand Impacts' on page 6 for more information.
- 9. Uses PPL methodology to determine Reported Gross Demand Reduction. Refer to discussion under 'Demand Impacts' on page 6 for more information.
- 10. As an upstream program, exact participation in the Residential Lighting Program is not known. The EM&V CSP estimated the number of program participants by dividing the total number of bulbs discounted by a CFL-per-participant value derived from the customer telephone survey data (7.0 bulbs in PY1, 6.7 bulbs in PY2, 6:04 in PY3 and 7:80 in PY4). The CFL count reflects the total number of program bulbs, including discounted bulbs sold at retail stores and bulbs distributed at give-away events.
- 11. The totals may not sum to the exact amount shown due to rounding.

A summary of the reported demand reduction including demand reductions occurring outside of the Top 100 Hours is presented in Figure 3-3.

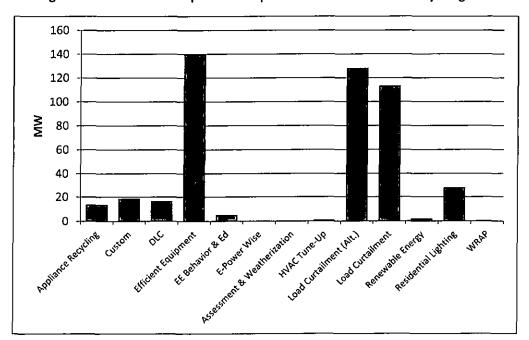


Figure 3-3: CPITD Total Reported Compliance Demand Reduction by Program¹³

¹³ The figure includes results as interpreted by the PUC/SWE, as well as results as interpreted by PPL labeled as "Load Curtailment (Alt.)". Refer to discussion under 'Demand Impacts' on page 6 for more information.

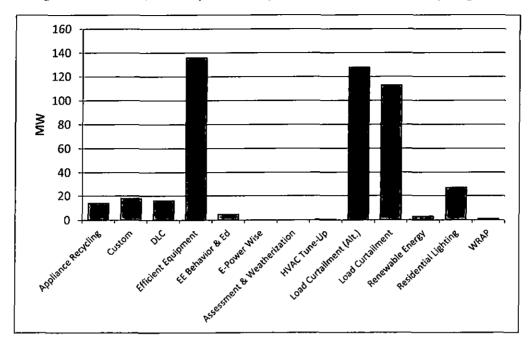


Figure 3-4: CPITD-Q Total Reported Compliance Demand Reduction by Program¹⁴

A summary of total demand reduction impacts by program through the PY4Q4 is presented in Table 3-2. These represent the total demand reduction in all hours (i.e. not limited to the top 100 hours) and are not the basis for compliance with the demand reduction target. These demand reductions are for transactions reported as of May 31, 2013. The demand reductions from demand response programs (Load Curtailment and Direct Load Control) and from energy efficiency measures through PY3 have been verified. Demand reductions from PY4 energy efficiency measures will be verified by the EM&V CSP before November 2013. As noted earlier, PPL Electric will continue to report demand reductions through August for energy efficiency measures installed before May 31, 2013 and that information will be in the annual report to be filed November 15, 2013. The final report will include results of a CFL cross-sector sales study conducted to calculate the portion of kWh and kW savings that should be classified as commercial sector kWh and kW savings (not residential sector savings).

¹⁴ The figure includes results as interpreted by the PUC/SWE, as well as results as interpreted by PPL labeled as "Load Curtailment (Alt.)". Refer to discussion under 'Demand Impacts' on page 6 for more information.

Table 3-2: Participation and Reported Total Gross Demand Reduction by Program

	Participants:		Reported Gross Demand Reduction (MW) ⁽¹⁾				Preliminary	
_ Program .	ıq	PYTD	CRITD	IQ	PYTD	CPITD ⁽³⁾	CPITD- Q ⁽⁴⁾	Realization Rate ⁽²⁾
Appliance Recycling	1,765	15,215	45,986	0.44	4.13	14.02	14.69	84.4%
Custom Incentive (5)	28	81	439	0.92	4.31	18.85	18.47	98.8%
Direct Load Control (6)	0	9,431	44,391	0.00	16.83	16.83	16.83	100.04%
Efficient Equipment Incentive (lighting and non- lighting measures)	5,010	22,414	206,400	12	44	140.01	136.43	92.0%
Energy Efficiency Behavior & Education (7)	101,936	101,936	253,404	6	6	5.60	5.60	Not available
E-Power Wise	263	2,440	9,183	0.01	0.11	0.60	0.57	93.7%
Home Energy Assessment & Weatherization	579	1,822	4,885	0.07	0.21	0.45	0.48	100.2%
HVAC Tune-Up	0	274	1,707	0.00	0.07	1.15	1.20	100.0%
Load Curtailment (8)	0	201	299	0.00	113.30	113.30	113.30	88.3%
Load Curtailment (Alt.) (9)	0	201	299	0.00	128.28	128.28	128.28	100.1%
Renewable Energy	0	116	1,946	0.00	0.26	2.56	3.87	98.0%
Residential Lighting (10)	66,329	338,158	1,427,462	1.05	9.07	28.26	27.88	87.2%
WRAP	625	3,643	13,292	0.00	0.01	0.78	1.71	108.0%
TOTAL PORTFOLIO(8, 11)	176,535	495,731	2,009,394	20.26	197.44	342.40	341.03	
TOTAL PORTOLIO (Alt.) (9, 11)	176,535	495,731	2,009,394	20.26	212.43	357.38	356.01	

- 1. Reported gross demand reductions here do not include the gross-up to reflect T&D losses which are included in Figure 1-2 of this Quarterly Report. The gross-up will be included as an *ex ante* adjustment in the Final Annual Report, to be filed November 15, 2013.
- 2. Preliminary Realization Rates have been carried over from the PY3 analysis, where available. These values will be used as placeholders until PY4 evaluation activities have been completed. Final PY4 Realization Rates will be included in the PY4 Final Annual Report, to be filed on November 15, 2013. No PY3 realization rates are available as a placeholder for the Behavior and Education program. The final realization rate is reported for the PY4 Direct Load Control. The PY4 realization rates for each of the two methods used to determine demand reductions for the Load Curtailment program are reported.
- 3. The CPITD MW values include the gross-up to reflect T&D losses for PY1 and PY2 only. Starting in PY3, the EM&V CSP changed the methodology and began applying the gross-up as an *ex ante* adjustment. The change was made to match data reported in PPL Electric's EEMIS tracking database.
- 4. The CPITD-Q MW values consist of *ex post* verified savings for PY1 PY3, and therefore do include the gross-up for T&D losses. The PY4 reported gross demand reduction values included in the CPITD-Q value do not include the gross-up.
- 5. The cumulative number of Custom Incentive Program participants includes: those still in the technical study phase; those in progress; and those cancelled. Participants in these three categories do not contribute to achieved savings. Excluding these three categories provides the total number of completed projects; as of PY4 Q4 there have been 248 total cumulative participants that meet these criteria.
- 6. The participation numbers shown are based on the date-each unique account number is uploaded into EEMIS. Each unique account number is counted in the period it first appears in the EEMIS extract. Therefore, the counts do not reflect customers who opted out after enrollment. For the Direct Load Control program, since counts reflect unique account numbers, participants with two metered air conditioning units are only counted once. The final reports will provide additional detail about the number of participating metered accounts, air conditioning units, and the number of opt-outs (partial participants).
- 7. Participation for the Energy Efficiency Behavior & Education program is considered to be cumulative across program years. However, since the savings associated with this program have a one year measure life, the energy savings are not cumulative, and therefore PYTD energy savings are equal to CPITD energy savings.
- 8. Uses PUC/SWE methodology to determine Reported Gross Demand Reduction. Refer to discussion under 'Demand Impacts'

on page 6 for more information.

- 9. Uses PPL's interpretation of the TRM to determine reported gross demand reduction. Refer to discussion under 'Demand Impacts' on page 6 for more information
- 10. As an upstream program, exact participation in the Residential Lighting Program is not known. The EM&V CSP estimated the number of program participants by dividing the total number of bulbs discounted by a CFL-per-participant value derived from the customer telephone survey data (7.0 bulbs in PY1, 6.7 bulbs in PY2, 6.04 in PY3 and 7.80 in PY4). The CFL count reflects the total number of program bulbs, including discounted bulbs sold at retail stores and bulbs distributed at give-away events.
- The totals may not sum to the exact amount shown due to rounding.

4 Summary of Finances

4.1 Portfolio Level Expenditures

All cost data shown below are through May 31, 2013. Due to rebate application processing time, PPL Electric will continue to report savings through August for measures installed before May 31, 2013. Also, costs will continue to accrue for Phase 1 rebates through September 2013 and for EM&V activities through December 2013. The nearly final costs (all costs except for the last few months of EM&V) will be reported in the annual report to be filed November 15, 2013.

A breakdown of the portfolio finances is presented in Table 4-1.

Table 4-1: Summary of Portfolio Finances

	Quarter 4 (\$000)	PYTD (\$000)	GPITD (\$000)
EDC Incentives to Participants	\$8,697	\$34,145	\$128,170
EDC Incentives to Trade Allies	\$0	\$0	\$0
Subtotal EDC Incentive Costs	\$8,697	\$34,145	\$128,170
Design & Development ⁽¹⁾	\$0	-\$9	\$3,206
Administration ⁽²⁾	\$291	\$1,490	\$9,104
Management (3)	\$2,032	\$26,223	\$66,246
Marketing ⁽⁴⁾	\$309	\$1,893	\$12,046
Technical Assistance	\$0	\$0	\$0
Subtotal EDC Implementation Costs	\$2,633	\$29,596	\$90,603
EDC Evaluation Costs	\$486	\$2,856	\$10,547
SWE Audit Costs	\$226	\$537	\$2,180
Total EDC Costs (5)	\$12,042	\$67,135	\$231,500
Participant Costs (6)	N/A	N/A	N/A
Total TRC Costs ⁽⁷⁾	N/A	N/A	N/A

NOTES

- 1. PPL Electric reallocated costs in this category in PY4 to direct program costs for which they were applicable. Additionally, some costs were incorrectly charged to Act 129 and were removed completely.
- 2. Includes: administrative CSP (rebate processing); EEMIS (tracking system); and PPL Electric's general administration and clerical costs.
- Includes: EDC program management; CSP program management; general management oversight; and major accounts.
- 4. Includes: the marketing CSP; and marketing costs by program CSPs.
- 5. Per the 2011 Total Resource Cost (TRC) Test Order, Total EDC Gosts only refer to EDC-incurred expenses.
- 6. Per the 2011 Total Resource Cost Test Order, net Participant Costs are costs for the end-use customer. These will be calculated for the PY4 Final Annual Report.
- TRC Costs will be calculated for the PY4 Final Annual Report.

4.2 Program Level Expenditures

Program-specific finances are shown in the following tables.

Table 4-2: Summary of Program Finances - Appliance Recycling Program

	Quarter 4 (\$000)	PYTD (\$000)	CPITD (\$000)
EDC Incentives to Participants	\$24	\$627	\$1,906
EDC Incentives to Trade Allies	\$0	\$0	\$0
Subtotal EDC Incentive Costs	\$24	\$627	\$1,906
·			
Design & Development	\$0	\$0	\$0
Administration ⁽¹⁾	\$0	\$0	\$0
Management ⁽²⁾	\$165	\$1,488	\$4,520
Marketing ⁽³⁾	\$12	\$337	\$1,198
Technical Assistance	\$0	\$0	\$0
Subtotal EDC Implementation Costs	\$177	\$1,825	\$5,718
EDC Evaluation Costs	\$0	\$0	\$0
SWE Audit Costs	\$0	\$0	\$0
Total EDC Costs ⁽⁴⁾	\$201	\$2,452	\$7,623
Participant Costs ⁽⁵⁾	N/A	N/A	N/A
Total TRC Costs ⁽⁶⁾			
			

NOTES

- 1. Includes the administrative CSP (rebate processing), tracking system, and general administration and clerical cost.
- 2. Includes EDC program management and CSP program management.
- 3. Includes marketing costs by program CSPs.
- 4. Per the 2011 Total Resource Cost Test Order, the Total EDC Costs refer to EDC incurred expenses only.
- 5. Per the 2011 Total Resource Cost Test Order, the net Participant Costs are the costs for the end-use customer.
- Total TRC Costs includes EDC Evaluation Costs, Total EDC Costs and Participant Costs. Final TRC Costs will be calculated for the PY4 Final Annual Report.

Table 4-3: Summary of Program Finances – Residential Lighting Program

	Quarter 4 (\$000)	PYTD (\$000)	CPITD (\$000)
EDC Incentives to Participants	\$1,058	\$3,633	\$11,094
EDC Incentives to Trade Allies	\$0	\$0	\$0
Subtotal EDC Incentive Costs	\$1,058	\$3,633	\$11,094
Design & Development	\$0	\$0	\$0
Administration ⁽¹⁾	\$0	\$0	\$0
Management ⁽²⁾	\$150	\$2,018	\$6,034
Marketing ⁽³	\$4	\$40	\$207
Technical Assistance	\$0	\$0	\$0
Subtotal EDC Implementation Costs	\$153	\$2,058	\$6,242
EDC Evaluation Costs	\$0	\$0	\$0
SWE Audit Costs	\$0	\$0	\$0
Total EDC Costs ^[4]	\$1,211	\$5,690	\$17,335
Participant Costs ⁽⁵⁾	N/A	N/A	N/A
Total TRC Costs ⁽⁶⁾	N/A	N/A	N/A

- 1. Includes the administrative CSP (rebate processing), tracking system, and general administration and clerical cost.
- 2. Includes EDC program management and CSP program management.
- 3. Includes marketing costs by program CSPs.
- 4. Per the 2011 Total Resource Cost Test Order, the Total EDC Costs refer to EDC incurred expenses only.
- 5. Per the 2011 Total Resource Cost Test Order, the net Participant Costs are the costs for the end-use customer.
- Total TRC Costs includes EDC Evaluation Costs, Total EDC Costs and Participant Costs. Final TRC Costs will be calculated for the PY4 Final Annual Report.

Table 4-4: Summary of Program Finances - Custom Incentive Program

	Quarter 4 (\$000)	PYTD (\$000)	CPITD (\$000)
EDC Incentives to Participants	\$1,055	\$3,606	\$10,701
EDC Incentives to Trade Allies	\$0	\$0	\$0
Subtotal EDC Incentive Costs	\$1,055	\$3,606	\$10,701
Design & Development	\$0	\$0	\$0
Administration ⁽¹⁾	\$0	\$0	\$0
Management ⁽²⁾	\$269	\$799	\$3,730
Marketing ⁽³⁾	\$0	\$0	\$8
Technical Assistance	\$0	\$0	\$0
Subtotal EDC Implementation Costs	\$269	\$799	\$3,737
EDC Evaluation Costs	\$0	\$0	\$0
SWE Audit Costs	\$0	\$0	\$0
Total EDC Costs ⁽⁴⁾	\$1,324	\$4,405	\$14,438
Participant Costs ⁽⁵⁾	N/A	N/A	N/A
Total TRC Costs ⁽⁶⁾	N/A	N/A	N/A

- 1. Includes the administrative CSP (rebate processing), tracking system, and general administration and clerical cost.
- 2. Includes EDC program management and CSP program management.
- 3. Includes marketing costs by program CSPs.
- 4. Per the 2011 Total Resource Cost Test Order, the Total EDC Costs refer to EDC incurred expenses only.
- 5. Per the 2011 Total Resource Cost Test Order, the net Participant Costs are the costs for the end-use customer.
- Total TRC Costs includes EDC Evaluation Costs, Total EDC Costs and Participant Costs. Final TRC Costs will be calculated for the PY4 Final Annual Report

Table 4-5: Summary of Program Finances - Direct Load Control Program

	Quarter 4 (\$000)	PYTD (\$000)	CPITD (\$000)
EDC Incentives to Participants(1)	\$0	\$0	\$0
EDC Incentives to Trade Allies	\$0	\$0	\$0
Subtotal EDC Incentive Costs	\$0	\$0	\$0
Design & Development	\$0	\$0	\$0
Administration ⁽²⁾	\$0	\$0	\$ 0
Management ⁽³⁾	\$22	\$1,688	\$8,829
Marketing ⁽⁴⁾	\$0	\$0	\$0
Technical Assistance	\$0	\$0	\$0
Subtotal EDC Implementation Costs	\$22	\$1,688	\$8,829
EDC Evaluation Costs	\$0	\$0	\$0
SWE Audit Costs	\$0	\$0	\$0
Total EDC Costs(5)	\$22	\$1,688	\$8,829
Participant Costs ⁽⁶⁾	N/A	N/A	N/A
Total TRC Costs ⁽⁷⁾	N/A	N/A	N/A

- 1. PPL pays the CSP to deliver the program. The CSP determines and pays incentives to participants. In accordance with the TRC Order, CSP payments to participants are treated as a program management expense, not an incentive.
- 2. Includes the administrative CSP (rebate processing), tracking system, and general administration and clerical cost.
- 3. Includes:EDC program management and CSP program management
- 4. Includes marketing costs by program CSPs.
- 5. Per the 2011 Total Resource Cost Test Order, the Total EDC Costs refer to EDC incurred expenses only.
- 6. Per the 2011 Total Resource Cost Test Order, the net Participant Costs are the costs for the end-use customer.
- Total TRC Costs includes EDC Evaluation Costs, Total EDC Costs and Participant Costs. Final TRC Costs will be calculated for the PY4 Final Annual Report

Table 4-6: Summary of Program Finances – Energy Efficiency Behavior & Education Program

	Quarter 4 (\$000)	PYTD (\$000)	CPITD (\$000)
EDC Incentives to Participants	\$0	\$0	\$0
EDC Incentives to Trade Allies	\$0	\$0	\$0
Subtotal EDC Incentive Costs	\$0	\$0	\$0
Design & Development	\$0	\$0	\$0
Administration ⁽¹⁾	\$0	\$0	\$0
Management ⁽²⁾	\$110	\$449	\$2,543
Marketing ⁽³⁾	\$0	\$0	\$0
Technical Assistance	\$0	\$0	\$0
Subtotal EDC Implementation Costs	\$110	\$449	\$2,543
EDC Evaluation Costs	\$0	\$0	\$0
SWE Audit Costs	\$0	\$0	\$0
Total EDC Costs ⁽⁴⁾	\$110	\$449	\$2,543
Participant Costs ⁽⁵⁾	N/A	N/A_	N/A
Total TRC Costs ⁽⁶⁾	N/A	N/A	N/A

- 1. Includes the administrative CSP (rebate processing), tracking system, and general administration and clerical cost.
- 2. Includes EDC program management and CSP program management
- 3. Includes marketing costs by program CSPs.
- 4. Per the 2011 Total Resource Cost Test Order, the Total EDC Costs refer to EDC incurred expenses only.
- 5. Per the 2011 Total Resource Cost Test Order, the net Participant Costs are the costs for the end-use customer.
- Total TRC Costs includes EDC Evaluation Costs, Total EDC Costs and Participant Costs. Final TRC Costs will be calculated for the PY4 Final Annual Report

Table 4-7: Summary of Program Finances - Efficient Equipment Program

	Quarter 4 (\$000)	PYTD (\$000)	CPITD (\$000)
EDC Incentives to Participants	\$6,550	\$25,778	\$80,071
EDC Incentives to Trade Allies	\$0	\$0	\$0
Subtotal EDC Incentive Costs	\$6,550	\$25,778	\$80,071
Design & Development	\$0	\$0	\$0
Administration ⁽¹⁾	\$0	\$0	\$0
Management ⁽²⁾	\$1,558	\$5,449	\$12,494
Marketing ⁽³⁾	\$0	\$22	\$53
Technical Assistance	\$0	\$0	\$0
Subtotal EDC Implementation Costs	\$1,558	\$5,471	\$12,547
EDC Evaluation Costs	\$0	\$0	\$0
SWE Audit Costs	\$0	\$0	\$0
Total EDC Costs ⁽⁴⁾	\$8,108	\$31,249	\$92,617
Participant Costs ⁽⁵⁾	N/A	N/A	N/A
Total TRC Costs ⁽⁶⁾	N/A	N/A	N/A

- 1. Includes the administrative CSP (rebate processing), tracking system, and general administration and clerical cost.
- 2. Includes EDC program management and CSP program management
- 3. Includes marketing costs by program CSPs.
- 4. Per the 2011 Total Resource Cost Test Order, the Total EDC Costs refer to EDC incurred expenses only.
- 5. Per the 2011 Total Resource Cost Test Order, the net Participant Costs are the costs for the end-use customer.
- Total TRC Costs includes EDC Evaluation Costs, Total EDC Costs and Participant Costs. Final TRC Costs will be calculated for the PY4 Final Annual Report

Table 4-8: Summary of Program Finances - E-Power Wise Program

	Quarter 4 (\$000)	PYTD (\$000)	CPITD (\$000)
EDC Incentives to Participants ⁽¹⁾	\$0	\$0	\$429
EDC Incentives to Trade Allies	\$0	\$0	\$0
Subtotal EDC Incentive Costs	\$0	\$0	\$429
Design & Development	\$0	\$0	\$0
Administration ⁽²⁾	\$0	\$0	\$0
Management ⁽³⁾	\$10	\$116	\$320
Marketing ⁽⁴⁾	\$0	\$0	\$0
Technical Assistance	\$0	\$0	\$0
Subtotal EDC Implementation Costs	\$10	\$116	\$320
EDC Evaluation Costs	\$0	\$0	\$0
SWE Audit Costs	\$0	\$0	\$0
Total EDC Costs ⁽⁵⁾	\$10	\$116	\$749
Participant Costs ⁽⁶⁾	N/A	N/A	N/A
Total TRC Costs ⁽⁷⁾	N/A	N/A	N/A

- 1. Reclassified from "incentives" to "management" starting in PY3 Q3. Historical values were not changed.
- 2. Includes the administrative CSP (rebate processing), tracking system, and general administration and clerical cost.
- 3. Includes EDC program management and CSP program management.
- 4. Includes marketing costs by program CSPs.
- 5. Per the 2011 Total Resource Cost Test Order, the Total EDC Costs refer to EDC incurred expenses only.
- 6. Per the 2011 Total Resource Cost Test Order, the net Participant Costs are the costs for the end-use customer.
- Total TRC Costs includes EDC Evaluation Costs, Total EDC Costs and Participant Costs. Final TRC Costs will be calculated for the PY4 Final Annual Report.

Table 4-9: Summary of Program Finances - Load Curtailment Program

	Quarter 4 (\$000)	PYTD (\$000)	CPITD (\$000)
EDC Incentives to Participants(1)	\$0	\$0	\$0
EDC Incentives to Trade Allies	\$0	\$0	\$0
Subtotal EDC Incentive Costs	\$0	\$0	\$0
Design & Development	\$0	\$0	\$0
Administration ⁽²⁾	\$0	\$0	\$0
Management ⁽³⁾	\$0	\$5,980	\$10,075
Marketing ⁽⁴⁾	\$0	\$0	\$0
Technical Assistance	\$0	\$0	\$0
Subtotal EDC Implementation Costs	\$0	\$5,980	\$10,075
EDC Evaluation Costs	\$0	\$0	\$0
SWE Audit Costs	\$0	\$0	\$0
Total EDC Costs ⁽⁵⁾	\$0	\$5,980	\$10,075
Participant Costs ⁽⁶⁾	N/A	N/A	N/A
Total TRC Costs ⁽⁷⁾	N/A	N/A	N/A

- 1. PPL pays the CSP to deliver the program. The CSP determines and pays incentives to participants. In accordance with the TRC Order, CSP payments to participants are treated as a program management expense, not an incentive.
- 2. Includes the administrative CSP (rebate processing), tracking system, and general administration and clerical cost.
- 3. Includes EDC program management and CSP program management.
- 4. Includes marketing costs by program CSPs.
- 5. Per the 2011 Total Resource Cost Test Order, the Total EDC Costs refer to EDC incurred expenses only.
- 6. Per the 2011 Total Resource Cost Test Order, the net Participant Costs are the costs for the end-use customer.
- Total TRC Costs includes EDC Evaluation Costs, Total EDC Costs and Participant Costs. Final TRC Costs will be calculated for the PY4 Final Annual Report.

Table 4-10: Summary of Program Finances - WRAP

	Quarter 4 (\$000)	PYTD (\$000)	CPITD (\$000)
EDC Incentives to Participants(1)	\$0	\$0	\$18,182
EDC Incentives to Trade Allies	\$0	\$0	\$0
Subtotal EDC Incentive Costs	\$0	\$0	\$18,182
Design & Development	\$0	\$0	\$0
Administration ⁽²⁾	\$0	\$0	\$0
Management ⁽³⁾	\$135	\$7,002	\$11,034
Marketing ⁽⁴⁾	\$0	\$0	\$1
Technical Assistance	\$0	\$0	\$0
Subtotal EDC Implementation Costs	\$135	\$7,002	\$11,035
EDC Evaluation Costs	\$0	\$0	\$0
SWE Audit Costs	\$0	\$0	\$0
Total EDC Costs ⁽⁵⁾	\$135	\$7,002	\$29,217
Participant Costs ⁽⁶⁾	N/A	N/A	N/A
Total TRC Costs ⁽⁷⁾	N/A	N/A	N/A

- 1. Reclassified from "incentives" to "management" starting in PY3 Q4. Historical values were not changed.
- 2. Includes the administrative CSP (rebate processing), tracking system, and general administration and clerical cost.
- 3. Includes EDC program management and CSP program management.
- 4. Includes marketing costs by program CSPs.
- 5. Per the 2011 Total Resource Cost Test Order, the Total EDC Costs refer to EDC incurred expenses only.
- 6. Per the 2011 Total Resource Cost Test Order, the net Participant Costs are the costs for the end-use customer.
- 7. Total TRC Costs includes EDC Evaluation Costs, Total EDC. Costs and Participant Costs. Final TRC Costs will be calculated for the PY4-Final Annual Report

Table 4-11: Summary of Program Finances - Renewable Energy Program

	Quarter 4 (\$000)	PYTD (\$000)	CPITD (\$000)
EDC Incentives to Participants	\$0	\$420	\$5,427
EDC Incentives to Trade Allies	\$0	\$0	\$0
Subtotal EDC Incentive Costs	\$0	\$420	\$5,427
Design & Development	\$0	\$0	\$0
Administration ⁽¹⁾	\$0	\$0	\$0
Management ⁽²⁾	\$0	\$0	\$203
Marketing ⁽³⁾	\$0	\$0	\$0
Technical Assistance	\$0	\$0	\$0
Subtotal EDC Implementation Costs	\$0	\$0	\$203
EDC Evaluation Costs	\$0	\$0	\$0
SWE Audit Costs	\$0	\$0	\$0
Total EDC Costs ⁽⁴⁾	\$0	\$420	\$5,630
Participant Costs ⁽⁵⁾	N/A	N/A	N/A
Total TRC Costs ⁽⁶⁾	N/A	N/A	N/A

- 1. Includes the administrative CSP (rebate processing), tracking system, and general administration and clerical cost.
- 2. Includes EDC, program management and CSP program management.
- 3. Includes marketing costs by program CSPs.
- 4. Per the 2011 Total Resource Cost Test Order, the Total EDC Costs refer to EDC incurred expenses only.
- 5. Per the 2011 Total Resource Cost Test Order, the net Participant Costs are the costs for the end-use customer.
- Total TRC Costs includes EDC Evaluation Costs, Total EDC Costs and Participant Costs. Final TRC Costs will be calculated for the PY4 Final Annual Report.

Table 4-12: Summary of Program Finances ~ HVAC Tune-Up Program

	Quarter 4 (\$000)	PYTD (\$000)	CPITD (\$000)
EDC Incentives to Participants	\$0	\$21	\$69
EDC Incentives to Trade Allies	\$0	\$0	\$0
Subtotal EDC Incentive Costs	\$0	\$21	\$69
Design & Development	\$0	\$0	\$0
Administration ⁽²⁾	\$0	\$0	\$0
Management ⁽²⁾	\$0	\$5	\$731
Marketing ⁽³⁾	\$0	\$0	\$18
Technical Assistance	\$0	\$0	\$0
Subtotal EDC Implementation Costs	\$0	\$5	\$749
EDC Evaluation Costs	\$0	\$0	\$0
SWE Audit Costs	\$0	\$0	\$0
Total EDC Costs ^(a)	\$0	\$25	\$818
Participant Costs ⁽⁵⁾	N/A	N/A	N/A
Total TRC Costs ⁽⁶⁾	N/A	N/A	N/A

- 1. Includes the administrative CSP (rebate processing), tracking system, and general administration and clerical cost.
- 2. Includes EDC program management and CSP program management.
- 3. Includes marketing costs by program CSPs.
- 4. Per the 2011 Total Resource Cost Test Order, the Total EDC Costs refer to EDC incurred expenses only.
- 5. Per the 2011 Total Resource Cost Test Order, the net Participant Costs are the costs for the end-use customer.
- Total TRC Costs includes EDC Evaluation Costs, Total EDC Costs and Participant Costs. Final TRC Costs will be calculated for the PY4 Final Annual Report.

Table 4-13: Summary of Program Finances – Residential Energy Assessment & Weatherization Program

	Quarter 4 (\$000)	PYTD (\$000)	CPITD (\$000)
EDC Incentives to Participants	\$10	\$61	\$293
EDC Incentives to Trade Allies	\$0	\$0	\$0
Subtotal EDC Incentive Costs	\$10	\$61	\$293
Design & Development	\$0	\$0	\$0
Administration ⁽¹⁾	\$0	\$0	\$0
Management ⁽²⁾	\$110	\$348	\$1,437
Marketing ⁽³⁾	\$0	\$0	\$31
Technical Assistance	\$0	\$0	\$0
Subtotal EDC Implementation Costs	\$110	\$348	\$1,467
EDC Evaluation Costs	\$0	\$0	\$0
SWE Audit Costs	\$0	\$0	\$0
Total EDC Costs ⁽⁴⁾	\$120	\$410	\$1,760
Participant Costs ⁽⁵⁾	N/A	N/A	N/A
Total TRC Costs ⁽⁶⁾	N/A	N/A	N/A

- 1. Includes the administrative CSP (rebate processing), tracking system, and general administration and clerical cost.
- 2. Includes:EDC program management and CSP program management.
- 3. Includes marketing costs by program CSPs.
- 4. Per the 2011 Total Resource Cost Test Order, the Total EDC Costs refer to EDC incurred expenses only.
- 5. Per the 2011 Total Resource Cost Test Order, the net Participant Costs are the costs for the end-use customer.
- Total TRC Costs includes EDC Evaluation Costs, Total EDC Costs and Participant Costs. Final TRC Costs will be calculated for the PY4 Final Annual Report.

Appendix A: PY4 Evaluation Activities

Table A-1 shows the evaluation activities for each program claiming savings in PY4. Nonparticipant surveys will be conducted for select programs to collect information for the net savings adjustments.

Table A-1. PY4 Evaluation Activities

		Table A-1. P14 Evalua	delon receivieres	<u></u>		
Programs	Sectors	Records Review	Participant Surveys	Nonparticipant Surveys	Site Visits	Metering
Appliance Recycling	Residential	Census Quarterly	Completed Q3	NA _	NA	NA
Residential Lighting (CFL)	Residential	Census Quarterly	Comp	oleted Q3	NA	NA
Energy Efficiency Behavior & Education	Residential	Census Quarterly	Completed Q4	Completed Q4	NA	NA
Efficient Equipment Incentive	Residential	Quarterly	Completed Q3	NA	NA	NA
Home Energy Assessment & Weatherization	Residential	Quarterly	Completed Q3	NA	NA	NA
Act 129 WRAP	Residential low income	Census to identify duplicates Quarterly, prorated by job type	NA	NA	NA	NA
E-Power Wise	Residential low income	Census database, Quarterly	NA	NA	NA	NA
Renewable Energy	Govt/Non- profit	Program closed; few remaining GSHP projects	NA	NA	NA	NA
Efficient Equipment (non- lighting)	Non- residential	Batched	Completed Q3	NA	Batched	NA
Efficient Equipment (lighting)	Non- residential	Quarterly	Completed Q3	NA	Quarterly	As needed
Efficient Equipment (Direct Discount)	Small commercial	Batched	Completed Q3	NA _	Quarterly	As needed
HVAC Tune-Up	Small commercial	Census at program end	NA	NA .	NA	NA
Custom Incentive	Commercial & Industrial	Census large projects Sample small projects	Q4	NA	As needed	As needed
Direct Load Control	Residential, Commercial	Census of metered units included in the analysis	Completed Q2	NA	NA	By CSP
Load Curtailment	Commercial & Industrial	Census included in the analysis	Completed Q3	NA	NA	By CSP

Phone Survey Activities

Table A-2 summarizes the completed survey efforts that have in occurred in PY4. Table A-3 shows the full PY4 survey schedule.

Table A-2: Summary of PY4 Completed Survey Efforts To-Date

Table A-2: Summary of F14 Confidence Survey Entots 10-Date						
	Field Start	Field End	Target	Achieved	Conf./	
Survey	Date	:Date	Completes	Completes	Precision	
Direct Load Control (Peak Saver)	11/13/12	12/03/12	95	95	90/10	
Load Curtailment (SWE- developed survey, fielded In- House)	1/22/13	1/27/13	19	17	80/10	
Commercial Efficient Equipment	1/28/13	2/18/13	142	138	90/10	
Commercial Efficient Equipment- Direct Discount	1/31/13	2/10/13	70	70	90/10	
Residential Efficient Equipment	2/4/13	2/19/13	70	76	90/10	
Residential Lighting Campaign	2/6/13	2/28/13	325	301	90/10	
Energy Assessment & Weatherization - Audit	2/11/13	2/22/13	50	50	90/10	
Energy Assessment & Weatherization - Weatherization	2/19/13	2/23/13	70	71	90/10	
Appliance Recycling	2/26/13	3/4/13	141	142	90/10	
Consumer Education - participant	3/5/13	3/26/13	190	175	90/10	
Consumer Education - nonparticipant	3/12/13	3/28/13	150	151	90/10	
Custom	3/21/13	5/31/13	70	70	90/10	