# Quarterly Report to the Pennsylvania Public Utility Commission

# For the Period September 1, 2012 through November 30, 2012 Program Year 4, Quarter 2

For Pennsylvania Act 129 of 2008 Energy Efficiency and Conservation Plan

Prepared by ADM Associates, Inc.

For

West Penn Power Company
Docket No. M-2009-2093218

January 14, 2013

# **Table of Contents**

TABLE	E OF CONTENTS	
ACRO	NYMS	I
	OVERVIEW OF PORTFOLIO	
1.1		
1.2	PROGRAM UPDATES AND FINDINGS	7
1.3	B EVALUATION UPDATES AND FINDINGS	8
2 9	SUMMARY OF ENERGY IMPACTS BY PROGRAM	14
3 9	SUMMARY OF DEMAND IMPACTS BY PROGRAM	17
4 9	SUMMARY OF FINANCES	20
4.1	Portfolio Level Expenditures	20
4 2	PROGRAM LEVEL EXPENDITURES	21

# Acronyms

C & I Commercial and Industrial

CATI Computer-Aided Telephone Interview

CFL Compact Fluorescent Lamp

CPITD Cumulative Program/Portfolio Inception to Date

CPITD-Q Cumulative Program/Portfolio Inception through Current Quarter

CVR Conservation Voltage Reduction

CVRf Conservation Voltage Reduction factor

DLC Direct Load Control

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

kW Kilowatt

kWh Kilowatt-hour

LED Light Emitting Diode

LIEEP Low-Income Energy Efficiency Program
LIURP Low-Income Usage Reduction Program

M&V Measurement and Verification

MW Megawatt
MWh Megawatt-hour
NTG Net-to-Gross

PUC Public Utility Commission

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

PY3TD Program/Portfolio Year Three to Date
SEER Seasonal Energy Efficiency Rating

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 West Penn Power Company ("West Penn" or "Company") in the second quarter of Program Year 4 (PY4), defined as September 1, 2012 through November 30, 2012, as well as the cumulative accomplishments of the programs since inception.

# 1.1 Summary of Achievements

West Penn has achieved 82 percent of the May 31, 2013 energy savings compliance target, based on cumulative program inception to date (CPITD) reported gross energy savings<sup>1</sup>, and 82 percent of the energy savings compliance target, based on CPITD gross energy savings achieved through Quarter 2 (CPITD-Q)<sup>2</sup>, as shown in **Figure 1-1**.

<sup>&</sup>lt;sup>1</sup> 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.

<sup>&</sup>lt;sup>2</sup> 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.

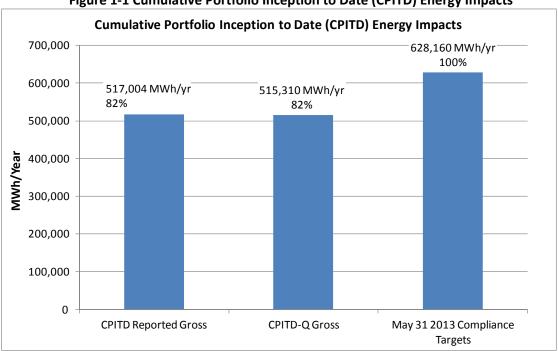


Figure 1-1 Cumulative Portfolio Inception to Date (CPITD) Energy Impacts

West Penn has achieved 50 percent of the May 31, 2013 demand reduction compliance target, based on CPITD reported gross demand reduction and 44 percent of the demand reduction compliance target based on CPITD gross demand reduction achieved through Quarter 2 (CPITD-Q)<sup>3</sup>, as shown in **Figure 1-2**<sup>4</sup>. Please note that this only includes contributions from energy efficiency programs and does not yet reflect contributions from Demand Reduction programs operated during the summer of 2012.

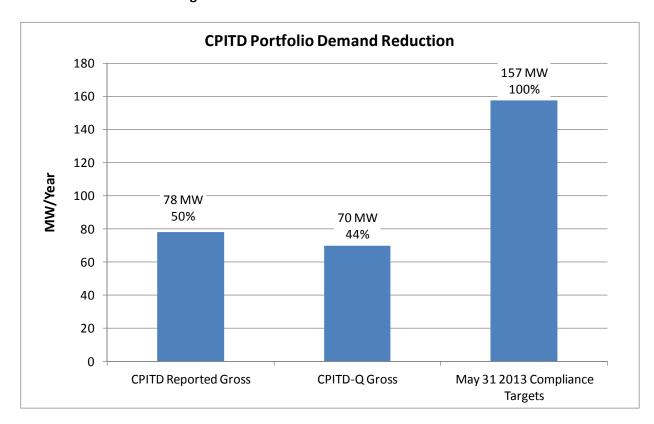


Figure 1-2. CPITD Portfolio Demand Reduction

<sup>&</sup>lt;sup>3</sup> Reference footnote 3 on page 4.

<sup>&</sup>lt;sup>4</sup> These figures only include contributions from energy efficiency programs and does not yet reflect contributions from Demand Reduction programs operated during the summer of 2012.

There are 10 measures available to the low-income sector. The measures offered to the low-income sector therefore comprise 24 percent of the total measures offered. As required by Act 129, this exceeds the fraction of the electric consumption of the utility's low-income households divided by the total electricity consumption in the West Penn Power territory. (10 percent). The CPITD reported gross energy savings achieved in the low-income sector is 58,135 MWh/yr; this is 11 percent of the CPITD total portfolio reported gross energy savings.

West Penn achieved 140 percent of the May 31, 2013, energy reduction compliance target for government, nonprofit and institutional sector, based on CPITD reported gross energy savings, and 137 percent of the target based on CPITD gross energy savings achieved through Quarter 2 (CPITD-Q)<sup>7</sup>, as shown in Figure 1-3.

<sup>&</sup>lt;sup>5</sup> Act 129 includes a provision requiring electric distribution companies to offer a number of energy efficiency 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 energy or demand savings.

<sup>&</sup>lt;sup>6</sup> The Energy Savings achieved in the low-income sector in the PY4Q2 report are calculated according to the procedure in the PY3 Annual report (page 14). This is a shift from the previous calculation procedure that was used for the PY4Q1 report, and the new methodology results in smaller claimed impacts, thus the adjustment from the PY4Q1 report.

<sup>&</sup>lt;sup>7</sup>Reference footnote 3 on page 4.

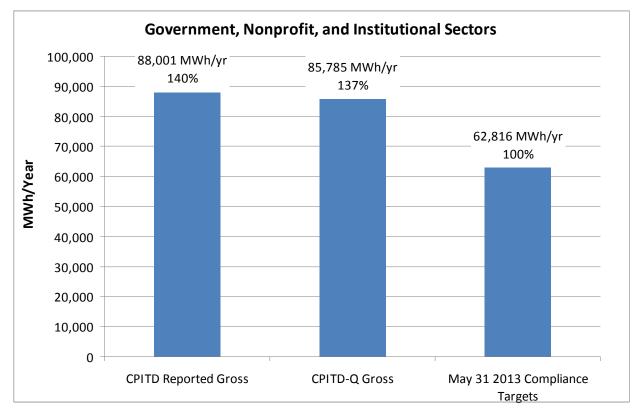


Figure 1-3 Government, Nonprofit, and Institutional Sectors

## 1.2 Program Updates and Findings

On October 28, 2011, the Commission approved West Penn's interim Amended Plan filed in Docket No. M-2009-2093218. The Amended Plan aligned WPP's Energy Efficiency and Conservation ("EE&C") Plan with the other FirstEnergy Pennsylvania Utilities.

- Residential Appliance Turn-In Program: No changes to this program during the PY4Q2.
- Residential Energy Efficient Products Program: No changes to this program during the PY4Q2.
- Residential Energy Efficiency HVAC Equipment Program: No changes to this program during the PY4Q2.
- Residential Home Performance Program: There are four components to this program: 1) The online analyzer; 2) walk thru audits; 3) whole house audits; and, 4) behavior modification. There were no changes to the first three components of this program. As of this writing, the Behavior Modification Program CSP is compiling preliminary savings calculations.
- Critical Peak Rebate (CPR) Rate: No changes to this program during the PY4Q2.
- Limited Income Energy Efficient Program (LIEEP): Implemented changes that were approved by
  the Commission regarding 2012 program design related to savings and budget. LIEEP services
  were closed effective June 1, 2012, many of the customers who would have been serviced by
  LIEEP, will be serviced by the Joint Utility Usage Management Program (JUUMP) and referred to
  WAP and/or the NGDC's LIURP programs.

- Joint Utility Usage Management Program: Implemented changes that were approved by the Commission in the amended plan regarding 2012 program design. WPP included a broader scope so that additional customers can participate in JUUMP. After several conference calls with Columbia Gas of Pennsylvania and an in-person meeting with Equitable Gas Company JUUMP will continue, however, it will also include referrals to Natural Gas Distribution Company's (NGDC's). Both FirstEnergy and NGDC's will regularly exchange scheduled work lists. When a contractor for both utilities cannot be scheduled at the same time, each utility will schedule a work time that is convenient for the customer. A partial Low Income, Low Usage mailing of energy efficiency kits was completed in the month of November.
- **Commercial & Industrial Equipment Program Small**: There were no changes to this program during PY4 Q2.
- Time of Use (TOU) with Critical Peak Pricing (CPP) Rate: There were no changes to this program during PY4 Q2.
- Commercial & Industrial Equipment Program Large: There were no changes to this program during PY4 Q2.
- **Customer Load Response**: This program was operated between June 1 and September 30, 2012. As of this writing, the gross / net impact evaluation effort is underway.
- **Customer Resources Demand Response Program**: This program was operated between June 1 and September 30, 2012. As of this writing, the gross / net impact evaluation effort is underway.
- **Distributed Generation:** This program was removed from West Penn's Plan under docket M-2009-2093218 approved by the Commission on June 14, 2012.
- Conservation Voltage Reduction Program: No changes to this program during the PY4Q2.
- Governmental & Institutional Program: There were no changes to this program during PY4 Q2.

# 1.3 Evaluation Updates and Findings

Residential Appliance Turn-In Program

The evaluation methodology for this program is unchanged from PY3.

Table 1.3.1 Residential Appliance Turn-In Program Evaluation Summary

Program Component	Evaluation Activities Planned	Evaluation Activities Status
Refrigerator		ADM has conducted areliminary dock
Freezer	Tracking System/TRM Review  Verification Surveys	ADM has conducted preliminary desk reviews. First sample will be drawn from the Q1 and Q2 populations.
Room air conditioner		the Q1 and Q2 populations.

# • Residential Energy Efficient Products Program

The sampling scheme for this program includes several qualitative strata for lighting and appliances. Evaluation activities for the strata are listed below.

**Table 1.3.2 Residential Energy Efficient Products Program Evaluation Summary** 

Program Component	Evaluation Activities Planned	Evaluation Activities Status
CFL Buydowns	Invoice + calculation review	
CFL Giveaways	Invoice + calculation review	PY4 evaluation activities to date include calculation and ex-ante reviews and assignment of preliminary realization rate
Appliances	Invoice + calculation review (large sample, stratified by appliance type)	based on desk review and application of updated TRM protocols.
	On-Site inspection (smaller sample, focus on clothes washers)	

# • Residential Energy Efficient HVAC Equipment Program

The sampling scheme for this program includes four qualitative strata. Evaluation activities for the strata are listed below.

Table 1.3.3 Residential Energy Efficient HVAC Equipment Program Evaluation Summary

Program Component	Evaluation Activities Planned	Evaluation Activities Status		
Air Source Heat Pump	Invoice + calculation review (large sample) On-Site inspection (smaller sample)	PY4 evaluation activities to date include calculation and ex-ante reviews and assignment of preliminary realization rate based on desk review and application of		
Ground Source Heat Pump	Invoice + calculation review (large sample) On-Site inspection (smaller sample)	updated TRM protocols. The average efficiencies and capacities from the PY3 evaluation are used to generate preliminary realization rates for this		
Central Air Conditioning	Invoice + calculation review (large sample) On-Site inspection (smaller sample)	rogram.		
HVAC tune-ups	Invoice + calculation review, and telephone verification surveys			

## • Residential Home Performance Program

The Residential Home Performance Program assists households in identifying energy savings opportunities through self-administered and professional walk-through home audits and providing customers with CFLs and other low cost energy savings measures. The program promotes CFL giveaways through several CFL promotional channels, including Opt-in, Smart Meter and School Kits. The program also includes a behavioral modification and education component designed to provide customers with information about their energy usage and low cost ways they can reduce usage.

**Table 1.3.4 Residential Home Performance Program Evaluation Summary** 

Program Component	Evaluation Activities Planned	<b>Evaluation Activities Status</b>			
Conservation Kits	Survey representative sample of participants	ADM has conducted desk reviews of the tracking data and has constructed preliminary realization rates that consider historical "in service rates" and successful delivery rates, as well as changes in the TRM protocols.			
Direct Install of Low-Cost Measures	Sample once for entire PY4, conduct engineering review and verification surveys.	ADM has conducted preliminary desk reviews. Sample will be drawn shortly after PY2Q2 report is filed.			
Behavior Modification	Billing Analysis	M&V plans are completed and initial data requests have been made by the M&V team.			

## • Critical Peak Rebate (CPR) Rate

Impact evaluation for this program will begin in January 2013 and preliminary demand reduction estimates will be available by March 2013.

# Limited Income Energy Efficient Program (LIEEP)

This program is separated into two strata for evaluation purposes. Evaluation activities are similar for the two strata and are described in the table below.

**Table 1.3.5 Joint Utility Usage Management Program Evaluation Summary** 

Program Component	Evaluation Activities Planned	Evaluation Activities Status			
In-home services	Invoice + calculation review and telephone verification surveys	ADM has conducted preliminary desk reviews. Sample will be drawn shortly after PY2Q2 report is filed.			
Conservation Kits	Invoice + calculation review and telephone verification surveys	ADM has conducted preliminary desk reviews. Sample will be drawn shortly after PY2Q2 report is filed.			

# Joint Utility Usage Management Program

This program is separated into two strata for evaluation purposes. Evaluation activities are similar for the two strata and are described in the table below.

**Table 1.3.6 Joint Utility Usage Management Program Evaluation Summary** 

Program Component	Evaluation Activities Planned	<b>Evaluation Activities Status</b>			
JUUMP Comprehensive Audits	Study feasibility of billing analysis and conduct billing analysis for PY4 if practicable.	ADM has conducted preliminary tracking data reviews.			
Conservation Kits	Invoice + calculation review and telephone verification surveys	ADM has conducted preliminary tracking data reviews.			

## • Commercial & Industrial Equipment Program - Small

This program offers energy efficiency measures to small commercial/industrial customers. The impact evaluation utilizes stratified sampling. First, the population is stratified into qualitative strata that consist of standardized measure groups as listed below. Each qualitative stratum may contain several quantitative strata based on the expected magnitude of the impacts. The sample sizes are based on past program experience regarding the variability of the realization rates for sampled projects.

Table 1.3.6 Commercial & Industrial Equipment Program Evaluation Summary

Program Component	Evaluation Activities Planned	Evaluation Activities Status
"Lighting for Business" Applications	Stratified sampling and on-site visits	First sample to be drawn from Q1 and Q2 populations. Desk review completed for C/I CFL kits.
HVAC and Prescriptive Motors	Sample for first 2 quarters, then for each subsequent quarter. Conduct on-sites and analyses as required.	First sample to be drawn from Q1 and Q2 populations. ADM has conducted rebate application/ tracking and reporting reviews for a direct install program component.
Custom	Sample for first 2 quarters, then for each subsequent quarter. Conduct on-sites and analyses as required.	First sample to be drawn from Q1 and Q2 populations.

# • Time of Use (TOU) with Critical Peak Pricing (CPP) Rate

This program had no participation; no impact evaluation will be performed.

# • Commercial & Industrial Equipment Program – Large

This program offers similar measures as the Small C/I and Government Equipment programs. The evaluation approach for this program is similar to the one employed for the Small C/I program.

**Table 1.3.7 Commercial & Industrial Equipment Program Evaluation Summary** 

Program Component	Evaluation Activities Planned	Evaluation Activities Status		
"Lighting for Business" Applications	Stratified sampling and on-site visits	First sample to be drawn from Q1 and Q2 populations.		
Prescriptive HVAC, Motor, and Refrigeration Applications	Stratified sampling and on-site visits	First sample to be drawn from Q1 and Q2 populations. ADM has conducted rebate application/ tracking and reporting reviews for a direct install program component.		
Custom Applications Stratified sampling and on-site visit		First sample to be drawn from Q1 and Q2 populations. Some on/site and analysis work completed for two custom projects with projected impacts above the threshold for the "certainty" stratum.		

#### Customer Load Response

Impact evaluation for this program will begin in January 2013 and preliminary demand reduction estimates will be available by March 2013. The evaluation effort will involve stratified sampling and inspection of the hourly demand reduction calculations for selected projects.

#### Customer Resources Demand Response Program

Impact evaluation for this program will begin in January 2013 and preliminary demand reduction estimates will be available by March 2013. The evaluation effort will involve stratified sampling and inspection of the hourly demand reduction calculations for selected projects.

#### Distributed Generation

This program had no participation; no impact evaluation will be performed.

## • Conservation Voltage Reduction Program

The CVR program incorporates voltage regulation techniques on select distribution circuits that result in lower service voltage levels and, thus, lower the energy consumption and demand of customers. Three sets of retrofit isolation tests are planned: One in Winter 2013, one in Spring 2013, and one in Summer 2013.

#### Governmental & Institutional Program

This program provides prescriptive and performance based incentives for the installation of cost effective energy efficient non-standard equipment through an authorized contractor network and traditional channels. The evaluation approach for this program is similar to the one employed for the other nonresidential energy efficiency programs.

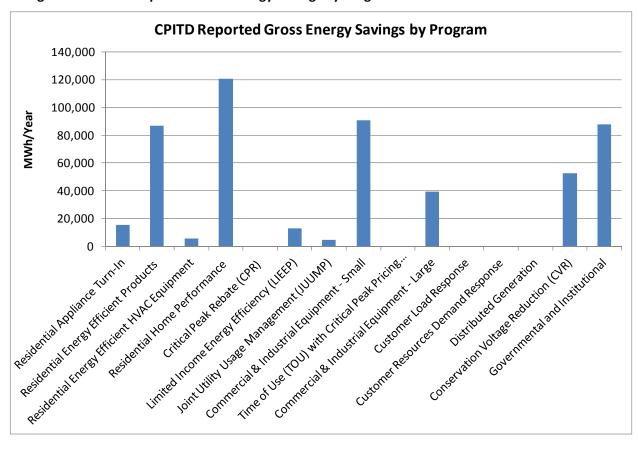
**Table 1.3.8 Governmental & Institutional Program Evaluation Summary** 

Program Component	Evaluation Activities Planned	Evaluation Activities Status
Lighting	Stratified sampling and on-site visits	First sample to be drawn from Q1 and Q2 populations.
Street Lighting	Stratified sampling and on-site visits	First sample to be drawn from Q1 and Q2 populations.
Traffic Signals Stratified sampling and on-site visits		First sample to be drawn from Q1 and Q2 populations.

# 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



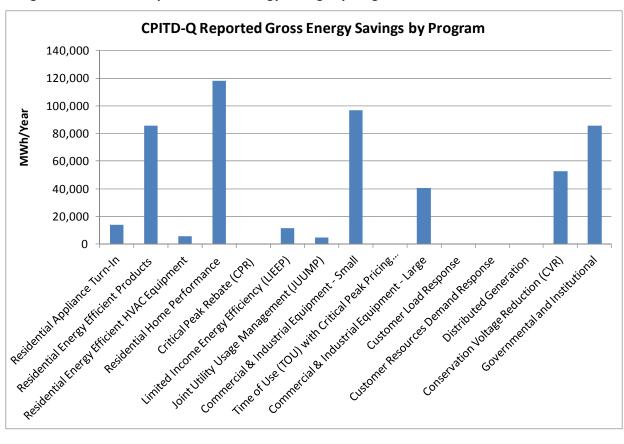


Figure 2-2. CPITD-Q Reported Gross Energy Savings by Program

A summary of energy impacts by program through the PY3 Q4 is presented in Table 2-1.

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

		Participar	nts	Reported Gross Impact (MWh/Year)			Preliminary Realization Rate <sup>1</sup>	
Program	IQ	PYTD	CPITD	IQ	PYTD	CPITD	CPITD-Q	PYTD
Residential Appliance Turn-In	1,679	3,344	9,360	2,979	5,956	15,352	13,741	77.7%
Residential Energy Efficient Products	49,338	102,699	428,655	8,264	17,779	86,779	85,482	88.3%
Residential Energy Efficient HVAC Equipment	2,854	7,887	11,360	1,028	2,347	5,582	5,826	95.9%
Residential Home Performance <sup>2</sup>	2,761	7,947	380,424	1,157	3,038	120,566	118,189	92.9%
Critical Peak Rebate (CPR)	0	0	0	0	0	0	0	n/a
Limited Income Energy Efficiency (LIEEP)	0	420	10,702	16	522	13,149	11,490	100.0%
Joint Utility Usage Management (JUUMP)	955	1,374	5,716	617	1,160	4,843	4,775	98.9%
Commercial & Industrial Equipment - Small	6,991	7,076	33,145	15,529	19,244	90,706	96,926	100.0%
Time of Use (TOU) with Critical Peak Pricing (CPP)	0	0	0	0	0	0	0	n/a
Commercial & Industrial Equipment - Large	26	40	89	11,708	14,972	39,533	40,604	100.0%
Customer Load Response	0	0	0	0	0	0	0	n/a
Customer Resources Demand Response	155	155	155	0	0	0	0	n/a
Distributed Generation	0	0	0	0	0	0	0	n/a
Conservation Voltage Reduction (CVR) <sup>3</sup>	0	0	0	18,101	52,492	52,492	52,492	100.0%
Governmental and Institutional	29	40	1,064	2,712	3,562	88,001	85,785	1
TOTAL PORTFOLIO	64,788	130,982	880,670	62,112	121,072	517,004	515,310	97%

#### NOTES

<sup>1.</sup> Preliminary Realization Rates are based on evaluation activities and findings conducted on a partial sample set. These realization rates are not based on a statistically significant sample and are subject to change until the full evaluation is complete at the end of the program year. In this report, the realization rates for residential programs are based on tracking system review, incorporation of TRM updates, and historical verification/in-service rates. For nonresidential programs, a preliminary placeholder of 95% is used based on historical program performance.

<sup>2.</sup> Residential Home Performance participation includes 175,000 participants for Behavior Modification measure. No savings results were reported to

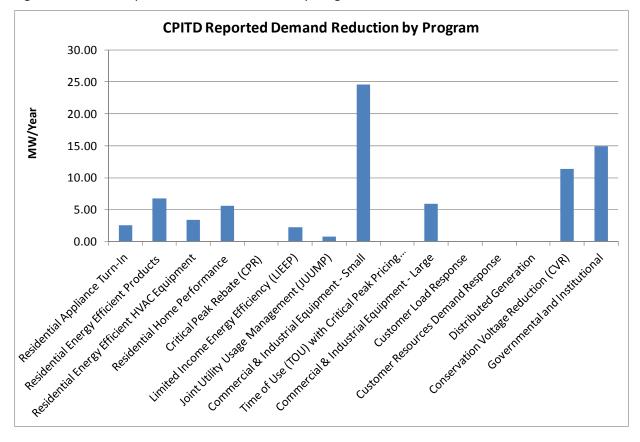
<sup>3.</sup> Conservation Voltage Reduction reported energy savings is based on preliminary engineering assessment.

# 3 Summary of Demand Impacts by Program

A summary of the reported demand reduction by program is presented in

Figure 3-1.

Figure 3-1. CPITD Reported Demand Reduction by Program



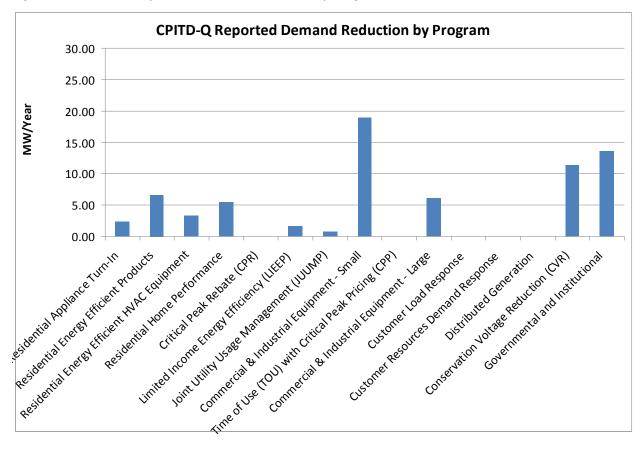


Figure 3-2. CPITD-Q Reported Demand Reduction by Program

A summary of demand reduction impacts by program through the PY3Q4 is presented in Table 3-1.

Table 3-1. Participation and Reported Gross Demand Reduction by Program

		Participar	nts	Reported Gross Impact (MW/Year)			Preliminary Realization Rate <sup>1</sup>	
Program	IQ	PYTD	CPITD	IQ	PYTD	CPITD	CPITD-Q	PYTD
Residential Appliance Turn-In	1,679	3,344	9,360	0.41	0.82	2.52	2.32	80.2%
Residential Energy Efficient Products	49,338	102,699	428,655	0.43	0.90	6.73	6.60	88.9%
Residential Energy Efficient HVAC Equipment	2,854	7,887	11,360	0.80	2.18	3.37	3.28	76.5%
Residential Home Performance <sup>2</sup>	2,761	7,947	380,424	0.04	0.12	5.58	5.42	135.7%
Critical Peak Rebate (CPR)	0	0	0	0.00	0.00	0.00	0.00	n/a
Limited Income Energy Efficiency (LIEEP)	0	420	10,702	0.00	0.06	2.25	1.62	100.0%
Joint Utility Usage Management (JUUMP)	955	1,374	5,716	0.07	0.20	0.74	0.74	98.5%
Commercial & Industrial Equipment - Small	6,991	7,076	33,145	4.15	4.62	24.53	18.92	100.0%
Time of Use (TOU) with Critical Peak Pricing (CPP)	0	0	0	0.00	0.00	0.00	0.00	n/a
Commercial & Industrial Equipment - Large	26	40	89	1.36	1.66	5.91	6.06	100.0%
Customer Load Response	0	0	0	0.00	0.00	0.00	0.00	n/a
Customer Resources Demand Response	155	155	155	0.00	0.00	0.00	0.00	n/a
Distributed Generation	0	0	0	0.00	0.00	0.00	0.00	n/a
Conservation Voltage Reduction (CVR) <sup>3</sup>	0	0	0	-1.07	11.33	11.33	11.33	100.0%
Governmental and Institutional	29	40	1,064	0.43	0.50	14.93	13.60	100.0%
TOTAL PORTFOLIO	64,788	130,982	880,670	6.63	22.39	77.88	69.89	97%

#### NOTES:

<sup>1.</sup> Preliminary Realization Rates are based on evaluation activities and findings conducted on a partial sample set. These realization rates are not based on a statistically significant sample and are subject to change until the full evaluation is complete at the end of the program year. In this report, the realization rates for residential programs are based on tracking system review, incorporation of TRM updates, and historical verification/in-service rates. For nonresidential programs, a preliminary placeholder of 95% is used based on historical program performance.

<sup>2.</sup> Residential Home Performance participation includes 175,000 participants for Behavior Modification measure. No savings results were reported to date.

<sup>3.</sup> Conservation Voltage Reduction reported demand savings is based on preliminary engineering assessment.

# 4 Summary of Finances

# 4.1 Portfolio Level Expenditures

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

**Table 4-1. Summary of Portfolio Finances** 

	IQ (\$000)	PYTD (\$000)	CPITD (\$000)
EDC Incentives to Participants	\$2,690	\$10,849	\$34,081
EDC Incentives to Trade Allies	\$0	\$0	\$0
Subtotal EDC Incentive Costs	\$2,690	\$10,849	\$34,081
Design & Development	\$0	\$0	\$1,787
Administration	\$321	\$426	\$3,977
Management <sup>1</sup>	\$0	\$0	\$0
Marketing	\$358	\$609	\$5,693
Technical Assistance <sup>2</sup>	\$2,064	\$1,797	\$12,931
Subtotal EDC Implementation Costs	\$2,744	\$2,832	\$24,389
EDC Evaluation Costs	\$211	\$232	\$1,747
SWE Audit Costs	\$0	\$310³	\$2,304
Total EDC Costs	\$5,645	\$14,223	\$62,522
Participant Costs	\$0	\$0	\$0
Total TRC Costs			
			Į

<sup>&</sup>lt;sup>1</sup>EDC costs other than those identified explicitly.

<sup>&</sup>lt;sup>2</sup>Implementation Contractor Costs.

<sup>&</sup>lt;sup>3</sup>SWE Audit Costs from PY4 Q1 included in PYTD.

# 4.2 Program Level Expenditures

Program-specific finances are shown in the following tables.

Table 4-2. Summary of Program Finances – Residential Appliance Turn-In Program

	IQ (\$000)	PYTD (\$000)	CPITD (\$000)
EDC Incentives to Participants	\$63	\$129	\$546
EDC Incentives to Trade Allies	\$0	<b>\$</b> 0	<b>\$</b> 0
Subtotal EDC Incentive Costs	\$63	\$129	\$546
Design & Development	\$0	\$0	\$0
Administration	\$3	\$3	\$131
Management <sup>1</sup>	\$0	\$0	<b>\$</b> 0
Marketing	\$33	\$60	\$891
Technical Assistance <sup>2</sup>	\$103	\$197	\$1,140
Subtotal EDC Implementation Costs	\$139	\$260	\$2,163
EDC Evaluation Costs	\$6	\$7	\$91
SWE Audit Costs	\$0	\$0	<b>\$</b> 0
Total EDC Costs	\$208	\$396	\$2,799
Participant Costs	\$0	\$0	<b>\$</b> 0
Total TRC Costs			
Notes:			
<sup>1</sup> FDC costs other than those identified explic	ritly		

<sup>&</sup>lt;sup>1</sup>EDC costs other than those identified explicitly.

<sup>&</sup>lt;sup>2</sup>Implementation Contractor Costs.

Table 4-3. Summary of Program Finances – Residential Energy Efficient Products Program

	IQ (\$000)	PYTD (\$000)	CPITD (\$000)
EDC Incentives to Participants	\$348	\$329	\$3,698
EDC Incentives to Trade Allies	\$0	\$0	\$0
Subtotal EDC Incentive Costs	\$348	\$329	\$3,698
Design & Development	\$0	\$0	\$265
Administration	\$35	\$42	\$414
Management <sup>1</sup>	\$0	\$0	\$0
Marketing	\$55	\$51	\$2,195
Technical Assistance <sup>2</sup>	\$145	\$223	\$1,079
Subtotal EDC Implementation Costs	\$235	\$316	\$3,953
EDC Evaluation Costs	\$23	\$18	\$310
SWE Audit Costs	<b>\$</b> 0	\$0	\$0
Total EDC Costs	\$605	\$662	\$7,960
Participant Costs	\$0	\$0	\$0
Total TRC Costs			
		L	

<sup>&</sup>lt;sup>1</sup>EDC costs other than those identified explicitly.

<sup>&</sup>lt;sup>2</sup>Implementation Contractor Costs.

Table 4-4. Summary of Program Finances – Residential Energy Efficient HVAC Equipment Program

	IQ (\$000)	PYTD (\$000)	CPITD (\$000)
EDC Incentives to Participants	\$150	\$482	\$1,113
EDC Incentives to Trade Allies	<b>\$</b> 0	<b>\$</b> 0	\$0
Subtotal EDC Incentive Costs	\$150	\$482	\$1,113
Design & Development	\$0	\$0	\$123
Administration	\$8	\$13	\$147
Management <sup>1</sup>	\$0	\$0	\$0
Marketing	\$39	\$153	\$353
Technical Assistance <sup>2</sup>	\$67	\$186	\$444
Subtotal EDC Implementation Costs	\$114	\$353	\$1,067
EDC Evaluation Costs	\$9	\$5	\$104
SWE Audit Costs	\$0	\$0	\$0
Total EDC Costs	\$273	\$840	\$2,284
Participant Costs	\$0	\$0	\$0
Total TRC Costs			

<sup>&</sup>lt;sup>1</sup>EDC costs other than those identified explicitly.

<sup>&</sup>lt;sup>2</sup>Implementation Contractor Costs.

Table 4-5. Summary of Program Finances – Residential Home Performance Program

	IQ (\$000)	PYTD (\$000)	CPITD (\$000)
EDC Incentives to Participants	\$117	\$287	\$6,031
EDC Incentives to Trade Allies	<b>\$</b> 0	\$0	\$0
Subtotal EDC Incentive Costs	\$117	\$287	\$6,031
Design & Development	\$0	\$0	\$135
Administration	\$46	\$54	\$283
Management <sup>1</sup>	\$0	\$0	\$0
Marketing	\$32	\$146	\$993
Technical Assistance <sup>2</sup>	\$468	-\$627	\$3,352
Subtotal EDC Implementation Costs	\$547	-\$427	\$4,763
EDC Evaluation Costs	\$13	\$7	\$161
SWE Audit Costs	<b>\$</b> 0	\$0	\$0
Total EDC Costs	\$677	-\$134	\$10,956
Participant Costs	\$0	\$0	\$0
Total TRC Costs			

<sup>&</sup>lt;sup>1</sup>EDC costs other than those identified explicitly.

<sup>&</sup>lt;sup>2</sup>Implementation Contractor Costs.

Table 4-6. Summary of Program Finances – Critical Peak Rebate (CPR) Rate

	IQ (\$000)	PYTD (\$000)	CPITD (\$000)
EDC Incentives to Participants	\$152	\$361	\$361
EDC Incentives to Trade Allies	\$0	<b>\$</b> 0	\$0
Subtotal EDC Incentive Costs	\$152	\$513	\$361
Design & Development	\$0	\$0	\$6
Administration	\$8	\$14	\$85
Management <sup>1</sup>	\$0	\$0	\$0
Marketing	\$0	<b>\$</b> 0	\$179
Technical Assistance <sup>2</sup>	\$5	\$87	\$119
Subtotal EDC Implementation Costs	\$13	\$101	\$390
EDC Evaluation Costs	\$5	\$18	\$35
SWE Audit Costs	\$0	\$0	\$0
Total EDC Costs	\$171	\$633	\$939
Participant Costs	\$0	\$0	\$0
Total TRC Costs			

<sup>&</sup>lt;sup>1</sup>EDC costs other than those identified explicitly.

<sup>&</sup>lt;sup>2</sup>Implementation Contractor Costs.

Table 4-7. Summary of Program Finances – Limited Income Energy Efficiency Program (LIEEP)

	IQ (\$000)	PYTD (\$000)	CPITD (\$000)
EDC Incentives to Participants	\$0	-\$693	\$6,329
EDC Incentives to Trade Allies	\$0	\$0	\$0
Subtotal EDC Incentive Costs	\$0	-\$693	\$6,329
Design & Development	\$0	\$0	\$40
Administration	\$16	\$10	\$316
Management <sup>1</sup>	\$0	\$0	\$0
Marketing	\$0	-\$1	\$17
Technical Assistance <sup>2</sup>	\$4	-\$30	\$662
Subtotal EDC Implementation Costs	\$20	-\$20	\$1,035
EDC Evaluation Costs	\$4	-\$2	\$50
SWE Audit Costs	\$0	\$0	\$0
Total EDC Costs	\$24	-\$715	\$7,414
Participant Costs	\$0	\$0	\$0
Total TRC Costs			
	L	<u> </u>	L

<sup>&</sup>lt;sup>1</sup>EDC costs other than those identified explicitly.

<sup>&</sup>lt;sup>2</sup>Implementation Contractor Costs.

Table 4-8. Summary of Program Finances – Joint Utility Usage Management Program

	IQ (\$000)	PYTD (\$000)	CPITD (\$000)
EDC Incentives to Participants	\$0	\$1,582	\$2,106
EDC Incentives to Trade Allies	\$0	\$0	\$0
Subtotal EDC Incentive Costs	\$0	\$1,582	\$2,106
Design & Development	\$0	\$0	\$25
Administration	\$49	\$65	\$238
Management <sup>1</sup>	\$0	\$0	\$0
Marketing	\$0	<b>\$</b> 1	\$16
Technical Assistance <sup>2</sup>	\$767	\$894	\$1,178
Subtotal EDC Implementation Costs	\$815	\$961	\$1,457
EDC Evaluation Costs	\$11	\$15	\$65
SWE Audit Costs	\$0	\$0	\$0
Total EDC Costs	\$827	\$2,558	\$3,627
Participant Costs	\$0	\$0	\$0
Total TRC Costs			

<sup>&</sup>lt;sup>1</sup>EDC costs other than those identified explicitly.

<sup>&</sup>lt;sup>2</sup>Implementation Contractor Costs.

Table 4-9. Summary of Program Finances – Commercial & Industrial Equipment Program - Small

	IQ (\$000)	PYTD (\$000)	CPITD (\$000)
EDC Incentives to Participants	\$773	\$1,025	\$4,310
EDC Incentives to Trade Allies	\$0	\$0	\$0
Subtotal EDC Incentive Costs	\$773	\$1,025	\$4,310
Design & Development	\$0	\$0	\$308
Administration	\$61	\$79	\$940
Management <sup>1</sup>	\$0	\$0	\$0
Marketing	\$133	\$138	\$582
Technical Assistance <sup>2</sup>	\$192	\$363	\$1,504
Subtotal EDC Implementation Costs	\$385	\$580	\$3,334
EDC Evaluation Costs	\$99	\$112	\$500
SWE Audit Costs	\$0	\$0	\$0
Total EDC Costs	\$1,257	\$1,717	\$8,144
Participant Costs	\$0	\$0	\$0
Total TRC Costs			
Natas			

<sup>&</sup>lt;sup>1</sup>EDC costs other than those identified explicitly.

<sup>&</sup>lt;sup>2</sup>Implementation Contractor Costs.

Table 4-10. Summary of Program Finances – Time of Use (TOU) with Critical Peak Pricing (CPP) Rate

	IQ (\$000)	PYTD (\$000)	CPITD (\$000)
EDC Incentives to Participants	\$0	\$0	\$0
EDC Incentives to Trade Allies	\$0	<b>\$</b> 0	\$0
Subtotal EDC Incentive Costs	\$0	\$0	\$0
Design & Development	\$0	\$0	\$6
Administration	\$2	\$3	\$49
Management <sup>1</sup>	\$0	\$0	\$0
Marketing	\$0	\$0	\$17
Technical Assistance <sup>2</sup>	\$1	\$1	\$28
Subtotal EDC Implementation Costs	\$3	\$4	\$100
EDC Evaluation Costs	\$15	\$10	\$22
SWE Audit Costs	\$0	\$0	\$0
Total EDC Costs	\$18	\$14	\$122
Participant Costs	\$0	\$0	\$0
Total TRC Costs			
		L	

<sup>&</sup>lt;sup>1</sup>EDC costs other than those identified explicitly.

<sup>&</sup>lt;sup>2</sup>Implementation Contractor Costs.

Table 4-11. Summary of Program Finances – Commercial & Industrial Equipment Program – Large

	IQ (\$000)	PYTD (\$000)	CPITD (\$000)
EDC Incentives to Participants	\$535	\$762	\$2,660
EDC Incentives to Trade Allies	<b>\$</b> 0	<b>\$</b> 0	\$0
Subtotal EDC Incentive Costs	\$535	\$762	\$2660
Design & Development	\$0	\$0	\$667
Administration	\$34	\$51	\$618
Management <sup>1</sup>	\$0	\$0	\$0
Marketing	\$47	\$63	\$246
Technical Assistance <sup>2</sup>	\$246	\$401	\$1,659
Subtotal EDC Implementation Costs	\$326	\$514	\$3,190
EDC Evaluation Costs	\$5	\$12	\$100
SWE Audit Costs	\$0	\$0	\$0
Total EDC Costs	\$866	\$1,289	\$5,950
Participant Costs	\$0	\$0	\$0
Total TRC Costs			

<sup>&</sup>lt;sup>1</sup>EDC costs other than those identified explicitly.

<sup>&</sup>lt;sup>2</sup>Implementation Contractor Costs.

Table 4-12. Summary of Program Finances – Customer Load Response Program

	IQ (\$000)	PYTD (\$000)	CPITD (\$000)
EDC Incentives to Participants	\$0	\$0	\$15
EDC Incentives to Trade Allies	\$0	\$0	<b>\$</b> 0
Subtotal EDC Incentive Costs	\$0	\$0	\$15
Design & Development	\$0	\$0	\$88
Administration	\$4	\$4	\$82
Management <sup>1</sup>	\$0	\$0	<b>\$</b> 0
Marketing	\$0	\$0	\$2
Technical Assistance <sup>2</sup>	\$5	\$6	\$47
Subtotal EDC Implementation Costs	\$9	\$10	\$219
EDC Evaluation Costs	\$1	\$1	\$15
SWE Audit Costs	\$0	\$0	<b>\$</b> 0
Total EDC Costs	\$10	\$11	\$249
Participant Costs	\$0	\$0	\$0
Total TRC Costs			

<sup>&</sup>lt;sup>1</sup>EDC costs other than those identified explicitly.

<sup>&</sup>lt;sup>2</sup>Implementation Contractor Costs.

Table 4-13. Summary of Program Finances – Customer Resources Demand Response Program

	IQ (\$000)	PYTD (\$000)	CPITD (\$000)
EDC Incentives to Participants	\$123	\$4,052	\$4,052
EDC Incentives to Trade Allies	\$0	\$0	\$0
Subtotal EDC Incentive Costs	\$123	\$4,052	\$4,052
Design & Development	\$0	\$0	\$7
Administration	\$10	\$10	\$93
Management <sup>1</sup>	\$0	\$0	\$0
Marketing	<b>\$</b> 0	\$0	\$49
Technical Assistance <sup>2</sup>	\$2	\$4	\$378
Subtotal EDC Implementation Costs	\$12	\$14	\$526
EDC Evaluation Costs	\$14	\$13	\$34
SWE Audit Costs	\$0	\$0	\$0
Total EDC Costs	\$150	\$4,079	\$4,612
Participant Costs	\$0	\$0	\$0
Total TRC Costs			
Nation			

<sup>&</sup>lt;sup>1</sup>EDC costs other than those identified explicitly.

<sup>&</sup>lt;sup>2</sup>Implementation Contractor Costs.

Table 4-14. Summary of Program Finances – Distributed Generation Program

	IQ (\$000)	PYTD (\$000)	CPITD (\$000)
EDC Incentives to Participants	\$0	\$0	<b>\$</b> 0
EDC Incentives to Trade Allies	\$0	\$0	\$0
Subtotal EDC Incentive Costs	\$0	\$0	\$0
Design & Development	\$0	\$0	\$5
Administration	\$2	\$2	\$41
Management <sup>1</sup>	\$0	\$0	\$0
Marketing	\$0	\$0	\$3
Technical Assistance <sup>2</sup>	\$0	\$0	\$27
Subtotal EDC Implementation Costs	\$2	\$2	\$77
EDC Evaluation Costs	\$0	\$0	\$1
SWE Audit Costs	<b>\$</b> 0	\$0	\$0
Total EDC Costs	\$3	\$3	\$79
Participant Costs	\$0	\$0	\$0
Total TRC Costs			

<sup>&</sup>lt;sup>1</sup>EDC costs other than those identified explicitly.

<sup>&</sup>lt;sup>2</sup>Implementation Contractor Costs.

Table 4-15. Summary of Program Finances – Conservation Voltage Reduction (CVR) Program

	IQ (\$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	\$23	\$51	\$142
Management <sup>1</sup>	\$0	\$0	\$0
Marketing	\$0	\$0	\$0
Technical Assistance <sup>2</sup>	\$1	\$1	\$6
Subtotal EDC Implementation Costs	\$24	\$52	\$149
EDC Evaluation Costs	\$1	\$1	\$3
SWE Audit Costs	\$0	\$0	\$0
Total EDC Costs	\$26	\$53	\$152
Participant Costs	\$0	\$0	\$0
Total TRC Costs			
		<u> </u>	

<sup>&</sup>lt;sup>1</sup>EDC costs other than those identified explicitly.

<sup>&</sup>lt;sup>2</sup>Implementation Contractor Costs.

Table 4-16. Summary of Program Finances – Governmental and Institutional Program

	IQ (\$000)	PYTD (\$000)	CPITD (\$000)
EDC Incentives to Participants	\$430	\$2,381	\$3,600
EDC Incentives to Trade Allies	<b>\$</b> 0	<b>\$</b> 0	\$0
Subtotal EDC Incentive Costs	\$430	\$2,381	\$3,600
Design & Development	\$0	\$0	\$111
Administration	\$20	\$24	\$396
Management <sup>1</sup>	\$0	\$0	\$0
Marketing	\$20	-\$2	\$150
Technical Assistance <sup>2</sup>	\$58	\$90	\$418
Subtotal EDC Implementation Costs	\$97	\$111	\$1,075
EDC Evaluation Costs	\$4	\$14	\$257
SWE Audit Costs	<b>\$</b> 0	<b>\$</b> 0	\$0
Total EDC Costs	\$531	\$2,507	\$4,931
Participant Costs	<b>\$</b> 0	\$0	\$0
Total TRC Costs			
		<u> </u>	

<sup>&</sup>lt;sup>1</sup>EDC costs other than those identified explicitly.

<sup>&</sup>lt;sup>2</sup>Implementation Contractor Costs.