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January 16, 2024

VIA ELECTRONIC FILING

Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission
400 North Street
Harrisburg, PA 17120

**RE: Semi-Annual Report to the Pennsylvania Public Utility Commission and Act 129 Statewide Evaluator; Phase IV Program year Period June 1, 2023, to May 31, 2024, for Metropolitan Edison Company, Pennsylvania Electric Company, Pennsylvania Power Company and West Penn Power Company;
Docket Nos. M-2020-3020820, M-2020-3020821, M-2020-3020822, and M-2020-3020823**

Dear Secretary Chiavetta:

Enclosed please find the Semi-Annual Report to the Pennsylvania Public Utility Commission in the above-captioned matter for Metropolitan Edison Company, Pennsylvania Electric Company, Pennsylvania Power Company, and West Penn Power Company.

Should you have any questions regarding this matter, please do not hesitate to contact me.

Very truly yours,



Daniel A. Garcia

DG/mlr

Enclosure

cc: Certificate of Service

Semi-Annual Report to the Pennsylvania Public Utility Commission

Phase IV of Act 129

Program Year 15

(June 1, 2023 – May 31, 2024)

For Pennsylvania Act 129 of 2008

Energy Efficiency and Conservation Plan

Prepared by ADM

and the FirstEnergy Pennsylvania EDCs for:

Metropolitan Edison Company	M-2020-3020820
Pennsylvania Electric Company	M-2020-3020821
Pennsylvania Power Company	M-2020-3020822
West Penn Power Company	M-2020-3020823

Filed January 16, 2024

For the Reporting Period Ending November 30, 2023

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Acronyms

BDR	Behavioral Demand Response
C&I	Commercial and Industrial
CSP	Conservation Service Provider or Curtailment Service Provider
DLC	Direct Load Control
DR	Demand Response
EDC	Electric Distribution Company
EDT	Eastern Daylight Time
EE&C	Energy Efficiency and Conservation
EM&V	Evaluation, Measurement, and Verification
EUL	Effective Useful Life
GNI	Government, Non-Profit, Institutional
HVAC	Heating, Ventilating, and Air Conditioning
ICSP	Implementation Conservation Service Provider
kW	Kilowatt
kWh	Kilowatt-hour
LED	Light-Emitting Diode
LIURP	Low-Income Usage Reduction Program
M&V	Measurement and Verification
MW	Megawatt
MWh	Megawatt-hour
NTG	Net-to-Gross
P4TD	Phase IV to Date
PA PUC	Pennsylvania Public Utility Commission
PSA	Phase IV to Date Preliminary Savings Achieved; equal to VTD + PYTD
PSA+CO	PSA savings plus Carryover from Phase III
PY	Program Year: e.g., PY13, from June 1, 2021 to May 31, 2022
PYRTD	Program Year Reported to Date
PYVTD	Program Year Verified to Date
RTD	Phase IV to Date Reported Gross Savings
SWE	Statewide Evaluator
TRC	Total Resource Cost
TRM	Technical Reference Manual
VTD	Phase IV to Date Verified Gross Savings

Types of Savings

Gross Savings: The change in energy consumption and/or peak demand that results directly from program-related actions taken by participants in an EE&C program, regardless of why they participated.

Net Savings: The total change in energy consumption and/or peak demand that is attributable to an EE&C program. Depending on the program delivery model and evaluation methodology, the net savings estimates may differ from the gross savings estimate due to adjustments for the effects of free riders, changes in codes and standards, market effects, participant and nonparticipant spillover, and other causes of changes in energy consumption or demand not directly attributable to the EE&C program.

Reported Gross: Also referred to as *ex ante* (Latin for “beforehand”) savings. The energy savings and peak demand reduction values calculated by the EDC or its program Implementation Conservation Service Providers (ICSP) and stored in the program tracking system.

Verified Gross: Also referred to as *ex post* (Latin for “from something done afterward”) gross savings. The energy savings and peak demand reduction estimates reported by the independent evaluation contractor after the gross impact evaluation and associated M&V efforts have been completed.

Verified Net: Also referred to as *ex post* net savings. The energy savings and peak demand reduction estimates reported by the independent evaluation contractor after application of the results of the net impact evaluation. Typically calculated by multiplying the verified gross savings by a net-to-gross (NTG) ratio.

Annual Savings: Energy savings and demand reduction expressed on an annual basis, or the amount of energy and/or peak demand an EE&C measure or program can be expected to save over the course of a typical year. Annualized savings are noted as MWh/year or MW/year. The Pennsylvania TRM provides algorithms and assumptions to calculate annual savings, and Act 129 compliance targets for consumption reduction are based on the sum of the annual savings estimates of installed measures.

Lifetime Savings: Energy savings and demand reduction expressed in terms of the total expected savings over the useful life of the measure. Typically calculated by multiplying the annual savings of a measure by its effective useful life. The TRC Test uses savings from the full lifetime of a measure to calculate the cost-effectiveness of EE&C programs.

Program Year Reported to Date (PYRTD): The reported gross energy savings and peak demand reduction achieved by an EE&C program or portfolio within the current program year. PYTD values for energy efficiency will always be reported gross savings in a semi-annual report.

Program Year Verified to Date (PYVTD): The verified gross energy savings and peak demand reduction achieved by an EE&C program or portfolio within the current program year.

Phase IV to Date (P4TD): The energy savings and peak demand reduction achieved by an EE&C program or portfolio within Phase IV of Act 129. Reported in several permutations described below.

Phase IV to Date Reported (RTD): The sum of the reported gross savings recorded to date in Phase IV of Act 129 for an EE&C program or portfolio.

Phase IV to Date Verified (VTD): The sum of the verified gross savings recorded to date in Phase IV of Act 129 for an EE&C program or portfolio, as determined by the impact evaluation finding of the independent evaluation contractor.

Phase IV to Date Preliminary Savings Achieved (PSA): The sum of the verified gross savings (VTD) from previous program years in Phase IV where the impact evaluation is complete plus the reported gross savings from the current program year (PYTD).

Phase IV to Date Preliminary Savings Achieved + Carryover (PSA+CO): The sum of the verified gross savings from previous program years in Phase IV plus the reported gross savings from the current program year plus any verified gross carryover savings from Phase III of Act 129. This is the best estimate of an EDC's progress toward the Phase IV compliance targets.

Section 1 Introduction

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 for Phases I (2008 through 2013), II (2013 through 2016) and III (2016 through 2021). In late 2020, each EDC filed a new energy efficiency and conservation (EE&C) plan with the PA PUC detailing the proposed design of its portfolio for Phase IV. These plans were updated based on stakeholder input and subsequently approved by the PUC in 2021.

Implementation of Phase IV of the Act 129 programs began on June 1, 2021. This report documents the progress and effectiveness of the Phase IV EE&C accomplishments in Program Year 15 (PY15) for Metropolitan Edison Company (“Met-Ed” or “ME”), Pennsylvania Electric Company (“Penelec” or “PN”), Penn Power Company (“Penn Power” or “PP”), and West Penn Power Company (“West Penn Power” or “WPP”) (known collectively as the “FirstEnergy Pennsylvania EDCs” or “FirstEnergy” or “Companies”), as well as the cumulative accomplishments of the Phase IV programs since inception. This report additionally documents the energy savings carried over from Phase III. The Phase III carryover savings count towards EDC energy efficiency savings compliance targets for Phase IV.

This report details the participation, spending, and reported gross impacts of the energy efficiency programs during the first six months of PY15. Compliance with Act 129 savings goals is ultimately based on verified gross savings. FirstEnergy has retained ADM Associates as an independent evaluation contractor for Phase IV of Act 129. ADM Associates is responsible for the measurement and verification of the savings and calculation of verified gross savings. The verified gross savings for PY15 energy efficiency programs will be reported in the final annual report, to be filed on September 30, 2024.

Phase IV of Act 129 includes a peak demand reduction goal for Met-Ed, Penelec, Penn Power, and West Penn Power. Unlike previous phases of Act 129, Phase IV peak demand reduction targets must be met through coincident demand reductions from energy efficiency measures. The Act 129 peak demand reduction definition is non-holiday weekdays from 2:00 pm to 6:00 pm in June, July, and August. As in prior phases, compliance with Act 129 peak compliance goals is assessed at the system-level so all coincident peak demand impacts are adjusted for line losses.

Section 2 Summary of Achievements

2.1 CARRYOVER SAVINGS FROM PHASE III OF ACT 129

The Commission's Phase IV Implementation Order¹ allowed EDCs to carry over verified savings above the Phase III portfolio and low-income savings goal and apply those savings toward Phase IV compliance targets. Table 2-1 shows total MWh/year carryover savings from Phase III for each of the FirstEnergy EDCs².

Table 2-1: Phase III Carryover Savings

EDC	Phase III Carryover Savings (MWh/Year)	Low-Income Phase III Carryover Savings (MWh/Year)
Met-Ed	147,303	9,782
Penelec	130,025	10,466
Penn Power	66,577	3,504
West Penn Power	168,480	8,269

Figures 1A-1D: Carryover Savings from Phase III of Act 129 compare each of the EDC's Phase III verified gross savings total to the Phase III compliance target to illustrate the carryover calculation.

¹ Pennsylvania Public Utility Commission, *Energy Efficiency and Conservation Program Implementation Order*, at Docket No. M-2020-3015228, (*Phase IV Implementation Order*), entered June 18, 2020.

Figures 1A-1D: Carryover Savings from Phase III of Act 129

Figure 1A: Carryover Savings from Phase III of Act 129 - Met-Ed

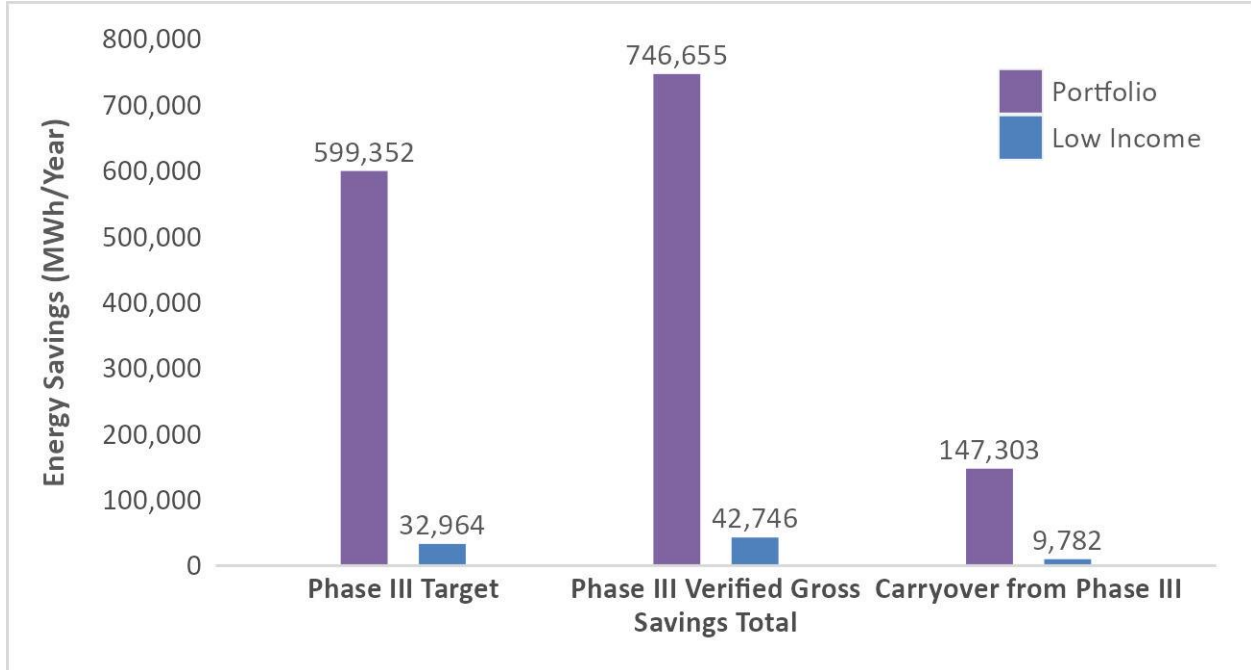


Figure 1B: Carryover Savings from Phase III of Act 129 – Penelec

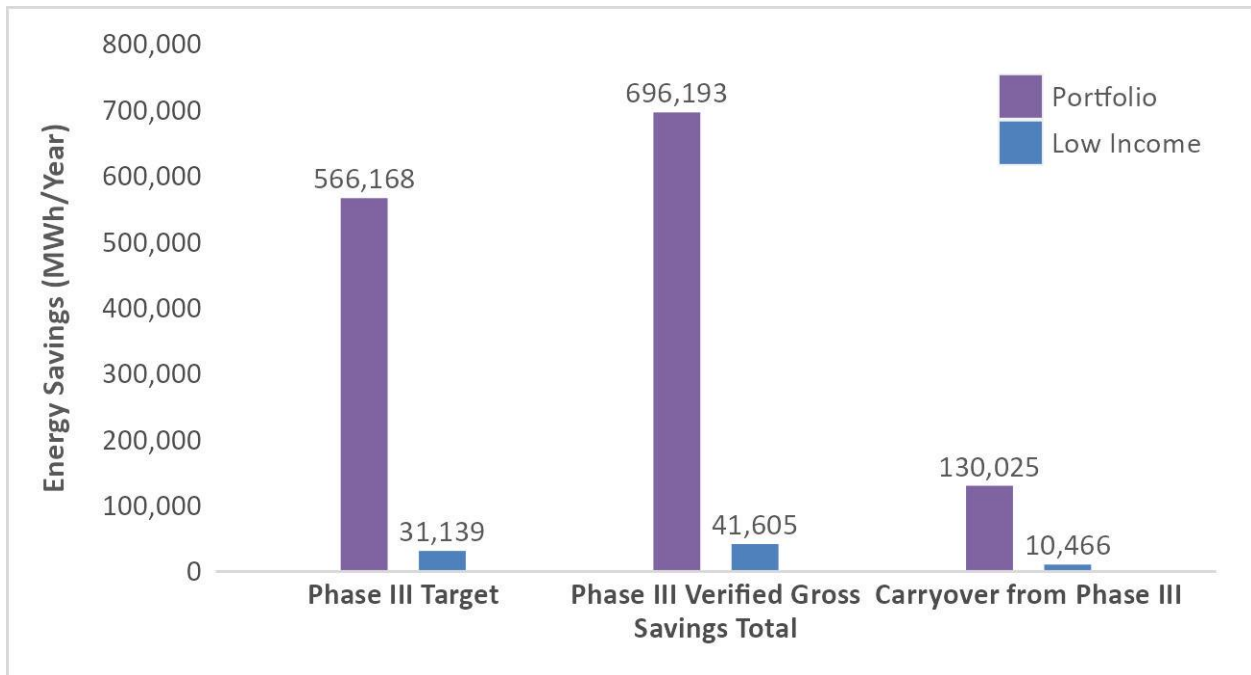


Figure 1C: Carryover Savings from Phase III of Act 129 – Penn Power

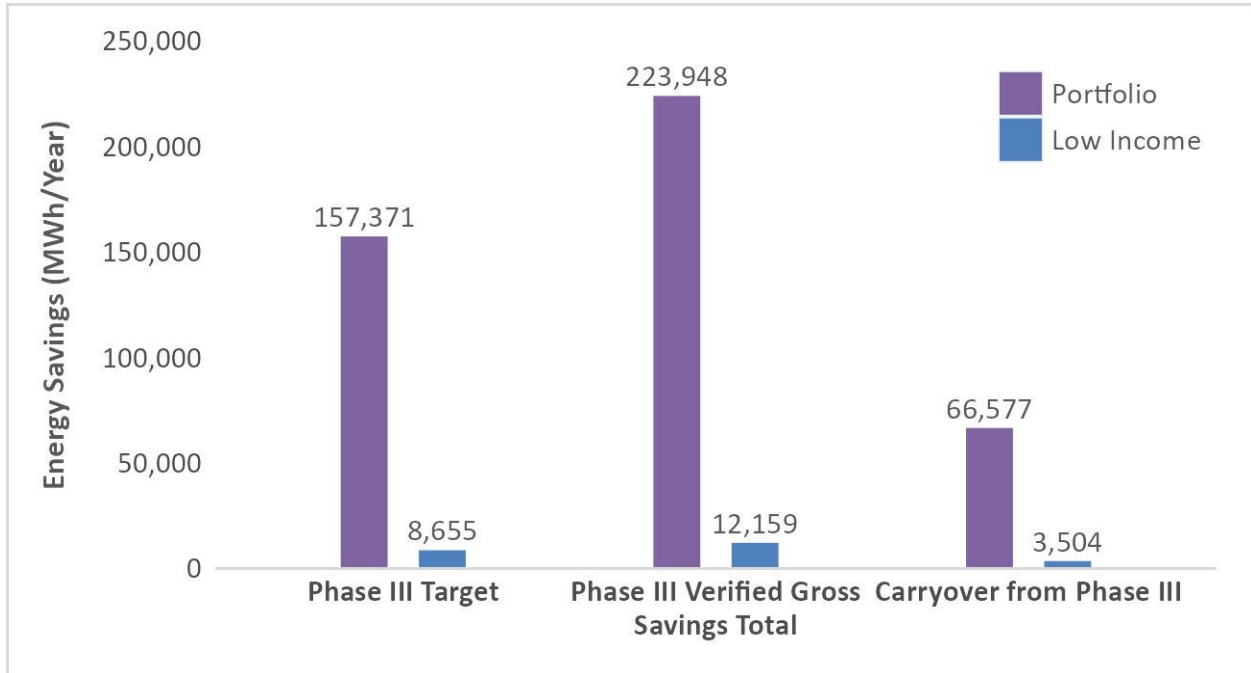
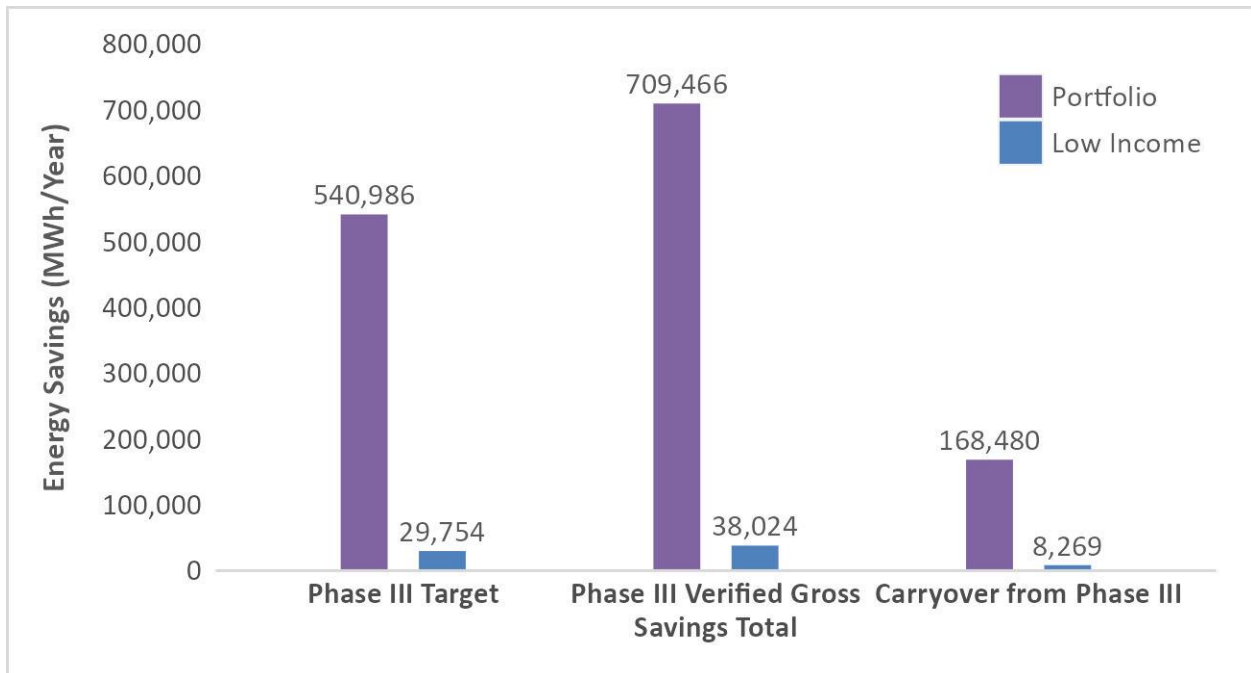


Figure 1D: Carryover Savings from Phase III of Act 129 – West Penn Power



Phase III did not include a peak demand reduction target from energy efficiency, so there is no carryover savings toward the Phase IV peak demand reduction target.

2.2 PHASE IV ENERGY EFFICIENCY ACHIEVEMENTS TO DATE

Table 2-2 presents performance to date for each of the FirstEnergy EDCs since the beginning of Program Year 15 on June 1, 2023. Since the beginning of Program Year 15 on June 1, 2023, the FirstEnergy EDCs have claimed:

Table 2-2: Gross Energy Savings and Demand Reduction for PY15

EDC	Gross MWh/yr Savings (PYRTD)	Gross Peak Demand MW Savings (PYRTD)
Met-Ed	33,461	6.20
Penelec	36,842	6.01
Penn Power	9,388	1.65
West Penn Power	36,212	7.91

Table 2-3 and Table 2-4 show achievements to date in Phase IV. Since the beginning of Phase IV of Act 129 on June 1, 2021, the FirstEnergy EDCs have achieved:

Table 2-3: Gross Energy Savings and Demand Reduction since the beginning of Phase IV of Act 129

EDC	Reported Gross Electric Energy Savings MWh/yr Savings (RTD)	Reported Gross Peak Demand MW Savings (RTD)	Gross Electric Energy Savings MWh/yr Savings (PSA)	Gross Peak Demand MW Savings (PSA)
Met-Ed	169,319	27.99	165,672	27.09
Penelec	143,291	26.16	145,208	25.28
Penn Power	45,543	8.20	43,607	7.31
West Penn Power	160,018	29.10	160,020	26.47

Including carryover savings from Phase III, the FirstEnergy EDCs have achieved:

Table 2-4: Phase IV Energy Savings including Phase III carryover

EDC	Gross/Verified Savings (PSA)	Carryover Savings MWh/yr (CO)	CO + Gross/Verified Savings (PSA + CO)	% of Compliance Target
Met-Ed	165,672	147,303	312,975	68%
Penelec	145,208	130,025	275,233	63%
Penn Power	43,607	66,577	110,184	85%
West Penn Power	160,020	168,480	328,500	65%

Figures 2A-2D and Figures 3A-3D show the FirstEnergy EDCs' EE&C Plan progress toward Phase IV energy savings and peak demand reduction compliance targets.

Figures 2A-2D: Performance toward Phase IV Portfolio Energy Savings Target

Figure 2A: Performance toward Phase IV Portfolio Energy Savings Target – Met-Ed

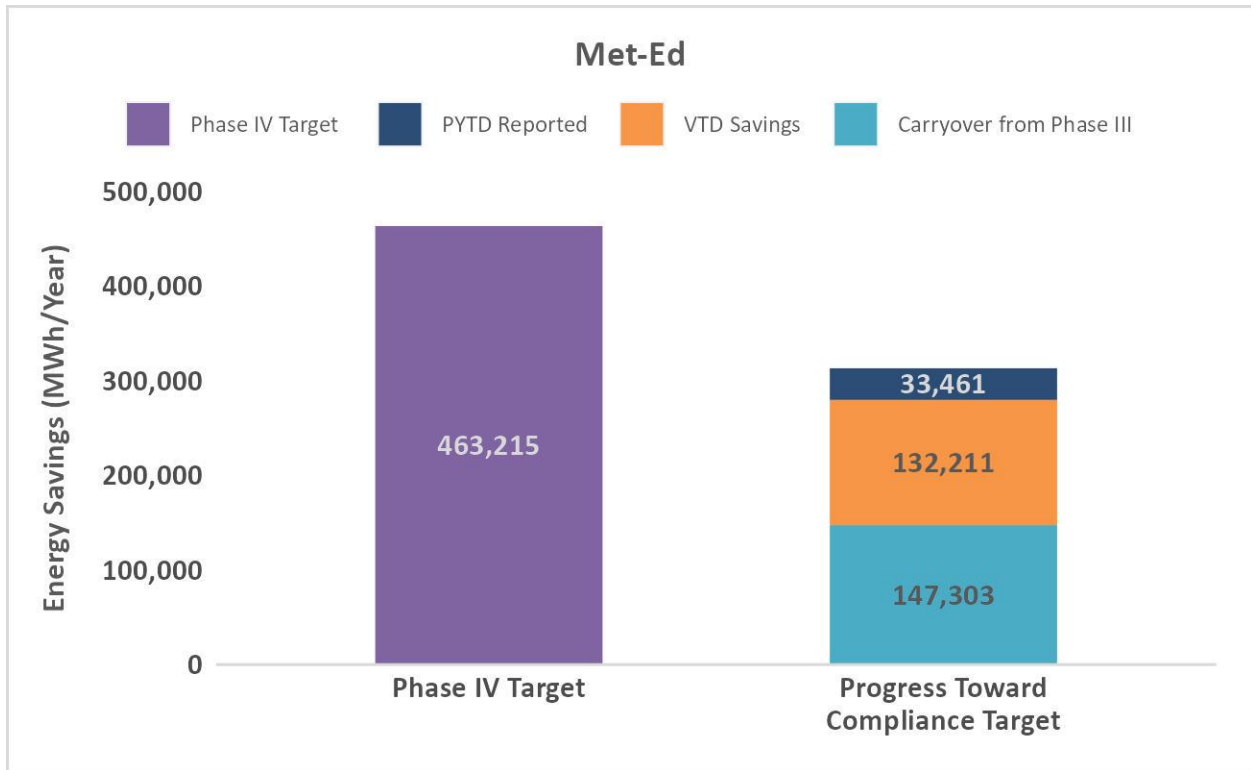


Figure 2B: Performance toward Phase IV Portfolio Energy Savings Target – Penelec

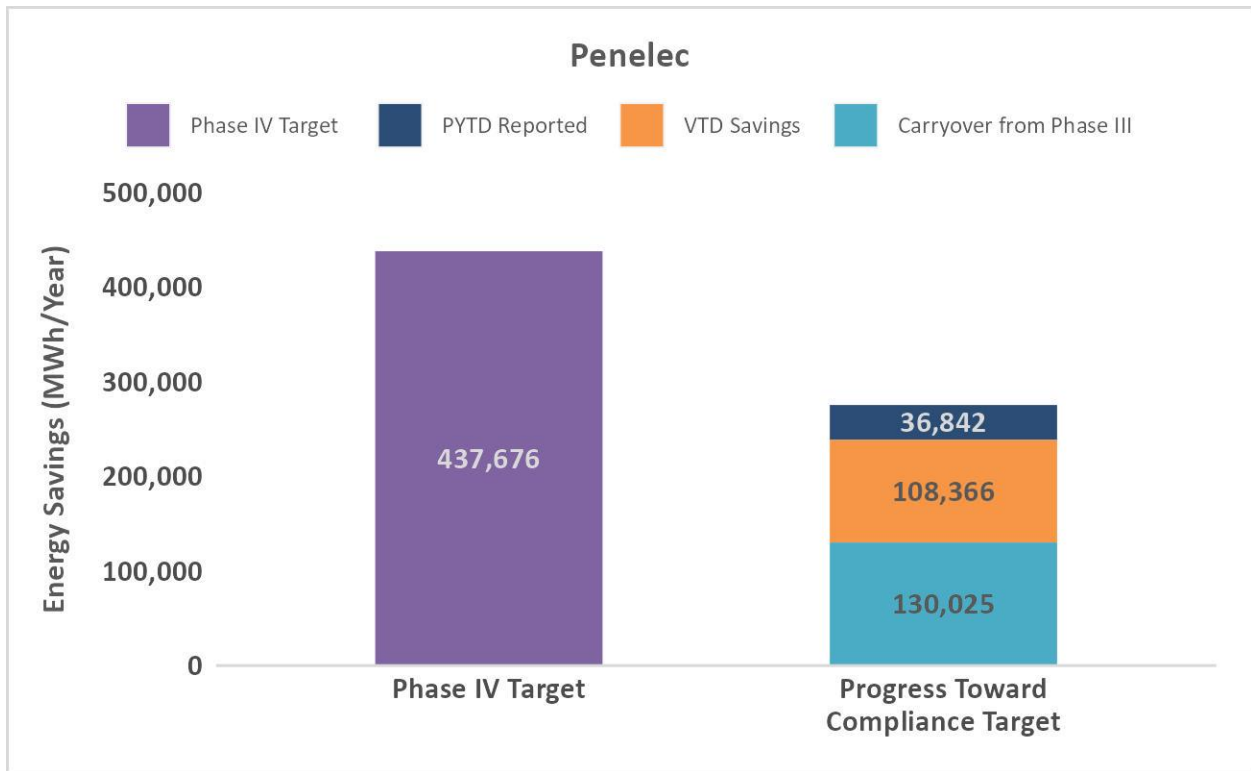


Figure 2C: Performance toward Phase IV Portfolio Energy Savings Target – Penn Power

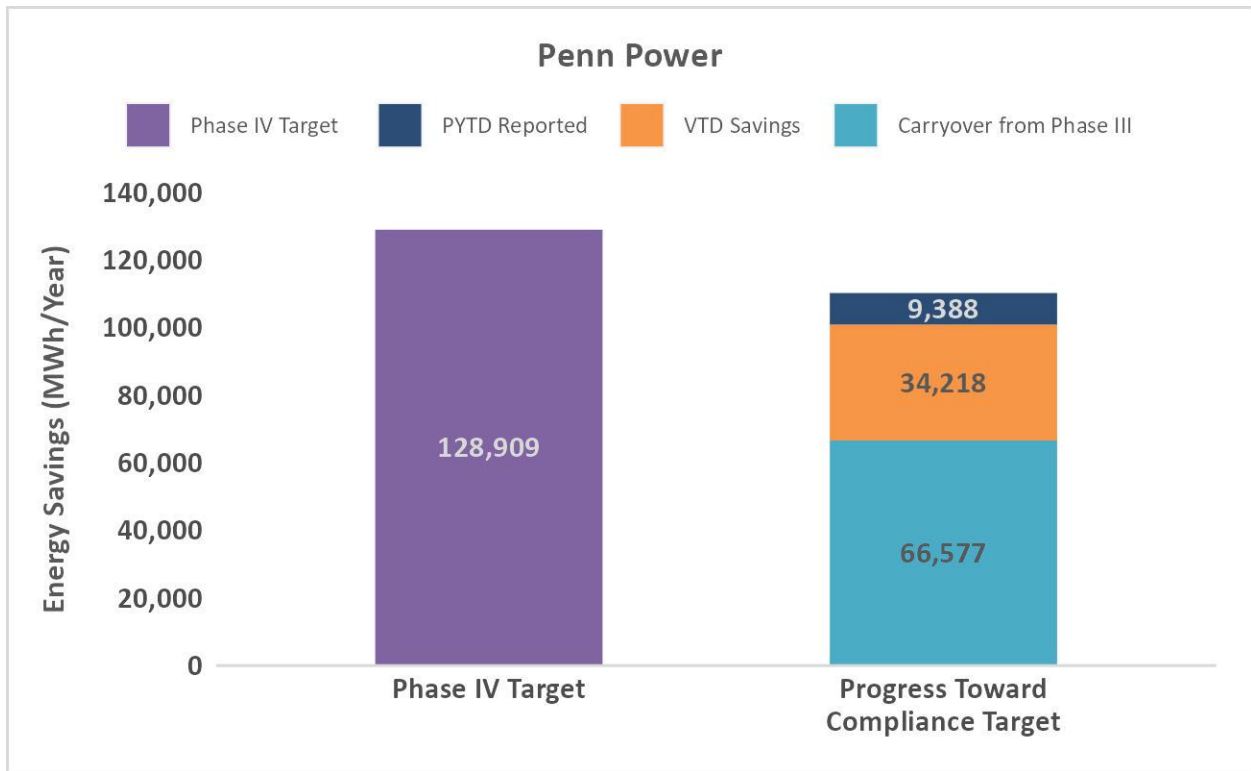
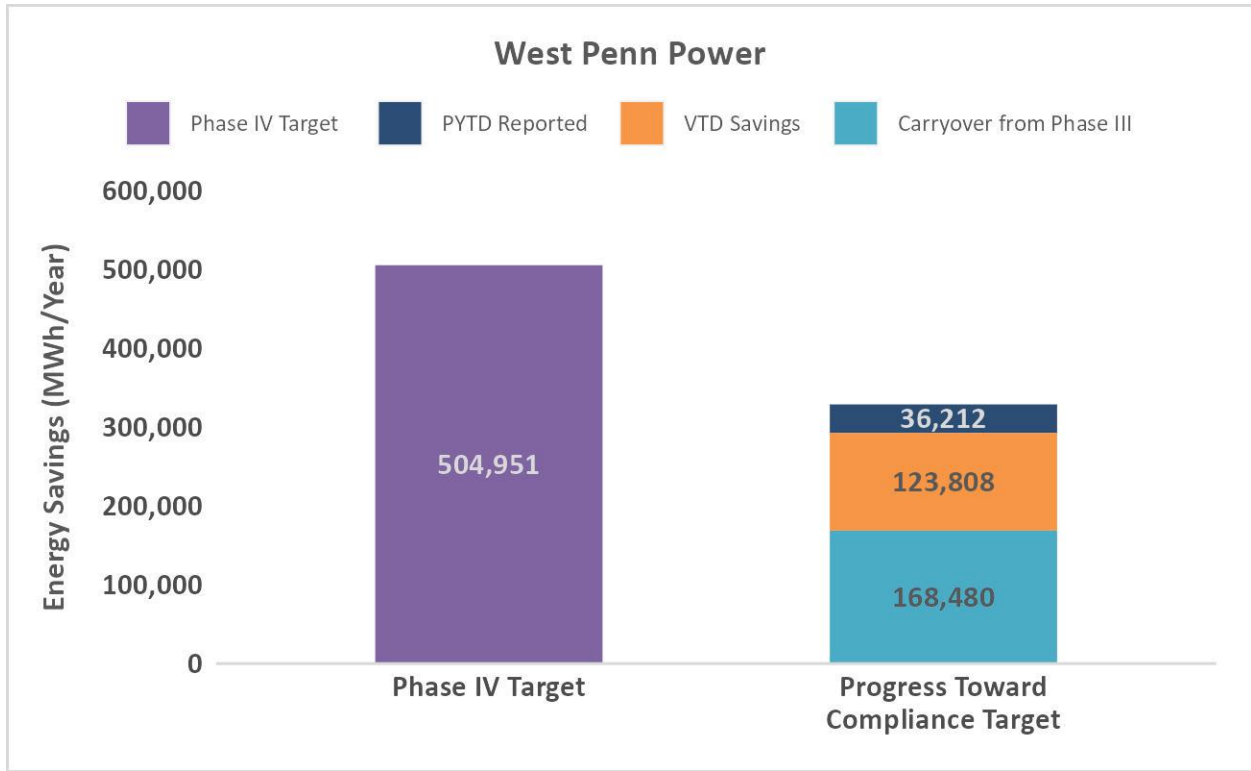


Figure 2D: Performance toward Phase IV Portfolio Energy Savings Target – West Penn Power



Figures 3A-3D: Performance toward Phase IV Portfolio Peak Demand Target

Figure 3A: Performance toward Phase IV Portfolio Peak Demand Target – Met-Ed

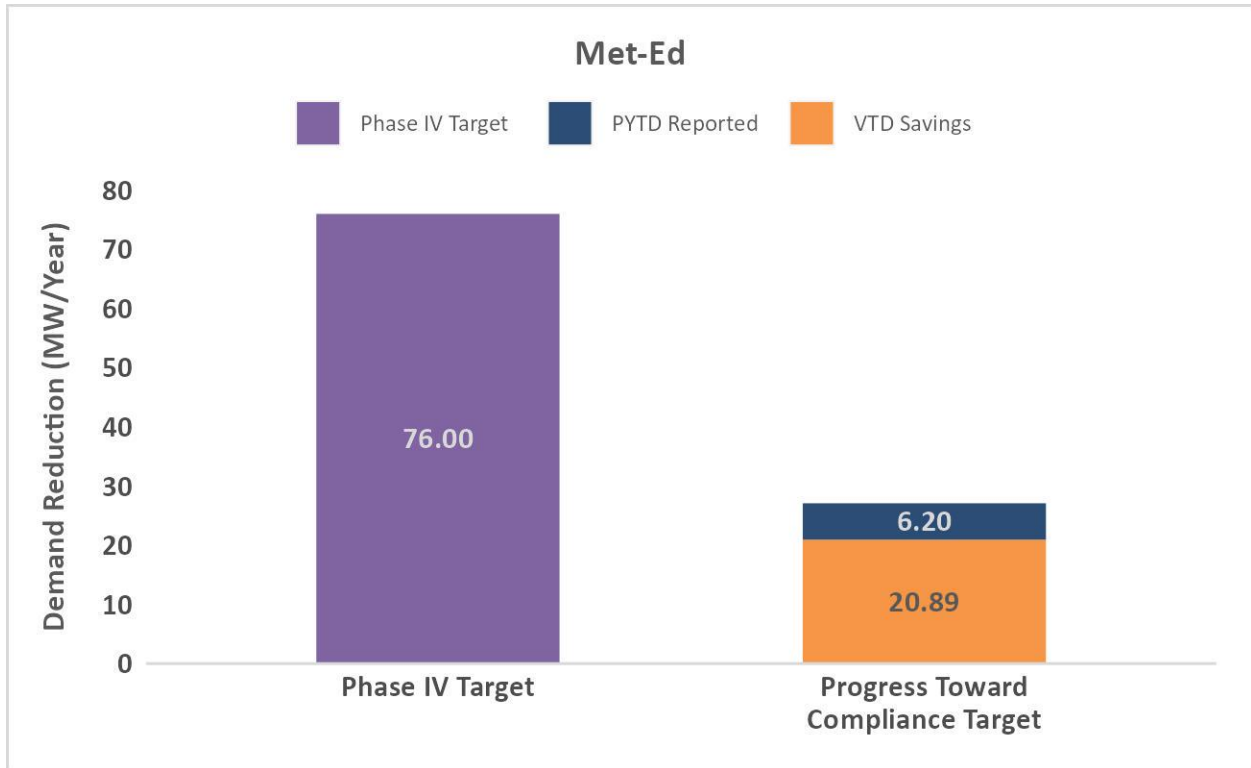


Figure 3B: Performance toward Phase IV Portfolio Peak Demand Target – Penelec

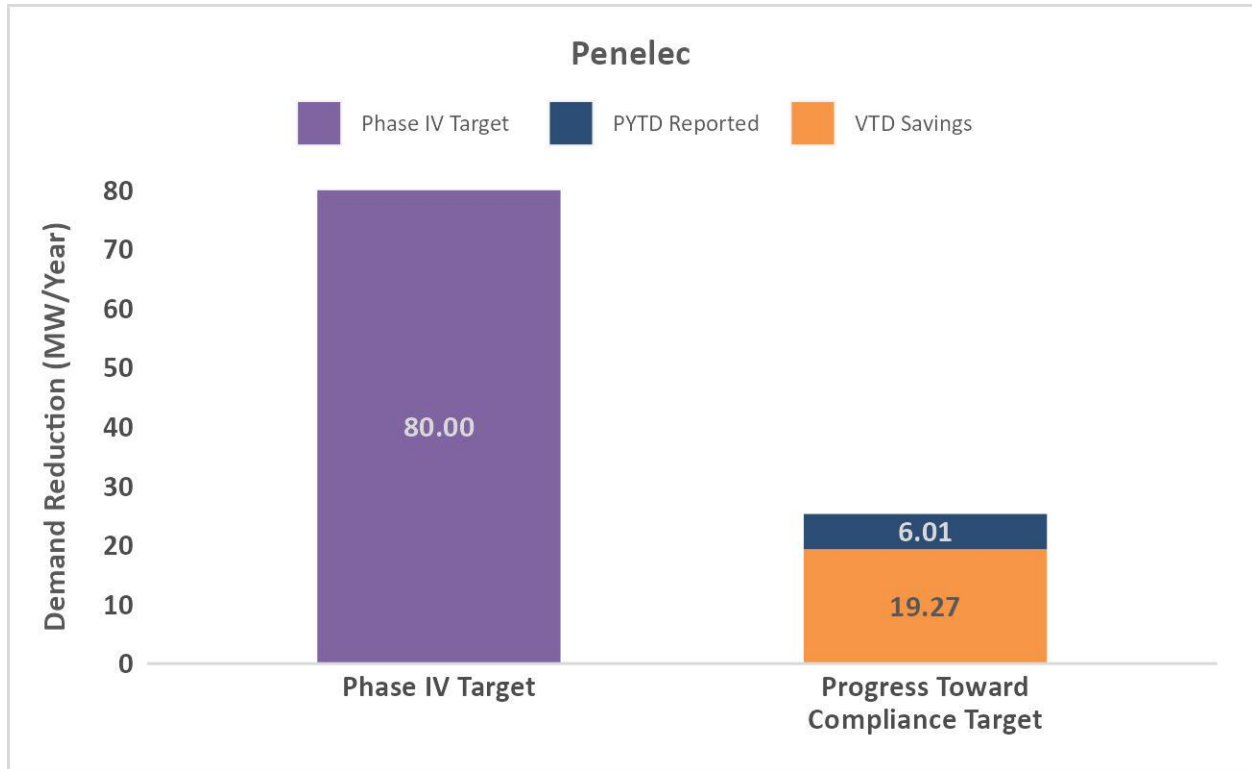


Figure 3C: Performance toward Phase IV Portfolio Peak Demand Target – Penn Power

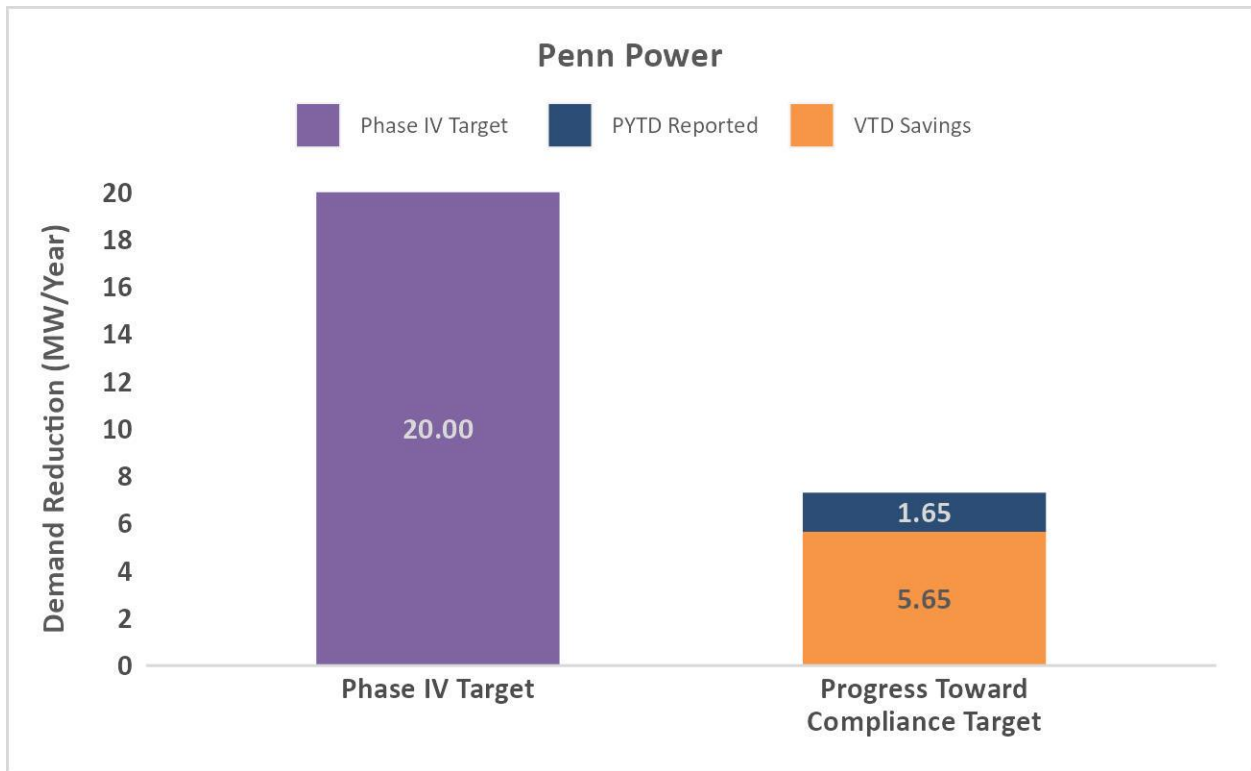
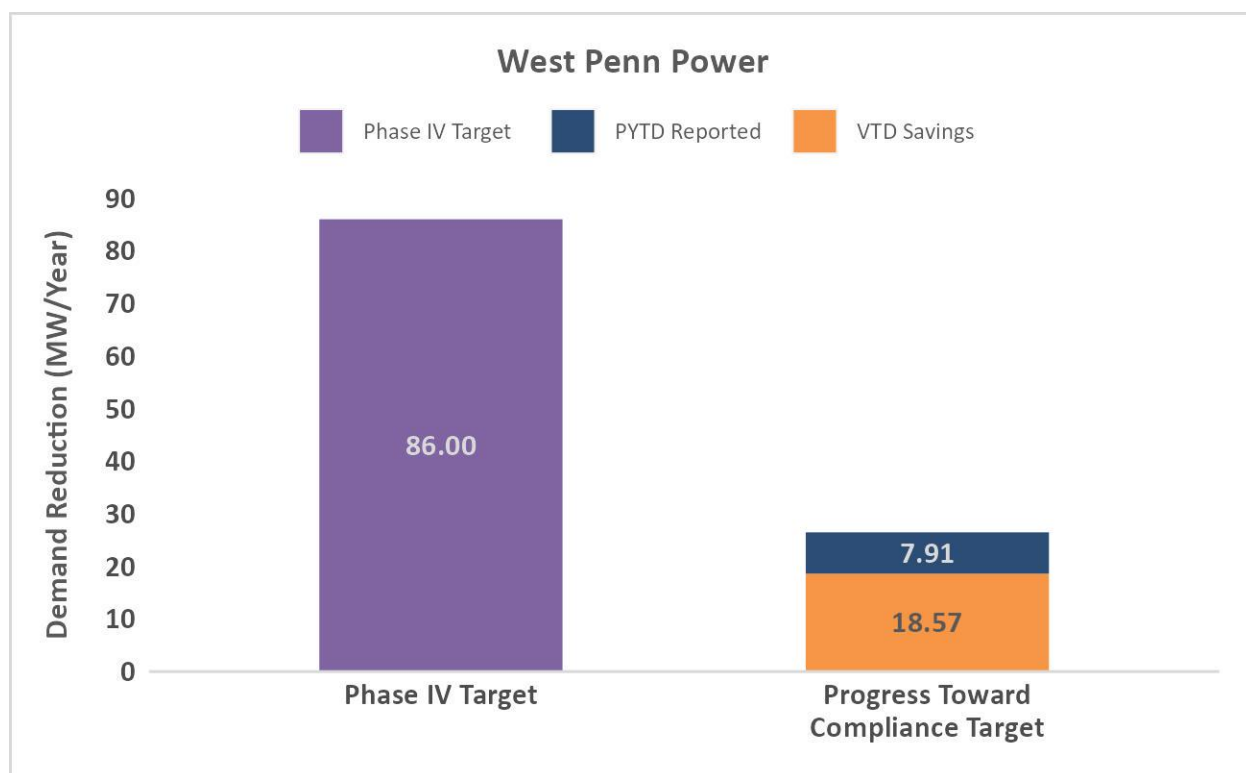


Figure 3D: Performance toward Phase IV Portfolio Peak Demand Target – West Penn Power

Reaching Low-Income Households

The Phase IV Implementation Order directed EDCs to offer conservation measures to the low-income customer segment based on the proportion of electric sales attributable to low-income households. The proportionate number of measures target for each FirstEnergy EDC is 8.79% for Met-Ed, 10.23% for Penelec, 10.64% for Penn Power and 8.79% for West Penn Power. Each FirstEnergy EDC offers a total of 126 distinct EE&C measures to its residential and non-residential customer classes. There are 30 measures available to each of the FirstEnergy EDC low-income customer segments at no cost to the customer. This represents 17.5% of the total measures offered in the EE&C plan and exceeds the proportionate number of measures target for each of the EDCs.

The PA PUC also established a low-income energy savings target of 5.8% of the portfolio savings goal. The low-income savings target for the FirstEnergy EDCs is presented in Table 2-5 and is based on verified gross savings. Figures 4A-4D compare the PSA+CO performance to date for the low-income customer segments to the Phase IV savings targets. Based on the latest available information, Table 2-5 presents the percent achievement of each EDC's Phase IV low-income energy savings target.

Table 2-5: Low-Income Program Energy Savings and Targets

EDC	Low-Income Target (MWh/yr)	PSA + CO (MWh/yr)	% of Low-Income Savings Target Achieved
Met-Ed	26,866	20,378	76%
Penelec	25,385	24,231	95%
Penn Power	7,477	7,256	97%
West Penn Power	29,287	25,095	86%

Figures 4A-4D: EE&C Plan Performance Toward Phase IV Low-Income Compliance Target

Figure 4A: EE&C Plan Performance Toward Phase IV Low-Income Compliance Target – Met-Ed

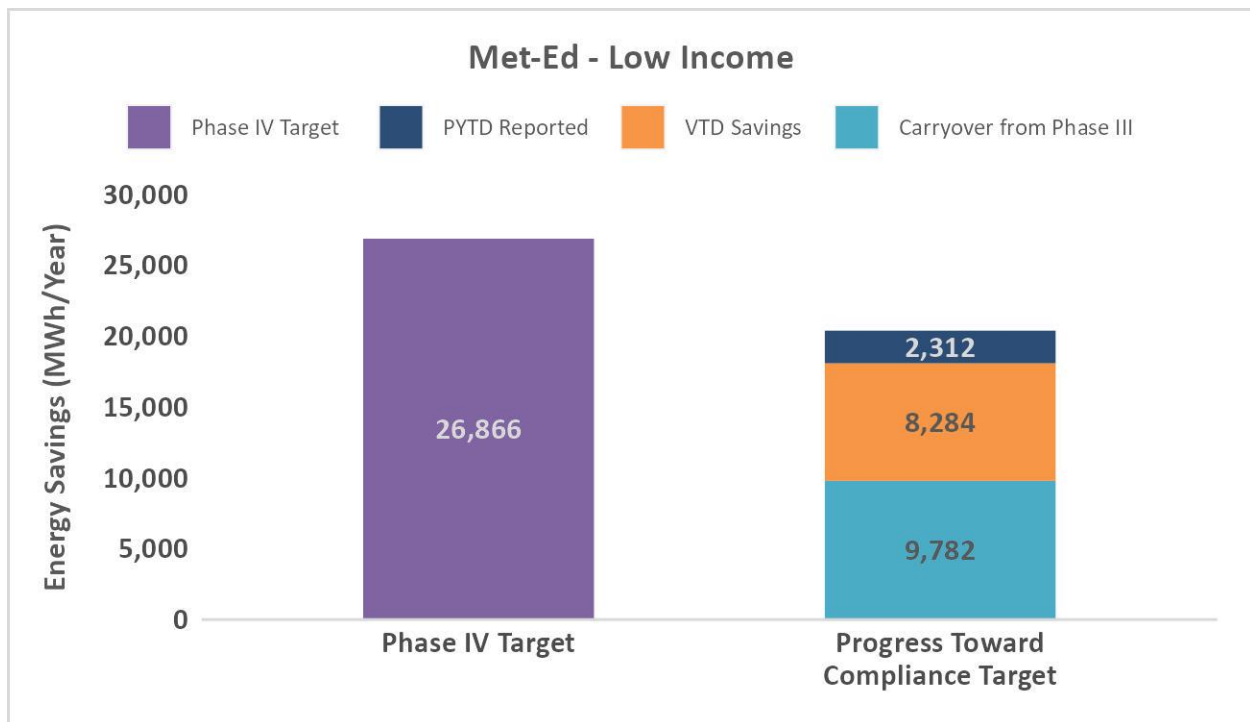


Figure 4B: EE&C Plan Performance Toward Phase IV Low-Income Compliance Target – Penelec

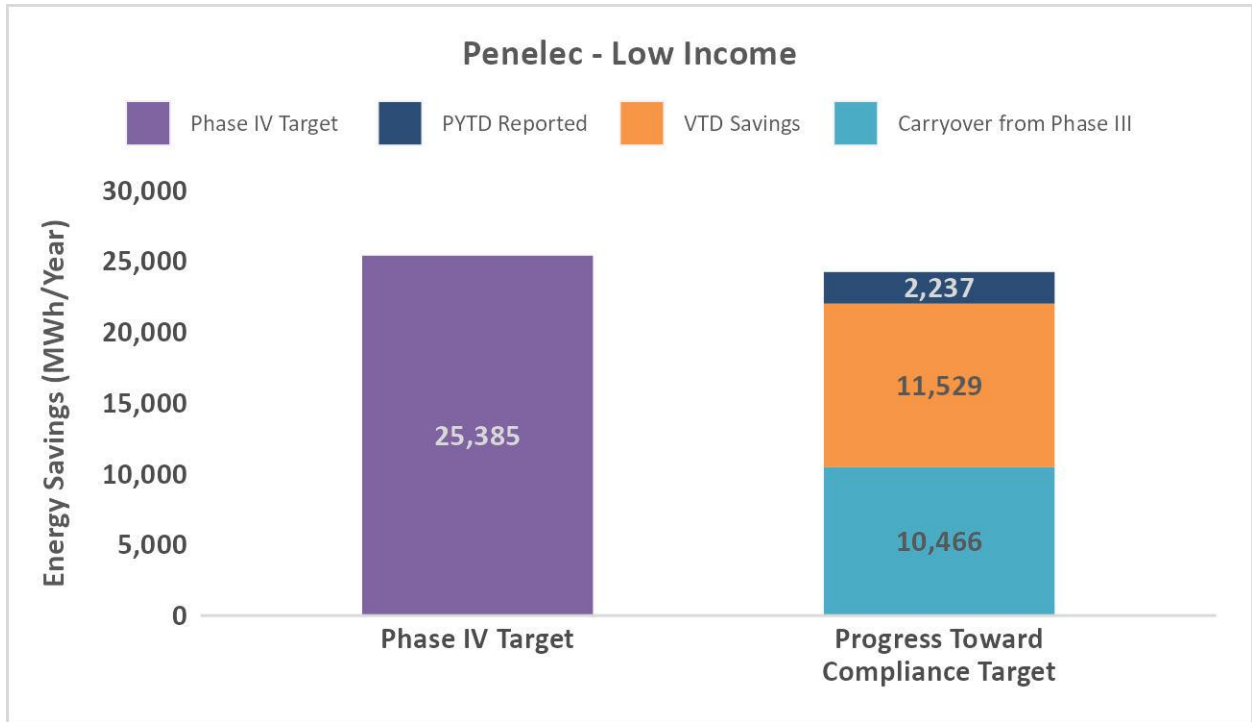


Figure 4C: EE&C Plan Performance Toward Phase IV Low-Income Compliance Target – Penn Power

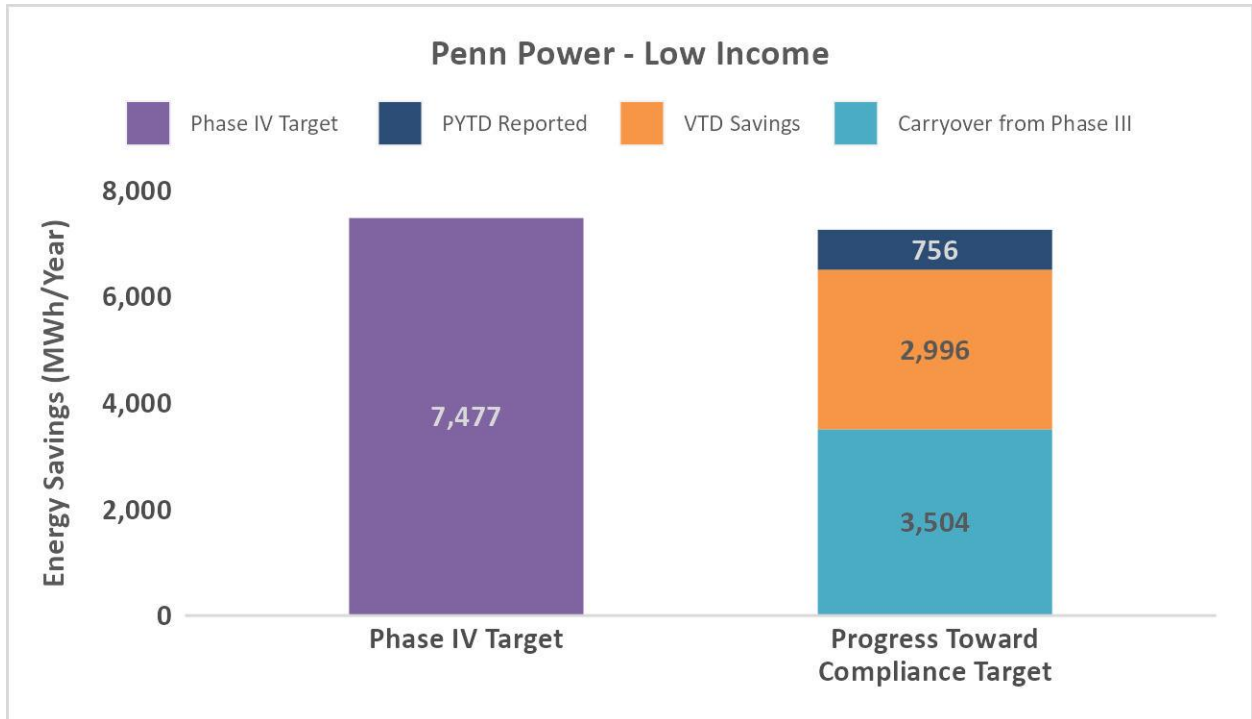
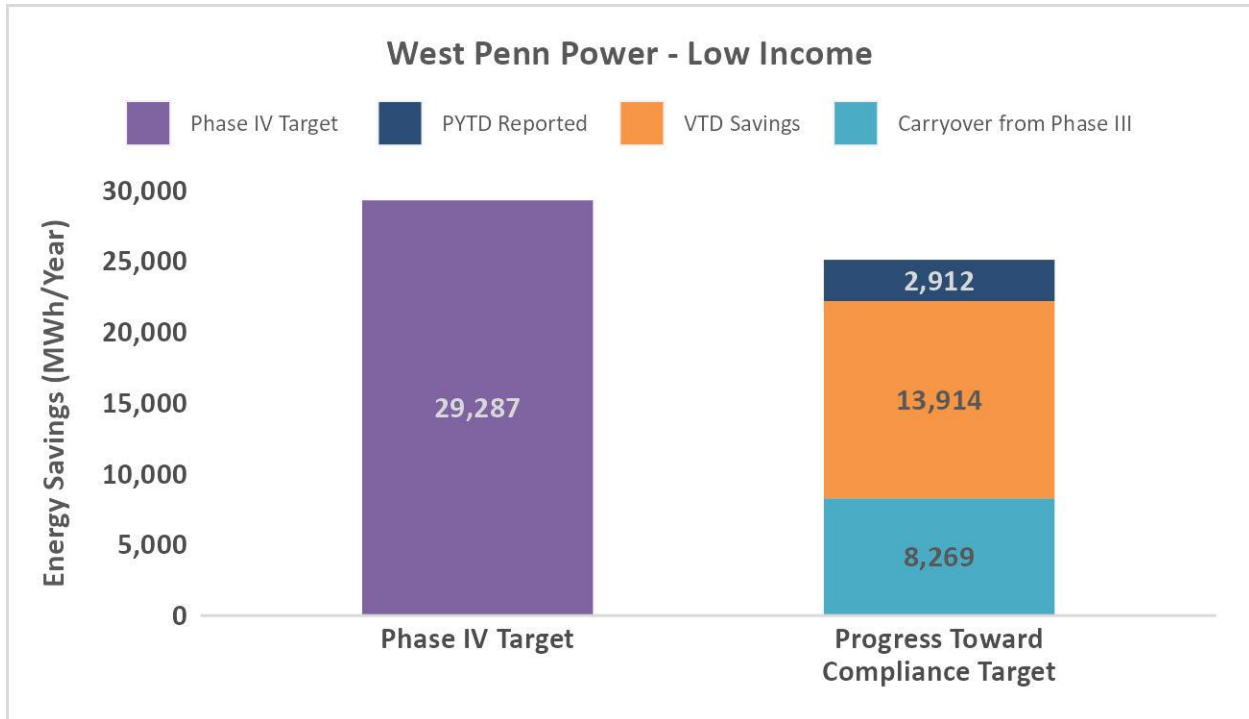


Figure 4D: EE&C Plan Performance Toward Phase IV Low-Income Compliance Target – West Penn Power



2.4 PHASE IV PERFORMANCE BY CUSTOMER SEGMENT

Table 2-6 presents the participation, savings, and spending by customer sector for PY15. The residential, small C&I, large C&I sectors are defined by EDC tariff and the residential low-income and governmental/educational/non-profit sector were defined by statute (66 Pa. C.S. § 2806.1). The residential low-income segment is a subset of the residential customer class and the GNI segment will include customers who are part of the Small C&I or Large C&I rate classes. The savings, spending, and participation values for the LI and GNI segments have been removed from the parent sectors in Table 2-6.

Table 2-6: PY15 Summary Statistics by Customer Segment

EDC	Parameter	Residential (Non-LI)	Residential LI	Small C&I (Non-GNI)	Large C&I (Non-GNI)	GNI
Met-Ed	# participants	107,955	26,588	481	138	8
	PYRTD MWh/yr	12,913	2,312	8,125	9,626	485
	PYRTD MW/yr	2.7	0.6	1.5	1.4	0.1
	Incentives (\$1000)	\$2,166.16	\$1,089.75	\$3,194.50	\$807.79	\$142.35
Penelec	# participants	76,933	15,656	515	72	18
	PYRTD MWh/yr	11,264	2,237	11,827	10,243	1,272
	PYRTD MW/yr	1.6	0.2	2.3	1.6	0.2
	Incentives (\$1000)	\$1,501.13	\$1,605.49	\$3,609.54	\$1,028.45	\$155.06
Penn Power	# participants	32,268	9,411	109	24	5
	PYRTD MWh/yr	3,633	756	3,469	1,451	79
	PYRTD MW/yr	0.7	0.1	0.6	0.3	0.0
	Incentives (\$1000)	\$733.64	\$454.29	\$1,015.50	\$246.16	\$16.52
West Penn Power	# participants	131,563	18,917	450	105	13
	PYRTD MWh/yr	11,597	2,912	12,438	8,544	721
	PYRTD MW/yr	3.0	0.4	2.6	1.7	0.2
	Incentives (\$1000)	\$1,846.55	\$1,949.18	\$3,528.32	\$1,673.51	\$194.92

Table 2-7 summarizes plan performance by sector since the beginning of Phase IV.

Table 2-7: Phase IV Summary Statistics by Customer Segment

EDC	Parameter	Residential (Non-LI)	Residential LI	Small C&I (Non-GNI)	Large C&I (Non-GNI)	GNI
Met-Ed	# participants	321,407	61,741	1,259	342	55
	PSA MWh/yr	60,823	10,422	30,173	62,283	1,972
	PSA MW	11.1	1.8	5.3	8.4	0.3
	Incentives (\$1000)	\$10,682.21	\$3,649.96	\$1,284.89	\$884.61	\$266.94
Penelec	# participants	279,081	54,032	1,706	223	48
	PSA MWh/yr	53,438	12,824	45,923	31,031	1,992
	PSA MW	8.6	1.5	10.0	4.9	0.3
	Incentives (\$1000)	\$7,364.93	\$4,878.47	\$2,783.39	\$448.66	\$64.07
Penn Power	# participants	101,874	20,902	369	65	26
	PSA MWh/yr	18,837	3,633	9,463	10,389	1,285
	PSA MW	3.5	0.5	1.7	1.4	0.2
	Incentives (\$1000)	\$3,218.42	\$1,414.56	\$707.38	\$504.01	\$137.71
West Penn Power	# participants	348,051	54,358	1,668	291	30
	PSA MWh/yr	57,543	15,042	45,905	39,940	1,590
	PSA MW	10.7	1.9	7.9	5.6	0.3
	Incentives (\$1000)	\$9,355.53	\$5,300.50	\$3,679.50	\$963.14	\$8.52

Section 3 Updates and Findings

3.1 IMPLEMENTATION UPDATES AND FINDINGS

Implementation updates and findings through the first half of PY15 are as follows:

Energy Efficient Products Program

- **Appliance Recycling:** This subprogram is temporarily suspended as of August 2023. The previous implementer for this subprogram, ARCA Inc. unexpectedly ceased operations in early August 2023. The Companies are currently in the process of securing an alternative implementer and anticipate resuming operations of the Appliance Recycling subprogram in the first half of 2024.
- **Appliances:** This subprogram is implemented by Franklin Energy. This program offers instant discounts and/or mail-in rebates to customers for the purchase of ENERGY STAR-certified appliances. Room air conditioners and dehumidifiers are the appliances most rebated through this program. The Appliance Rebates subprogram is marketed through a variety of consumer-focused media including bill inserts, bill messages, e-mails, Facebook ads, through the Behavioral Home Energy Reports, the Online Audit tool, and at approximately 250 retailers throughout the Company's service territory including retail store associate training.
- **HVAC:** This subprogram is implemented by Franklin Energy and offers rebates for the purchase of high-efficiency HVAC equipment. The program continues to progress well during the first half of PY15 with activity from HVAC contractors across the EDCs contributing to the program meeting or exceeding goals. The rebate submission process continues to offer flexibility for customers to submit applications by mail or email and allows for contractors to submit through an online portal on behalf of customers. Email notifications are also sent to contractors that use the online portal to provide processing status updates for the rebate applications they submit on behalf of their customers. Franklin Energy also successfully conducted outreach to HVAC contractors to educate them on the eligibility changes from SEER to SEER2 effective for HVAC units installed after 06/01/23.

Energy Efficient Homes Program

- **Behavioral:** This subprogram is implemented by Oracle. The Home Energy Reports sent in the first half of the program year highlighted the dehumidifier instant rebates, the Comprehensive Audit Program, and information on rebates available for heat pump water heaters.
- **Comprehensive Audit:** This subprogram is implemented by CLEAResult and has started to exceed their PY15 goal in all OpCos except Penelec. CLEAResult will continue to complete projects but at a slower pace to avoid exceeding the Plan budget.

- **New Homes:** The New Homes subprogram is implemented by Performance Systems Development (PSD). The program continues outreach to enroll builders and raters in the program.. There are currently 144 builders and 20 raters enrolled in the program.
- **School Kits:** This subprogram is implemented by AM Conservation Group. The program provides energy efficiency education and awareness through a classroom-based education program for grades K-8. Each student receives low cost direct-install items that customers can install by themselves.
- **Energy Efficiency Kits:** The Kits subprogram is implemented by AM Conservation Group. The program targets new residents within the Companies' service territories. Customers may also opt-in to the program by phone or website by providing their account number.
- **Online Audit:** The software tool, referred to as the Home Energy Analyzer, is available on the Companies' website. Customers enter information about their home into the Analyzer and receive tips on how to save energy. Some of the tip's direct customers to other Energy Efficiency programs. There is also a graph that displays where most of the energy use in the home occurs.

Low Income Energy Efficiency Program:

- **Appliance Rebate:** This subprogram is implemented by Franklin Energy. The Companies offer additional incentives to customers identified as low-income on purchases of select energy efficient appliances. During the first half of PY15, the Companies continued outreach through retailers to educate store associates about the program. Email campaigns also continue to highlight the enhanced incentives available for eligible customers. In mid-November through early December 2023, the Companies launched a successful online promotion that offered a no-cost air purifier to income eligible customers which resulted in 10,000 units being shipped to residences across the service territory.
- **New Homes:** The low-income New Homes subprogram is also implemented by Performance Systems Development (PSD). Raters have submitted low-income projects for Met Ed in the first half of PY15.
- **School Kits:** This low-income School Kits subprogram is implemented by AM Conservation Group. The program provides energy efficiency education and awareness through a classroom-based education program for grades K-8. Each student receives low cost direct-install items that customers can install by themselves. The Company offers additional measures in each kit for schools identified as low income.
- **Energy Efficiency Kits:** The low-income Energy Efficiency Kits subprogram is implemented by AM Conservation Group. The program targets new residents within the Companies' service territories. Customers may also opt-in to the program by phone or website by providing their account number. The Company offers additional items for installation in each kit for those identified as low income.
- **Weatherization:** This subprogram, which is a combination of WARM Plus, implemented by CLEAResult, and WARM Extra Measures, implemented by FirstEnergy's Human

Service Department, is progressing well. Both teams continue to improve processes and procedures to provide the best experience to the customer, while obtaining the max savings.

- **Residential and SCI Multifamily:** This subprogram is implemented by CLEAResult. FirstEnergy and CLEAResult have adjusted the intake process for applications to better serve the building as a whole, instead of trying to silo customers into programs at the beginning based on income.
- **Appliance Recycling:** As stated above, this subprogram is temporarily suspended as of August 2023.
- **Behavioral:** This subprogram is implemented by Oracle. Customers identified as low-income receive Home Energy Reports with low or no cost tips to educate customers on how to use less energy. The reports sent in the first half of the program year also included detailed messaging and promotions for summer savings tips, audit programs for low-income customers, and enhanced rebates available for the purchase of certain ENERGY STAR certified appliances.

Residential, LCI and SCI Multifamily – Market-Rate Rebate Programs

This subprogram is implemented by CLEAResult.

- FirstEnergy and CLEAResult have adjusted the intake process for applications to better serve the building as a whole, instead of trying to silo customers into programs at the beginning based on income.

C/I Efficient Solutions for Business – Small

This program is implemented by Franklin Energy and Willdan, who were introduced to customers and program allies through a series of e-Blasts at the start of Phase IV. The program is gaining momentum and continues to be marketed through a variety of activities which helped the Companies reach a wider audience and increase program participation.

- Coffee Breaks at various locations/dates for program allies or customers to stop in and ask questions about the programs
- Meet and Greet for program allies - June 6, 8, 28 and September 15, 28
- Customer Webinar detailing FirstEnergy’s Act 129 energy efficiency incentive programs, September 21
- Online portal training webinars that targeted programs allies
- Events for customers to learn about the programs
 - o Pittsburgh Construction and Development Summit – June 22
 - o The NAESCO Pittsburgh Regional Conference – August 2
 - o ASHRAE Region 3 Conference – August 10
 - o Chamber of Commerce Meetings
- PA energy efficiency roundtables

- Pennsylvania Technical Assistance Program (PennTap) Energy Advisor Training

To support the outreach efforts, the Companies leverage their internal resources – Customer Support, National Accounts, Economic Development, Area Managers, and Energy Efficiency Staff – to support the program and promote Act 129 portfolio of programs to assigned accounts or contacts.

- **Prescriptive and Custom Sub-Programs:** These sub-programs are implemented by Franklin Energy and are fully operational for Phase IV.
- **Retro-commissioning, Building Tune-Up and Commercial New Construction Sub-Programs:** These sub-programs are implemented by Willdan and are fully operational for Phase IV.

C/I Efficient Solutions for Business – Large

This program is implemented by Franklin Energy and Willdan, who were introduced to customers and program allies through a series of e-Blasts at the start of Phase IV. The program is gaining momentum and continues to be marketed through a variety of activities which helped the Companies reach a wider audience and increase program participation.

- Coffee Breaks at various locations/dates for program allies or customers to stop in and ask questions about the programs
- Meet and Greet for program allies - June 6, 8, 28 and September 15, 28
- Customer Webinar detailing FirstEnergy's Act 129 energy efficiency incentive programs, September 21
- Articles and Banner Ads on Questline for managed accounts utilizing customer support managers
- Distributed survey to develop energy benchmarking for customers vs their peers to bring awareness for the need of Energy Efficiency
- Online portal training webinars that targeted programs allies
- Events for customers to learn about the programs
- Pittsburgh Construction and Development Summit – June 22 The NAESCO Pittsburgh Regional Conference – August 2ASHRAE Region 3 Conference – August 10 Chamber of Commerce Meetings
- PA energy efficiency roundtables
- Pennsylvania Technical Assistance Program (PennTap) Energy Advisor Training

To support the outreach efforts, the Companies leverage their internal resources – Customer Support, National Accounts, Economic Development, Area Managers, and Energy Efficiency Staff – to support the program and promote Act 129 portfolio of programs to assigned accounts or contacts.

- **Prescriptive and Custom Sub-Programs:** These sub-programs are implemented by Franklin Energy and are fully operational for Phase IV.

- **Retro-commissioning, Building Tune-Up and Commercial New Construction Sub-Programs** : These sub-programs are implemented by Willdan and are fully operational for Phase IV.

3.2 EVALUATION UPDATES AND FINDINGS

Evaluation updates and findings through the first half of PY15 are as follows:

- **Portfolio level**: ADM continually reviews the Companies' Tracking and Reporting (T&R) database and collaborates with Companies' staff and the T&R vendor, AEG, to investigate values that are flagged for review in an automated QA/QC process. The ADM team has revised the PY15 Evaluation Plan to change the timing of certain evaluation activities during Phase IV. The plan was recently approved by the SWE Team.
- **Energy Efficient Products Program**: ADM is reviewing invoices and applications to support our desk review process in PY15. ADM is conducting participant surveys for gross impact evaluation.
- **Energy Efficient Homes Program**: The ADM team has worked with the FirstEnergy implementation team to establish data collection and reporting procedures for Phase IV. The gross impact evaluation effort for PY15 has launched and participant surveys are underway. ADM and its subcontractor, Ecometric Consulting, Inc., have conducted on-site visits for the New Homes program component.
- **Low-Income Energy Efficiency Program**: The ADM team has worked with the FirstEnergy implementation team to establish data collection and reporting procedures for Phase IV. ADM has made initial data requests for documentation and site inspection results to be used in the PY15 program evaluation.
- **C&I Energy Solutions for Business – Small and C&I Energy Solutions for Business – Large**. ADM has pulled an initial evaluation sample for nonresidential programs and has received project documentation from FirstEnergy. Data collection for impact evaluation is currently underway. ADM has developed and submitted to the SWE several draft IMPs, which have been reviewed and approved by the SWE Team. ADM is currently developing IMPs for chiller tune-ups and novelty cooler shutoff timers. Tetra Tech and ADM attend biweekly meetings with the implementation team to review the project pipeline, to discuss large projects, and to coordinate evaluation efforts.

Section 4 Summary of Participation by Program

Participation is defined differently for certain programs depending on the program delivery channel and data tracking practices. The nuances of the participant definition vary by program, and within elements of a given program. The Phase IV participation counting logic is summarized by program in the bullets below, and Table 4-1A through Table 4-1D provides the current participation totals for PY15 and Phase IV.

- **Energy Efficient Homes Program**
 - **School Kits:** the number of energy savings kits delivered to students' homes.
 - **Energy Efficiency Kits:** the number of energy savings kits delivered to customer homes.
 - **Energy Audits:** the number of customers who have had an energy audit with direct install measures installed.
 - **Behavioral:** the number of customers currently receiving energy usage reports and the number of customers that participated in the new Online Audit program component. P4TD participation numbers reflect the total number of customers that participated in the program since the beginning of Phase IV.
 - **New Homes:** the count of new energy efficient homes being built with EnergyStar standards or higher efficiency level than the current building code.

- **Energy Efficient Products Program**
 - **Appliance Turn-In:** the count of customer recycling pick-up incidents. If a homeowner recycles multiple appliances at one pick-up event, it is recorded as a single participant. In the new midstream component, each lot of 25 appliances removed from a second-hand retailer is recorded as a single participant.
 - **Appliances and Consumer Electronics:** the number of appliances sold.
 - **HVAC:** the number of HVAC units or programmable thermostats that are purchased and installed. If a customer purchases and installs both units at the same time they are counted as one participant.

- **Low Income Energy Efficiency Program**
 - **Energy Efficiency Kits:** the number of energy savings kits delivered to customers' homes.
 - **Weatherization:** the number of customers receiving energy saving measures.
 - **Multifamily:** the number of customers receiving energy saving measures.
 - **Behavioral:** the number of customers currently receiving energy usage reports. P4TD participation numbers reflect the total number of customers that participated in the program since the beginning of Phase IV.

- **New Homes:** the number of new energy efficient homes being built with EnergyStar standards or higher efficiency than the current building code.
 - **Appliances and Consumer Electronics:** the number of appliances sold.
 - **Appliance Turn In:** the count of customer recycling pick-up incidents. If a homeowner recycles multiple appliances at one pick-up event, it is recorded as a single participant.
 - **School Kits:** the number of energy savings kits delivered to students' homes.
- **C&I Energy Solutions for Business Program – Small:** The count of completed project applications.
 - **C&I Energy Solutions for Business Program – Large:** The count of completed project applications.

Table 4-1A to 4-1D: Phase IV Participation by Program Component

Table 4-1A: EE&C Plan Participation by Program Component – Met-Ed

Program	Component	PYTD Participation	P4TD Participation
Energy Efficient Homes	EE Kits	28,845	142,196
Energy Efficient Homes	Home Energy Reports	62,040	95,770
Energy Efficient Homes	Multifamily - Res	23	71
Energy Efficient Homes	New Homes	386	2,054
Energy Efficient Homes	Online Audits	1,639	13,722
Energy Efficient Homes	Residential Audit and DI	322	819
Energy Efficient Products	Appliance Recycling	589	9,699
Energy Efficient Products	Residential Downstream Appliances	2,112	8,928
Energy Efficient Products	Residential Downstream HVAC	1,047	4,084
Energy Efficient Products	Residential Midstream Appliances	10,952	44,064
Low Income Energy Efficiency	Appliance Recycling	51	1,232
Low Income Energy Efficiency	EE Kits	4,078	21,886
Low Income Energy Efficiency	Home Energy Reports	21,514	34,175
Low Income Energy Efficiency	LI Direct Install	622	2,718
Low Income Energy Efficiency	New Homes	23	80
Low Income Energy Efficiency	Online Audits	178	1,202
Low Income Energy Efficiency	Residential Downstream Appliances	122	448
C&I Energy Solutions for Business - Small	Appliance Recycling	11	110
C&I Energy Solutions for Business - Small	CI Custom	5	18
C&I Energy Solutions for Business - Small	CI EMNC	254	581
C&I Energy Solutions for Business - Small	CI Multifamily	5	11
C&I Energy Solutions for Business - Small	CI Prescriptive	212	580
C&I Energy Solutions for Business - Large	CI Custom	3	11
C&I Energy Solutions for Business - Large	CI EMNC	12	23
C&I Energy Solutions for Business - Large	CI Prescriptive	125	322
Portfolio Total		135,170	384,804

Table 4-1B: EE&C Plan Participation by Program Component – Penelec

Program	Component	PYTD Participation	P4TD Participation
Energy Efficient Homes	EE Kits	27,512	134,363
Energy Efficient Homes	Home Energy Reports	34,153	76,609
Energy Efficient Homes	Multifamily - Res	17	94
Energy Efficient Homes	New Homes	34	255
Energy Efficient Homes	Online Audits	1,333	8,943
Energy Efficient Homes	Residential Audit and DI	317	628
Energy Efficient Products	Appliance Recycling	324	7,307
Energy Efficient Products	Residential Downstream Appliances	1,444	5,745
Energy Efficient Products	Residential Downstream HVAC	460	2,069
Energy Efficient Products	Residential Midstream Appliances	11,339	43,068
Low Income Energy Efficiency	Appliance Recycling	47	1,393
Low Income Energy Efficiency	EE Kits	4,140	25,593
Low Income Energy Efficiency	Home Energy Reports	9,757	19,917
Low Income Energy Efficiency	LI Direct Install	1,295	4,960
Low Income Energy Efficiency	New Homes	0	9
Low Income Energy Efficiency	Online Audits	300	1,655
Low Income Energy Efficiency	Residential Downstream Appliances	117	505
C&I Energy Solutions for Business - Small	Appliance Recycling	4	90
C&I Energy Solutions for Business - Small	CI Custom	8	33
C&I Energy Solutions for Business - Small	CI EMNC	200	429
C&I Energy Solutions for Business - Small	CI Multifamily	11	58
C&I Energy Solutions for Business - Small	CI Prescriptive	309	1,141
C&I Energy Solutions for Business - Large	CI Custom	2	6
C&I Energy Solutions for Business - Large	CI EMNC	12	17
C&I Energy Solutions for Business - Large	CI Prescriptive	59	203
Portfolio Total		93,194	335,090

Table 4-1C: EE&C Plan Participation by Program Component – Penn Power

Program	Component	PYTD Participation	P4TD Participation
Energy Efficient Homes	EE Kits	8,930	39,751
Energy Efficient Homes	Home Energy Reports	17,850	34,946
Energy Efficient Homes	Multifamily - Res	9	9
Energy Efficient Homes	New Homes	241	1,168
Energy Efficient Homes	Online Audits	458	2,943
Energy Efficient Homes	Residential Audit and DI	191	431
Energy Efficient Products	Appliance Recycling	91	2,395
Energy Efficient Products	Residential Downstream Appliances	643	2,801
Energy Efficient Products	Residential Downstream HVAC	229	1,117
Energy Efficient Products	Residential Midstream Appliances	3,626	16,313
Low Income Energy Efficiency	Appliance Recycling	10	318
Low Income Energy Efficiency	EE Kits	0	3,814
Low Income Energy Efficiency	Home Energy Reports	8,925	14,638
Low Income Energy Efficiency	LI Direct Install	394	1,676
Low Income Energy Efficiency	New Homes	0	0
Low Income Energy Efficiency	Online Audits	60	328
Low Income Energy Efficiency	Residential Downstream Appliances	22	128
C&I Energy Solutions for Business - Small	Appliance Recycling	2	23
C&I Energy Solutions for Business - Small	CI Custom	3	7
C&I Energy Solutions for Business - Small	CI EMNC	47	141
C&I Energy Solutions for Business - Small	CI Multifamily	1	8
C&I Energy Solutions for Business - Small	CI Prescriptive	60	209
C&I Energy Solutions for Business - Large	CI Custom	2	4
C&I Energy Solutions for Business - Large	CI EMNC	6	12
C&I Energy Solutions for Business - Large	CI Prescriptive	17	56
Portfolio Total		41,817	123,236

Table 4-1D: EE&C Plan Participation by Program Component – West Penn Power

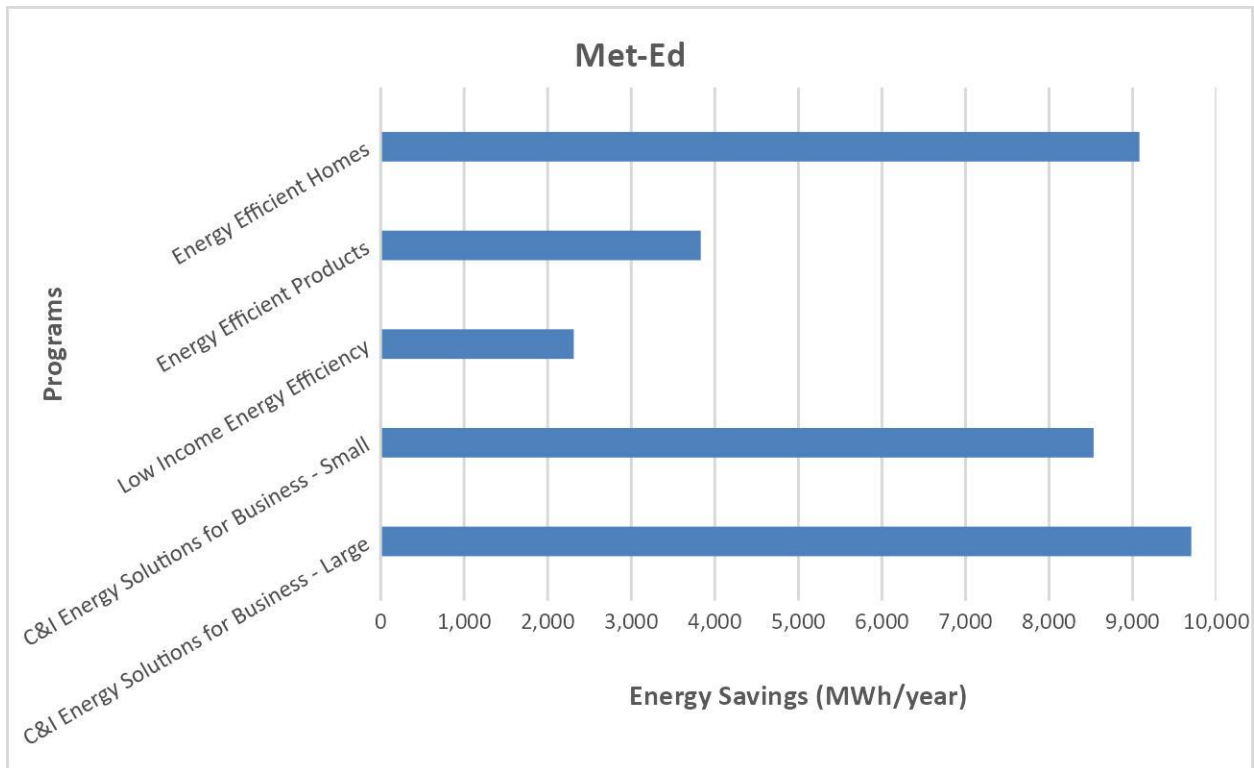
Program	Component	PYTD Participation	P4TD Participation
Energy Efficient Homes	EE Kits	26,601	138,467
Energy Efficient Homes	Home Energy Reports	88,778	133,312
Energy Efficient Homes	Multifamily - Res	67	273
Energy Efficient Homes	New Homes	380	2,082
Energy Efficient Homes	Online Audits	1,971	11,731
Energy Efficient Homes	Residential Audit and DI	382	875
Energy Efficient Products	Appliance Recycling	487	10,308
Energy Efficient Products	Residential Downstream Appliances	2,188	9,527
Energy Efficient Products	Residential Downstream HVAC	1,062	4,506
Energy Efficient Products	Residential Midstream Appliances	9,647	36,970
Low Income Energy Efficiency	Appliance Recycling	31	1,237
Low Income Energy Efficiency	EE Kits	5,148	26,491
Low Income Energy Efficiency	Home Energy Reports	12,000	20,527
Low Income Energy Efficiency	LI Direct Install	1,402	4,514
Low Income Energy Efficiency	New Homes	0	1
Low Income Energy Efficiency	Online Audits	207	1,032
Low Income Energy Efficiency	Residential Downstream Appliances	129	556
C&I Energy Solutions for Business - Small	Appliance Recycling	4	97
C&I Energy Solutions for Business - Small	CI Custom	17	48
C&I Energy Solutions for Business - Small	CI EMNC	180	435
C&I Energy Solutions for Business - Small	CI Multifamily	7	89
C&I Energy Solutions for Business - Small	CI Prescriptive	255	1,027
C&I Energy Solutions for Business - Large	Appliance Recycling	0	1
C&I Energy Solutions for Business - Large	CI Custom	0	7
C&I Energy Solutions for Business - Large	CI EMNC	20	25
C&I Energy Solutions for Business - Large	CI Prescriptive	85	260
Portfolio Total		151,048	404,398

Section 5 Summary of Energy Impacts by Program

Figures 5A-5D: PYTD Reported Gross Energy Savings by Program present a summary of the PYTD reported gross energy savings by program for Program Year 15. The energy impacts in this report are presented at the meter level and do not reflect adjustments for transmission and distribution losses.

Figures 5A-5D: PYTD Reported Gross Energy Savings by Program³

Figure 5A: PYTD Reported Gross Energy Savings by Program - Met-Ed



³ Results for the Small & Large Energy Solutions for Business programs include GNI customers who participated in these programs.

Figure 5B: PYTD Reported Gross Energy Savings by Program – Penelec

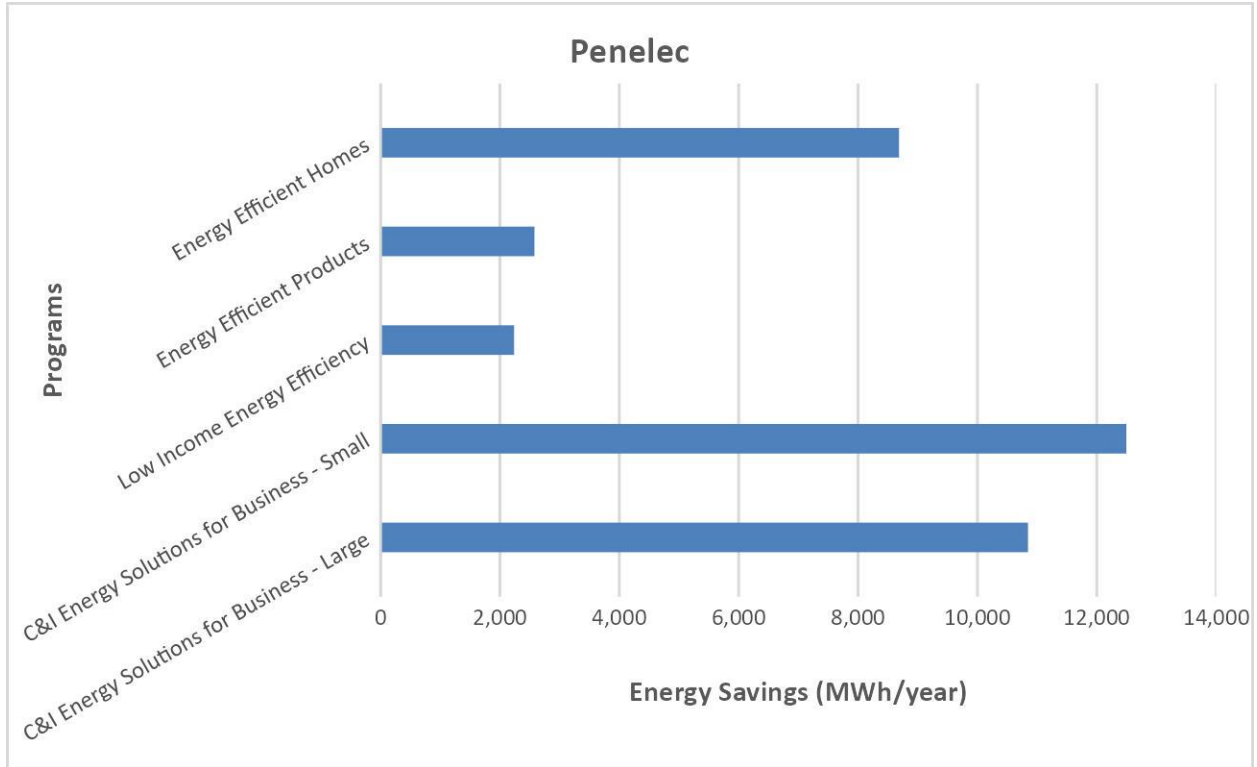


Figure 5C: PYTD Reported Gross Energy Savings by Program - Penn Power

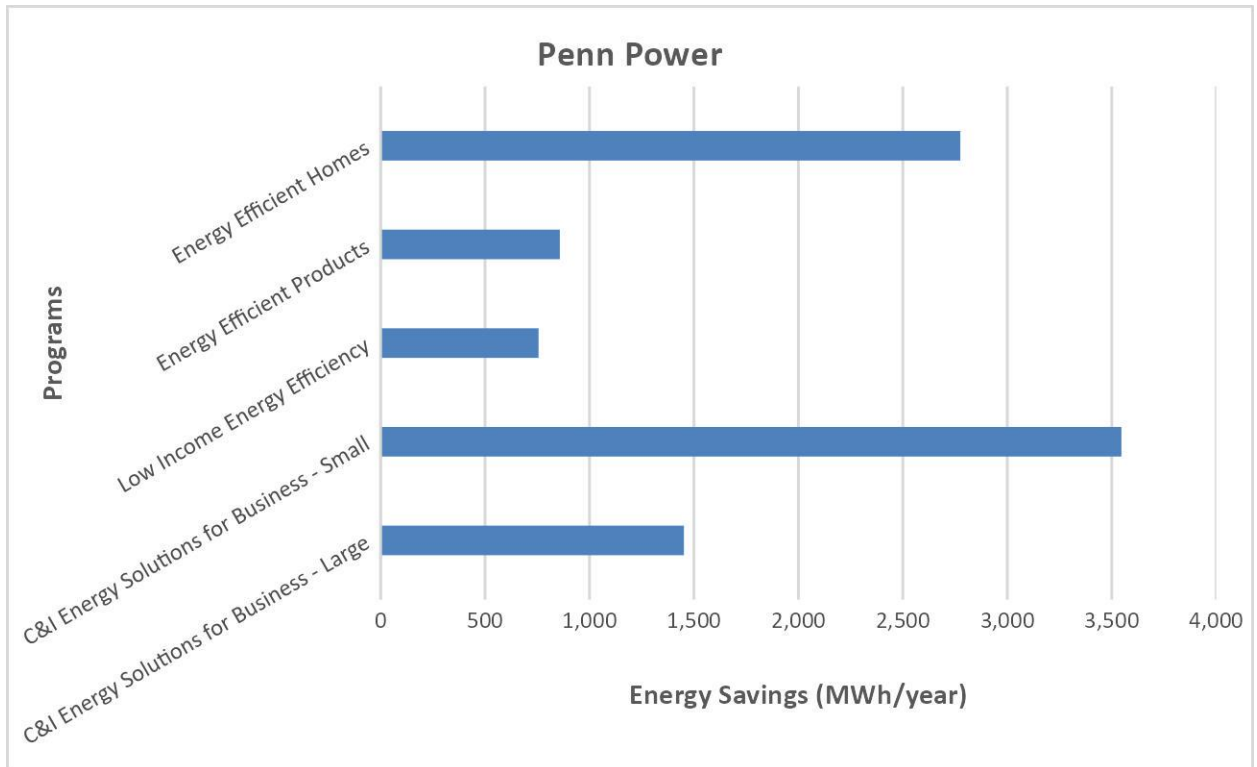
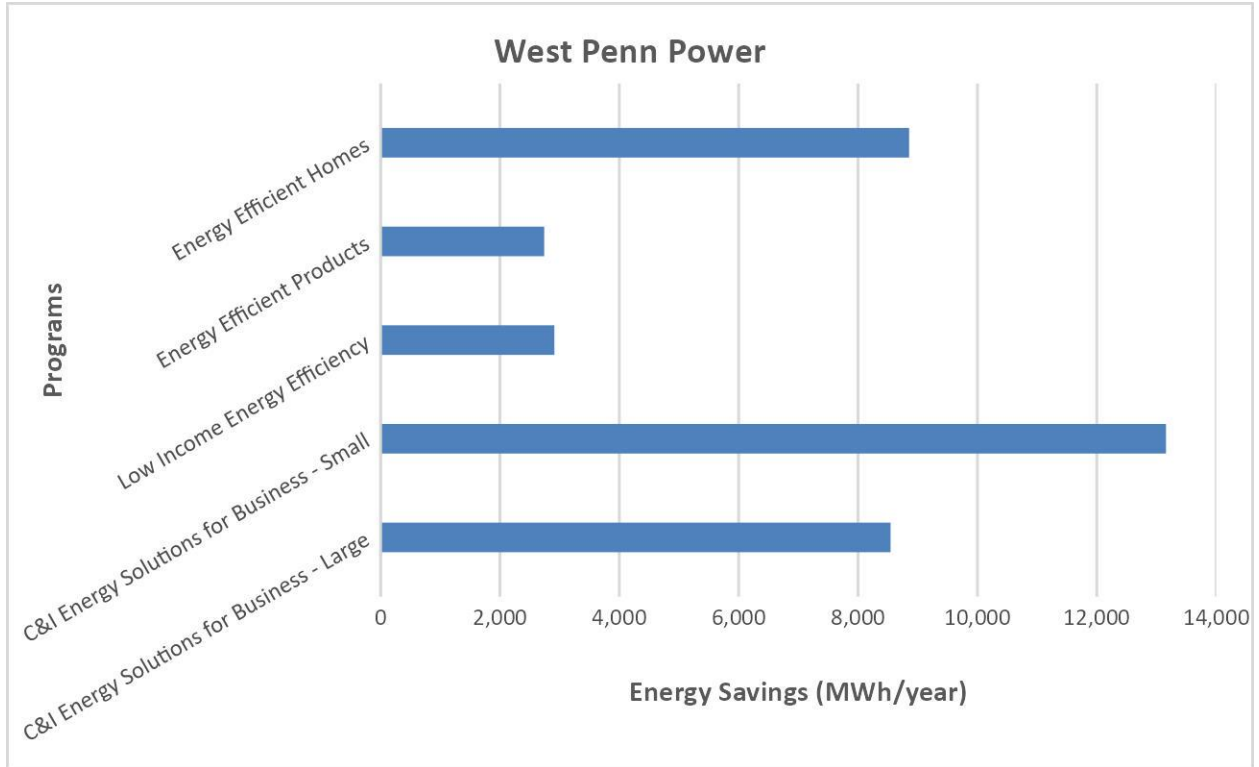


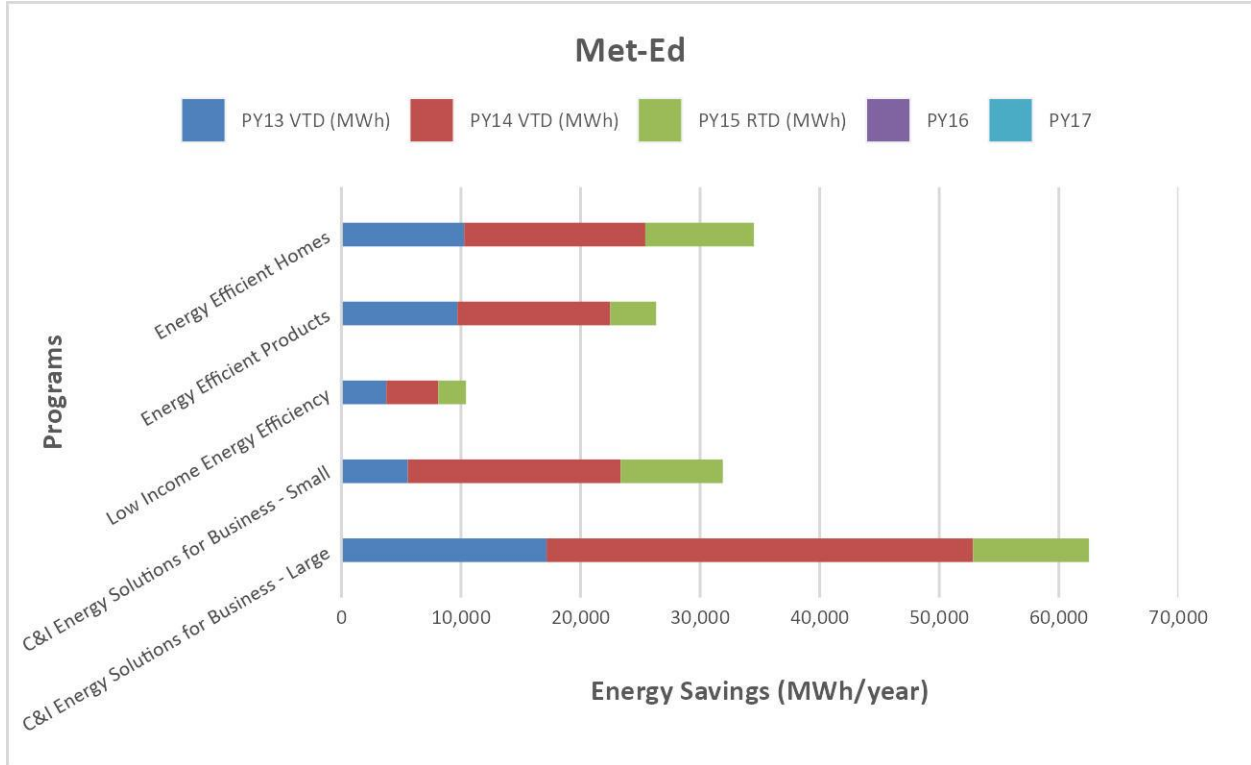
Figure 5D: PYTD Reported Gross Energy Savings by Program - West Penn Power



Figures 6A-6D: PSA Energy Savings by Program for Phase IV present a summary of the PSA gross energy savings by program for Phase IV of Act 129. PSA savings include verified gross savings from previous program years and the PYTD savings from the current program year.

Figures 6A-6D: PSA Energy Savings by Program for Phase IV⁴

Figure 6A: PSA Energy Savings by Program for Phase IV - Met-Ed



⁴ Results for the Small & Large Energy Solutions for Business programs include GNI customers who participated in these programs.

Figure 6B: PSA Energy Savings by Program for Phase IV – Penelec

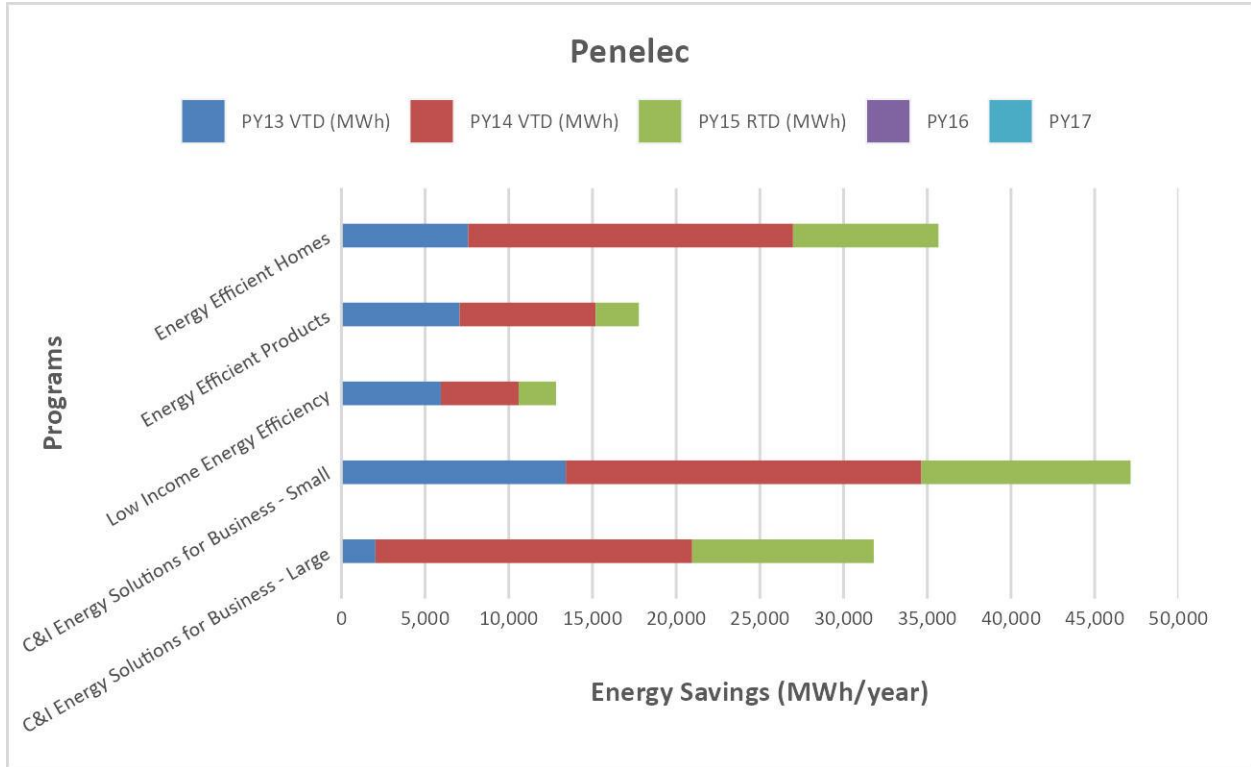


Figure 6C: PSA Energy Savings by Program for Phase IV - Penn Power

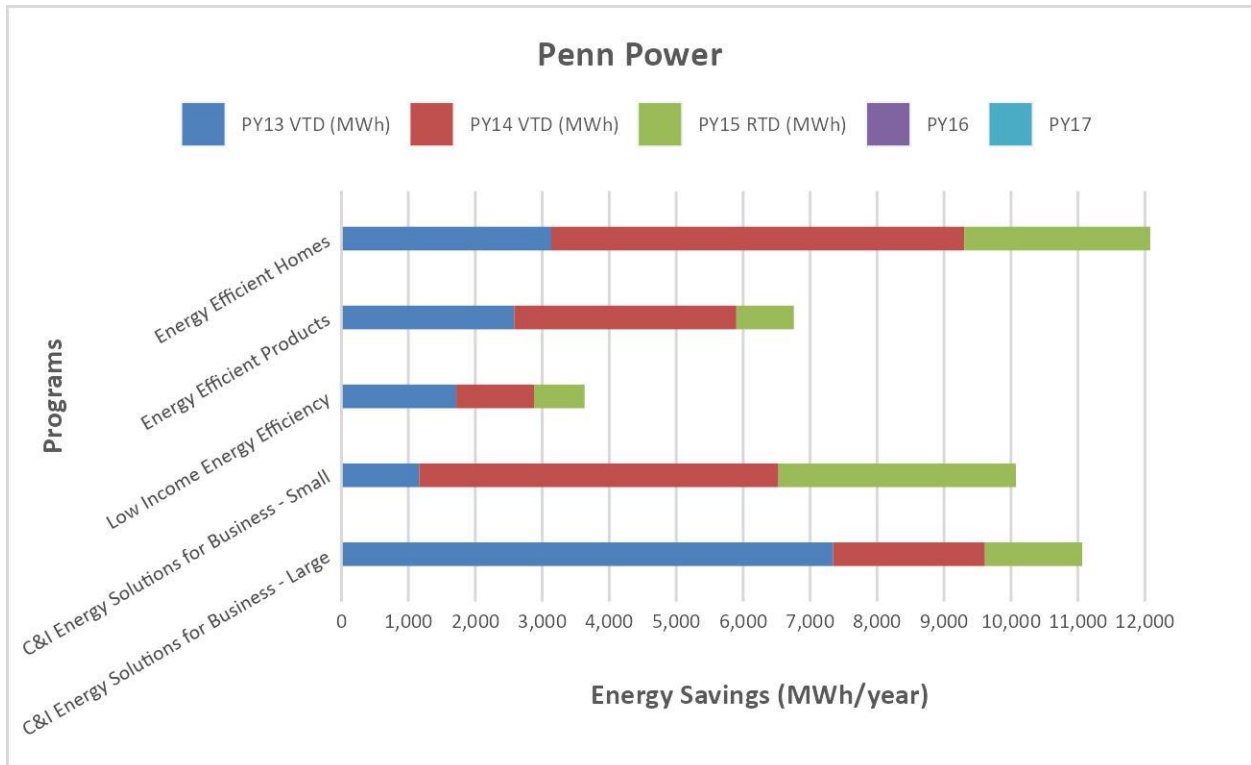


Figure 6D: PSA Energy Savings by Program for Phase IV - West Penn Power

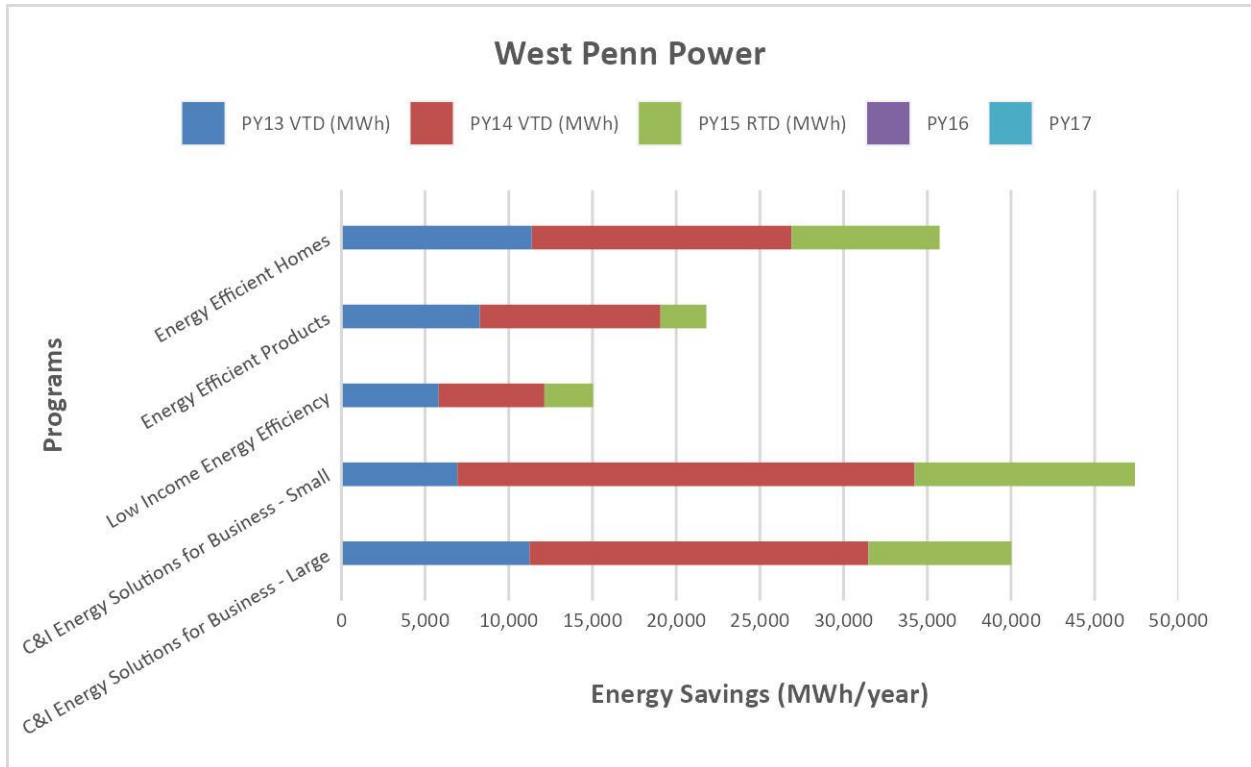


Table 5-1⁵ presents a summary of energy impacts by program through the current reporting period.

Table 5-1: Energy Savings by Program (MWh/Year)

Utility	Program	PYRTD	RTD	VTD	PSA
Met-Ed	Energy Efficient Homes	9,082	42,135	25,419	34,500
	Energy Efficient Products	3,832	24,461	22,491	26,323
	Low Income Energy Efficiency	2,312	10,381	8,110	10,422
	C&I Energy Solutions for Business - Small	8,533	31,320	23,368	31,901
	C&I Energy Solutions for Business - Large	9,702	61,021	52,824	62,526
	Portfolio Total	33,461	169,319	132,211	165,672
Penelec	Energy Efficient Homes	8,686	35,793	26,982	35,667
	Energy Efficient Products	2,578	16,948	15,192	17,770
	Low Income Energy Efficiency	2,237	12,032	10,588	12,824
	C&I Energy Solutions for Business - Small	12,494	47,523	34,649	47,144
	C&I Energy Solutions for Business - Large	10,847	30,995	20,956	31,803
	Portfolio Total	36,842	143,291	108,366	145,208
Penn Power	Energy Efficient Homes	2,775	12,968	9,304	12,079
	Energy Efficient Products	858	6,535	5,899	6,757
	Low Income Energy Efficiency	756	3,881	2,877	3,633
	C&I Energy Solutions for Business - Small	3,546	10,786	6,528	10,074
	C&I Energy Solutions for Business - Large	1,452	11,374	9,611	11,063
	Portfolio Total	9,388	45,543	34,218	43,607
West Penn Power	Energy Efficient Homes	8,855	40,784	26,885	35,740
	Energy Efficient Products	2,742	20,530	19,061	21,803
	Low Income Energy Efficiency	2,912	14,111	12,131	15,042
	C&I Energy Solutions for Business - Small	13,159	46,461	34,246	47,405
	C&I Energy Solutions for Business - Large	8,544	38,132	31,486	40,031
	Portfolio Total	36,212	160,018	123,808	160,020

⁵ Results for the Small & Large Energy Solutions for Business programs include GNI customers who participated in these programs.

Section 6 Summary of Peak Demand Impacts by Program

Act 129 defines peak demand reduction from energy efficiency as the average expected reduction in electric demand from 2:00 p.m. to 6:00 p.m. EDT on non-holiday weekdays from June to August. The peak demand impacts from energy efficiency in this report are presented at the system level, meaning they reflect adjustments for transmission and distribution losses. The FirstEnergy EDCs use the line loss factors by sector presented in Table 6-1.

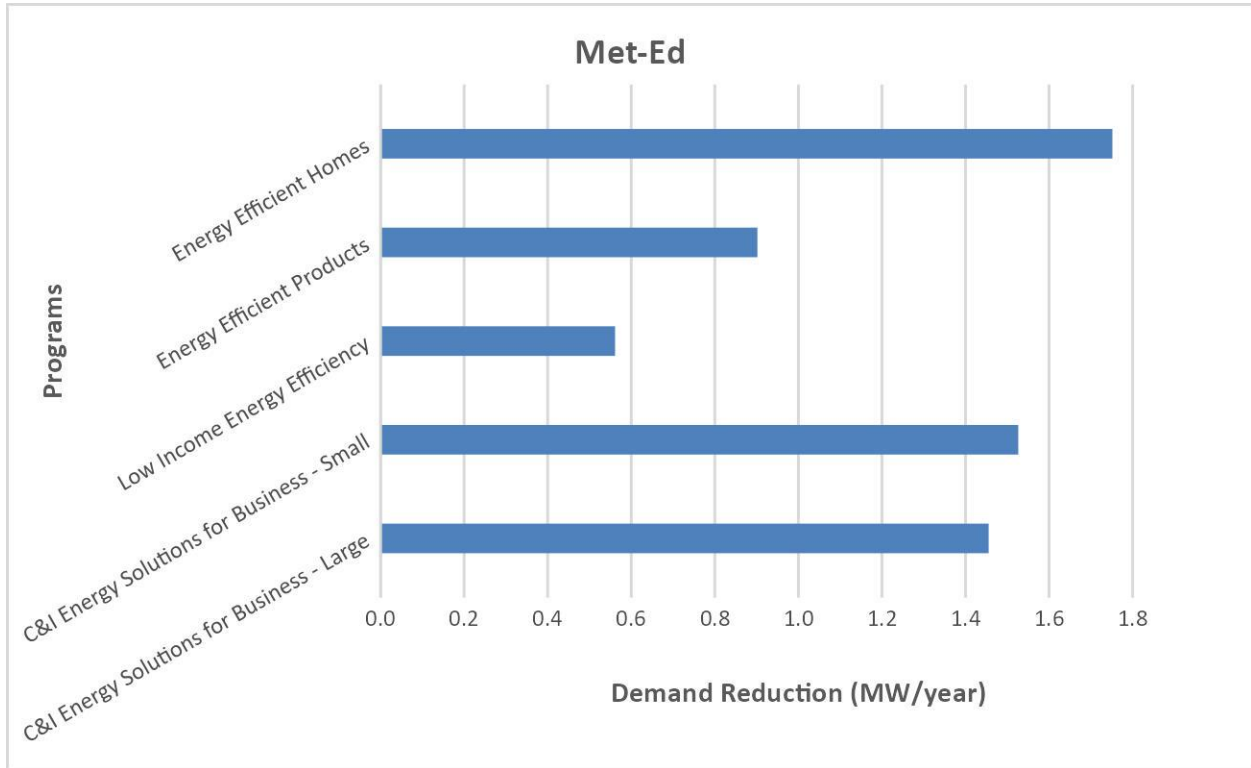
Table 6-1: Line Loss Factors by EDC

EDC	Residential	Small C&I	Large C&I
Met-Ed	1.0945	1.0720	1.0720
Penelec	1.0945	1.0720	1.0720
Penn Power	1.0949	1.0545	1.0545
West Penn Power	1.0943	1.0790	1.0790

Figures 7A-7D: PYRTD Gross Peak Demand Reduction by Program present a summary of the PYRTD reported gross peak demand reduction by energy efficiency program for Program Year 15.

Figures 7A-7D: PYRTD Gross Peak Demand Reduction by Program⁶

Figure 7A: PYRTD Gross Peak Demand Reduction by Program - Met-Ed



⁶ Results for the Small & Large Energy Solutions for Business programs include GNI customers who participated in these programs.

Figure 7B: PYRTD Gross Peak Demand Reduction by Program – Penelec

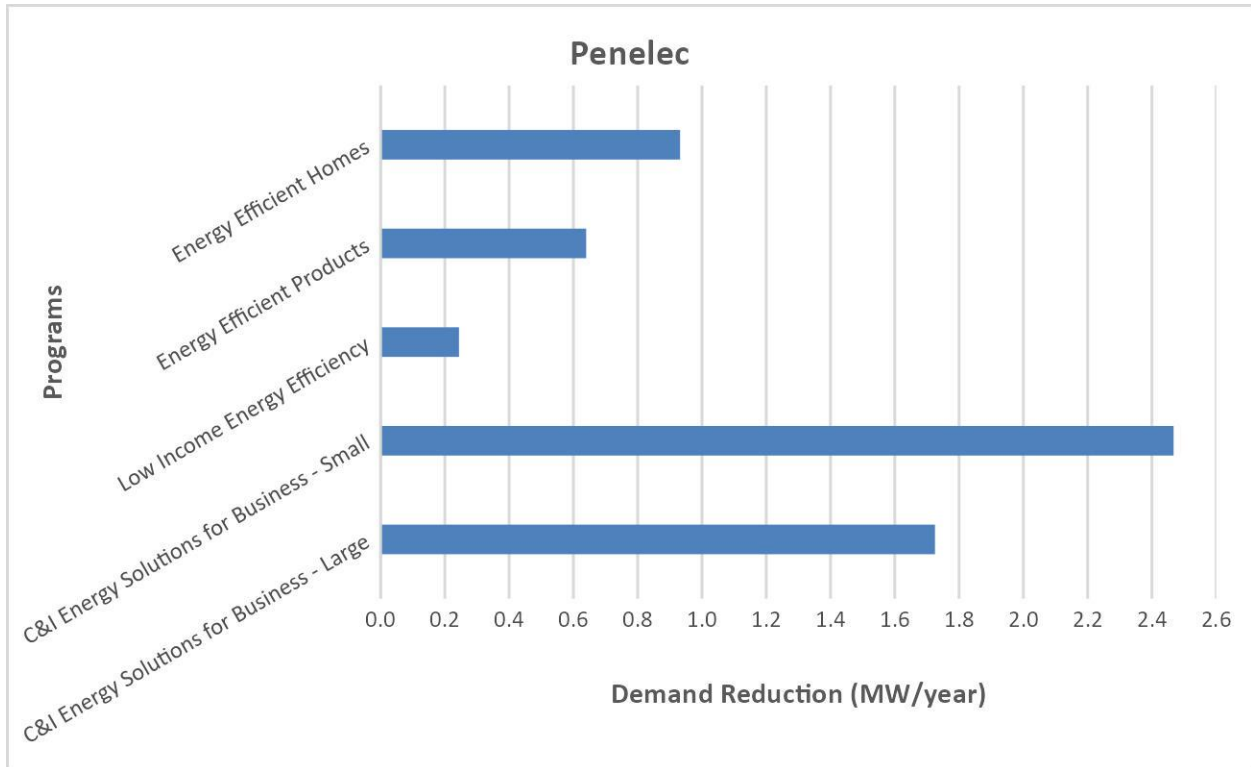


Figure 7C: PYRTD Gross Peak Demand Reduction by Program - Penn Power

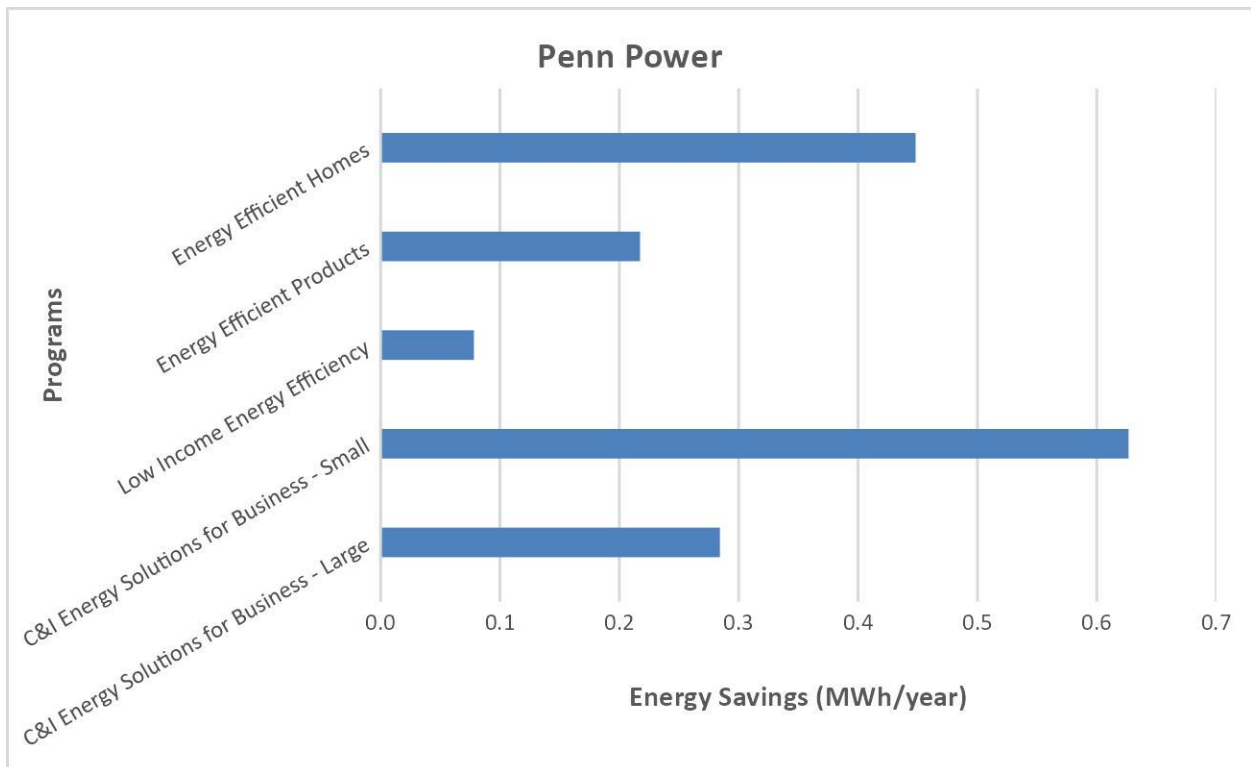
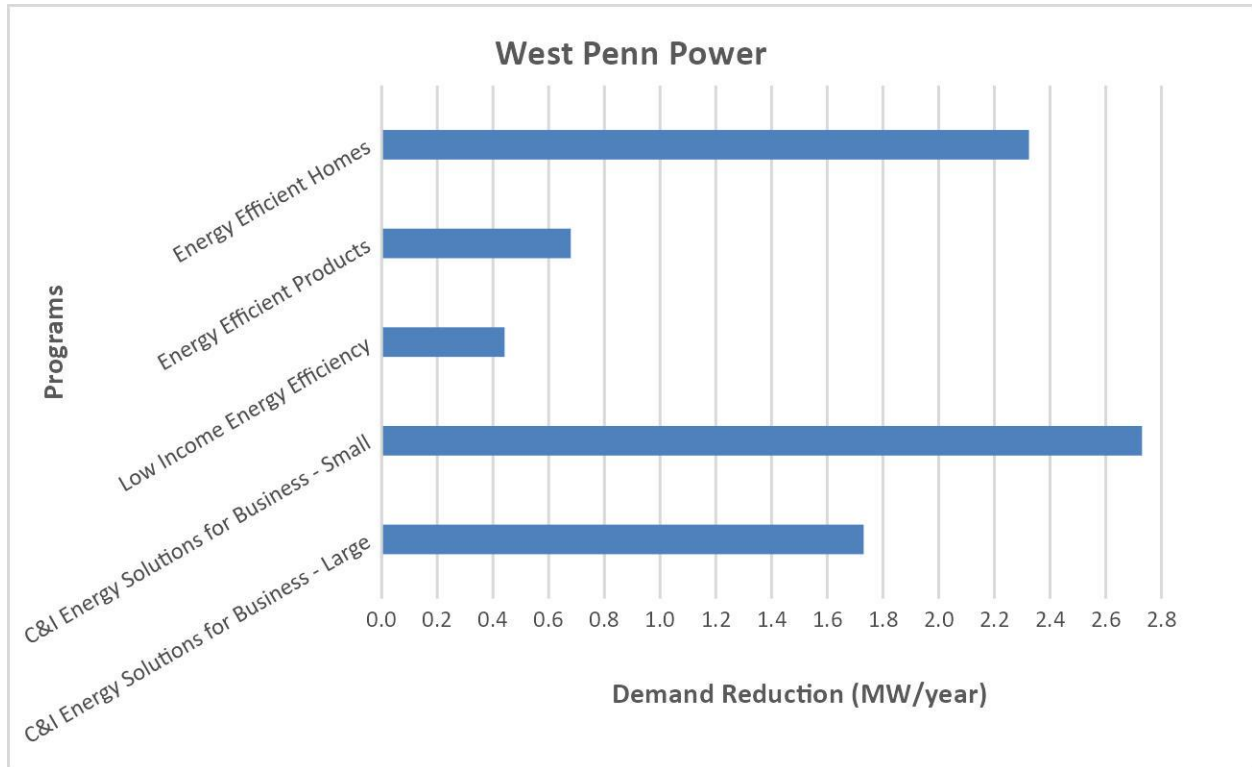


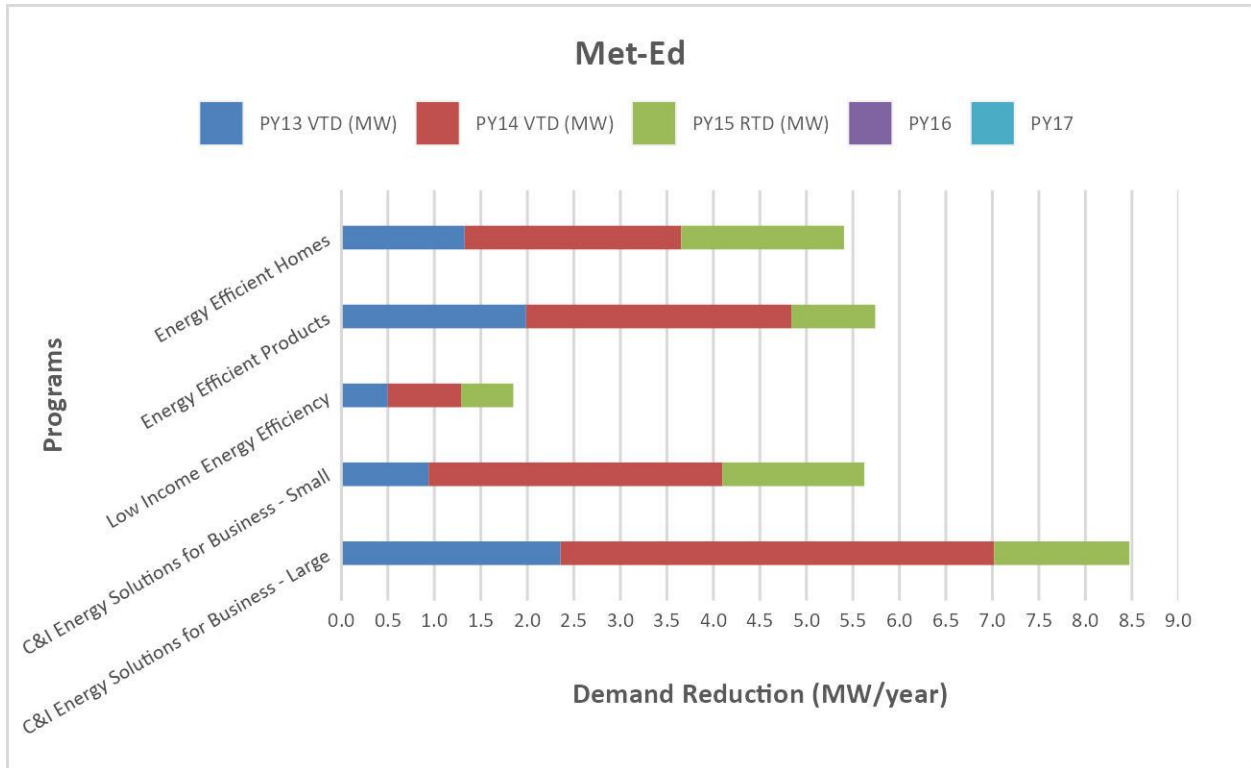
Figure 7D: PYRTD Gross Peak Demand Reduction by Program - West Penn Power



Figures 8A-8D: PSA Gross Peak Demand Reduction by Energy Efficiency Program for Phase IV present a summary of the PSA gross peak demand reduction by energy efficiency program for Phase IV of Act 129.⁷

Figures 8A-8D: PSA Gross Peak Demand Reduction by Energy Efficiency Program for Phase IV⁸

Figure 8A: PSA Gross Peak Demand Reduction by Energy Efficiency Program for Phase IV – Met-Ed



⁷ Results for the Small & Large Energy Solutions for Business programs include GNI customers who participated in these programs.

⁸ Results for the Small & Large Energy Solutions for Business programs include GNI customers who participated in these programs.

Figure 8B: PSA Gross Peak Demand Reduction by Energy Efficiency Program for Phase IV – Penelec

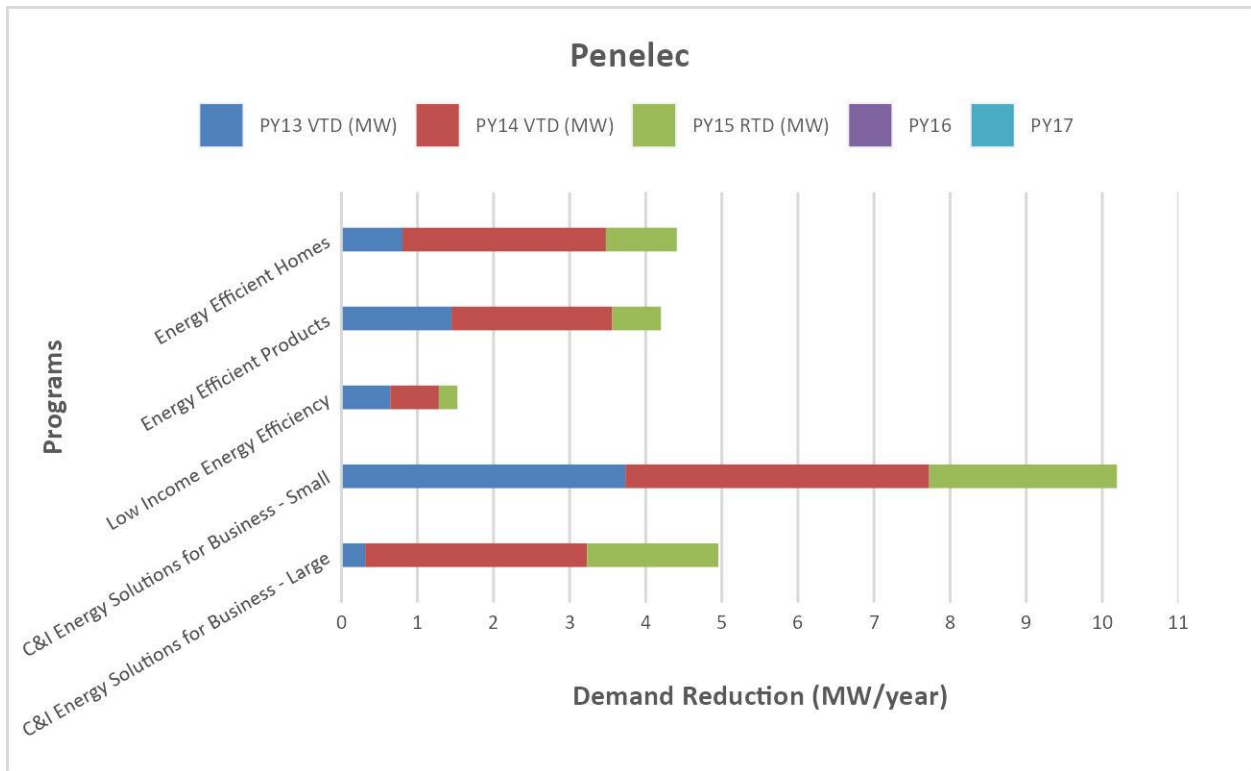


Figure 8C: PSA Gross Peak Demand Reduction by Energy Efficiency Program for Phase IV – Penn Power

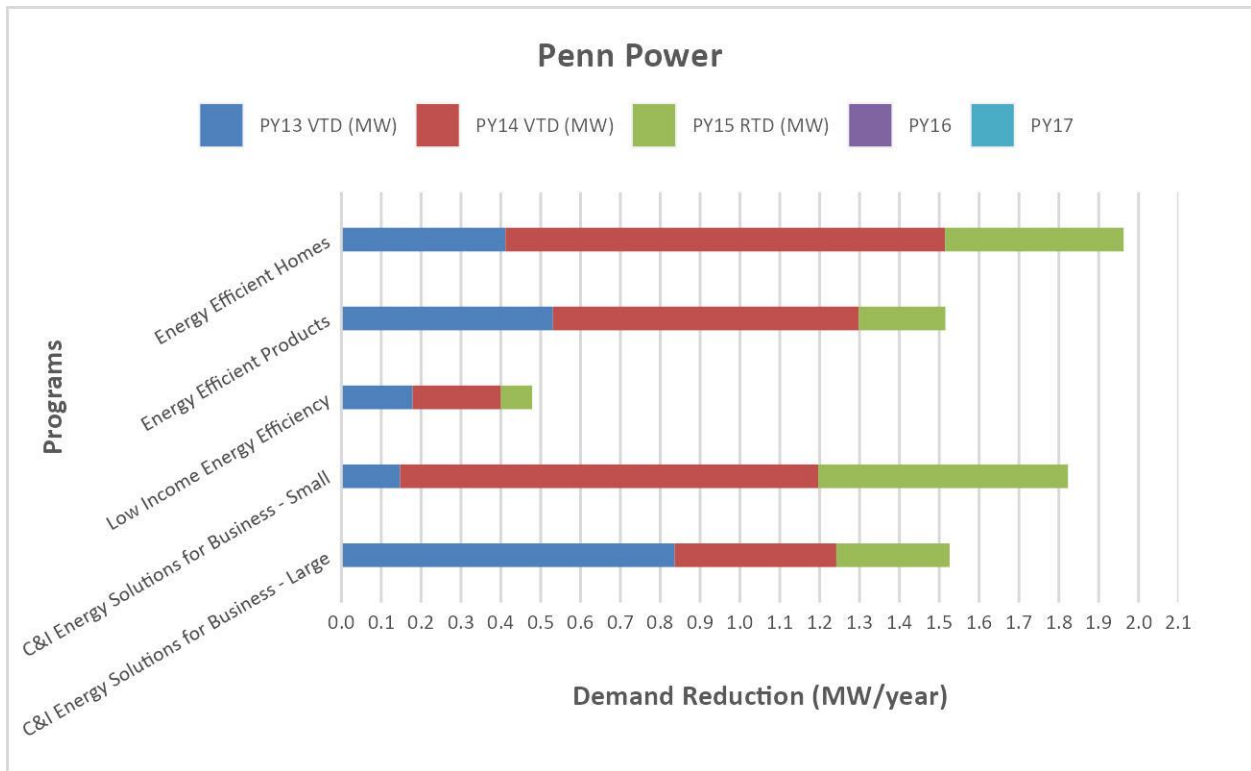


Figure 8D: PSA Gross Peak Demand Reduction by Energy Efficiency Program for Phase IV – West Penn Power

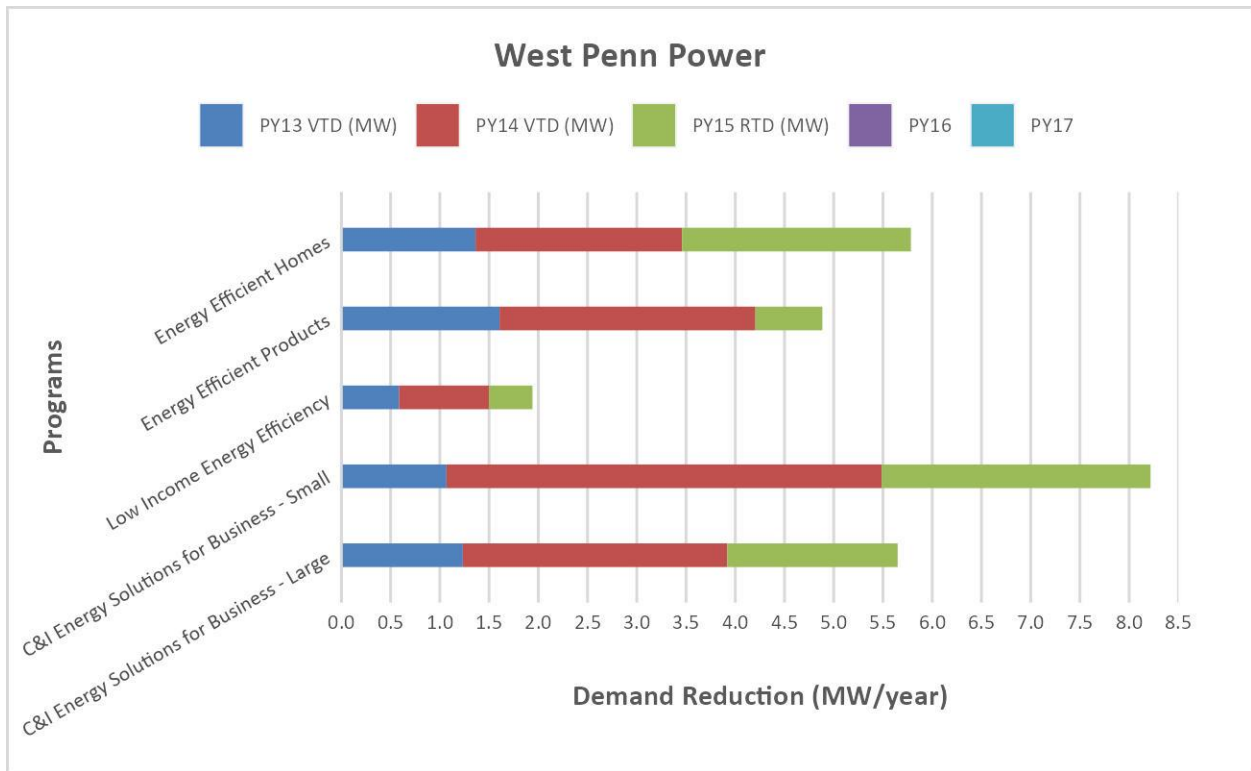


Table 6-2 presents a summary of the peak demand impacts by program through the current reporting period.

Table 6-2: Peak Demand Reduction by Program (MW/Year)⁹

Utility	Program	PYRTD	RTD	VTD	PSA
Met-Ed	Energy Efficient Homes	1.75	6.68	3.65	5.40
	Energy Efficient Products	0.90	5.56	4.84	5.74
	Low Income Energy Efficiency	0.56	1.65	1.29	1.85
	C&I Energy Solutions for Business - Small	1.53	5.66	4.10	5.62
	C&I Energy Solutions for Business - Large	1.46	8.43	7.02	8.47
	Portfolio Total	6.20	27.99	20.89	27.09
Penelec	Energy Efficient Homes	0.93	4.64	3.48	4.41
	Energy Efficient Products	0.64	4.12	3.56	4.20
	Low Income Energy Efficiency	0.24	1.58	1.28	1.53
	C&I Energy Solutions for Business - Small	2.47	10.68	7.72	10.19
	C&I Energy Solutions for Business - Large	1.72	5.14	3.23	4.95
	Portfolio Total	6.01	26.16	19.27	25.28
Penn Power	Energy Efficient Homes	0.45	2.45	1.51	1.96
	Energy Efficient Products	0.22	1.49	1.30	1.52
	Low Income Energy Efficiency	0.08	0.50	0.40	0.48
	C&I Energy Solutions for Business - Small	0.63	2.11	1.20	1.82
	C&I Energy Solutions for Business - Large	0.28	1.66	1.24	1.53
	Portfolio Total	1.65	8.20	5.65	7.31
West Penn Power	Energy Efficient Homes	2.32	7.24	3.46	5.78
	Energy Efficient Products	0.68	4.81	4.21	4.88
	Low Income Energy Efficiency	0.44	2.05	1.50	1.94
	C&I Energy Solutions for Business - Small	2.73	8.95	5.49	8.22
	C&I Energy Solutions for Business - Large	1.73	6.06	3.92	5.65
	Portfolio Total	7.91	29.10	18.57	26.47

⁹ Results for the Small & Large Energy Solutions for Business programs include GNI customers who participated in these programs.

Section 7 Summary of Finances

This section provides an overview of the expenditures associated with the FirstEnergy EDCs' portfolios and the recovery of those costs from ratepayers.

7.1 PROGRAM FINANCIALS

Program-specific and portfolio total finances for PY15 are shown in Table 7-1A to 7-1D. The columns in these tables are adapted from the list of 'Program Cost Elements' in the Commission's EE&C Plan template¹⁰ for Phase IV. Thus far in PY15, 73% of Met-Ed, 72% of Penelec, 71% of Penn Power, and 75% of West Penn Power's EE&C Plan expenditures have been incentives to participants and trade allies.

- Incentives includes rebates, point-of-sale buydowns, kits, and direct installation materials and labor.
- EDC Materials, Labor, and Administration includes costs associated with an EDC's own employees.
- ICSP Materials, Labor, and Administration includes both the program implementation contractor and the costs of any other outside vendors an EDC employs to support program delivery.

¹⁰ <https://www.puc.pa.gov/pcdocs/1676672.docx>

Table 7-1A to 7-1D: Program Year to Date Financials¹¹**Table 7-1A: Program Year to Date Financials – Met-Ed**

Program	Incentives to Participants and Trade Allies	EDC Materials, Labor, and Administration	ICSP Materials, Labor, and Administration	EM&V	Total EDC Cost
<i>Energy Efficient Homes</i>	\$1,399,637	\$63,496	\$459,729	\$63,641	\$1,986,503
<i>Energy Efficient Products</i>	\$766,528	\$57,512	\$310,145	\$38,409	\$1,172,594
<i>Low Income Energy Efficiency</i>	\$1,089,748	\$37,358	\$269,273	\$35,973	\$1,432,352
<i>C&I Energy Solutions for Business - Small</i>	\$3,322,452	\$104,779	\$473,200	\$129,342	\$4,029,774
<i>C&I Energy Solutions for Business - Large</i>	\$822,188	\$132,497	\$283,355	\$158,798	\$1,396,838
<i>Common Portfolio Costs</i>					\$0
<i>Total Portfolio</i>	\$7,400,554	\$395,642	\$1,795,702	\$426,163	\$10,018,061
<i>SWE Costs⁵</i>	\$0	\$0	\$0	\$0	\$126,720
<i>Total</i>	\$7,400,554	\$395,642	\$1,795,702	\$426,163	\$10,144,781

¹¹ Results for the Small & Large Energy Solutions for Business programs include GNI customers who participated in these programs. Statewide Evaluation costs are outside of the 2% spending cap.

Table 7-1B: Program Year to Date Financials – Penelec

Program	Incentives to Participants and Trade Allies	EDC Materials, Labor, and Administration	ICSP Materials, Labor, and Administration	EM&V	Total EDC Cost
<i>Energy Efficient Homes</i>	\$1,029,705	\$55,141	\$313,066	\$53,967	\$1,451,879
<i>Energy Efficient Products</i>	\$471,425	\$59,049	\$192,124	\$34,722	\$757,320
<i>Low Income Energy Efficiency</i>	\$1,605,485	\$47,375	\$308,156	\$37,887	\$1,998,903
<i>C&I Energy Solutions for Business - Small</i>	\$3,763,603	\$125,057	\$832,499	\$143,513	\$4,864,672
<i>C&I Energy Solutions for Business - Large</i>	\$1,029,455	\$104,111	\$462,712	\$117,638	\$1,713,916
<i>Common Portfolio Costs</i>					\$0
<i>Total Portfolio</i>	\$7,899,673	\$390,734	\$2,108,557	\$387,726	\$10,786,690
<i>SWE Costs⁵</i>	\$0	\$0	\$0	\$0	\$114,840
<i>Total</i>	\$7,899,673	\$390,734	\$2,108,557	\$387,726	\$10,901,530

Table 7-1C: Program Year to Date Financials – Penn Power

Program	Incentives to Participants and Trade Allies	EDC Materials, Labor, and Administration	ICSP Materials, Labor, and Administration	EM&V	Total EDC Cost
<i>Energy Efficient Homes</i>	\$582,838	\$35,222	\$186,179	\$20,501	\$824,740
<i>Energy Efficient Products</i>	\$150,807	\$27,756	\$65,767	\$10,687	\$255,017
<i>Low Income Energy Efficiency</i>	\$454,293	\$18,256	\$113,030	\$10,954	\$596,534
<i>C&I Energy Solutions for Business - Small</i>	\$1,029,044	\$46,826	\$231,620	\$36,826	\$1,344,317
<i>C&I Energy Solutions for Business - Large</i>	\$249,128	\$37,271	\$93,527	\$29,308	\$409,234
<i>Common Portfolio Costs</i>					\$0
<i>Total Portfolio</i>	\$2,466,111	\$165,332	\$690,123	\$108,276	\$3,429,843
<i>SWE Costs⁵</i>	\$0	\$0	\$0	\$0	\$35,640
<i>Total</i>	\$2,466,111	\$165,332	\$690,123	\$108,276	\$3,465,483

Table 7-1D: Program Year to Date Financials - West Penn Power

Program	Incentives to Participants and Trade Allies	EDC Materials, Labor, and Administration	ICSP Materials, Labor, and Administration	EM&V	Total EDC Cost
<i>Energy Efficient Homes</i>	\$1,317,757	\$74,346	\$523,127	\$69,848	\$1,985,079
<i>Energy Efficient Products</i>	\$528,794	\$70,954	\$260,905	\$42,575	\$903,228
<i>Low Income Energy Efficiency</i>	\$1,949,182	\$43,801	\$349,001	\$38,004	\$2,379,988
<i>C&I Energy Solutions for Business - Small</i>	\$3,723,238	\$108,445	\$674,470	\$127,842	\$4,633,994
<i>C&I Energy Solutions for Business - Large</i>	\$1,673,508	\$99,048	\$386,642	\$114,004	\$2,273,202
<i>Common Portfolio Costs</i>					\$0
<i>Total Portfolio</i>	\$9,192,479	\$396,594	\$2,194,145	\$392,273	\$12,175,491
<i>SWE Costs⁵</i>	\$0	\$0	\$0	\$0	\$118,800
<i>Total</i>	\$9,192,479	\$396,594	\$2,194,145	\$392,273	\$12,294,291

Program-specific and portfolio total finances since the inception of Phase IV are shown in Table 7-2A to 7-2D.

Table 7-2A to 7-2D: Phase IV to Date Financials¹²

Table 7-2A: Phase IV to Date Financials- Met-Ed

Program	Incentives to Participants and Trade Allies	EDC Materials, Labor, and Administration	ICSP Materials, Labor, and Administration	EM&V	Total EDC Cost
<i>Energy Efficient Homes</i>	\$6,590,453	\$452,529	\$2,012,315	\$378,651	\$9,433,949
<i>Energy Efficient Products</i>	\$4,091,755	\$402,238	\$2,597,882	\$231,316	\$7,323,191
<i>Low Income Energy Efficiency</i>	\$3,649,963	\$327,036	\$1,108,283	\$208,431	\$5,293,713
<i>C&I Energy Solutions for Business - Small</i>	\$6,903,078	\$628,026	\$2,031,023	\$576,431	\$10,138,557
<i>C&I Energy Solutions for Business - Large</i>	\$2,734,596	\$776,975	\$1,483,592	\$680,575	\$5,675,738
<i>Common Portfolio Costs</i>					\$0
<i>Total Portfolio</i>	\$23,969,844	\$2,586,805	\$9,233,095	\$2,075,404	\$37,865,148
<i>SWE Costs⁵</i>	\$0	\$0	\$0	\$0	\$633,600
<i>Total</i>	\$23,969,844	\$2,586,805	\$9,233,095	\$2,075,404	\$38,498,748

¹² Results for the Small & Large Energy Solutions for Business programs include GNI customers who participated in these programs. Statewide Evaluation costs are outside of the 2% spending cap.

Table 7-2B: Phase IV to Date Financials- Penelec

Program	Incentives to Participants and Trade Allies	EDC Materials, Labor, and Administration	ICSP Materials, Labor, and Administration	EM&V	Total EDC Cost
<i>Energy Efficient Homes</i>	\$4,841,157	\$384,844	\$1,195,723	\$303,773	\$6,725,497
<i>Energy Efficient Products</i>	\$2,523,772	\$397,952	\$1,841,533	\$213,802	\$4,977,059
<i>Low Income Energy Efficiency</i>	\$4,878,469	\$387,490	\$1,225,903	\$242,739	\$6,734,601
<i>C&I Energy Solutions for Business - Small</i>	\$9,043,185	\$713,340	\$3,315,649	\$639,453	\$13,711,627
<i>C&I Energy Solutions for Business - Large</i>	\$2,334,700	\$584,142	\$1,314,039	\$504,752	\$4,737,633
<i>Common Portfolio Costs</i>					\$0
<i>Total Portfolio</i>	\$23,621,283	\$2,467,767	\$8,892,846	\$1,904,520	\$36,886,417
<i>SWE Costs⁵</i>	\$0	\$0	\$0	\$0	\$574,200
<i>Total</i>	\$23,621,283	\$2,467,767	\$8,892,846	\$1,904,520	\$37,460,617

Table 7-2C: Phase IV to Date Financials- Penn Power

Program	Incentives to Participants and Trade Allies	EDC Materials, Labor, and Administration	ICSP Materials, Labor, and Administration	EM&V	Total EDC Cost
<i>Energy Efficient Homes</i>	\$2,243,002	\$196,617	\$760,692	\$128,077	\$3,328,389
<i>Energy Efficient Products</i>	\$975,421	\$149,050	\$646,723	\$64,594	\$1,835,788
<i>Low Income Energy Efficiency</i>	\$1,414,559	\$123,909	\$496,671	\$74,858	\$2,109,997
<i>C&I Energy Solutions for Business - Small</i>	\$2,675,336	\$233,947	\$826,503	\$164,248	\$3,900,035
<i>C&I Energy Solutions for Business - Large</i>	\$901,251	\$191,414	\$453,111	\$125,041	\$1,670,817
<i>Common Portfolio Costs</i>					\$0
<i>Total Portfolio</i>	\$8,209,568	\$894,938	\$3,183,700	\$556,818	\$12,845,025
<i>SWE Costs⁵</i>	\$0	\$0	\$0	\$0	\$178,200
<i>Total</i>	\$8,209,568	\$894,938	\$3,183,700	\$556,818	\$13,023,225

Table 7-2D: Phase IV to Date Financials- West Penn Power

Program	Incentives to Participants and Trade Allies	EDC Materials, Labor, and Administration	ICSP Materials, Labor, and Administration	EM&V	Total EDC Cost
<i>Energy Efficient Homes</i>	\$6,342,623	\$526,597	\$2,200,135	\$432,785	\$9,502,139
<i>Energy Efficient Products</i>	\$3,012,912	\$475,217	\$2,393,879	\$261,779	\$6,143,786
<i>Low Income Energy Efficiency</i>	\$5,300,502	\$362,348	\$1,219,983	\$222,114	\$7,104,946
<i>C&I Energy Solutions for Business - Small</i>	\$9,845,247	\$636,019	\$3,012,523	\$570,573	\$14,064,362
<i>C&I Energy Solutions for Business - Large</i>	\$3,459,883	\$562,998	\$1,292,554	\$489,135	\$5,804,569
<i>Common Portfolio Costs</i>					\$0
<i>Total Portfolio</i>	\$27,961,166	\$2,563,178	\$10,119,074	\$1,976,385	\$42,619,803
<i>SWE Costs</i> ⁵	\$0	\$0	\$0	\$0	\$594,000
<i>Total</i>	\$27,961,166	\$2,563,178	\$10,119,074	\$1,976,385	\$43,213,803

Cost-effectiveness testing for Act 129 EE&C programs is performed using the TRC Test. Benefit cost modeling is conducted annually using verified gross and verified net savings once the results of the independent impact evaluation are completed. TRC test results for PY15 will be presented in the final annual report to the PA PUC on September 30, 2024, along with a more granular breakdown of portfolio costs.

7.2 COST RECOVERY

Act 129 allows Pennsylvania EDCs to recover EE&C plan costs through a cost-recovery mechanism. FirstEnergy's cost-recovery charges are organized separately by five customer sectors to ensure that the electric rate classes that finance the programs are the rate classes that receive the direct energy and conservation benefits. Cost-recovery is necessarily tied to the way customers are metered and charged for electric service. Readers should be mindful of the differences between Tables 7-3A to 7-3D and Section 2.3. For example, the low-income customer segment is a subset of the FirstEnergy EDCs' residential tariff(s) and therefore not listed in Tables 7-3A to 7-3D.

Table 7-3A to 7-3D: EE&C Plan Expenditures by Cost-Recovery Category¹³**Table 7-3A: EE&C Plan Expenditures by Cost-Recovery Category – Met-Ed**

Operating Company	Cost Recovery Sector	Rate Classes Included	PYTD \$ Spending (\$1,000)	P4TD \$ Spending (\$1,000)
Met-Ed	Residential (incl. Low Income)	Rate RS	\$5,344	\$12,872
	Small C&I	Rate GS-Small, Rate GS-Medium, and Outdoor Lighting Service	\$1,623	\$3,378
	Large C&I	Rate GS-Large, Rate GP and Rate TP	\$795	\$2,575
	Street Lighting	Street Lighting Service, LED Street Lighting Service and Ornamental Street Lighting Service	\$10	\$12
Portfolio Total			\$7,771	\$18,837

Table 7-3B: EE&C Plan Expenditures by Cost-Recovery Category – Penelec

Operating Company	Cost Recovery Sector	Rate Classes Included	PYTD \$ Spending (\$1,000)	P4TD \$ Spending (\$1,000)
Penelec	Residential (incl. Low Income)	Rate RS	\$4,462	\$10,589
	Small C&I	Rate GS-Small, Rate GS-Medium, and Outdoor Lighting Service	\$3,154	\$5,521
	Large C&I	Rate GS-Large, Rate GP, and Rate LP	\$145	\$1,682
	Street Lighting	Street Lighting Service, LED Street Lighting Service, and Ornamental Street Lighting Service	\$2	\$5
Portfolio Total			\$7,763	\$17,797

¹³ Includes allocation of SWE costs in each Cost Recovery Sector.

Table 7-3C: EE&C Plan Expenditures by Cost-Recovery Category – Penn Power

Operating Company	Cost Recovery Sector	Rate Classes Included	PYTD \$ Spending (\$1,000)	P4TD \$ Spending (\$1,000)
Penn Power	Residential (incl. Low Income)	Rate RS	\$1,634	\$4,060
	Small C&I	Rate GS, GS Special Rider GSDS, Rate GM, Rate GS-Large and POL	\$808	\$1,451
	Large C&I	Rate GP, and Rate GT	\$265	\$1,061
	Street Lighting	Rate Schedules SV, SVD, SM and LED	\$5	\$5
Portfolio Total			\$2,712	\$6,578

Table 7-3D: EE&C Plan Expenditures by Cost-Recovery Category – West Penn Power

Operating Company	Cost Recovery Sector	Rate Classes Included	PYTD \$ Spending (\$1,000)	P4TD \$ Spending (\$1,000)
West Penn Power	Residential (incl. Low Income)	Rate 10	\$5,475	\$12,755
	Small C&I	Rate GS 20, Rate GS 30	\$2,947	\$6,130
	Large C&I	Rate GS 35, 40, 44, 46, and Tariff No. 38	\$702	\$2,215
	Street Lighting	Rate Schedules 51 through 58, 71, 72	\$1	\$4
Portfolio Total			\$9,125	\$21,104

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**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Semi-Annual Report to the Pennsylvania Public	:	
Utility Commission and Act 129 Statewide	:	Docket Nos. M-2020-3020820
Evaluator; Phase IV Program Period June 1, 2023	:	M-2020-3020821
to May 31, 2024, for Metropolitan Edison	:	M-2020-3020822
Company, Pennsylvania Electric Company,	:	M-2020-3020823
Pennsylvania Power Company and West Penn	:	
Power Company	:	

CERTIFICATE OF SERVICE

I hereby certify that I have this day served a true copy of the foregoing document upon the parties listed below by e-mail.

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