

Daniel A. Garcia, Esq. (724) 838-6416 (234) 678-2310 (Fax)

January 15, 2025

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, 2024 to May 31, 2025, for Metropolitan Edison Company, Pennsylvania Electric Company, Pennsylvania Power Company and West Penn Power Company;

<u>Docket Nos. M-2020-3020820, M-2020-3020821, M-2020-3020822, and M-2020-3020823</u>

Dear Secretary Chiavetta:

Enclosed please find the Semi-Annual Report to the Pennsylvania Public Utility Commission in the above-captioned matter for the FirstEnergy Pennsylvania Electric Company's rate districts, formally known as 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 16
(June 1, 2024 – May 31, 2025)

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 15, 2025

For the Reporting Period Ending November 30, 2024

Table of Contents

ACRONYMS	III	
TYPES OF SAVI	NGS	۱۱.
SECTION 1	Introduction	1
SECTION 2	SUMMARY OF ACHIEVEMENTS	2
2.1 CARRYO	VER SAVINGS FROM PHASE III OF ACT 129	
2.2 PHASE I	V ENERGY EFFICIENCY ACHIEVEMENTS TO DATE	
2.4 PHASE I	V PERFORMANCE BY CUSTOMER SEGMENT	
SECTION 3	UPDATES AND FINDINGS	17
3.1 IMPLEME	NTATION UPDATES AND FINDINGS	
3.2 EVALUAT	rion Updates and Findings21	
SECTION 4	SUMMARY OF PARTICIPATION BY PROGRAM	23
SECTION 5	SUMMARY OF ENERGY IMPACTS BY PROGRAM	28
SECTION 6	SUMMARY OF PEAK DEMAND IMPACTS BY PROGRAM	35
SECTION 7	SUMMARY OF FINANCES	44
7.1 PROGRA	M FINANCIALS	
7.2 Cost Re	ECOVERY	
	Figures	
FIGURE 1A: CA	ARRYOVER SAVINGS FROM PHASE III OF ACT 129 – MED-ED	. 3
	RFORMANCE TOWARD PHASE IV PORTFOLIO ENERGY SAVINGS TARGET -	
) RFORMANCE TOWARD PHASE IV PORTFOLIO PEAK DEMAND TARGET – MET-	. 6
	RFORMANCE TOWARD FRASE IV FORTFOLIO FEAR DEMAND TARGET - MET-	10
	&C PLAN PERFORMANCE TOWARD PHASE IV LOW-INCOME COMPLIANCE	
	T – MET-ED	
	A ENERGY SAVINGS BY PROGRAM FOR PHASE IV – MET-ED	
	RTD GROSS PEAK DEMAND REDUCTION BY PROGRAM - MET-ED	
	A GROSS PEAK DEMAND REDUCTION BY ENERGY EFFICIENCY PROGRAM	
FOR PH	ASE IV - MET-ED	39
	Tables	
TABLE 2-1: Ph	ASE III CARRYOVER SAVINGS	. 2
	OSS ENERGY SAVINGS AND DEMAND REDUCTION FOR PY16	
	OSS ENERGY SAVINGS AND DEMAND REDUCTION SINCE THE BEGINNING OF	
	IV OF ACT 129	
I ABLE Z-4: PH	ASE IV ENERGY SAVINGS INCLUDING PHASE III CARRYOVER	. 5

TABLE 2-5: LOW-INCOME PROGRAM ENERGY SAVINGS AND TARGETS	13
TABLE 2-6: PY16 SUMMARY STATISTICS BY CUSTOMER SEGMENT	16
TABLE 2-7: PHASE IV SUMMARY STATISTICS BY CUSTOMER SEGMENT	16
TABLE 4-1A: EE&C PLAN PARTICIPATION BY PROGRAM COMPONENT – MET-ED	24
TABLE 5-1: ENERGY SAVINGS BY PROGRAM (MWH/YEAR)	34
TABLE 6-1: LINE LOSS FACTORS BY EDC	35
TABLE 6-2: PEAK DEMAND REDUCTION BY PROGRAM (MW/YEAR)	43
TABLE 7-1A: PROGRAM YEAR TO DATE FINANCIALS – MET-ED	45
TABLE 7-2A: PHASE IV TO DATE FINANCIALS – MET-ED	49
TABLE 7-3A: EE&C PLAN EXPENDITURES BY COST RECOVERY CATEGORY	53

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 PA 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 16 ("PY16") 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 PY16. 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 PY16 energy efficiency programs will be reported in the final annual report, to be filed on September 30, 2025.

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.

¹ In Docket Nos. A-2023-3038771, et. al., The Commission approved FirstEnergy Corp.'s Pennsylvania distribution operating companies' (i.e., Metropolitan Edison Company, Pennsylvania Electric Company, Pennsylvania Power Company, and West Penn Power Company) request to merge into FirstEnergy Pennsylvania Electric Company, and be known as "Rate Districts". For purposes of this report and continuance of Act 129 Phase IV reporting norms, EDC is used in this report to distinguish compliance targets.

Section 2 Summary of Achievements

2.1 CARRYOVER SAVINGS FROM PHASE III OF ACT 129

The Commission's Phase IV Implementation Order² 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 EDCs

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	8,270

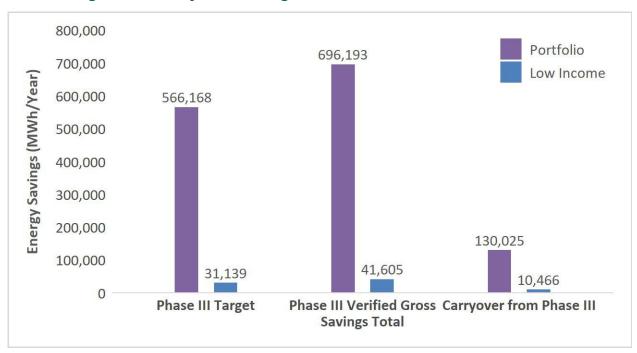
Figure 1A-1D compare each of the EDC's Phase III verified gross savings total to the Phase III compliance target to illustrate the carryover calculation.

² 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.



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





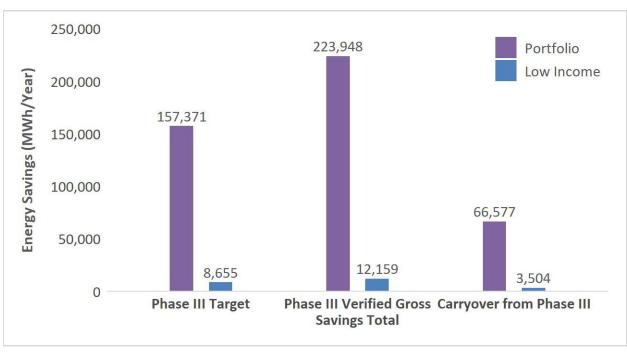
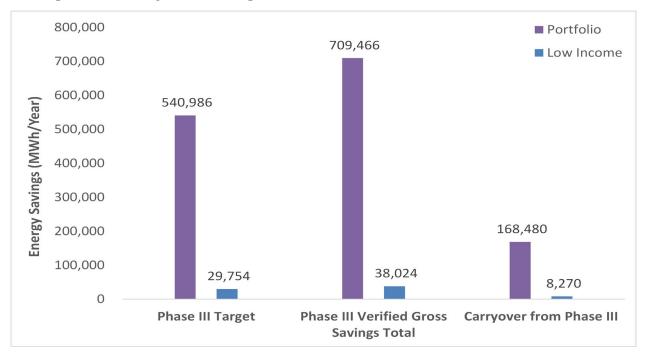


Figure 1C: Carryover Savings from Phase III of Act 129 – Penn Power





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 16 on June 1, 2024. Since the beginning of Program Year 16 on June 1, 2024, the FirstEnergy EDCs have claimed:

Table 2-2: Gross Energy Savings and Demand Reduction for PY16

EDC	Gross MWh/yr Savings (PYRTD)	Gross Peak Demand MW Savings (PYRTD)
Met-Ed	43,632	13.44
Penelec	45,122	11.29
Penn Power	16,727	4.46
West Penn Power	95,670	20.70

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	259,333	48.91	260,481	46.48
Penelec	231,935	44.39	224,662	42.41
Penn Power	79,694	15.34	76,133	14.47
West Penn Power	305,629	57.56	303,007	52.84

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 MWh/yr Savings (PSA + CO)	% of Compliance Target
Met-Ed	260,481	147,303	407,784	88%
Penelec	224,662	130,025	354,687	81%
Penn Power	76,133	66,577	142,710	111%
West Penn Power	303,007	168,480	471,487	93%

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.

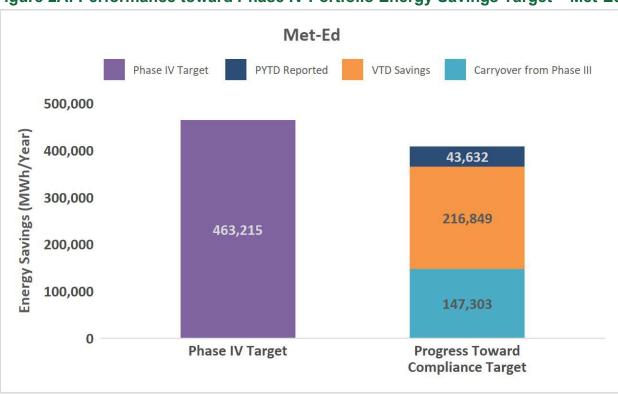


Figure 2A: Performance toward Phase IV Portfolio Energy Savings Target – Met-Ed



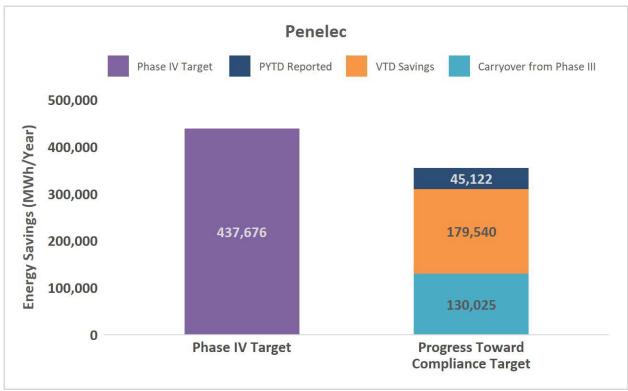


Figure 2C: Performance toward Phase IV Portfolio Energy Savings Target – Penn Power



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

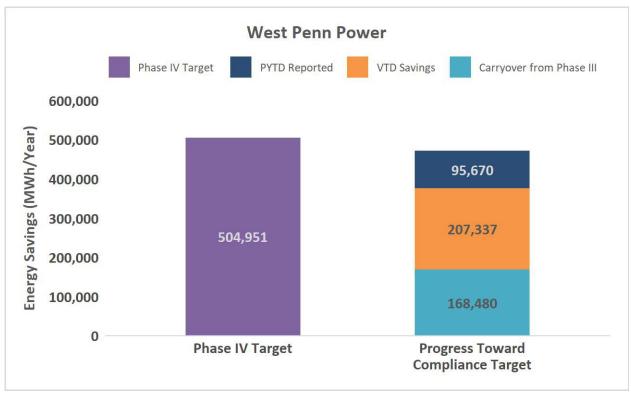




Figure 3A: Performance toward Phase IV Portfolio Peak Demand Target - Met-Ed



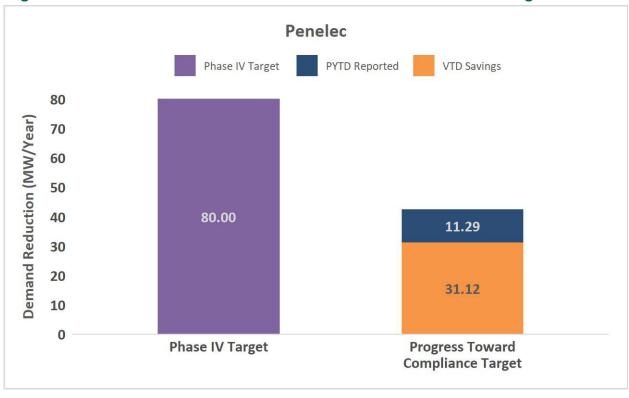


Figure 3C: Performance toward Phase IV Portfolio Peak Demand Target – Penn Power

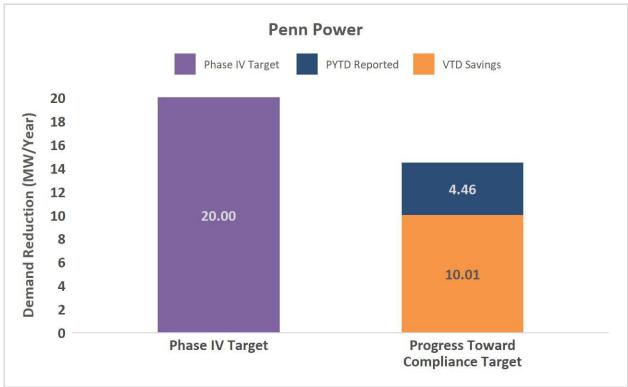




Figure 3D: Performance toward Phase IV Portfolio Peak Demand Target – West Penn Power

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 31 measures available to each of the FirstEnergy EDC low-income customer segments at no cost to the customer. This represents 17.7% 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	28,292	105%
Penelec	25,385	31,440	124%
Penn Power	7,477	8,614	115%
West Penn Power	29,287	33,372	114%

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

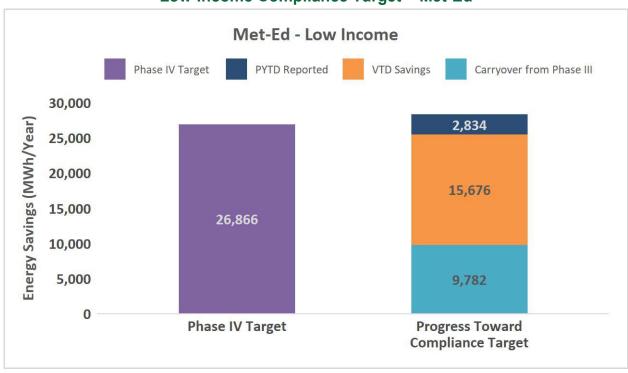


Figure 4B: EE&C Plan Performance Toward Phase IV Low-Income Compliance Target – Penelec

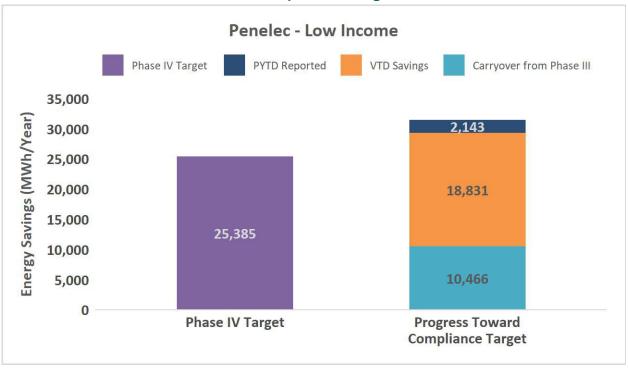


Figure 4C: EE&C Plan Performance Toward Phase IV Low-Income Compliance Target – Penn Power



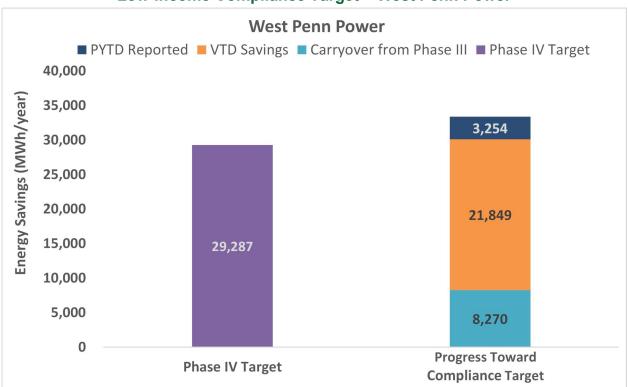


Figure 4D: EE&C Plan Performance Toward Phase IV **Low-Income Compliance Target – West Penn Power**

2.4 Phase IV Performance by Customer Segment

Table 2-6 represents the participation, savings, and spending by customer sector for PY16. 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 as defined by statute.3 The residential lowincome segment is a subset of the residential customer class and the GNI segment is a subset of the Small C&I and 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.

³ 66 Pa. C.S. § 2806.1.

Table 2-6: PY16 Summary Statistics by Customer Segment

EDC	Parameter	Residential (Non-LI)	Residential LI	Small C&I (Non-GNI)	Large C&I (Non-GNI)	GNI
	# participants	163,887	30,297	2,879	196	10
Met-Ed	PYRTD MWh/yr	17,449	2,834	17,555	5,360	435
Met-Ea	PYRTD MW/yr	7.7	0.6	3.8	1.2	0.1
	Incentives (\$1000)	\$2,225.29	\$1,391.79	\$3,264.94	\$1,048.70	\$37.41
	# participants	180,989	31,193	2,625	193	27
Penelec	PYRTD MWh/yr	14,053	2,143	16,160	11,481	1,284
reneiec	PYRTD MW/yr	4.9	0.3	3.6	2.2	0.3
	Incentives (\$1000)	\$1,716.49	\$1,833.63	\$3,205.34	\$1,110.91	\$503.35
	# participants	50,693	7,662	163	59	17
Penn Power	PYRTD MWh/yr	5,951	543	3,925	5,785	522
reilli rowei	PYRTD MW/yr	2.3	0.4	0.8	0.8	0.1
	Incentives (\$1000)	\$893.52	\$449.91	\$585.62	\$706.44	\$211.36
	# participants	203,705	25,004	815	197	29
West Penn Power	PYRTD MWh/yr	18,113	3,254	17,024	15,167	42,112
	PYRTD MW/yr	8.7	0.4	3.4	2.9	5.3
	Incentives (\$1000)	\$1,993.93	\$1,983.81	\$3,333.37	\$1,868.50	\$854.79

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
	# participants	467,783	83,313	4,718	653	78
Met-Ed	PSA MWh/yr	90,172	17,331	71,124	79,208	2,646
Mer-Ea	PSA MW	19.5	2.8	12.8	10.9	0.4
	Incentives (\$1000)	\$14,745.26	\$6,087.69	\$15,418.15	\$4,527.39	\$514.04
	# participants	467,947	79,917	4,999	532	85
Penelec	PSA MWh/yr	73,210	19,185	76,001	53,368	2,898
Perielec	PSA MW	14.4	2.2	16.0	9.3	0.5
	Incentives (\$1000)	\$10,370.36	\$8,339.67	\$16,892.88	\$4,514.92	\$801.34
	# participants	148,729	22,195	705	192	44
Penn Power	PSA MWh/yr	28,206	4,951	16,624	24,513	1,839
Penn Power	PSA MW	6.3	1.0	3.2	3.6	0.3
	Incentives (\$1000)	\$4,782.63	\$2,130.81	\$4,353.03	\$2,334.12	\$409.20
	,					
	# participants	576,259	73,786	3,314	620	71
West Penn Power	PSA MWh/yr	84,331	23,060	81,395	70,249	43,972
	PSA MW	19.4	2.8	14.4	10.7	5.6
	Incentives (\$1000)	\$13,103.48	\$9,092.36	\$18,172.95	\$6,677.34	\$1,367.10

Section 3 Updates and Findings

3.1 IMPLEMENTATION UPDATES AND FINDINGS

Implementation updates and findings through the first half of PY16 are as follows:

Energy Efficient Products Program

- Appliance Recycling: This subprogram resumed on May 13, 2024. This subprogram is implemented by CLEAResult. Residential, Low-Income and Commercial/ Industrial customers with an active PA EDC account can receive incentives for recycling older, working inefficient refrigerators, freezers, dehumidifiers, room air conditioners and mini refrigerators. Appliances are recycled to EPA RAD standards with CLEAResult being responsible for providing yearly RAD reporting data. The program is marketed through a variety of consumer-focused media including bill inserts, emails and Facebook ads.
- Appliances: This subprogram is implemented by Franklin Energy. This subprogram offers instant discounts and/or mail-in rebates to customers for the purchase of ENERGY STAR® certified appliances. Dehumidifiers and air purifiers are the appliances most rebated through this subprogram. 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 Companies' service territories including retail store associate training. Due to budget constraints in Met-Ed and Penn Power, the heat pump water heater rebate was reduced to \$100 effective in June 2024 and certain products were removed from the instant discount delivery channel in November 2024.
- HVAC: This subprogram is implemented by Franklin Energy and offers rebates for the purchase of high-efficiency HVAC equipment. The subprogram continues to perform well during the first half of PY16 with activity from HVAC contractors across the EDCs contributing to the program meeting or exceeding goals. In Penelec and West Penn Power, instant discounts for DIY mini-splits were added to the program in November 2024 through participating retailers. 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.

Energy Efficient Homes Program

- Behavioral: This subprogram is implemented by Oracle. The Home Energy Reports sent in the first half of the program year included PA TOU rate education, ENERGY STAR rebates, the Comprehensive Audit program, and information on ways to prepare for winter.
- Comprehensive Audit: This subprogram is implemented by CLEAResult and has met and/or exceeded their PY16 goals in all EDCs except PN. CLEAResult has continued to

- complete projects but at a slower pace to manage to the Plan budget. Solar PV Rebates were promoted beginning in November of 2024, as part of the Major Measures rebates that are offered.
- **New Homes:** The New Homes subprogram is implemented by Performance Systems Development (PSD). The subprogram continues outreach to enroll or re-enroll builders and raters in the program for the current phase. There are currently 167 builders and 22 raters enrolled in the subprogram.
- **School Kits**: This subprogram is implemented by AM Conservation Group. The subprogram 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: This subprogram is implemented by AM Conservation Group.
 The subprogram primarily targets new residents within the Companies' service territories.
 Customers may also opt-in to the subprogram 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' websites. Customers enter information about their home into the
 Analyzer and receive tips on how to save energy. Some of the tips promote 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 enhanced incentives to customers identified as low-income on purchases of select
 energy efficient appliances. During the first half of PY16, the Companies continued
 outreach through retailers to educate store associates about the subprogram. Email
 campaigns also continue to highlight the enhanced incentives available for eligible
 customers.
- **New Homes:** The low-income New Homes subprogram is also implemented by Performance Systems Development (PSD). Raters have submitted one low-income project in the first half of PY16.
- **School Kits:** This low-income School Kits subprogram is implemented by AM Conservation Group. The subprogram 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 subprogram targets new residents within the Companies' service territories. Customers may also opt-in to the subprogram 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 optimizing savings. Updates were made to the WARM Plus/MF Policy and Procedure Manual effective 8/5/2024 outlining changes in expectations for contractors working these subprograms.
- Residential and SCI Multifamily: This subprogram is implemented by CLEAResult. The streamlined onboarding policy implemented in PY15 has resulted in higher and more consistent MWh savings. Updates were made to the WARM Plus/MF Policy and Procedure Manual effective August 5, 2024, outlining changes in expectations for contractors working these subprograms.
- Appliance Recycling: This subprogram resumed on May 13, 2024. This subprogram is implemented by CLEAResult. Residential, Low-Income and Commercial/ Industrial customers with an active PA EDC account can receive incentives for recycling older, working inefficient refrigerators, freezers, dehumidifiers, room air conditioners and mini refrigerators. Appliances are recycled to EPA RAD standards with CLEAResult being responsible for providing yearly RAD reporting data. The subprogram is marketed through a variety of consumer-focused media including bill inserts, emails and Facebook ads.
- Behavioral: This subprogram is implemented by Oracle. Customers identified as lowincome receive Home Energy Reports with low or no cost tips to educate customers on ways to save energy. The report sent in the first half of the program year also included detailed messaging and promotions for summer savings tips, audit programs for lowincome 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. The streamlined onboarding policy implemented in PY15 has resulted in higher and more consistent MWh savings due to improved customer enrollment.

C/I Energy 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 continues to gain momentum and is marketed through a variety of activities which has helped the Companies reach a wider audience and increase program participation. These activities include:

- Coffee Breaks at various locations/dates for program allies or customers to stop in and ask questions about the programs
- Online portal training webinars that targeted programs allies
- Events for customers to learn about the programs
 - Lunch and Learn (Ag Reading) 9/9/24

- Municipal Event (9/15 -17) Hershey
- Schaedler Event Rivers Casino 9/18
- Energy Solutions Workshops: October 23 (Erie, PA) and October 30 (Indiana, PA)
 Encourage attendees to bring project information. (Penelec LCI)
- Intermediate Unit Presentation recap (11/19)
- 2024 Sustainable PA Conference (11/20 11/22)
- Watts and Learn: New Guidebook for Municipalities on Large-Scale Solar Development (11/22)
- Pennsylvania Municipal Authorities Association Conference and Trade Show,
 Schaedler-Yesco Trade Show
- PA energy efficiency roundtables
- Pennsylvania Technical Assistance Program ("PennTap") Energy Advisor Training
- As part of the Marketing and Outreach Do-It-For-Yourself program, representatives visited >4,300 SCI (less than 50kW demand) customers in person and called >7,700 SCI (less than 50kW demand) customers, surveying customers' need for LED tube lighting and advertising other incentive program offerings. CSPs also sent emails to >17,000 (less than 50kW demand) customers advertising EE programs.
- High level marketing efforts
 - Created New FirstEnergy Business Program LinkedIn Showcase page to build followers, both customers and trade allies, to increase program awareness and participation. Content is created from an annual perspective to feature program highlights, customer testimonials, local events, use cases, etc.
 - New marketing collateral (flyers, emails, tradeshow assets) that focuses on incentives for large commercial projects completed in the last 180 days.

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 the Act 129 portfolio of programs to assigned accounts or contacts.

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

C/I Energy 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 continues to gain momentum and is marketed through a variety of activities which has helped the Companies reach a wider audience and increase program participation. These activities include:

 Coffee Breaks at various locations/dates for program allies or customers to stop in and ask questions about the programs

- Online portal training webinars that targeted programs allies
- Events for customers to learn about the programs
 - Lunch and Learn (Ag Reading) 9/9/24
 - Municipal Event (9/15/24 9/17/24) Hershey
 - Schaedler Event Rivers Casino 9/18/24
 - Energy Solutions Workshop: October 23, 2024 (Erie, PA) and October 30, 2024
 (Indiana, PA) Encourage attendees to bring project information. (Penelec LCI)
 - o Intermediate Unit Presentation recap (11/19/24)
 - 2024 Sustainable PA Conference (11/20/24 11/22/24)
 - Watts and Learn: New Guidebook for Municipalities on Large-Scale Solar Development (11/22/24)
- PA energy efficiency roundtables
- PennTAP Energy Advisor Training
- High level marketing efforts
 - Created New FirstEnergy Business Program LinkedIn Showcase page to build followers, both customers and trade allies, to increase program awareness and participation. Content is created from an annual perspective to feature program highlights, customer testimonials, local events, use cases, etc.
 - New marketing collateral (flyers, emails, tradeshow assets) that focuses on incentives for large commercial projects completed in the last 180 days.

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 the Act 129 portfolio of programs to assigned accounts or contacts.

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

3.2 EVALUATION UPDATES AND FINDINGS

Evaluation updates and findings through the first half of PY16 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 PY16 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 PY16. ADM is conducting participant surveys for gross impact evaluation.
- **Energy Efficient Homes Program:** The gross impact evaluation effort for PY16 has launched and participant surveys are underway.
- Low-Income Energy Efficiency Program: ADM has made initial data requests for documentation and site inspection results to be used in the PY16 program evaluation.
- C&I Energy Solutions for Business Small and C&I Energy Solutions for Business

 Large. ADM has pulled two evaluation samples for nonresidential programs and has received project documentation for approximately 100 projects from FirstEnergy. Data collection for impact evaluation is currently underway for some large lighting and custom projects, with field work for additional projects expected to ramp up in early 2025. ADM is developing an IMP for building energy management systems, which is currently undergoing the review and approval process. Tetra Tech and ADM attend biweekly meetings with the implementation team to review the project pipeline, discuss large projects, and 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 PY16 and Phase IV.

• Energy Efficient Homes Program

- Energy Efficiency (EE) Kits: the number of energy savings kits delivered to students' homes, or the number of energy savings kits delivered to customer homes.
- Residential Audit and Direct Install (DI): the number of customers who have had an energy audit with direct install measures installed.
- Home Energy Reports: 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.
- Online Audits: the number of customers that participated in the Online Audit program component.
- 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 Recycling: 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.
- Residential Downstream Appliances: the number of appliances sold.
- Residential Downstream 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.
- Residential Midstream Appliances: the number of appliances sold.

Low Income Energy Efficiency Program

- Appliance Recycling: 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.
- EE Kits: the number of energy savings kits delivered to students' homes, or the number of energy savings kits delivered to customer homes.

- Home Energy Reports: 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.
- LI Direct Install: the number of customers receiving energy saving measures.
- New Homes: the number of new energy efficient homes being built with EnergyStar standards or higher efficiency than the current building code.
- Online Audits: the number of customers that participated in the Online Audit program component.
- o Residential Downstream Appliances: the number of appliances sold.
- **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: EE&C Plan Participation by Program Component – Met-Ed

Program	Component	PYTD Participation	P4TD Participation
Energy Efficient Homes	EE Kits	34,009	203,613
Energy Efficient Homes	Home Energy Reports	116,437	153,434
Energy Efficient Homes	Multifamily - Res	35	136
Energy Efficient Homes	New Homes	359	2,652
Energy Efficient Homes	Online Audits	1,492	19,674
Energy Efficient Homes	Residential Audit and DI	291	1,360
Energy Efficient Products	Appliance Recycling	1,779	11,479
Energy Efficient Products	Residential Downstream Appliances	1,620	12,482
Energy Efficient Products	Residential Downstream HVAC	1,379	6,263
Energy Efficient Products	Residential Midstream Appliances	6,486	56,690
Low Income Energy Efficiency	Appliance Recycling	80	1,312
Low Income Energy Efficiency	EE Kits	4,990	32,018
Low Income Energy Efficiency	Home Energy Reports	23,942	40,651
Low Income Energy Efficiency	LI Direct Install	1,075	4,452
Low Income Energy Efficiency	New Homes	0	80
Low Income Energy Efficiency	Online Audits	146	1,764
Low Income Energy Efficiency	Residential Downstream Appliances	64	3,036
C&I Energy Solutions for Business - Small	Appliance Recycling	26	136
C&I Energy Solutions for Business - Small	CI Custom	2,345	2,379
C&I Energy Solutions for Business - Small	CIEMNC	111	924
C&I Energy Solutions for Business - Small	CI Multifamily	6	28
C&I Energy Solutions for Business - Small	CI Prescriptive	397	1,307
C&I Energy Solutions for Business - Large	CI Custom	7	30
C&I Energy Solutions for Business - Large	CI EMNC	15	56
C&I Energy Solutions for Business - Large	CI Prescriptive	178	589
Portfolio Total		197,269	556,545

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

Program	Component	PYTD Participation	P4TD Participation
Energy Efficient Homes	EE Kits	34,664	197,971
Energy Efficient Homes	Home Energy Reports	132,456	179,402
Energy Efficient Homes	Multifamily - Res	74	296
Energy Efficient Homes	New Homes	59	380
Energy Efficient Homes	Online Audits	1,651	13,355
Energy Efficient Homes	Residential Audit and DI	255	1,152
Energy Efficient Products	Appliance Recycling	1,138	8,447
Energy Efficient Products	Residential Downstream Appliances	1,053	7,903
Energy Efficient Products	Residential Downstream HVAC	549	2,943
Energy Efficient Products	Residential Midstream Appliances	9,090	56,098
Low Income Energy Efficiency	Appliance Recycling	86	1,479
Low Income Energy Efficiency	EE Kits	3,316	33,107
Low Income Energy Efficiency	Home Energy Reports	25,699	30,372
Low Income Energy Efficiency	LI Direct Install	1,643	7,978
Low Income Energy Efficiency	New Homes	31	43
Low Income Energy Efficiency	Online Audits	335	2,567
Low Income Energy Efficiency	Residential Downstream Appliances	83	4,371
C&I Energy Solutions for Business - Small	Appliance Recycling	23	113
C&I Energy Solutions for Business - Small	CI Custom	2,082	2,128
C&I Energy Solutions for Business - Small	CI EMNC	81	722
C&I Energy Solutions for Business - Small	CI Multifamily	2	60
C&I Energy Solutions for Business - Small	CI Prescriptive	455	2,047
C&I Energy Solutions for Business - Large	CI Custom	5	16
C&I Energy Solutions for Business - Large	CI EMNC	8	39
C&I Energy Solutions for Business - Large	CI Prescriptive	189	491
Portfolio Total		215,027	553,480

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

Program	Component	PYTD Participation	P4TD Participation
Energy Efficient Homes	EE Kits	9,025	57,273
Energy Efficient Homes	Home Energy Reports	35,200	53,782
Energy Efficient Homes	Multifamily - Res	28	37
Energy Efficient Homes	New Homes	290	1,712
Energy Efficient Homes	Online Audits	566	4,595
Energy Efficient Homes	Residential Audit and DI	83	571
Energy Efficient Products	Appliance Recycling	390	2,785
Energy Efficient Products	Residential Downstream Appliances	463	3,848
Energy Efficient Products	Residential Downstream HVAC	232	1,553
Energy Efficient Products	Residential Midstream Appliances	4,416	22,573
Low Income Energy Efficiency	Appliance Recycling	16	334
Low Income Energy Efficiency	EE Kits	0	3,814
Low Income Energy Efficiency	Home Energy Reports	7,211	14,066
Low Income Energy Efficiency	LI Direct Install	358	2,269
Low Income Energy Efficiency	New Homes	0	0
Low Income Energy Efficiency	Online Audits	55	509
Low Income Energy Efficiency	Residential Downstream Appliances	22	1,203
C&I Energy Solutions for Business - Small	Appliance Recycling	1	24
C&I Energy Solutions for Business - Small	CI Custom	4	14
C&I Energy Solutions for Business - Small	CIEMNC	36	246
C&I Energy Solutions for Business - Small	CI Multifamily	0	8
C&I Energy Solutions for Business - Small	CI Prescriptive	136	447
C&I Energy Solutions for Business - Large	CI Custom	4	12
C&I Energy Solutions for Business - Large	CI EMNC	3	28
C&I Energy Solutions for Business - Large	CI Prescriptive	55	162
Portfolio Total		58,594	171,865

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

Program	Component	PYTD Participation	P4TD Participation
Energy Efficient Homes	EE Kits	29,524	194,540
Energy Efficient Homes	Home Energy Reports	159,894	279,068
Energy Efficient Homes	Multifamily - Res	149	594
Energy Efficient Homes	New Homes	460	3,023
Energy Efficient Homes	Online Audits	2,155	17,838
Energy Efficient Homes	Residential Audit and DI	289	1,399
Energy Efficient Products	Appliance Recycling	1,356	11,664
Energy Efficient Products	Residential Downstream Appliances	1,767	13,319
Energy Efficient Products	Residential Downstream HVAC	1,290	6,608
Energy Efficient Products	Residential Midstream Appliances	6,821	48,206
Low Income Energy Efficiency	Appliance Recycling	77	1,314
Low Income Energy Efficiency	EE Kits	5,484	37,350
Low Income Energy Efficiency	Home Energy Reports	17,801	22,748
Low Income Energy Efficiency	LI Direct Install	1,307	7,060
Low Income Energy Efficiency	New Homes	0	1
Low Income Energy Efficiency	Online Audits	218	1,633
Low Income Energy Efficiency	Residential Downstream Appliances	117	3,680
C&I Energy Solutions for Business - Small	Appliance Recycling	21	118
C&I Energy Solutions for Business - Small	CI Custom	29	95
C&I Energy Solutions for Business - Small	CI EMNC	148	898
C&I Energy Solutions for Business - Small	CI Multifamily	0	94
C&I Energy Solutions for Business - Small	CI Prescriptive	642	2,172
C&I Energy Solutions for Business - Large	Appliance Recycling	0	1
C&I Energy Solutions for Business - Large	CI Custom	10	24
C&I Energy Solutions for Business - Large	CIEMNC	23	65
C&I Energy Solutions for Business - Large	CI Prescriptive	168	538
Portfolio Total		229,750	654,050

Section 5 Summary of Energy Impacts by Program

Figure 5A-5D present a summary of the PYTD reported gross energy savings by program for Program Year 16. The energy impacts in this report are presented at the meter level and do not reflect adjustments for transmission and distribution losses.⁴

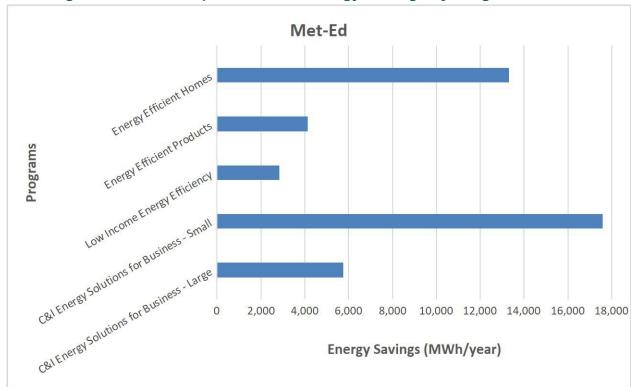


Figure 5A: PYTD Reported Gross Energy Savings by Program - Met-Ed

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

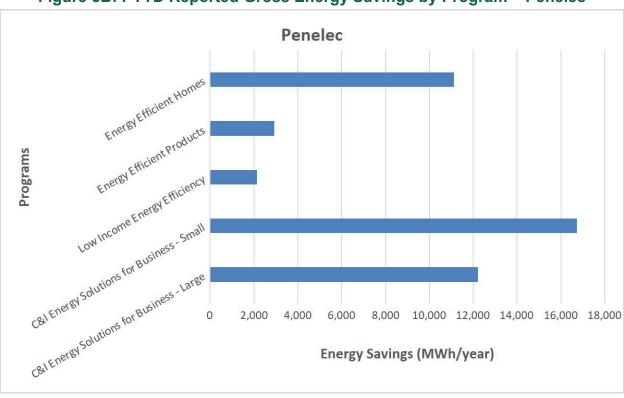
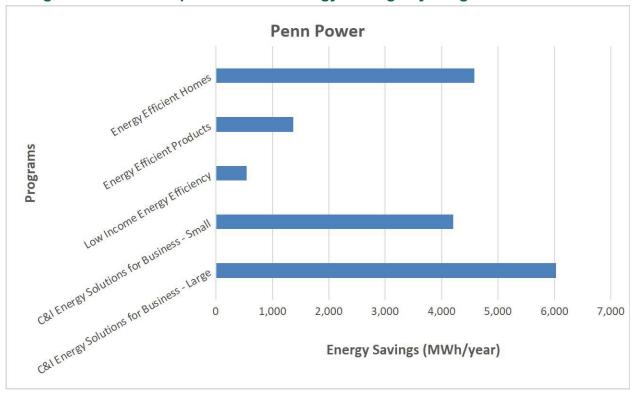


Figure 5B: PYTD Reported Gross Energy Savings by Program – Penelec





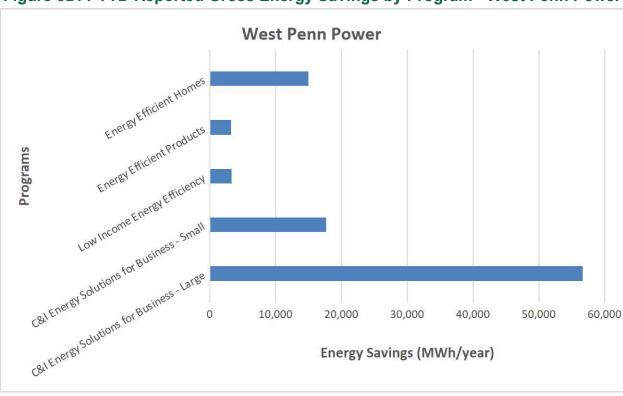


Figure 5D: PYTD Reported Gross Energy Savings by Program - West Penn Power

Figure 6A-6D 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.⁵

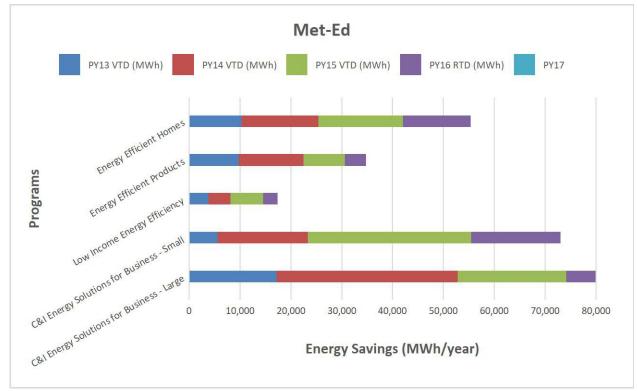


Figure 6A: PSA Energy Savings by Program for Phase IV - Met-Ed

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

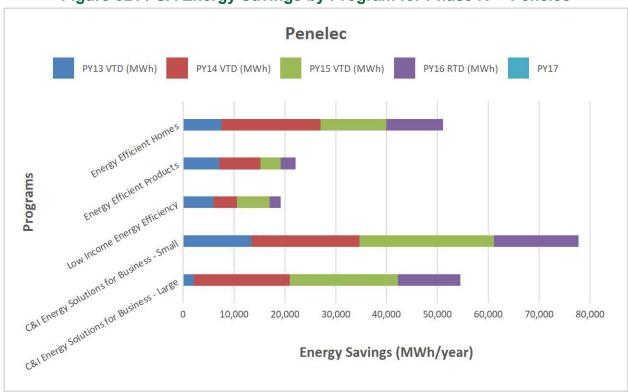


Figure 6B: PSA Energy Savings by Program for Phase IV - Penelec

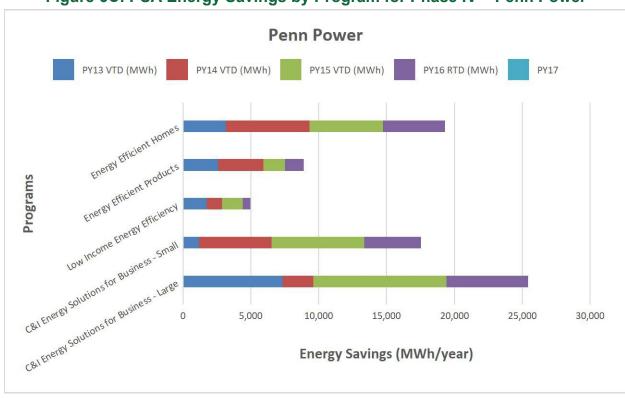


Figure 6C: PSA Energy Savings by Program for Phase IV - Penn Power





Table 5-16 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
	Energy Efficient Homes	13,315	65,369	42,075	55,390
	Energy Efficient Products	4,133	32,022	30,648	34,782
Met-Ed	Low Income Energy Efficiency	2,834	16,504	14,497	17,331
Met-Ea	C&I Energy Solutions for Business - Small	17,589	69,789	55,428	73,017
	C&I Energy Solutions for Business - Large	5,761	75,650	74,200	79,961
9	Portfolio Total	43,632	259,333	216,849	260,481
	Energy Efficient Homes	11,128	57,623	39,952	
	Energy Efficient Products	2,925	21,349	19,204	22,129
Penelec	Low Income Energy Efficiency	2,143	18,197	17,042	19,185
relielec	C&I Energy Solutions for Business - Small	16,717	79,941	61,081	77,798
	C&I Energy Solutions for Business - Large	12,208	54,826	42,261	54,469
	Portfolio Total	45,122	231,935	179,540	224,662
	Energy Efficient Homes	4,580	20,363		19,312
	Energy Efficient Products	1,371	8,565	7,524	8,895
Penn Power	Low Income Energy Efficiency	543	5,371	4,408	4,951
reilli rowei	C&I Energy Solutions for Business - Small	4,206	19,042	13,343	17,549
	C&I Energy Solutions for Business - Large	6,026	26,352	19,401	25,427
	Portfolio Total	16,727	79,694	59,406	76,133
		1.0000 10.0000 10.00		1,2021 11,1400	
	Energy Efficient Homes	14,917		,	
	Energy Efficient Products	3,197	25,585		
West Penn Power	Low Income Energy Efficiency	3,254	21,713	100	23,060
	C&I Energy Solutions for Business - Small	17,678	82,099	66,002	83,680
	C&I Energy Solutions for Business - Large	56,625	109,909	55,311	111,936
	Portfolio Total	95,670	305,629	207,337	303,007

⁶ 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

Figure 7A-7D present a summary of the PYRTD reported gross peak demand reduction by energy efficiency program for Program Year 16.⁷

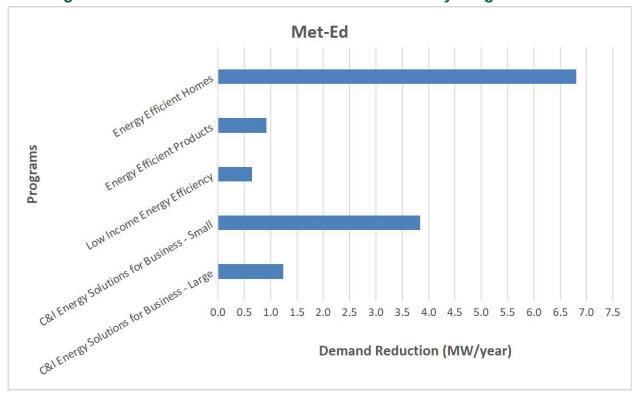


Figure 7A: PYRTD Gross Peak Demand Reduction by Program - Met-Ed

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

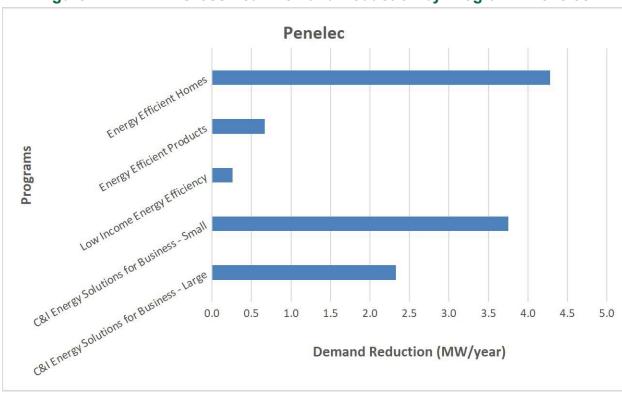
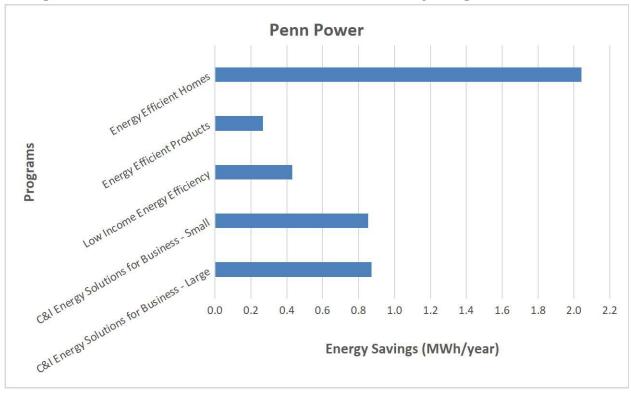


Figure 7B: PYRTD Gross Peak Demand Reduction by Program – Penelec





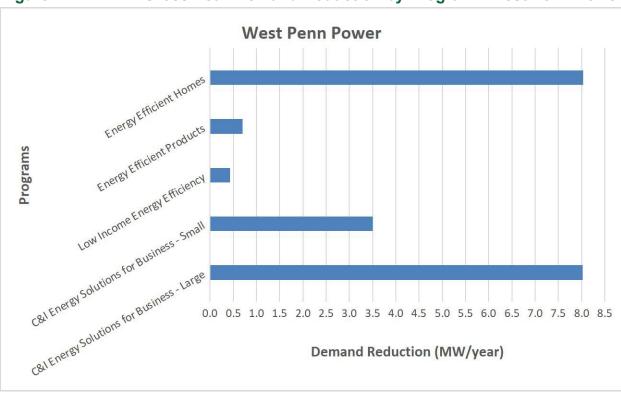
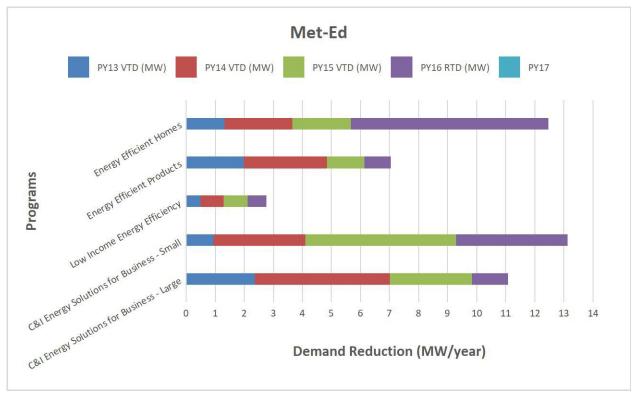


Figure 7D: PYRTD Gross Peak Demand Reduction by Program - West Penn Power

Figure 8A-8D a summary of the PSA gross peak demand reduction by energy efficiency program for Phase IV of Act 129.8





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

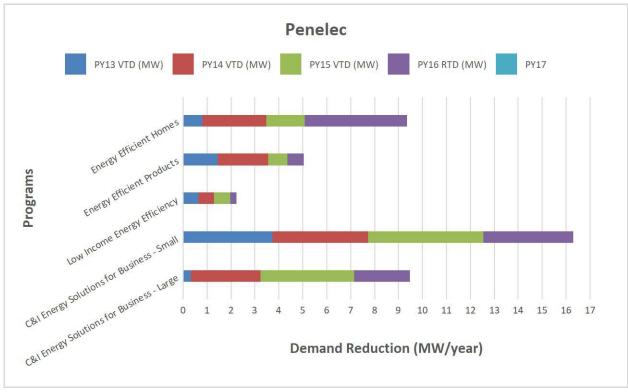


Figure 8C: PSA Gross Peak Demand Reduction by Energy Efficiency Program for Phase IV – Penn Power

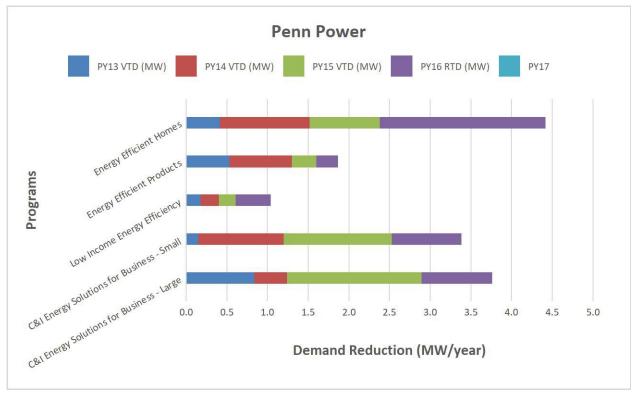






Table 6-2 presents a summary of the peak demand impacts by program through the current reporting period.

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

		N1		24 24	2
Utility	Program	PYRTD	RTD	VTD	PSA
	Energy Efficient Homes	6.80	14.36	5.66	12.47
	Energy Efficient Products	0.92	6.96	6.13	7.05
Met-Ed	Low Income Energy Efficiency	0.64	2.72	2.12	2.76
Mer-Ea	C&I Energy Solutions for Business - Small	3.83	13.56	9.30	13.13
	C&I Energy Solutions for Business - Large	1.24	11.32	9.83	11.07
	Portfolio Total	13.44	48.91	33.04	46.48
	Energy Efficient Homes	4.28	9.60	5.08	9.36
	Energy Efficient Products	0.67	5.02	4.36	5.03
Penelec	Low Income Energy Efficiency	0.26	2.28	1.97	2.23
relielec	C&I Energy Solutions for Business - Small	3.75	17.33	12.55	16.31
	C&I Energy Solutions for Business - Large	2.33	10.16	7.15	9.48
	Portfolio Total	11.29	44.39	31.12	42.41
	Energy Efficient Homes	2.04	4.87	2.38	4.42
	Energy Efficient Products	0.27	1.87	1.60	1.87
Penn Power	Low Income Energy Efficiency	0.43	1.01	0.61	1.04
I cili i owei	C&I Energy Solutions for Business - Small	0.85	3.70	2.53	3.38
	C&I Energy Solutions for Business - Large	0.87	3.91	2.89	3.76
	Portfolio Total	4.46	15.34	10.01	14.47
	Energy Efficient Homes	8.03	16.32	5.55	13.58
	Energy Efficient Products	0.71	5.81	5.12	5.82
West Penn Power	Low Income Energy Efficiency	0.43	2.98	2.37	2.81
West Fellii Fower	C&I Energy Solutions for Business - Small	3.50	15.90	11.30	14.80
	C&I Energy Solutions for Business - Large	8.02	16.55	7.80	15.83
	Portfolio Total	20.70	57.56	32.14	52.84

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 PY16 are shown in Table 7-1A to 7-1D.¹⁰ The columns in these tables are adapted from the list of 'Program Cost Elements' in the Commission's EE&C Plan template¹¹ for Phase IV. Thus far in PY16, 59% of Met-Ed, 61% of Penelec, 64% of Penn Power, and 62% 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 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.

¹¹ https://www.puc.pa.gov/pcdocs/1676672.docx

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
Energy Efficient Homes	\$1,580,331	\$45,578	\$656,699	\$49,389	\$2,331,997
Energy Efficient Products	\$644,961	\$43,217	\$841,046	\$33,012	\$1,562,235
Low Income Energy Efficiency	\$1,391,787	\$35,673	\$266,906	\$29,016	\$1,723,382
C&I Energy Solutions for Business - Small	\$3,269,434	\$82,057	\$1,221,877	\$118,674	\$4,692,043
C&I Energy Solutions for Business - Large	\$1,081,616	\$100,303	\$1,796,617	\$141,351	\$3,119,887
7 Th	С	ommon Portfolio	Costs		\$0
Total Portfolio	\$7,968,129	\$306,828	\$4,783,144	\$371,442	\$13,429,544
SWE Costs	\$0	\$0	\$0	\$0	\$84,480
Total	\$7,968,129	\$306,828	\$4,783,144	\$371,442	\$13,514,024

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	
Energy Efficient Homes	\$1,279,062	\$33,007	\$493,792	\$44,589	\$1,850,450	
Energy Efficient Products	\$437,430	\$46,841	\$559,846	\$30,018	\$1,074,135	
Low Income Energy Efficiency	\$1,833,629	\$42,709	\$345,775	\$31,080	\$2,253,193	
C&I Energy Solutions for Business - Small	\$3,442,460	\$93,283	\$1,153,092	\$130,793	\$4,819,629	
C&I Energy Solutions for Business - Large	\$1,377,132	\$63,282	\$2,084,244	\$104,854	\$3,629,511	
i i	С	ommon Portfolio	Costs		\$0	
Total Portfolio	\$8,369,713	\$279,122	\$4,636,750	\$341,333	\$13,626,919	
SWE Costs	\$0	\$0	\$0	\$0	\$76,560	
Total	\$8,369,713	\$279,122	\$4,636,750	\$341,333	\$13,703,479	

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
Energy Efficient Homes	\$601,953	\$24,154	\$220,737	\$15,188	\$862,033
Energy Efficient Products	\$291,566	\$19,493	\$221,326	\$8,942	\$541,327
Low Income Energy Efficiency	\$449,905	\$14,289	\$104,410	\$7,960	\$576,564
C&I Energy Solutions for Business - Small	\$757,610	\$33,063	\$232,562	\$33,987	\$1,057,223
C&I Energy Solutions for Business - Large	\$745,813	\$24,021	\$561,851	\$25,948	\$1,357,633
	С	ommon Portfolio	Costs		\$0
Total Portfolio	\$2,846,848	\$115,019	\$1,340,886	\$92,026	\$4,394,779
SWE Costs	\$0	\$0	\$0	\$0	\$23,760
Total	\$2,846,848	\$115,019	\$1,340,886	\$92,026	\$4,418,539

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
Energy Efficient Homes	\$1,442,767	\$61,416	\$650,959	\$51,982	\$2,207,124
Energy Efficient Products	\$551,165	\$58,347	\$703,406	\$36,643	\$1,349,561
Low Income Energy Efficiency	\$1,983,809	\$41,364	\$336,323	\$31,501	\$2,392,997
C&I Energy Solutions for Business - Small	\$3,634,707	\$91,557	\$961,807	\$117,524	\$4,805,596
C&I Energy Solutions for Business - Large	\$2,421,959	\$66,429	\$2,758,368	\$101,614	\$5,348,371
Edomoso Large	С	ommon Portfolio	Costs		\$0
Total Portfolio	\$10,034,408	\$319,113	\$5,410,863	\$339,265	\$16,103,649
SWE Costs	\$0	\$0	\$0	\$0	\$79,200
Total	\$10,034,408	\$319,113	\$5,410,863	\$339,265	\$16,182,849

Program-specific and portfolio total finances since the inception of Phase IV are shown in Table 7-2A to 7-2D. 12

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
Energy Efficient Homes	\$9,386,424	\$545,653	\$3,162,423	\$505,980	\$13,600,481
Energy Efficient Products	\$5,358,834	\$499,268	\$3,776,406	\$331,970	\$9,966,478
Low Income Energy Efficiency	\$6,087,687	\$402,085	\$1,585,580	\$270,023	\$8,345,375
C&I Energy Solutions for Business - Small	\$15,847,157	\$809,733	\$4,425,673	\$812,910	\$21,895,472
C&I Energy Solutions for Business - Large	\$4,612,435	\$1,001,524	\$3,566,276	\$952,556	\$10,132,792
	С	ommon Portfolio	Costs		\$0
Total Portfolio	\$41,292,538	\$3,258,263	\$16,516,357	\$2,873,439	\$63,940,597
SWE Costs	\$0	\$0	\$0	\$0	\$929,280
Total	\$41,292,538	\$3,258,263	\$16,516,357	\$2,873,439	\$64,869,877

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
Energy Efficient Homes	\$7,193,263	\$460,839	\$2,101,735	\$422,504	\$10,178,341
Energy Efficient Products	\$3,177,093	\$506,298	\$2,543,613	\$303,500	\$6,530,504
Low Income Energy Efficiency	\$8,339,666	\$478,089	\$1,839,557	\$307,395	\$10,964,707
C&I Energy Solutions for Business - Small	\$17,361,348	\$926,399	\$5,227,590	\$899,190	\$24,414,527
C&I Energy Solutions for Business - Large	\$4,847,791	\$735,624	\$3,718,175	\$707,254	\$10,008,844
8	С	ommon Portfolio	Costs		\$0
Total Portfolio	\$40,919,162	\$3,107,250	\$15,430,670	\$2,639,843	\$62,096,924
SWE Costs	\$0	\$0	\$0	\$0	\$842,160
Total	\$40,919,162	\$3,107,250	\$15,430,670	\$2,639,843	\$62,939,084

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
Energy Efficient Homes	\$3,386,856	\$246,771	\$1,170,526	\$166,353	\$4,970,506
Energy Efficient Products	\$1,395,777	\$190,777	\$933,506	\$91,160	\$2,611,220
Low Income Energy Efficiency	\$2,130,805	\$153,047	\$674,570	\$90,514	\$3,048,936
C&I Energy Solutions for Business - Small	\$4,650,505	\$304,642	\$1,248,894	\$232,162	\$6,436,204
C&I Energy Solutions for Business - Large	\$2,445,847	\$245,374	\$1,289,167	\$174,466	\$4,154,853
	С	ommon Portfolio	Costs		\$0
Total Portfolio	\$14,009,790	\$1,140,611	\$5,316,663	\$754,654	\$21,221,719
SWE Costs	\$0	\$0	\$0	\$0	\$261,360
Total	\$14,009,790	\$1,140,611	\$5,316,663	\$754,654	\$21,483,079

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
Energy Efficient Homes	\$9,150,352	\$653,427	\$3,474,300	\$563,481	\$13,841,561
Energy Efficient Products	\$3,953,130	\$605,074	\$3,310,259	\$371,097	\$8,239,560
Low Income Energy Efficiency	\$9,092,364	\$447,336	\$1,792,153	\$290,034	\$11,621,886
C&I Energy Solutions for Business - Small	\$18,966,739	\$836,752	\$4,805,008	\$805,015	\$25,413,514
C&I Energy Solutions for Business - Large	\$7,250,651	\$704,568	\$4,523,888	\$685,484	\$13,164,591
	С	ommon Portfolio	Costs		\$0
Total Portfolio	\$48,413,235	\$3,247,157	\$17,905,609	\$2,715,111	\$72,281,112
SWE Costs	\$0	\$0	\$0	\$0	\$871,200
Total	\$48,413,235	\$3,247,157	\$17,905,609	\$2,715,111	\$73,152,312

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 PY16 will be presented in the final annual report to the PA PUC on September 30, 2025, 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.13

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)
	Residential (incl. Low Income)	Rate RS	\$5,654	\$32,303
Small C&I	Rate GS-Small, Rate GS-Medium, and Outdoor Lighting Service		\$22,076	
Met-Ed	Large C&I	Rate GS-Large, Rate GP and Rate TP	\$3,147	\$10,437
	Street Lighting	Street Lighting Service, LED Street Lighting Service and Ornamental Street Lighting Service	\$2	\$54
Portfolio Total			\$13,514	\$64,870

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	\$5,211	\$28,027
	Small C&I	Rate GS-Small, Rate GS-Medium, and Outdoor Lighting Service	\$4,842	\$24,649
	Large C&I	Rate GS-Large, Rate GP, and Rate LP	\$3,650	\$10,239
	Street Lighting	Street Lighting Service, LED Street Lighting Service, and Ornamental Street Lighting Service	\$1	\$24
Portfolio Total			\$13,703	\$62,939

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	\$1,992	\$10,761
	Small C&I	Rate GS, GS Special Rider GSDS, Rate GM, Rate GS-Large and POL	\$1,063	\$6,500
	Large C&I	Rate GP, and Rate GT	\$1,363	\$4,214
	Street Lighting	Rate Schedules SV, SVD, SM and LED	\$0	\$7
Portfolio Total			\$4,419	\$21,483

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	\$5,989	\$34,127
	Small C&I	Rate GS 20, Rate GS 30	\$4,825	\$25,624
	Large C&I	Rate GS 35, 40, 44, 46, and Tariff No. 38	\$5,367	\$13,392
	Street Lighting	Rate Schedules 51 through 58, 71, 72	\$1	\$9
Portfolio Total			\$16,183	\$73,152

Page left blank on purpose

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, 2024 : M-2020-3020821 to May 31, 2025, 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.

Patrick M. Cicero, Esq.
Office of Consumer Advocate
555 Walnut Street
5th Floor, Forum Place
Harrisburg, PA 17101-1923
pcicero@paoca.org

Charis Mincavage
McNees Wallace & Nurick, LLC
100 Pine Street
P.O. Box 1166
Harrisburg, PA 17108
sbruce@mcneeslaw.com
cmincavage@mcneeslaw.com

Susan E. Bruce

Elizabeth R. Marx
John Sweet
Ria Pereira
Pennsylvania Utility Law Project
118 Locust Street
Harrisburg, PA 17101
emarx@pautilitylawproject.org
jsweet@pautilitylawproject.org
rpereira@pautilitylawproject.org

NazAarah Sabree, Small Business Advocate Office of Small Business Advocate 555 Walnut Street, 1st Floor Forum Place, Harrisburg, PA, 17101 ra-sba@pa.gov

Date: January 15, 2025

Daniel A. Garcia Attorney No. 311503

FirstEnergy Service Company 76 South Main Street

Akron, OH 44308 (724) 838-6416

dagarcia@firstenergycorp.com