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VIA E-FILING

March 2, 2026

Matthew Homsher, Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street
Harrisburg, PA 17120

Re: PPL Electric Utilities Corporation
2025 Annual Asset Optimization Plan
Docket No.

Dear Secretary Homsher:

Enclosed for filing on behalf of PPL Electric Utilities Corporation is its 2025 Annual Asset Optimization Plan.

Copies have been provided as indicated on the Certificate of Service.

Pursuant to 52 Pa. Code § 1.11, the enclosed document is to be deemed filed on March 2, 2026, which is the date it was filed electronically using the Commission's E-filing system.

If you have any questions or need additional information, please contact me or Mark Safi, Senior Manager Engineering, at (610) 774-6916.

Respectfully submitted,

Kimberly A. Klock

Enclosures

cc: Certificate of Service

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing has been served upon the following persons, in the manner indicated, in accordance with the requirements of 52 Pa. Code § 1.54 (relating to service by a participant).

VIA ELECTRONIC MAIL

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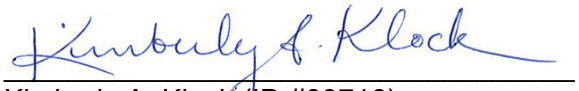
Date: March 2, 2026



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PPL Electric Utilities Corporation

Annual Asset Optimization Plan

Year Ended December 31, 2025

PPL Electric Utilities Corporation

PPL Electric Utilities Corporation

Introduction

PPL Electric Utilities Corporation ("PPL Electric" or the "Company") files this Annual Asset Optimization Plan ("AAO Plan") in compliance with 66 Pa.C.S. § 1356. Section 1356 requires a utility with an approved distribution system improvement charge ("DSIC") and long-term infrastructure improvement plan ("LTIIP") to file an AAO Plan. Consistent with the requirements of Section 1356, PPL Electric's AAO Plan will provide:

> (1) A description that specifies all eligible property repaired, improved and replaced in the immediately preceding 12-month period pursuant to the utility's long-term infrastructure improvement plan and prior year's asset optimization plan; and
>
> (2) A detailed description of all the facilities to be improved in the upcoming 12-month period.

The AAO Plan is part of PPL Electric's overall strategy to repair, improve, and replace its aging distribution infrastructure to ensure that its system continues to be safe, reliable, and able to meet the needs and expectations of its customers. PPL Electric's plans reflect the Company's ongoing commitment to accelerate its investment, while managing finite resources and ensuring that its portfolio of activities is effective. As a result, PPL Electric's plans for the upcoming 12-month period have been developed incorporating the lessons learned from the Company's experience with an effective LTIIP and DSIC.

Procedural History

On February 14, 2012, Governor Corbett signed into law Act 11 of 2012 ("Act 11"), which amends Chapters 3, 13 and 33 of the Public Utility Code. Act 11 authorizes electric distribution companies ("EDCs"), natural gas distribution companies ("NGDCs"), water utilities, wastewater utilities and city natural gas distribution operations to establish a DSIC. The DSIC allows utilities to recover reasonable and prudent costs incurred to repair, improve, or replace certain eligible property that is part of the utility's distribution system. Eligible property for EDCs is defined in Section 1351 of the Public Utility Code. *See* 66 Pa.C.S. § 1351. As a precondition to the initial implementation of a DSIC, each utility must file and obtain approval of an LTIIP that is consistent with the provisions of Section 1352 of the Public Utility Code. *See* 66 Pa.C.S. § 1352(a). Act 11 also requires a yearly compliance filing known as an AAO Plan. *See* 66 Pa.C.S. § 1356.

On August 2, 2012, the Commission issued its Final Implementation Order establishing procedures and guidelines necessary to implement Act 11. The Final Implementation Order adopted the requirements established in Act 11, provided additional standards that each utility must meet in developing an LTIIP and DSIC, and gave guidance to utilities for meeting the Commission's standards.

On March 14, 2013, the Commission entered a Proposed Rulemaking Order at Docket No. L-2012-2317274 in *Review of Long-Term Infrastructure Improvement Plan*. In its Order, the Commission provided proposed regulations regarding the LTIIP, including information on modification of a utility's LTIIP, and the annual review process for the AAO Plan. On May 23, 2014, after review of comments from interested stakeholders, the Commission entered a Final Rulemaking Order, which set forth the elements an LTIIP must contain and outlined the procedure and process for filing and review of LTIIPs and AAO Plans. The Final Rulemaking Order was published in the *Pennsylvania Bulletin* on December 20, 2014 (44 Pa.B. 7856), and the final regulations at 52 Pa. Code §§ 121.1-121.8 became effective upon that publication.

On September 21, 2016, the Commission entered a Supplemental Implementation Order at Docket No. M-2012-2293611 in *Implementation of Act 11 of 2012*. In that Order, the Commission addressed issues regarding the implementation, operation and computation of the DSIC. Specifically, the Commission addressed the requirement of quarterly financial reports for all utilities that use the DSIC mechanism; filing and computation issues for when the DSIC is reset to zero; treatment of over/under collections, or E-factor, after the DSIC is reset to zero; computation issues for determining the DSIC rate cap; and the requirement to file an LTIIP by water utilities that use the DSIC.

On October 27, 2022, the Commission entered a Supplemental Implementation Order ("October 2022 Order") at Docket No. M-2012-2293611 when it was determined that changes must be made to the DSIC calculation and the DSIC model tariff in order to implement changes required by the Pennsylvania Supreme Court's decision in *McCloskey v. Pa. PUC*, 255 A.3d 416 (Pa. 2021). In *McCloskey*, the Pennsylvania Supreme Court affirmed the Commonwealth Court of Pennsylvania's holding that new statutory language added by Act 40 applied to the DSIC and modified its calculation. In the October 2022 Order, the Commission directed utilities to file a proforma tariff supplement reflecting the updated formula for the calculation of the DSIC. Subsequently, on November 10, 2022, the Office of Consumer Advocate ("OCA") filed a Petition for Clarification and Reconsideration

("Petition") of the October 2022 Order. PPL Electric filed an Answer to OCA's Petition on November 21, 2022. In compliance with the October 2022 Order, PPL Electric filed its DSIC proforma tariff supplement on December 1, 2022, with an amended version filed December 20, 2022.

On April 26, 2024, PPL Electric filed a Petition for a Waiver of the Distribution System Improvement Charge Cap of 5% of Billed Revenues, in which the Company proposed an increase of the DSIC cap to 9%. On November 21, 2024, Administrative Law Judge Arlene Ashton ("ALJ Ashton") issued her Recommended Decision denying PPL Electric's Petition. On February 20, 2025, the Commission adopted a Motion by Commissioner Yanora to grant in part and deny in part PPL Electric's Exceptions to the Recommended Decision, under which the Company would be granted a temporary increase in the DSIC cap from 5% to 7.5% until the effective date of rates established in PPL Electric's next base rate case or the end of the Company's 2023-2027 LTIIP, whichever occurs first. The Commission entered its Final Order consistent with that Motion on February 28, 2025.

PPL Electric has been a long-time supporter of implementing a DSIC for EDCs and has actively participated in the Commission's process to develop the procedures and policies surrounding the Commission's implementation of Act 11. PPL Electric was a participant in the Commission's working groups and filed comments to both of the Commission's Tentative Implementation Orders.

Background

PPL Electric is a public utility and an EDC as defined in Sections 102 and 2803 of the Pennsylvania Public Utility Code, 66 Pa. C.S. §§ 102, 2803. PPL Electric furnishes electric distribution, transmission, and default service electric supply services to approximately 1.4 million customers throughout its certificated service territory, which includes all or portions of 29 counties and encompasses approximately 10,000 square miles in eastern and central Pennsylvania.

On January 10, 2013, PPL Electric's first LTIIP ("First LTIIP") was approved by the Commission at Docket No. P-2012-2325034. PPL Electric's First LTIIP covered the years 2013 through 2017. PPL Electric filed a petition seeking approval of a DSIC on January 15, 2013, which was approved in an Order entered on May 23, 2013, at Docket No. P-2012-2325034. PPL Electric's second LTIIP ("Second LTIIP") was filed with the Commission on August 31, 2017, and was approved in an Order entered on December 21, 2017, at Docket No. P-2017-2622393. The Company's Second LTIIP covers the years 2018-2022. PPL Electric's third LTIIP ("Third LTIIP") was filed with the Commission on September 2, 2022, and was approved in an Order entered on December 22, 2022, at Docket No. P-2022-3034972. The Third LTIIP covers the years 2023-2027. In preparing its LTIIPs, PPL Electric followed the guidelines established in the Commission's August 2, 2012, Final Implementation Order at Docket No. M-2012-2293611.

On January 17, 2024, PPL Electric filed a Petition for Approval of Major Modifications to its Third LTIIP. In the Petition, PPL Electric requested Commission approval of certain "major" modifications to its Third LTIIP, namely: (1) adding a new program, i.e., Predictive Failure Technology ("PFT"); and (2) updating its total capital expenditure projection for the LTIIP, which exceeded by more than 20% the total capital expenditure projection set forth in the current LTIIP. On July 11, 2024, the Commission entered an Order granting in part and denying in part PPL Electric's Petition. Specifically, the Commission approved all other proposed modifications to the Third LTIIP, except for the addition of the PFT program ("Modified Third LTIIP"). PPL Electric filed a corrected compliance version of its Modified Third LTIIP on August 28, 2024, and the Commission issued a Secretarial Letter on September 9, 2024, approving the corrected compliance version of the Modified Third LTIIP.

On September 25, 2025, PPL Electric filed a Petition for Approval of a Major Modification to its Modified Third LTIIP ("2nd Major Modification"). In the 2nd Major Modification, PPL Electric requested approval of an additional "major" modification to

its Third LTIIP updating its total capital expenditure projection for the LTIIP, which exceeded by more than 20% the total capital expenditures project set forth in the Modified Third LTIIP. The 2nd Major Modification is pending before the Commission.

Within the LTIIPs, PPL Electric categorized its distribution system infrastructure planned for replacements into asset groups and provided descriptions of the DSIC-eligible projects. Details on each of the asset groups included factors used to identify the need for the project, average age of the asset, scope of the project including the number of units to be replaced or improved over the next five years, the approximate location by geographic region for the projects, and the yearly expenditures for the five-year period covered by the LTIIPs for each asset class.

PPL Electric Utilities Corporation

Executive Summary

The upcoming 12-month period (2026) is covered by PPL Electric's Modified Third LTIIP, which contains a consolidated set of asset groups. As the table on page 10 shows, in 2025, PPL Electric spent $207.55 million and plans to spend $464.68 million on DSIC-eligible projects in 2026.

Reliability Performance

Since the 1994-1998 benchmark period, which defines PPL Electric's reliability performance targets, PPL Electric's service reliability has significantly improved; however, year over year reliability performance is impacted by varying weather conditions. In 2025, PPL Electric's SAIFI, SAIDI, and CAIDI values based on PUC metrics all improved over 2024. However, a record storm count year of 53 events negatively impacted performance relative to most years. This included 14 PUC Reportable storms, of which 4 were Tier 4 (800+ cases) or higher. For comparison, during the benchmark period, PPL Electric averaged 4.2 reportable events per year. The criteria for PUC Reportable storm events have not changed.

Overall, PPL Electric has been nationally ranked as a 1st quartile SAIFI performer by IEEE a since 2014 as a result of more than ten years of reducing permanent customer outages.

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The table below illustrates PPL Electric's past 5-year reliability performance as compared to the Commission benchmark and the IEEE 1366-2012 standard.

		2021	2022	2023	2024	2025
	Average Number of Customers Served	1,445,611	1,445,611	1,445,611	1,470,254	1,477,568
PUC METRICS	**SAIFI (Benchmark = 0.98; rolling 12-month Std. = 1.18)**	0.91	0.87	0.78	1.22	0.92
	CAIDI (Benchmark = 145; Rolling 12-month Std. = 174)	187	164	189	371	208
	SAIDI (Benchmark = 142; Rolling 12-month Std. = 205)	170	142	147	451	191
	MAIFI	2.6	1.4	0.3	9.7	11.7
	Number of Sustained Customer Interruptions (Trouble Cases)	24,241	23,882	23,082	32,294	26,185
	Number of Customers Affected	1,308,569	1,256,631	1,134,905	1,791,362	1,358,109
	Customer Minutes of Interruptions	245,413,282	206,385,043	214,249,565	663,783,475	282,306,129
	Number of Customer Momentary Interruptions	3,817,912	2,020,520	470,353	14,308,908	17,288,955
IEEE METRICS	**SAIFI**	0.68	0.74	0.64	0.66	0.765
	CAIDI	124	120	142	137	152
	SAIDI	85	89	91	90	116
	MAIFI	2.1	0.8	0.3	6.6	10.2
	Number of Sustained Customer Interruptions (Trouble Cases)	24,032	25,211	24,522	26,326	31,138
	Number of Customers Affected	988,372	1,071,806	935,297	971,887	1,130,104
	Customer Minutes of Interruptions	122,230,348	129,679,197	133,236,331	132,702,811	171,477,699
	Number of Customer Momentary Interruptions	3,100,572	1,232,315	404,981	9,631,692	15,071,193

PPL Electric Utilities Corporation

Approximately 48% of the capital dollars for distribution operations is allocated to Act 11 projects; therefore, the assumption was made that 48% of the Full Time Equivalent ("FTE") positions would be used for Act 11 purposes as well. The only breakdown available is between PPL Electric (PPL) and contract (COC) employees; there is no further drill down available at a field/supervisory level. The data shown below are for FTE only.

Year	PPL	COC	Total
2025	233	275	508

LTIIP Category	2025 Modified Third LTIIP	2025 Actual	2026 Modified Third LTIIP	2026 Forecast (2nd Major Mod. as Proposed)	2026 Forecast
Poles	$17.11	$41.20	$19.32	$21.94	$25.08
New Electronic Reclosers	$7.55	$9.60	$7.28	$6.50	$5.22
Distribution Animal Guarding	$0.32	$0.20	$0.31	$0.30	$0.30
Failed Equipment	$34.12	$54.48	$34.68	$38.17	$38.70
Underground Cable Replacement	$1.98	$3.29	$1.50	$3.20	$3.23
Low Tension Network Equipment and Structures	$4.56	$1.77	$4.25	$5.33	$5.26
LTN Upgrades	$11.56	$9.60	$13.94	$7.44	$14.79
Reliability	$7.13	$17.87	$5.84	$11.55	$17.87
System Reliability Improvement Projects	$12.66	$19.37	$4.13	$314.53	$274.68
Unreimbursed Highway Relocations	$4.92	$3.77	$4.07	$4.26	$7.86
Substation	$28.12	$17.19	$30.24	$42.56	$49.64
Protection and Control	13.47	$29.21	14.82	13.16	22.05
Total	$143.50	$207.55	$140.38	$468.94	$464.68
Dollars in Millions					

**Categories eligible to receive IIJA funding from the DOE with a 43% cost share with the DOE. As of this filing, no funding has been received by PPL Electric.*

PPL Electric Utilities Corporation

Distribution Assets

The following pages set forth actual results for calendar year 2025. These assets include, but are not limited to, the following:

- Structures
    - Poles
    - Crossarms
    - Vaults
    - Manholes
- Overhead Conductors and Hardware
- Underground Cables and Hardware
- Switching Devices
    - Air Break Switches
    - Disconnect Switches
    - Switching Cabinets
- Protective Devices
    - Fuses
    - Reclosers
    - Network Protectors
    - Lightning Arresters
- Transformers
    - Overhead
    - Pad-Mounted
    - Submersible
    - Low Tension Network

Poles

This category includes the replacement and reinforcement of wood poles to maintain reliability, ensure public safety, and further storm harden the system.

Planned Expenditures (in millions)

Planned Expenditures	$Million
2025 Modified Third LTIIP	$17.11
2025 AAOP Forecast	$ 13.51
2025 Actual	$41.20
2026 Modified Third LTIIP	$19.32
2026 Forecast (2nd Major Modification as Proposed)	$21.94
2026 Forecast	$25.08

Distribution Pole Replacements

Program Description and Purpose

Replacement of distribution wood poles identified as non-restorable (cannot be reinforced) during the annual inspect and treat program or during a spot inspection in an effort to improve public and employee safety, as well as service reliability. This program contributes to storm hardening efforts and aims to improve public and employee safety, as well as service reliability, by reducing potential pole failures.

Identification/Justification Process

PPL Electric inspects approximately 75,000 poles per year. Historical data suggests an approximate 8% rejection rate from the population of yearly inspections. Of those poles rejected, 70% are candidates for reinforcement while 30% are candidates for replacement. Replacing rejected poles avoids property damage and risk of accidental injury, and it mitigates the costs associated with extended service outages. Replacement rates are expected to fall as a result of PPL Electric's pole treatment program. The average age of an in-service wooden distribution pole is 43 years.

Scope

The scope of the program is a direct correlation to the number of wood pole inspections.

Replacements in Units	
2025 Modified Third LTIIP	2,000 - 2,500

2025 AAOP Forecast	2,000 - 2,500
2025 Actual	4,217
2026 Modified Third LTIIP	2,000 – 2,500
2026 Forecast (2nd Major Modification as Proposed)	2,000-2,500
2026 Forecast	2,100-2,600

Locations

Specific locations are a direct correlation to the wood pole inspection plan. Inspection locations are identified yearly primarily as a function of previous inspection dates, as well as ensuring cost-effectiveness of the program and minimizing inspection crew movements.

Comments

In 2025, completed pole replacements came in above the forecast due to significant storm impacts causing the reprioritization of reliability driven work.

Pole Reinforcements

Program Description and Purpose

Reinforcement of deteriorated distribution wood poles in order to restore the pole's original strength, ensure public safety, and maintain reliable electric service through the reduction of potential pole failures. This program contributes to storm hardening efforts by reducing potential pole failures.

Identification/Justification Process

PPL Electric inspects approximately 75,000 poles per year. Historical data suggests an approximate 8% rejection rate from the population of yearly inspections. Of those poles rejected, 70% are candidates for reinforcement. When applicable, this method achieves significant savings over pole replacement.

Scope

Reinforcements in Units	
2025 Modified Third LTIIP	4,000 – 5,000
2025 AAOP Forecast	400-800
2025 Actual	354
2026 Modified Third LTIIP	4,000-5,000

2026 Forecast (2nd Major Modification as Proposed)	300-400
2026 Forecast	300-400

Locations

Locations identified for reinforcement are a direct correlation to the number of wood pole inspections.

Comments

Poles that fail inspection are tested to see if they qualify for reinforcement rather than fully replacing the pole. The poles are reinforced using C-Truss or fiber wrap. The number of reinforcements completed in 2025 was below the forecast provided last year due to an overall lower pole inspection rejection rate. The 5-year average rejection rate decreased from 6% to 5.5% from 2020-2024 to 2021-2025.

New Electronic Reclosers

Program Description and Purpose

Proactive installation of new electronic reclosers on both single-phase and three-phase lines, to improve reliability performance by increasing circuit sectionalizing ability. Reclosers minimize the number of customers affected by a sustained outage.

Identification/Justification Process

Locations are requested by regional reliability engineers and prioritized annually based on anticipated reliability savings.

Scope

Installations in Units	
2025 Modified Third LTIIP	120-200
2025 AAOP Forecast	200 - 230
2025 Actual	206
2026 Modified Third LTIIP	120-200
2026 Forecast (2nd Major Modification as Proposed)	155-171
2026 Forecast	167-183

Locations (2025 Actual)

Region	Units
Lehigh	31
Northeast	57
Central	38
Susquehanna	27
Harrisburg	22
Lancaster	31

Planned Expenditures (in millions)

Planned Expenditures	$Million
2025 Modified Third LTIIP	$7.55
2025 AAOP Forecast	$18.40
2025 Actual	$9.60
2026 Modified Third LTIIP	$7.28
2026 Forecast (2nd Major Modification as Proposed)	$6.50
2026 Forecast	$5.22

Comments

2025 unit installations were in line with the forecast with lower cost per unit than what was forecasted.

Distribution Animal Guarding

Program Description and Purpose

Proactive installation of animal guards on existing distribution overhead transformers and air break switches to improve circuit reliability. Animal guards help prevent animal-related contacts which cause service interruptions.

Identification/Justification Process

Transformers are identified both by opportunistic installation of guarding during other non-related work, and by on-the-spot or follow-up orders after responding to animal-caused outages.

Scope

Areas to Address	
2025 Modified Third LTIIP	240 - 360

2025 AAOP Forecast	240 – 360
2025 Actual	452
2026 Modified Third LTIIP	240 - 360
2026 Forecast (2nd Major Modification as Proposed)	240-360
2026 Forecast	240-360

Locations (2025 Actual)

Region	Units
Lehigh	27
Northeast	284
Central	13
Susquehanna	25
Harrisburg	74
Lancaster	29

Planned Expenditures (in millions)

Planned Expenditures	$Million
2025 Modified Third LTIIP	$0.32
2025 AAOP Forecast	$0.31
2025 Actual	$0.20
2026 Modified Third LTIIP	$0.31
2026 Forecast (2nd Major Modification as Proposed)	$0.30
2026 Forecast	$0.30

Comments

Animal guarding work exceeded the forecast due to lower cost execution resources, which allowed PPL Electric to complete more installations at a lower overall cost.

Failed Equipment

Program Description and Purpose

This category includes the replacement of failed or deteriorated distribution equipment, LTN equipment, underground cable, and underground getaways.

Planned Expenditures	$Million
2025 Modified Third LTIIP	$ 34.12
2025 AAOP Forecast	$ 37.13

2025 Actual	$ 54.48
2026 Modified Third LTIIP	$ 34.68
2026 Forecast (2nd Major Modification as Proposed)	$38.17
2026 Forecast	$38.70

Comments

Planned expenditures were above the forecast due to increased units of overhead failed equipment.

Distribution Failed Equipment

Program Description and Purpose

Replacement or repair of failed or deteriorated capital units of distribution equipment, excluding underground cable, in order to maintain adequate service reliability.

Identification/Justification Process

Candidates are identified via inspections, both planned and ad-hoc, as well as actual outages and power service problems. Budget allocations are based on historical trends of hours charged to corrective work, in addition to projected trends of future equipment failures. Examples include, but are not limited to, failed reclosers, poles, capacitor banks, and air breaks.

Scope and Locations

Scope and locations are determined as equipment fails.

Replace Failed Underground Cable

Program Description and Purpose

Replacement of failed underground residential primary and secondary cables in order to maintain adequate service reliability.

Identification/Justification Process

Candidates are identified via actual failures. Budget recommendations are based on historical trends of hours charged to corrective work, in addition to projected trends of future equipment failures.

Scope and Locations

Scope and locations are determined as cable fails.

Replace Failed 12 kV Underground Getaway Cables

Program Description and Purpose

Replacement of failed 12 kV underground getaway cables to maintain adequate service reliability. Getaway failures can result in long duration outages. Getaway cables connect substations to outgoing feeders beyond the substation perimeter.

Identification/Justification Process

Candidates are identified via actual failures and cables with poor test results. Budget recommendations are based on historical trends in getaway failure quantities and costs, in addition to projected trends of future getaway failures based on asset health metrics.

Scope and Locations

Scope and locations are determined as getaway cables fail while in service or fail conditionally under testing.

Replace Deteriorated/Failed Low Tension Network Equipment and Structures

Program Description and Purpose

Replacement or repair of deteriorated and failed equipment related to Low-Tension Networks, including network transformers, network protectors, manholes, and vault tops in order to maintain adequate service reliability. Low-Tension Networks are low voltage underground distribution facilities found in urban areas.

Identification/Justification Process

Candidates are identified via actual failures, inspections, testing, or work on the system. Budget recommendations are based on historical trends of corrective work, in addition to projected trends of future equipment failures.

Scope and Locations

Scope and locations are determined as assets fail.

Replace Deteriorated/Failed Area Supply Substations

Program Description and Purpose

Replacement of failed or deteriorated station facilities at area supply substations with in-kind equipment to maintain safe and reliable service. Identified facilities include, but are not limited to, circuit breakers, power transformers, tie/transfer cables, disconnect switches, DC equipment, and instrument transformers.

Identification/Justification Process

Candidates are identified via actual failures, inspections, and test results. Budget recommendations are based on historical trends in equipment failure quantities and costs, in addition to projected trends of future equipment failures based on asset health metrics.

Scope and Locations

Scope and locations are determined as station equipment fail while in service or fail conditionally under testing.

Underground Cable Replacement

Program Description and Purpose

Programmatic replacement of deteriorated underground cable to maintain reliable electric service.

Identification/Justification Process

Candidates are selected based on history of cable failures and failure risk scores generated by a data analytics model that uses criteria such as segment length, cable age, customer count, and number of tap fuse outages.

Regional allocation of cable remediation is based on historical regional percent contribution to system-wide cable failures.

Scope

Replacements in Units	
2025 Modified Third LTIIP	135-225
2025 AAOP Forecast	570-670
2025 Actual	191
2026 Modified Third LTIIP	100-200
2026 Forecast (2nd Major Modification as Proposed)	200-300
2026 Forecast	220-270

Locations (2025 Actual)

Region	Units
Lehigh	54
Northeast	11
Central	29
Susquehanna	20
Harrisburg	31
Lancaster	46

Planned Expenditures (in millions)

Planned Expenditures	$Million
2025 Modified Third LTIIP	$ 1.98
2025 AAOP Forecast	$ 7.91
2025 Actual	$ 3.29

2026 Modified Third LTIIP	$ 1.50
2026 Forecast (2nd Major Modification as Proposed)	$ 3.20
2026 Forecast	$ 3.23

Comments

Underground segments placed in service came in below forecast due to material delays, outage constraints and reprioritization of reliability work to mitigate impact of storms. All 2025 projects on track to complete in 2026.

Low Tension Network Primary Cable, Equipment and Structures

Program Description and Purpose

Programmatic replacement of deteriorated equipment related to Low Tension Networks, including primary underground cable, network transformers, network protectors, manholes, and vault tops. The purpose of this program is to ensure public safety and service reliability through the replacement of underground facilities that have reached the end of their expected life or that show signs of premature age from prolonged exposure to corrosive environments.

Identification/Justification Process

Primary underground cables for Low Tension Network feeders are reaching their end of useful life and proactive replacements mitigate feeder outages. Replacement and repairs of manhole and vault tops are determined by regular inspections. Network transformer and network protector replacements are determined through inspection and age, where assets exceeding 40 years in service are considered highest priority.

Scope

	Planned Expenditure	**Units**
Primary Cable	2025 Modified Third LTIIP	0-2
Primary Cable	2025 AAOP Forecast	0 - 2
Primary Cable	2025 Actual	1
Primary Cable	2026 Modified Third LTIIP	0-3
Primary Cable	2026 Forecast (2nd Major Modification as Proposed)	0-3
Primary Cable	2026 Forecast	4-6
LTN Equipment	2025 Modified Third LTIIP	30-75
LTN Equipment	2025 AAOP Forecast	30 - 75
LTN Equipment	2025 Actual	7

LTN Equipment	2026 Modified Third LTIIP	75-125
LTN Equipment	2026 Forecast (2nd Major Modification as Proposed)	80-105
LTN Equipment	2026 Forecast	75-125

Locations (2025 Actual)

Region	Primary Cable	LTN Equipment
Lehigh	1	0
Northeast	0	6
Central	0	0
Susquehanna	0	0
Harrisburg	0	1
Lancaster	0	0

Planned Expenditures (in millions)

Planned Expenditures	$Million
2025 Modified Third LTIIP	$ 4.56
2025 AAOP Forecast	$ 5.36
2025 Actual	$ 1.77
2026 Modified Third LTIIP	$ 4.25
2026 Forecast (2nd Major Modification as Proposed)	$5.33
2026 Forecast	$5.26

Comments

2025 LTN Equipment was below the expected 2025 forecast due to the delayed installation of the LTN aluminum ladder projects as a result of additional testing and development required to meet PPL Electric standards. These projects are planned to be completed in 2026.

LTN Upgrades

Program Description and Purpose

The purpose of this program is to install remote monitoring and control equipment in all Low Tension Network ("LTN") vaults, upgrade network devices up to the latest standard, replace vault equipment near its end of useful life, and install telemetry on secondary network cable. These improvements will allow for safer operation of LTNs, reduce PPL Electric Utilities Corp.

maintenance costs, reduce failed equipment requiring replacement, and provide better data for asset planning and investments.

Identification/Justification Process

Rollout of this program began in the Lehigh and Harrisburg regions. By the completion of this program in 2026, all LTN vaults will receive automation.

Scope

Replacements in Units	
2025 Modified Third LTIIP	155
2025 AAOP Forecast	212
2025 Actual	83
2026 Modified Third LTIIP	262
2026 Forecast (2nd Major Modification as Proposed)	185-214
2026 Forecast	340-378

Locations (2025 Actual)

Region	Units
Lehigh	29
Northeast	14
Central	16
Susquehanna	1
Harrisburg	22
Lancaster	1

Planned Expenditures (in millions)

Planned Expenditures	$Million
2025 Modified Third LTIIP	$ 11.56
2025 AAOP Forecast	$ 10.49
2025 Actual	$ 9.60
2026 Modified Third LTIIP	$13.94
2026 Forecast (2nd Major Modification as Proposed)	$7.44
2026 Forecast	$14.79

Comments

The number of LTN automation jobs constructed in 2025 was below the forecast due to the work being substantially completed in the field but not fully commissioned. All jobs initially planned for 2025 are expected to be completed in 2026, which will put the Company on track to finish LTN upgrades by the end of 2026 as planned.

Reliability

This category includes deployment of Smart Grid devices and distribution circuit upgrades to address reliability issues identified through inspections or various circuit or customer level performance metrics.

Planned Expenditures (in millions)

Planned Expenditures	$Million
2025 Modified Third LTIIP	$ 7.13
2025 AAOP Forecast	$7.13
2025 Actual	$ 17.87
2026 Modified Third LTIIP	$ 5.84
2026 Forecast (2nd Major Modification as Proposed)	$11.55
2026 Forecast	$17.66

Comments

Actual 2025 expenditures exceeded the forecast due to significant storm impacts causing the reprioritization of reliability driven work and creation of new reliability driven scope.

Distribution Reliability Preservation

Program Description and Purpose

Upgrades to the distribution system as justified by regional reliability supervisors to improve reliability. Improvements are targeted towards Worst Performing Circuits ("WPCs"), circuits with a history of customer complaints, or recommendations as a result of PCAs. PCAs are detailed reliability and operational analysis performed on 25% of a region's distribution circuits per year. Additional work is scoped on the basis of Customers Experiencing Multiple Interruptions ("CEMI"), and Customers Experiencing Multiple Momentary Interruptions ("CEMMI").

Identification/Justification Process

Projects are identified and submitted for both small and large-scale circuit improvement. These projects are ranked utilizing PPL Electric's investment prioritization tool to ensure funds are directed towards the most cost-effective projects. The number of projects and locations may vary depending on areas with reliability concerns. Examples include, but are not limited to, installation of fuses, fault indicators, reconductoring of

vintage conductor, upgrading conductor to reduce impact of vegetation related service outages, and relocating sections of lines that may be inaccessible or prone to vegetation related service outages.

It should be noted projects vary significantly in size, which can result in material swings in the number of planned projects.

Scope

Planned Projects	
2025 Modified Third LTIIP	20-35
2025 AAOP Forecast	20-35
2025 Actual	416
2026 Modified Third LTIIP	20-35
2026 Forecast (2nd Major Modification as Proposed)	20-35
2026 Forecast	450-500

Locations

Locations are identified based upon emergent reliability needs.

Comments

Distribution Reliability Preservation jobs placed in service exceeded the 2025 forecast due to a significant impact of storm activity that accelerated reliability work. The change in number of Distribution Reliability Preservation projects from 2025 to 2026 is due to increased scoping for PPL Electric's circuit hardening initiative that focuses on improving system resiliency and SAIFI.

Reliability Preservation Emergent

Program Description and Purpose

Remediation of issues primarily associated with secondary voltage and emergent small-scale customer reliability needs in order to improve reliability.

Identification/Justification Process

Work is identified by line crews, as well as through customer calls, and is completed to avoid potential service outages, power quality concerns, and safety issues. Examples include, but are not limited to, modifying capacitance to address voltage concerns, installing fusing to aid in sectionalizing, and replacing transformers to resolve transformer overload. Budget recommendations are based on historical trends of hours charged.

Scope and Locations

Scope and locations are determined as emergent needs arise.

System Reliability Improvement Projects

Program Description and Purpose

Large-scale improvements to distribution circuits with a history of poor reliability. This program addresses long-term projects, primarily aimed at WPCs. However, other proactive long-term projects with proven reliability benefit are included.

Identification/Justification Process

Each quarter, distribution planners and regional reliability supervisors meet to propose projects to improve WPCs. Projects are approved by distribution planning supervisors and vetted against other projects for scheduling based on historical reliability, potential benefit, and cost. Projects may span multiple years and are listed in the years they are planned to go in service. Scope is expected to increase in outer years as circuits and projects are identified. Examples include, but are not limited to, circuit reconfigurations with new tie lines, new lines and terminals, or the installation of substations for increased reliability.

Additionally, PPL Electric monitors large customer impact outages on a daily basis. A circuit that begins to show reliability deterioration and notable impact on reliability metrics requires a root cause analysis. Such analysis can result in the identification of a long-term project.

Note that the projects vary significantly in size, which can result in material swings in the number of planned projects.

Scope

Planned Projects	
2025 Modified Third LTIIP	6 - 12
2025 AAOP Forecast	6 - 12
2025 Actual	29
2026 Modified Third LTIIP	6 - 12
2026 Forecast (2nd Major Modification as Proposed)	310-370
2026 Forecast	225-280

Locations (2025 Actual)

Region	**Projects**
Lehigh	2
Northeast	4

Central	9
Susquehanna	4
Harrisburg	3
Lancaster	7

Planned Expenditures (in millions)

Planned Expenditures	$Million
2025 Modified Third LTIIP	$ 12.66
2025 AAOP Forecast	$ 12.66
2025 Actual	$19.37
2026 Modified Third LTIIP	$ 4.13
2026 Forecast (2nd Major Modification as Proposed)	$314.53
2026 Forecast	$274.68

Comments

The number of System Reliability Improvement jobs placed in service exceeded the 2025 forecast due to a significant impact of storm activity that accelerated reliability work. The change in number of System Improvement Reliability Projects from 2025 to 2026 is due to increased scoping for PPL Electric's circuit hardening initiative that focuses on improving system resiliency and SAIFI. Projects consist of one or multiple solutions that may include circuit reconfigurations and relocations, device installations, new ties, new lines and terminals, or the installation of substations for reliability improvement.

Unreimbursed Highway Relocations

Program Description and Purpose

Unreimbursed customer requested relocations of PPL Electric distribution facilities in support of highway and bridge projects throughout the service territory.

Identification/Justification Process

The customers (project sponsors) include PennDOT, the PA Turnpike Commission, and various counties and municipalities. PPL Electric and the project sponsor execute a reimbursement agreement, and PPL Electric is reimbursed for its work based on the "pole count method," as defined in PennDOT's DM-5 manual. Historically, reimbursement for distribution projects is approximately 35%.

To accommodate highway relocations and other municipal projects, approximately 70-120 projects per year are placed in service. PPL Electric typically is notified of distribution relocation work 12 months or less before the start of requested utility relocation activities.

Scope and Locations

Scope and locations are determined as requests are received.

Planned Expenditures (in millions)

PPL Electric's expenditures to complete highway relocation projects are the net of total expenditures minus the project sponsor's reimbursements.

Planned Expenditures	
2025 Modified Third LTIIP	$ 4.92
2025 AAOP Forecast	$ 7.45
2025 Actual	$ 3.77
2026 Modified Third LTIIP	$ 4.07
2026 Forecast (2nd Major Modification as Proposed)	$4.26
2026 Forecast	$7.86

Comments

Timelines for several projects were shifted from 2025 to 2026 due to PennDOT and Turnpike schedule changes in 2025, resulting in less work being completed in 2025.

Substation

This category includes replacement of various substation assets and substation animal guarding.

Substation assets include, but are not limited to, the following:

- Structures
  - Enclosures
  - Fences
- Overhead Conductors and Hardware
- Underground Cables and Hardware
- Switching Devices
  - Air Break Switches
  - Disconnect Switches
- Protective Devices
  - Circuit Breakers
  - Fuses
  - Reclosers
  - Lightning Arresters
- Transformers

- Power
- Station Service
- Instrument

Planned Expenditures (in millions)

Planned Expenditures	$Million
2025 Modified Third LTIIP	$ 28.12
2025 AAOP Forecast	$ 17.33
2025 Actual	$ 17.19
2026 Modified Third LTIIP	$ 30.24
2026 Forecast (2nd Major Modification as Proposed)	$42.56
2026 Forecast	$49.64

Comments

The 2025 actual spend was in line with the forecast. The 2026 forecasts are projected to be higher than initial forecasts due to additional proactive getaway, circuit breaker, and transformer replacements as a result of increased failure rates in recent years.

Underground Getaway Cable Replacements and Life Extension

Program Description and Purpose

Proactive replacement of aging and deteriorating 12 kV underground getaway cables to prevent failures that can result in long duration outages.

Identification/Justification Process

Getaways are selected for proactive replacement based on data analytics risk models that quantify cable health and risk and provide a priority ranking based on risk factors such as age, repair history, installation type, length, load transferability, etc. Scope is additionally identified through inspection feedback and other work.

Scope

Replacements in Units	
2025 Modified Third LTIIP	9-13
2025 AAOP Forecast	9-13
2025 Actual	10
2026 Modified Third LTIIP	20-30
2026 Forecast (2nd Major Modification as Proposed)	24-29

2026 Forecast	30-35

Locations (2025 Actual)

Region	Units
Lehigh	1
Northeast	2
Central	2
Susquehanna	0
Harrisburg	3
Lancaster	2

Comments

Actual work completed was below the forecast primarily due to material and labor delays, and scheduling and outage constraints. 2026 forecasts are higher than initial projections due to additional replacements being scoped because of increased failure rates in recent years.

Miscellaneous Substation Equipment

Program Description and Purpose

Programmatic replacement of older substation equipment, including air break switches, potential transformers ("PTs"), capacitance-coupled voltage transformers ("CCVTs"), circuit switchers, lightning arresters, voltage regulators, and DC panels in order to prevent future maintenance concerns and to maintain reliable service.

Identification/Justification Process

Candidates for replacement are identified based on age and/or operating condition, both indicators of potential failure. Once identified, replacement of these facilities is coordinated and aligned with the replacement of other assets at the same substation within the five-year planning window.

Scope

Replacements in Units	
2025 Modified Third LTIIP	8-12
2025 AAOP Forecast	8-12
2025 Actual	43
2026 Modified Third LTIIP	18-22
2026 Forecast (2nd Major Modification as Proposed)	18-20
2026 Forecast	18-22

Locations (2025 Actual)

Region	Units
Lehigh	9
Northeast	17
Central	0
Susquehanna	0
Harrisburg	7
Lancaster	10

Comments

Projects in this category surpassed the original 2025 AAOP Forecast due to the influx of necessary HVAC upgrades at several substations.

Distribution Substation Circuit Breakers

Program Description and Purpose

Proactive replacement of substation circuit breakers ("CBs") based on asset health and risk factors produced by data analytics models to maintain reliable service. This program includes the replacement of 12 kV circuit breakers.

Identification/Justification Process

Candidates for replacement are identified based on data analytics risk models that consider age, mis-operation history, repair history, obsoletion, and load transferability. Once identified, replacement of these facilities is coordinated and aligned with the replacement of other assets at the same substation within the five-year planning window. Furthermore, assets with chronic issues and high O&M trails are also factored into the proactive replacement scope.

Scope

Replacements in Units	
2025 Modified Third LTIIP	70-100
2025 AAOP Forecast	60-70
2025 Actual	69
2026 Modified Third LTIIP	50-70
2026 Forecast (2nd Major Modification as Proposed)	65-85

2026 Forecast	80-100

Locations (2025 Actual)

Region	Units
Lehigh	20
Northeast	12
Central	10
Susquehanna	8
Harrisburg	5
Lancaster	14

Comments

The number of circuit breakers replaced in 2025 was in line with 2025 forecast. 2026 forecasts are higher than initial projections due to additional replacements being scoped because of increased failure rates in recent years.

69/12 kV &138/12kV Transformer Replacement

Program Description and Purpose

Proactive replacement of distribution substation transformers based on asset health and risk factors produced by data analytics models to maintain reliable service. This program includes the replacement of 69/12 kV and 138/12 kV transformers.

Identification/Justification Process

Candidates for replacement are identified based on data analytics risk models that consider age, dissolved gas analysis trends/analytics, repair history, obsoletion, and load transferability. Once identified, replacement of these facilities is coordinated and aligned with the replacement of other assets at the same substation within the five-year planning window. Furthermore, assets with chronic issues and high O&M trails are also factored into the proactive replacement scope.

Scope

Replacements in Units	
2025 Modified Third LTIIP	6-10
2025 AAOP Forecast	6-10
2025 Actual	14
2026 Modified Third LTIIP	6-10

2026 Forecast (2nd Major Modification as Approved)	6-10
2026 Forecast	6-10

Locations (2025 Actual)

Region	Units
Lehigh	1
Northeast	5
Central	2
Susquehanna	4
Harrisburg	0
Lancaster	2

Comments:

The number of transformers replaced in 2025 exceeded the forecast due to carried-over work from the prior year.

Distribution Substation DC Equipment

Program Description and Purpose

Programmatic replacement of distribution substation DC equipment based on asset health and risk factors produced by data analytics models to maintain reliable service. This program includes the replacement of 24 V, 48 V, and 125 V batteries, chargers, and related equipment.

Identification/Justification Process

Candidates for replacement are identified based on age, operating issues, availability of spare parts, and failure trends. Once identified, replacement of these facilities is coordinated and aligned with the replacement of other assets at the same substation within the five-year planning window. Furthermore, DC assets with chronic issues and high O&M trails are also factored into the proactive replacement scope.

Scope

Replacements in Units	
2025 Modified Third LTIIP	25-30
2025 AAOP Forecast	20-25
2025 Actual	2
2026 Modified Third LTIIP	25-30
2026 Forecast (2nd Major Modification as Proposed)	30-35
2026 Forecast	35-40

Locations (2025 Actual)

Region	Units
Lehigh	0
Northeast	0
Central	1
Susquehanna	0
Harrisburg	0
Lancaster	1

Comments

2025 installations were below projected values due to reprioritization of scope because of the increased storm impact in 2025.

Substation Animal Guarding

Program Description and Purpose

Improvements to existing distribution substation equipment via the proactive installation of animal guards to prevent animal contacts and maintain reliable service. Guarded equipment includes transformer bushings, circuit breakers, fuse/disconnect switches, bus supporting insulators, surge arresters, station service transformers, PTs, and cable terminations. Future investments could be made in pilot products like internal perimeter electric fences for comprehensive rodent deterrents at high animal contact risk locations.

Identification/Justification Process

Distribution substations are regionally prioritized based on historical animal-related service outages (both at the substation and within a 1-mile perimeter), number of customers served, substation load, and transferability. High priority substations are animal guarded first with the lower priority substations guarded in outer years.

Scope

Planned Installations	
2025 Modified Third LTIIP	2-6
2025 AAOP Forecast	6-15
2025 Actual	3
2026 Modified Third LTIIP	2-6
2026 Forecast (2nd Major Modification as Approved)	5-10

2026 Forecast	8-15

Locations (2025 Actual)

Region	Units
Lehigh	0
Northeast	0
Central	0
Susquehanna	0
Harrisburg	2
Lancaster	1

Comments

Substation animal guarding installations were below forecast due to outage constraints. The remaining work will be completed in 2026.

12 kV Underground Bus Tie & Transfer Cable Replacement

Program Description and Purpose

Proactive replacement of distribution substation underground bus tie and transfer cables based on asset health and risk factors produced by data analytics models to maintain reliable service. This program includes the replacement of all 12 kV underground cables within the perimeter of the substation yard.

Identification/Justification Process

Underground bus tie and transfer cables are selected for proactive replacement based on data analytics risk models that quantify cable health and risk, and provide a priority ranking based on factors such as age, repair history, installation type, length, loading, etc. Scope is additionally identified through inspection feedback and other work.

Scope

Planned Projects	
2025 Modified Third LTIIP	5-10
2025 AAOP Forecast	5 - 10
2025 Actual	4
2026 Modified Third LTIIP	5-10

2026 Forecast (2nd Major Modification as Proposed)	7-12
2026 Forecast	9-14

Locations (2025 Actual)

Region	Units
Lehigh	0
Northeast	2
Central	0
Susquehanna	1
Harrisburg	0
Lancaster	1

Comments

Installations were below forecast due to outage constraints. The remaining work will be completed in 2026.

Protection and Control

Program Description and Purpose

Proactive replacement of protection and control equipment to maintain reliable distribution service to customers. Replacement of legacy relays with modern microprocessor relays will also improve fault monitoring and diagnosis processes and will provide added insight into circuit breaker health and risk. Replacement of obsolete Supervisory Control and Data Acquisition ("SCADA") protocols and equipment will also enable relays to perform properly.

Identification/Justification Process

Candidates for replacement are identified based on obsolescence, availability of vendor support, age, and automation enhancement potential. Once identified, replacement of these facilities is coordinated and aligned with the replacement of other assets at the same substation within the five-year planning window.

Scope

Planned Projects	
2025 Modified Third LTIIP	104-114
2025 AAOP Forecast	150-200
2025 Actual	251
2026 Modified Third LTIIP	121-139

2026 Forecast (2nd Major Modification as Proposed)	145-160
2026 Forecast	155-185

Locations (2025 Actual)

Region	Units
Lehigh	26
Northeast	40
Central	39
Susquehanna	22
Harrisburg	56
Lancaster	68

Planned Expenditures (in millions)

Planned Expenditures	$Million
2025 Modified Third LTIIP	$13.47
2025 AAOP Forecast	$ 16.76
2025 Actual	$ 29.21
2026 Modified Third LTIIP	$ 14.82
2026 Forecast (2nd Major Modification as Proposed)	$13.16
2026 Forecast	$22.05

Comments

The number of installations placed in service in 2025 was higher than projected due to carry-over work from 2024, and reprioritization of reliability related work to help improve automated remote restoration capabilities for improved storm response. In 2026, the projection increased to continue to improve system-wide substation reliability and automated remote restoration capabilities.