BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Docket No. R-2025-3057164

PPL Electric Utilities Corporation

Statement No. 12

Direct Testimony of Andrew Elmore

Topics: Taxes

Dated: September 30, 2025

I. INTRODUCTION

Q. Please state your name and business address.

A. My name is Andrew W. Elmore. My business address is 645 Hamilton Street, Allentown, PA.

Q. By whom are you employed and in what capacity?

A. I am employed as Vice President – Tax by PPL Corporation ("PPL Corp."), which is the parent company of PPL Electric Utilities Corporation ("PPL Electric" or the "Company").

Q. What are your responsibilities as Vice President – Tax?

A. I have held this position since September 2020, and in that role, I am responsible for all aspects of PPL Corp.'s income tax compliance and planning, tax accounting, and financial reporting for Securities and Exchange Commission ("SEC") and regulatory purposes related to tax matters.

Q. What is your educational background?

A. I earned a Bachelor's degree in French and political science from the University of Massachusetts in Boston in 1989 and a Juris Doctor degree from the University of Kentucky in 1993.

Q. Please describe your professional experience.

A. From 1993 until 1996, I was employed as an associate at a law firm in Providence, RI. I then worked at Arthur Andersen in Boston until 2000 and subsequently at Deloitte in Boston until 2004. In the same year, I assumed a position at United Technologies Corporation in Hartford, CT until 2006. I then worked for Zimmer Biomet in Indiana until 2011 when I was employed by PPL. From 1996 through 2019 my primary practice area was international tax.

Q. What is the purpose of your testimony?

A. My testimony and accompanying exhibits describe and support PPL Electric's calculation of certain tax-related ratemaking adjustments to the retail rate base and operating expenses contained in the historic test year ("HTY"), future test year ("FTY"), and fully projected future test year ("FPFTY") retail rate base and operating expenses. In addition, my testimony describes the impacts to PPL Electric of significant federal tax legislation that has been enacted since the filing of the last rate proceeding.

Q. Are you sponsoring any exhibits in this proceeding?

A. Yes. I am sponsoring PPL Electric Exhibits AE-1 and AE-2 and portions of Part II of the filing requirements as noted on its index.

II. TAX ADJUSTMENTS

Q. Are you sponsoring any schedules in Exhibits Historic 1, Future 1 and Fully Projected Future 1?

A. Yes. I am sponsoring the following: Schedules B-5, C-6, D-16, D-17, D-18, and D-19 of Exhibits Historic 1, Future 1, and Fully Projected Future 1.

Q. What is shown on Schedules B-5 of Exhibits Historic 1, Future 1, and Fully Projected Future 1?

A. Schedules B-5 of Exhibits Historic 1, Future 1 and Fully Projected Future 1 set forth the Company's detailed statement of taxes for the 12 months ended June 30, 2025, June 30, 2026, and June 30, 2027, respectively. Those taxes include, but are not limited to, state and federal income taxes, state and federal taxes other than income taxes, and deferred taxes.

Q. What is shown on Schedules C-6 of Exhibits Historic 1, Future 1 and Fully Projected Future 1?

A. Schedules C-6 of Exhibits Historic 1, Future 1 and Fully Projected Future 1 reflect the balances of deferred income taxes at the end of the respective test years, including the tax deferrals related to Accelerated Cost Recovery System ("ACRS") and Modified Accelerated Cost Recovery System ("MACRS") property. The applicable ACRS/MACRS statute provides for mandatory normalization of federal tax benefits on post-1980 property. Accordingly, PPL Electric has claimed federal income tax normalization associated with ACRS/MACRS-related property in this filing, as well as

deferred income tax balances associated with plant-related book and tax basis differences such as Contributions in Aid of Construction ("CIAC"), tax repairs deduction under Internal Revenue Code Section ("Section") 162, tax capitalization of Section 263A costs and Section 174 Research and Development ("R&D") costs, etc. (collectively "basis differences") related to ACRS/MACRS property. It should be noted that the amounts shown for ACRS/MACRS property and basis differences have been reduced by deficient deferred taxes related to net operating losses which gave rise to those deferred tax balances. Please see testimony below discussing the Tax Cuts and Jobs Act for discussion on deficient deferred taxes. For the Historic and Future test years, deferred tax related to riders (Distribution System Improvement Charge and Smart Meter) have been removed from the ending balances. For the FPFTY, the incremental deferred tax liability arising from the items discussed are calculated on a prorated basis in accordance with Treasury Regulation Sec. 1.167(l)-1(h)(6)(ii).

Q. Please explain the "Adjustment to Taxes Other Than Income" shown on Schedules D-13.

A. Schedules D-13 of Exhibits Historic 1, Future 1, and Fully Projected Future 1 reflect Pennsylvania Gross Receipts Tax ("GRT") and Public Utility Realty Tax Act ("PURTA") adjustments, which are discussed in detail below. Any differences between actual tax amounts and the amounts reflected in these schedules will be captured in the State Tax Adjustment Surcharge ("STAS") rate filing and reflected in rates commencing on January 1 of each year after this proceeding.

Q. Please explain the Pennsylvania Gross Receipts Tax shown on Schedules D-16.

A. The adjustment to GRT is shown on Schedules D-16, page 1 for Exhibits Historic 1, Future 1, and Fully Projected Future 1. This adjustment reflects the GRT liability changes that will result from base rate revenue projections generated by the annualization of sales under present rates. The GRT impact of these revenue projections is reflected on page 2 of those schedules.

Q. Please explain the adjustment for PURTA on Schedules D-16.

A. The PURTA is calculated under present rates based on the state taxable value and PURTA millage rate as of the December 31, 2024, tax year per the Pennsylvania Department of Revenue's Public Utility Realty Tax Notice of Determination Letter dated July 30, 2025. The tax expense per books for the 12 months ended June 30, 2025, and the tax expense per budget for the 12 months ending June 30, 2026, and June 30, 2027, are deducted from the respective test year's amounts above to determine the adjustment for PURTA.

Q. Please explain the adjustment of federal and state income taxes, shown on Schedules D-17.

A. Schedules D-17 show, in column 1, the tax computation as recorded for the 12 months ended June 30, 2025, and as budgeted for the 12 months ending June 30, 2026, and June 30, 2027. Column 2 shows adjustments required to exclude revenues, expenses and income tax adjustments associated with the various Automatic Recovery Clauses and Riders. These clauses and riders include:

Generation Service Charges ("GSC-1" and "GSC-2")

Act 129 – Energy Efficiency Rider Phase 4 ("ACR 4")

Transmission Service Charge ("TSC")

Universal Service Rider ("USR")

Competitive Enhancement Rider ("CER")

Purchase of Receivables ("POR)

Merchant Function Charge ("MFC")

Distribution System Improvement Charge ("DSIC") (excluded in 12 months ended June 30, 2025, and June 30, 2026)

Smart Meter Rider – Phase 2 ("SMR 2") (excluded in the 12 months ended June 30, 2025, and June 30, 2026)

Tax Cuts and Jobs Act ("TCJA")

Storm Damage Expense Rider ("SDER")

Column 3 shows the derivation of the revenues, expenses and tax adjustments for PPL Electric's combined transmission and distribution ("T&D") operations only. Column 4 shows the various adjustments for a proper computation of taxable income on a pro forma basis at present rates. Column 5 shows the pro forma income tax computation at present rates.

Taxable income and the tax computations are adjusted in Column 4 for the following reasons:

- To reflect the effect on taxable income of adjustments to revenue and expense set forth on Schedules D-2 and to reflect other changes in taxable income.

- To eliminate the effect of prior year tax adjustments, provisions for possible tax deficiencies and non-plant deferred taxes under flow-through ratemaking on the books for the 12 months ended June 30, 2025.
- To eliminate the effect of the non-plant deferred taxes under flow-through ratemaking reflected in the forecasts for the 12 months ended June 30, 2026, and June 30, 2027.

Q. Please describe how depreciation is calculated for tax purposes.

A. In general, depreciation for tax purposes is computed starting with the tax basis of the property and using various depreciation methods and rates that differ from those used in computing book depreciation. Tax depreciation is typically, if not invariably, higher than book depreciation, resulting in lower tax basis in assets compared to book basis.

In computing tax depreciation for this filing, PPL Electric applied the same methods used in its prior base rate proceedings and its Federal and Pennsylvania income tax returns. That is, for property acquired after 1980, PPL Electric uses the ACRS, as provided for in the Economic Recovery Tax Act of 1981, and the MACRS, as provided for in the Tax Reform Act of 1986. In addition, PPL Electric adopted, for income tax purposes, a broader view of "unit of property" related to its ACRS/MACRS property. As a result, those components of property that are "functionally interdependent" can be considered a distinct unit of property and, as such, certain expenditures for repairs to this property can be currently deducted for tax purposes.

Q. Can you elaborate on the adjustment related to annualized interest?

A. This adjustment is the result of adjusting the interest deduction based on the test year-end rate base, as shown on Schedules D-17, page 3. Because customers pay a return on only these amounts, the interest associated with this investment is properly applied to PPL Electric's T&D operations for ratemaking purposes.

Q. Please summarize the effects of these tax adjustments.

A. Recognition of all tax adjustments reflected on Schedules D-17 results in a net decrease in taxable income for the HTY, FTY, and FPFTY. Taxable income is the basis for computing both federal and Pennsylvania income taxes.

The actual Pennsylvania Corporate Net Income Tax rate is being phased down over several years, starting with 8.49% for 2024, 7.99% for 2025, 7.49% for 2026 and 6.99% for 2027. The test years will reflect a blended Pennsylvania Corporate Net Income Tax Rate due to test year activity over two calendar year periods with different state tax rates. The federal income tax is computed at the current 21% tax rate. For federal income tax purposes, the amount of Pennsylvania income tax is an allowable deduction. Details of the computations of all taxes incurred as a result of the proposed revenue increase are shown on Schedules D-17, page 4.

Q. Please explain Schedules D-18 "Adjustment to Provision for Deferred Income Taxes" for the test years.

A. Normally, deferred taxes arise in connection with expenses which, for various reasons, are recorded on the books as an expense in a different year and/or amount than the same

item is allowed as an income tax deduction. This is referred to as a book/tax timing difference. Generally Accepted Accounting Principles ("GAAP"), which are prescribed by the Financial Accounting Standards Board ("FASB"), require that the tax savings related to an expense item be recorded on the books at the same time as the expense item is recorded. For example, if the expense item is deducted for book purposes in a year subsequent to the year it is deducted for tax purposes, a deferred tax charge is recorded on the income statement and a liability for such tax is recorded on the balance sheet in the year the tax deduction occurs. The same principle also applies to revenue items.

Schedules D-18 show the normalization of the net deferred taxes recorded on the books for the 12 months ended June 30, 2025, and as budgeted for the 12 months ending June 30, 2026, and June 30, 2027. For all test years, the specific items covered by deferred taxes arise in connection with timing differences, as discussed above.

Regarding Schedules D-18, PPL Electric uses ACRS/MACRS in computing tax depreciation on post-1980 property additions. Schedules D-18 reflect the mandatory deferral of the federal income tax effects of ACRS/MACRS based on the tax plant balances at June 30, 2025, 2026, and 2027. Schedules D-18 also reflect the deferral of income taxes associated with basis differences related to ACRS/MACRS property.

Deferred taxes are adjusted in column 4 for the following reasons:

- To remove deferred taxes on non-plant related timing differences to reflect Pennsylvania flow-through ratemaking.
- To eliminate the effect of prior year tax adjustments and provisions for possible tax deficiencies recorded for the 12 months ended June 30,

2025.

- To reflect the deferred tax impact of pro forma adjustments on plant-related timing differences discussed above.

Q. Please explain Schedules D-19 "Adjustment to Amortization of Deferred Investment Tax Credit."

A. Schedules D-19 adjust the amortization of the investment tax credit to reflect a full year's amortization based on the remaining balance of unamortized investment tax credit as of June 30, 2025, 2026, and 2027. If applicable, Schedules D-19 will also include new investment tax credits for the test years.

II. ACT 40 REQUIREMENTS

Q. Mr. Elmore, are you familiar with Section 1301.1 of the Public Utility Code, which is otherwise known as Act 40 of 2016?

A. Yes, I am. The legislation, among other things, eliminated the use of consolidated tax savings adjustments for setting rates for public utilities in Pennsylvania. Subsection (b) of Section 1301.1 requires a utility to demonstrate that it shall use at least 50 percent of what otherwise would have been the revenue requirement associated with a consolidated tax savings adjustment to support reliability or infrastructure related to the rate-base eligible capital investment and that the other 50 percent shall be used for general corporate purposes. However, it is also my understanding that this subsection (b) "shall no longer apply after December 31, 2025," under its own terms. 66 Pa. C.S. § 1301.1(c)(1). My understanding is predicated in part on the advice of counsel.

Q. Has the Company calculated what would have been the ratemaking level of a consolidated tax savings adjustment for PPL Electric prior to the enactment of Section 1301.1 of the Public Utility Code?

A. As explained above, subsection (b) no longer applies after December 31, 2025. Because the Commission's Final Order in this proceeding will be entered after the expiration of subsection (b), the Company maintains that it is not required to present that calculation.

Notwithstanding, a calculation of the consolidated tax adjustment for that purpose, using the modified effective tax rate methodology traditionally used by the Commission prior to the enactment of Act 40, is set forth in PPL Electric Exhibit AE-1.

Q. If Section 1301.1(b) of the Public Utility Code no longer applies as of December 31, 2025, and the Company's claim in this case is based upon an FPFTY that ends after the date that it no longer applies, why is the Company providing this calculation in this proceeding?

A. It is my understanding that Section 1301.1(c)(2) of the Public Utility Code states that Act 40 "shall apply to all cases where the final order is entered after the effective date of this section." Also, the Commission theoretically could opt not to suspend the proposed rate increase for seven months, although it is my understanding that is the Commission's typical procedure in base rate cases. Therefore, the proposed rates technically could become effective before Section 1301.1(b)'s December 31, 2025 expiration date. Due to this timing, the Company is providing what would have been

the ratemaking level of a consolidated tax savings adjustment for PPL Electric prior to the enactment of Section 1301.1 of the Public Utility Code.

Q. Is the Company's presentation in this filing consistent with the Commission's and the Commonwealth Court's treatment of PA Act 40 of 2016?

A. Yes. I believe that the Company's presentation in this filing is consistent with the Commission's determination on Act 40 in UGI Utilities, Inc. – Electric Division's 2018 Base Rate Proceeding at Docket No. R-2017-2640058 as well as the Commonwealth Court's order affirming the Commission's order on appeal.

III. TAX LEGISLATION

Q. Please explain the significant changes made by the TCJA?

A. The TCJA was enacted in 2017 after PPL Electric's previous rate case. The more significant changes applicable to regulated public utilities were: (1) the reduction in the U.S. federal corporate income tax rate from a top marginal rate of 35% to a flat rate of 21%, effective January 1, 2018; (2) limitations on the tax deductibility of interest expense, with certain exceptions from such limitations, including an exception for regulated public utilities; (3) full current year expensing of capital expenditures with an exception for regulated public utilities that qualify for the exception to the interest expense limitations; and (4) the continuation of certain rate normalization requirements for accelerated tax depreciation benefits.

Q. Please explain how TCJA impacted PPL Electric?

A. On the date of enactment, PPL Electric remeasured its deferred tax assets and liabilities due to the reduction of the U.S. Federal Corporate income tax rate to 21%. The changes in accumulated deferred income taxes ("ADIT"), described as excess or deficient deferred taxes, were, in large part, recorded as an offset to either a regulatory asset or regulatory liability to be reflected in future rates charged to customers. A combination of IRS normalization requirements and utility commission approvals dictate how the excess and deficient deferred taxes reflected in the regulatory assets and liabilities are amortized and included in customer rates. Excess ADIT balances related to federal method and life book and tax depreciation differences, known as "protected" ADIT, are governed by IRS normalization requirements and must be amortized using the Average Rate Assumption Method ("ARAM"). All other excess ADIT balances ("unprotected ADIT") are amortized in accordance with regulatory approvals. The Commission's orders at Docket Nos. M-2018-2641242 and P-2019-3013366 provided a temporary methodology to pass the tax benefits of the amortization of excess ADIT to customers until utilities within the state filed their next rate case. PPL Electric has not filed a rate case following the enactment of the TCJA until the current year. Consequently, PPL Electric has prepared the Commission-issued templates to include the amortization of excess and deficient ADIT and tax rate changes on taxable income in a TCJA rider to pass the tax benefits of TCJA to customers. The TCJA customer credits will no longer be administered through the TCJA rider when new customer rates go into effect.

Q. Can you explain the provisions and impacts of Public Law No: 119-21 (H.R. 1, 119th Congress), otherwise known as the One Big Beautiful Bill Act ("OBBBA")?

A. As a general matter, the OBBBA will not have a material impact on PPL Electric. For purposes of clarity regarding the relevant provisions of the OBBBA, please see attached PPL Electric Exhibit AE-2 for a summary of the tax-related provisions of the OBBBA.

Q. Does this conclude your direct testimony?

A. Yes, it does.

PPL Electric Utilities Corporation
Consolidated Income Tax Adjustment
Year Ended December 31, 2024

			2022	2023	2024	Three Year Average
	Non-Regulated Company Taxable Losses		(a)	(b)	(c)	(d)=((a)+(b)+(c))/3
1	CEP Reserves, Inc.		0	(8,398,359)	0	(2,799,453)
2	LG&E and KU Energy LLC		(91,266,009)	(160,237,587)	(253,631,702)	(168,378,433)
3	PP&L Residual Corporation		0	(1,442,134)	(2,137,060)	(1,193,065)
4	PPL Capital Funding, Inc.		(2,007,737)	(576,131)	0	(861,289)
5	PPL Corporation	Pg 2, Line 5	(12,921,275)	0	(31,521,750)	(14,814,342)
6	PPL Distributed Energy Resources, LLC	Pg 2, Line 9	0	0	0	0
7	PPL Energy Funding Corporation	Pg 2, Line 13	(33,869,898)	(21,158,837)	(4,808,594)	(19,945,776)
8	PPL Energy Holdings, LLC		(2,935,533)	(1,345,142)	(25,909,514)	(10,063,396)
9	PPL Energy Resources, LLC	Pg 2, Line 17	0	0	0	0
10	PPL Midwest Transmission, LLC		(93,268)	(675,372)	(912,438)	(560,359)
11	PPL Renewables, LLC	Pg 2, Line 21	0	0	0	0
12	PPL Rhode Island Holdings, LLC	Pg 2, Line 26	(52,620,119)	(95,494,423)	(124,241,303)	(90,785,282)
13	PPL Safari Holdings, LLC	Pg 2, Line 30	0	0	0	0
14	PPL Subsidiary Holdings, LLC		(23,787)	(29,472)	(41,846)	(31,702)
15	PPL Technology Ventures, LLC		(1,398,687)	(1,653,746)	(620,099)	(1,224,177)
16	PPL TransLink, Inc.		(764,156)	(2,170,110)	(416,697)	(1,116,988)
17	PPL UK Holdings, LLC		(855,499)	0	0	(285,166)
18	The Narragansett Electric Company	Pg 2, Line 35	0	(198,661,220)	(115,806,337)	(104,822,519)
19	**Total Taxable Losses**	Sum of Lines 1 thru 18	$ (198,755,968)	$ (491,842,532)	$ (560,047,340)	$ (416,881,947)
20	**Taxable Income Companies**	Pg 2, Line 45	$ 1,092,983,330	$ 1,113,146,099	$ 1,209,558,566	1,138,562,665
	Taxable Income - PA Utilities					
21	PPL Electric Utilities Corporation	Pg 2, Line 50	$ 328,502,122	$ 415,543,515	$ 251,893,034	$ 331,979,557
22	Percent Taxable Income Pa. Utilities to Total Taxable Income Companies (Line 21 / Line 20)					29.1578%
	Calculation of Tax Benefit on Consolidated Tax Savings Applicable to PPL Utilities					
23	Adjustment for Consolidated Tax Savings (Line 19 x Line 22)					$ (121,553,604)
24	Adjustment to Federal Income Taxes (Line 23 * 21%)					$ (25,526,257)
25	Percent of T&D Taxable Income to Total Taxable Income (D-14, page 2, Line xx, Col 3 / Col 1)					100.0000%
26	Federal Income Tax Benefit (i.e., revenue requirement remaining with PPL Utilities) (Line 24 x Line 25)					$ (25,526,257)
	ACT 40 Requirements					
27	Fifty percent of revenue requirement amount to support reliability or infrastructure capital investments (Line 26 * 50%)					$ (12,763,129)
28	Fifty percent of revenue requirement amount to support general corporate purposes (Line 26 * 50%)					(12,763,129)
29	One hunderd percent of revenue requirement addressed (Line 27 + Line 28 = Line 26)					$ (25,526,257)

PPL Electric Utilities Corporation
Consolidated Income Tax Adjustment
Year Ended December 31, 2024

		2022	2023	2024
1	**Taxable (Loss) - PPL Corporation**	$ (22,921,275)	$ 1,592,177	$ (33,116,190)
	Adjustment for Non-recurring Items:			
2	The Narragansett Electric Company Acquisition Adjustments	$ 10,000,000	$ -	$ -
3	Talen Litigation	$ -	$ -	$ 1,594,440
4	Total adjustments	$ 10,000,000	$ -	$ 1,594,440
5	**Adjusted Taxable Income/(Loss)**	$ (12,921,275)	$ 1,592,177	$ (31,521,750)
6	**Taxable (Loss) - PPL Distributed Energy Resources, LLC**	$ (7,373,270)	$ 72,341,522	$ -
	Adjustment for Non-recurring Items:			
7	Sale of Renewable Business	$ 7,373,270	$ (72,341,522)	$ -
8	Total adjustments	$ 7,373,270	$ (72,341,522)	$ -
9	**Adjusted Taxable Income/(Loss)**	$ -	$ -	$ -
10	**Taxable (Loss) - PPL Energy Funding Corporation**	$ (33,869,898)	$ (144,936,362)	$ (4,808,594)
	Adjustment for Non-recurring Items:			
11	Talen Litigation	$ -	$ 123,777,525	$ -
12	Total adjustments	$ -	$ 123,777,525	$ -
13	**Adjusted Taxable Income/(Loss)**	$ (33,869,898)	$ (21,158,837)	$ (4,808,594)
14	**Taxable (Loss) - PPL Energy Resources, LLC**	$ (18,095)	$ (171,364)	$ -
	Adjustment for Non-recurring Items:			
15	Sale of Renewable Business	$ 18,095	$ 171,364	$ -
16	Total adjustments	$ 18,095	$ 171,364	$ -
17	**Adjusted Taxable Income/(Loss)**	$ -	$ -	$ -
18	**Taxable (Loss) - PPL Renewables, LLC**	$ (1,844,332)	$ 39,140,231	$ -
	Adjustment for Non-recurring Items:			
19	Sale of Renewable Business	$ 1,844,332	$ (39,140,231)	$ -
20	Total adjustments	$ 1,844,332	$ (39,140,231)	$ -
21	**Adjusted Taxable Income/(Loss)**	$ -	$ -	$ -
22	**Taxable (Loss) - PPL Rhode Island Holdings, LLC**	$ (164,262,244)	$ (180,353,118)	$ (301,602,122)
	Adjustment for Non-recurring Items:			
23	The Narragansett Electric Company Acquisition Adjustments	$ 2,500,000	$ -	$ -
24	The Narragansett Electric Company Integration Adjustments	$ 109,142,125	$ 84,858,695	$ 177,360,819
25	Total adjustments	$ 111,642,125	$ 84,858,695	$ 177,360,819
26	**Adjusted Taxable Income/(Loss)**	$ (52,620,119)	$ (95,494,423)	$ (124,241,303)
27	**Taxable (Loss) - PPL Safari Holdings, LLC**	$ (41,730,443)	$ -	$ -
	Adjustment for Non-recurring Items:			
28	Sale of Renewable Business	$ 41,730,443	$ -	$ -
29	Total adjustments	$ 41,730,443	$ -	$ -
30	**Adjusted Taxable Income/(Loss)**	$ -	$ -	$ -
31	**Taxable (Loss) - The Narragansett Electric Company**	$ (37,674,563)	$ (268,467,100)	$ (174,701,024)
	Adjustment for Non-recurring Items:			
32	The Narragansett Electric Company Acquisition Adjustments	$ 92,191,935	$ -	$ -
33	The Narragansett Electric Company Integration Adjustments	$ 44,913,401	$ 69,805,880	$ 58,894,687
34	Total adjustments	$ 137,105,336	$ 69,805,880	$ 58,894,687
35	**Adjusted Taxable Income/(Loss)**	$ 99,430,773	$ (198,661,220)	$ (115,806,337)

PPL Electric Utilities Corporation
Consolidated Income Tax Adjustment
Year Ended December 31, 2024

		2022	2023	2024
36	**Taxable (Loss) - PPL Corporation Consolidated**	$ 584,513,761	$ 414,612,372	$ 394,408,262
37	**Less: Taxable Loss Companies on Page 1, Line 19**	$ 198,755,968	$ 491,842,532	$ 560,047,340
38	**Taxable Income Companies**	$ 783,269,729	$ 906,454,904	$ 954,455,602
	Adjustment for Non-recurring Items:			
39	Sale of Renewable Business	$ 50,966,140	$ (111,310,389)	$ -
40	The Narragansett Electric Company Acquisition Adjustments	$ 104,691,935	$ -	$ -
41	The Narragansett Electric Company Integration Adjustments	$ 154,055,526	$ 160,107,090	$ 236,255,506
42	Talen Litigation	$ -	$ 123,777,525	$ 1,594,440
43	PPL Electric Billing Issue	$ -	$ 34,116,969	$ 17,253,018
44	Total adjustments	$ 309,713,601	$ 206,691,194	$ 255,102,963
45	**Adjusted Taxable Income Companies on Page 1, Line 20**	$ 1,092,983,330	$ 1,113,146,099	$ 1,209,558,566
46	**Taxable (Loss) - PPL Electric Utilities Corporation**	$ 328,501,852	$ 381,426,274	$ 234,639,741
	Adjustment for Non-regulated LLC's disregarded for income tax purposes:			
47	CEP Commerce, LLC	$ 270	$ 273	$ 275
	Adjustment for Non-recurring items:			
48	PPL Electric Billing Issue	$ -	$ 34,116,969	$ 17,253,018
49	Total Adjustments	$ 270	$ 34,117,242	$ 17,253,293
50	**Adjusted Taxable Income/(Loss)**	$ 328,502,122	$ 415,543,515	$ 251,893,034

The One Big Beautiful Bill Act ("OBBBA" H.R. 1) Analysis
All references to sections are to sections of the Internal Revenue Code of 1986, as amended, unless otherwise indicated

OBBBA Section	OBBBA Section Title	Corresponding IRC Section	IRC Description	Company Analysis
Sec. 70301	Full expensing for certain business property.	168	Bonus depreciation	Regulated utilities are not permitted to take bonus depreciation. Section 168(k)(9)(A) provides "any property which is primarily used in a trade or business described in clause (iv) of Section 163(j)(7)(A)" does not constitute qualified property for the bonus depreciation deduction. Section 163(j)(7)(A)(iv) provides that the term "trade or business" does not include public utilities.
Sec. 70302	Full expensing of domestic research and experimental expenditures.	174A	Research and experimental expenditures	Under The OBBBA, research and experimentation costs can now be expensed immediately for tax years beginning after 12/31/2024. Additionally, taxpayers are required to reduce domestic research or experimental expenditures by the amount of any research credit under section 41; alternatively, the taxpayer may elect to claim a reduced research credit. The Company is evaluating the changes to the applicable statute, but does not anticipate material impacts.
Sec. 70303	Modification of limitation on business interest.	163	Business interest limitation	The Company is exempt from the limitation as a regulated business pursuant to section 163(j)(7)(A)(iv), as enacted by the Tax Cuts and Jobs Act of 2017.
Sec. 70304	Extension and enhancement of paid family and medical leave credit.	45S	FMLA tax credit	In general, the OBBBA makes the family and medical leave credit permanent and lowers the employee eligibility threshold from 12 months to 6 six months. The Company is evaluating the changes to the applicable statute, but does not anticipate material impacts.
Sec. 70305	Exceptions from limitations on deduction for business meals.	274	Business meals	This section amends the limitation on the deductibility of meals provided at the convenience of an employer under Code section 274(o). Code section 274(o) refers to the sell of food and beverages to customers and also providing meals to their employees (e.g., restaurants), and for fishing vessels. Not applicable to the Company.
Sec. 70306	Increased dollar limitations for expensing of certain depreciable business assets.	179	Expensing depreciable business assets	The Company exceeds the dollar limitations of section 179(b)(1) and therefore cannot avail itself of section 179. No impact to the Company.
Sec. 70307	Special depreciation allowance for qualified production property.	168	Depreciation on qualified production property	No impact to current Company practice. The Company does not qualify under this provision because, among other things, it does not produce agricultural production and chemical products under section 168(n)(2)(E).
Sec. 70308	Enhancement of advanced manufacturing investment credit.	48D	Advanced manufacturing investment credit	The OBBBA provides for a 35% credit for qualified investments in an advanced manufacturing facility that produces semiconductors or semiconductor manufacturing. Not applicable to the Company.
Sec. 70341	Coordination of business interest limitation with interest capitalization provisions.	163	Business interest limitation	The Company is exempt from business interest limitation as a regulated business pursuant to section 163(j)(7)(A)(iv), as enacted by the Tax Cuts and Jobs Act of 2017. The Company does follow the capitalized interest provisions under section 263A, among others, Accordingly, the Company is not impacted from this change.

OBBBA Section	OBBBA Section Title	Corresponding IRC Section	IRC Description	Company Analysis
Sec. 70342	Definition of adjusted taxable income for business interest limitation.	163	Business interest limitation	The Company is exempt from business interest limitation as a regulated business pursuant to section 163(j)(7)(A)(iv), as enacted by the Tax Cuts and Jobs Act of 2017. Additionally, the Company has no foreign operations. Accordingly, the Company is not impacted from this change.
Sec. 70501	Termination of previously-owned clean vehicle credit.	25E	Previously-owned clean vehicle credit	The OBBBA terminates the section 25E credit for vehicles acquired after September 30, 2025. No impact to the Company.
Sec. 70502	Termination of clean vehicle credit.	30D	Clean vehicle credit	The OBBBA terminates the section 30D credit for vehicles acquired after September 30, 2025. No impact to the Company.
Sec. 70503	Termination of qualified commercial clean vehicles credit.	45W	Qualified commercial clean vehicles credit	The OBBBA terminates the section 45W credit for vehicles acquired after September 30, 2025. No impact to the Company.
Sec. 70504	Termination of alternative fuel vehicle refueling property credit.	30C	Alternative fuel vehicle refueling property credit	The OBBBA terminates the section 30C credit for refueling equipment placed in service after June 30, 2026. No impact to the Company.
Sec. 70507	Termination of energy efficient commercial buildings deduction.	179D	Efficient commercial buildings deduction	The OBBBA terminates the section 179D deduction for certain energy efficient buildings beginning construction after June 30, 2026. No impact to the Company.
Sec. 70509	Termination of cost recovery for energy property.	168	Cost recovery for energy property	The OBBBA terminates the five-year accelerated depreciation for energy property where construction begins after December 31, 2024. However, energy property that qualifies for section 45Y PTC or section 48E ITC will continue to be treated as five-year MACRS property under section 168(a). The Company does not anticipate any impacts based on anticipated timelines of contemplated energy property construction.
Sec. 70510	Modifications of zero-emission nuclear power production credit.	45U	Nuclear power production credit	The OBBBA applies Foreign Entity of Concern (FEOC) restrictions for specified foreign entities for taxable years beginning after enactment. Not applicable as the Company does not qualify for 45U credits.
Sec. 70511	Termination of clean hydrogen production credit.	45V	Clean hydrogen production credit	The OBBBA terminates the section 45V credit for projects beginning construction after December 31, 2027. No impact to the Company.
Sec. 70512	Termination and restrictions on clean electricity production credit.	45Y	Clean electricity production credit	The OBBBA terminates the production tax credit for wind and solar facilities that are placed in service after December 31, 2027. The termination does not apply to solar and wind facilities where construction begins within 12 months after the date of enactment. The Company does not anticipate any impacts based on anticipated timelines of contemplated energy property construction.
Sec. 70513	Termination and restrictions on clean electricity investment credit.	48E	Clean electricity investment credit	The OBBBA terminates the investment tax credit for wind and solar facilities that are placed in service after December 31, 2027. The termination does not apply to solar and wind facilities where construction begins within 12 months after the date of enactment. The Company does not anticipate any impacts based on anticipated timelines of contemplated energy property construction.
Sec. 70514	Phase-out and restrictions on advanced manufacturing production credit.	45X	Advanced manufacturing production credit	The OBBBA terminates the 45X credit for certain components beginning in years 2028 and beyond. Not applicable as the Company does not qualify for 45X credits.
Sec. 70515	Restriction on the extension of advanced energy project credit program.	48C	Advanced energy project credit	The OBBBA restricts funds returned from forfeited section 48C credits from being later reissued. The Company does not qualify for 45C credits.

OBBBA Section	OBBBA Section Title	Corresponding IRC Section	IRC Description	Company Analysis
Sec. 70521	Extension and modification of clean fuel production credit.	45Z	Clean fuel production credit	This credit relates to certain transportation fuel. The OBBBA extends the period in which this credit can be claimed to December 31, 2029. The Company does not qualify for 45Z credits.
Sec. 70522	Restrictions on carbon oxide sequestration credit.	45Q	Carbon oxide sequestration credit	The OBBBA equalizes the credit values for carbon oxide disposed in secure geological storage and that which is used as a tertiary injectant and disallows the credit for any taxable year after the date of enactment in which the taxpayer is treated as either a specified foreign entity or foreign-influenced entity. The Company does not qualify for 45Q credits.
Sec. 70523	Intangible drilling and development costs taken into account for purposes of computing adjusted financial statement income.	56A	Intangible drilling costs	The OBBBA permits a deduction for purposes of the 15% corporate alternative minimum tax for intangible drilling and development costs for oil, gas, and geothermal wells for taxable years beginning after December 31, 2025. Not applicable to the Company.
Sec. 70524	Income from hydrogen storage, carbon capture, advanced nuclear, hydropower, and geothermal energy added to qualifying income of certain publicly traded partnerships.	7704	Definitions	Not applicable as the Company is not a publicly traded partnership.
Sec. 70603	Excessive employee remuneration from controlled group members and allocation of deductions.	162	Excessive employee remuneration	The OBBB adds an entity aggregation rule in section 162(m) and provides that remuneration paid to a specified covered employee by any member of the controlled group is aggregated to determine the loss of deduction for amounts over $1 million. No impact to current Company practice.
Sec. 70426	1-percent floor on deduction of charitable contributions made by corporations.	170	Charitable contribution deduction	Beginning in 2026, the OBBBA provides that corporate taxpayers may claim a charitable deduction for any taxable year only to the extent that the aggregate of total contributions exceeds 1% of the corporation's taxable income and does not exceed 10% of its taxable income. The Company is evaluating the impact of the statute, but does not anticipate material impacts.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Docket No. R-2025-3057164

PPL Electric Utilities Corporation

Statement No. 13

Direct Testimony of Katelyn Arnold

Topics: **Cash Working Capital**
Roll-in of Riders
CER Elimination
Uncollectible Accounts, Purchase of Receivables Program, and Merchant Function Charge
Storm Damage Expense Rider
Revenue Forecast

Dated: September 30, 2025

I. INTRODUCTION

Q. Please state your name and business address.

A. My name is Katelyn Arnold. My business address is 827 Hausman Road, Allentown, PA 18104-9392.

Q. By whom are you employed and in what capacity?

A. I am employed by PPL Services Corporation ("PPL Services"), a subsidiary of PPL Corporation and an affiliate of PPL Electric Utilities Corporation ("PPL Electric" or the "Company") as Manager – Regulatory Strategy & Rates.

Q. What are your responsibilities as Manager – Regulatory Strategy & Rates?

A. I am responsible for developing, monitoring, and communicating PPL Electric's positions on and responses to regulatory, legislative, and public policy issues at both the state and federal level; primarily, in the areas of industry structure, retail and wholesale markets, rates, customer impacts, and other related topics. I am also responsible for the development and execution of rate-related revenue analysis and reporting, including auditing controls and requirements, rate compliance, rate case success for the regulated electric business, and ad-hoc analysis to optimize business planning.

Q. What is your educational background?

A. I graduated from Lafayette College in 2017 with a Bachelor of Arts in Government & Law and Economics. I graduated from Lehigh University in 2022 with a Master of Business Administration degree.

Q. Please describe your professional experience.

A. In 2018, I was employed by PPL Services as a Financial Analyst in the Treasury Department where I supported the Accounts Payable function. In 2020, I moved into a Regulatory Policy Specialist role in PPL Services. In 2022, I was promoted to Sr. Regulatory Policy Specialist. In 2023, I assumed the role of Manager – Regulatory Strategy & Compliance, and in July 2024 my role was expanded to Manager – Regulatory Strategy & Rates, which is my current role.

Q. What is the purpose of your testimony?

A. I will testify about the Company's cash working capital, the roll-in of various riders into base rates (including the revenues and plant associated with the Distribution System Improvement Charge ("DSIC")), the elimination of the Company's Competitive Enhancement Rider ("CER"), the Company's uncollectible accounts (including their relation to the Purchase of Receivables ("POR") Program and Merchant Function Charge ("MFC")), the Company's modifications to its Storm Damage Expense Rider ("SDER"), and the Company's revenue forecast.

Q. Are you sponsoring any exhibits in this proceeding?

A. Yes, I am sponsoring Exhibit KEA 1.

Q. Are you sponsoring any schedules in this proceeding?

A. Yes. I am sponsoring filing requirements I-A-3, and II-B-4 and co-sponsoring filing requirement IV-B. I am also sponsoring or co-sponsoring Schedules C-4, D-8, D-9, and D-13 in Exhibits Historic 1, Future 1, and Fully Projected Future 1.

II. CASH WORKING CAPITAL

Q. Schedules C-4 of Exhibits Historic 1, Future 1, and Fully Projected Future 1 show details of PPL Electric's claim for cash working capital. Would you explain these schedules?

A. Schedules C-4 of Exhibits Historic 1, Future 1 and Fully Projected Future 1 are computations of PPL Electric's average investment in cash working capital. There are four major components in this computation: cash working capital required for operation and maintenance ("O&M") expenses; funds invested in prepayments; an adjustment for accrued taxes and an adjustment for interest payments.

Q. Please explain these four components.

A. Page 2 of Schedules C-4 shows the first component, which is cash working capital required for O&M expenses. There are two components to this calculation: revenue lag and expense lag. With respect to the revenue lag, PPL Electric bills its customers once every month, but the due date for payment varies between 15 and 30 days from the billing date. On this basis, there is a considerable span of days between the time electricity is furnished to a customer and the time the customer pays for such electricity. This span commonly called the revenue lag, averages 36 days for customers with 15-

day due dates, 59 days for customers with 20-day due dates, and 42 days for customers with 30-day due dates. The average lag in receipt of revenues from all these sources is 47.8 days on a dollar-weighted basis.

With respect to the expense lag, in most instances, PPL Electric must pay its bills for payroll, employee benefits, support group costs and other operating expenses prior to the time it is able to collect the amount due for the service giving rise to these expenses. PPL Electric has examined its records to determine, as to the major categories of expense, the average span of days between the time an expense is incurred and the time it is paid. On page 2 of Schedule C-4 of Exhibit Historic 1, the average span of days for major categories of expense is shown. This lag ranges from 12 days to 67 days for various types of costs. The overall average for all expenses is 42.6 days. Thus, the average net lag between the payment of expenses and the receipt of the related revenue is 5.2 days (47.8 days less 42.6 days). To cover its expenses and continue to conduct its business during this time lag, PPL Electric must provide a cash investment, which is the first component of its cash working capital claim.

The second major component of cash working capital is funds invested in prepayments, which the Company uses to pay for an expense in advance. This amount is shown on page 3 of Schedules C-4. In conducting its electric business, PPL Electric must pay certain costs prior to the time such items are properly charged to expense for accounting and ratemaking purposes. For example, the Commission's annual assessment must be prepaid but is expensed monthly over the period to which it applies. Costs of this nature initially are recorded in FERC Account 165, Prepayments, and subsequently are charged to expense from this account.

The claim for prepaid expenses is based on the 13-month average of the various items included in Account 165. This amount has been claimed as a component of cash working capital for each of the three test years presented in this proceeding.

The third component of cash working capital is the adjustment for accrued taxes, which is shown in detail on page 4 of Schedules C-4. In the case of federal income tax, estimated payments must be made on April, June, September and December 15 of the year to which the tax is applicable. Because revenues are collected from customers monthly, these funds are temporarily available for payment of other costs. PPL Electric's computations indicate that funds available from these taxes average 11.62% of the federal income tax due.

Presently, the Pennsylvania income tax has the following pattern of required estimated payments:

- 25% on March 15
- 25% on June 15
- 25% on September 15
- 25% on December 15

PPL Electric's computations indicate that the funds available from these taxes average 9.54% of the Pennsylvania income tax due.

The Pennsylvania gross receipts tax must be paid on an estimated basis by March 15 of the year to which the tax is applicable. Because revenue is collected from customers monthly, funds must be provided by investors to pay these taxes prior to the collection of revenues from customers. PPL Electric's computations indicate that the funds which must be provided for this purpose average 27.96% of the tax due. This

adjustment is based on the total Pennsylvania gross receipts tax which must be paid at the 59 mill rate actually in effect.

The Pennsylvania Public Utility Realty Tax must be paid on an estimated basis by May 1 of the year to which the tax is applicable. Because revenue is collected from customers monthly, funds must be provided by investors to pay these taxes prior to the collection from customers. PPL Electric's computations indicate that funds which must be provided for this purpose average 7.13% of the tax due.

The net effect of these various accrued tax adjustments is an increase in PPL Electric's cash working capital requirement as shown on page 4 of Schedules C-4.

The fourth component of cash working capital is an offsetting adjustment for the funds applicable to debt interest payments, which are shown on page 5 of Schedules C-4. PPL Electric "theoretically" has unrestricted use of these funds from the time of the monthly collection from customers until the payment of interest and on a semi-annual or quarterly basis. PPL Electric does not agree with the appropriateness of such a reduction to the rate base. However, this adjustment has been made to facilitate the adjudication of this filing and in compliance with the Commission's current policy.

Q. Has PPL Electric changed the methodology that it uses to calculate its claim for cash working capital from that used in previous base rate proceedings?

A. No. PPL Electric has not changed the methodology used to calculate its claim for cash working capital. My understanding is that the Company has used the same methodology for more than 30 years, and this Commission has approved the Company's use of this methodology in numerous base rate proceedings during that period.

III. ROLL-IN OF RIDER MECHANISMS

Q. What rider mechanisms does the Company propose rolling into base rates?

A. First, the Company proposes to roll in the Tax Cuts and Jobs Act ("TCJA") Rider into base rates. The new corporate tax rate established by the TCJA is reflected in the Company's base rates in this proceeding, so the rider mechanism is no longer necessary. Additionally, the Company is eliminating the TCJA Rider from its Retail Tariff as of June 30, 2026, as required by the Commission's Orders dated May 17, 2018, at Docket No. R 2018 3000775, and at Docket M-2018-2641242.

Second, regarding the Smart Meter Rider – Phase 2 ("SMR-2"), PPL Electric proposes to roll the remaining net rate base for the Smart Meter Pilot Programs into base rates, and to close the existing SMR tariff provisions effective June 30, 2026. The Company's smart meter technology essentially has been fully deployed, so the rider mechanisms are no longer necessary.

Third, the Company has included the costs of its existing DSIC in base rates, as required by Section 1358(b) of the Public Utility Code. The Company is proposing to include the capital investment, associated depreciation, and tax effects for the DSIC in base rates. The Company will then reset its DSIC to 0% upon implementation of new base rates. As a result, the cap for the DSIC will be reset to 5% instead of the 7.5% approved by the Commission in PPL Electric's recent DSIC Cap Waiver proceeding.[1]

[1] *See Petition of PPL Electric Utilities Corp. for a Waiver of the Distribution System Improvement Charge Cap of 5% of Billed Revenues*, Docket Nos. P-2024-3048732, et al. (Order entered Feb. 28, 2025).

IV. ELIMINATION OF COMPETITIVE ENHANCEMENT RIDER (CER)

Q. What is the CER?

A. The CER was designed to recover the annual costs associated with the Company's competitive retail electricity market enhancement initiatives and related consumer education programs. Currently, the CER charge is negative $0.01 through December 31, 2025.

Q. What is the Company proposing with respect to the CER?

A. PPL Electric proposes to eliminate the CER from its tariff. Currently, the only costs being recovered through the CER are the costs associated with administering the Eligible Customer List ("ECL"), which will now be updated every five years.[2] As such, PPL Electric proposes to eliminate the CER and, instead, to rely on base rates to recover the costs of administering the ECL. As seen in Schedules D-8 in Exhibits Historic 1, Future 1, and Fully Projected Future 1, the Company has made pro forma adjustments to reflect the recovery of these costs through base rates as opposed to the CER, which is being eliminated.

V. UNCOLLECTIBLE ACCOUNTS, PURCHASE OF RECEIVABLES (POR) PROGRAM, AND MERCHANT FUNCTION CHARGE (MFC)

Q. What is the Company's claim for customer uncollectible accounts expense in this proceeding?

A. The Company's claim for uncollectible expense for the fully projected future test year

[2] *See Guidelines for Eligible Customer Lists*, Docket No. M-2010-2183412 (Order entered Mar. 13, 2025).

("FPFTY") is $38 million. The claimed bad debt write-off percentage is 1.80% for residential customers, 0.26% for small commercial & industrial ("C&I") customers and 0.30% for large C&I customers. The calculation of the Company's claim is set forth in Exhibit KEA 1, which is attached to this testimony.

Q. Is PPL Electric proposing to use these percentages for the MFC and POR Program?

A. Yes. The Company proposes to use a value of 1.80% for residential POR and MFC and a value of 0.26% for small commercial & industrial POR and MFC.

VI. STORM DAMAGE EXPENSE RIDER (SDER)

Q. Please describe the Company's SDER.

A. Approved as part of the Company's 2015 Rate Case, the SDER is a Section 1307(a) automatic adjustment rider that recovers only actual, experienced storm damage operating and maintenance expenses. These storm damage expenses are appropriate for recovery through this surcharge mechanism because they are easily identifiable and outside the Company's control. The SDER currently applies only to expenses from Commission-reportable storms.[3] The storm damage expenses from non-reportable storms are currently recovered through base rates and not through the SDER. The SDER recognizes that base rates currently provide for recovery of $14.7 million annually in storm damage expenses for reportable storms. The SDER recovers from

[3] Reportable storms are those that cause unscheduled service interruptions in a single event to 2,500 or more customers for six or more consecutive hours; non-reportable storms are all other storms. See 52 Pa. Code § 67.1(b).

customers or refund to customers, as appropriate, only applicable expenses from reportable storms that are less than or greater than $14.7 million recovered annually through base rates. Of note, there is another $5.3 million in current base distribution rates associated with the amortization of extraordinary storms as approved in the Company's 2015 distribution base rate case. Combined, this reflects the approximately $20 million used as the baseline in the annual SDER rate filing.

Storm damage expenses consist of those expenses incurred to remediate storm damage to the Company's distribution system, including, but not limited to: (1) overtime and premium wages of the Company's employees; (2) costs of outside service providers and mutual aid utilities employed by the Company during storm restoration efforts; (3) materials and supplies used to repair or replace damaged property; (4) overhead charges associated with storm damage expenses, including wages and benefits; (5) transportation; (6) purchasing and stores charges; (7) expediting expenses for the reasonable and extra costs to make temporary repairs and to expedite the permanent repair or replacement of damaged property; and (8) expenses of providing services to customers whose electric service has been interrupted. Straight-time wages and benefits and expenses reimbursed by others are excluded from the SDER, and capitalized costs of repairing or replacing damaged facilities are excluded from the SDER.

Under the Commission-approved SDER, expenses from major storm events are recovered over three years, with interest. The purpose of this extended recovery period is to improve the stability of rates under the SDER. Otherwise, the SDER could vary, from time to time, especially following major storm events such as the Winter Storms

Riley & Quinn in March 2018.

Furthermore, the SDER caps the total annual revenues collected under the SDER at an amount not to exceed 3% of the total intrastate operating revenues billed to customers, exclusive of amounts recovered under the State Tax Adjustment Surcharge ("STAS").

Q. Is the Company proposing to change the amount of storm damage expenses associated with Commission-reportable storms that are recovered through base rates?

A. Yes. The current, assumed level of $14.7 million in storm damage expenses for reportable storms is insufficient based on the Company's experience. As explained by PPL Electric witness Lookup (PPL Electric St. No. 16), the Company has been experiencing Commission-reportable storms in greater number, severity, and frequency. As a result, an increasing amount of storm damage expenses associated with Commission-reportable storms have been recovered through the SDER. Because the SDER is capped at 3% of total intrastate annual revenues, PPL Electric must update the base level of storm damage expenses associated with Commission-reportable storms, or else the Company may lose the opportunity to timely recover those associated costs. As such, PPL Electric proposes to increase the amount of storm damage expenses in its base distribution rates associated with Commission-reportable storms to $32 million.

Q. Has the Company exceeded this 3% cap in the past?

A. Yes, the Company exceeded the 3% cap in 2024 for the 2025 rate period. As a result,

PPL Electric recorded a regulatory asset totaling $11,336,169.67 for SDER-eligible storm costs in excess of the cap and is requesting recovery of that regulatory asset in this proceeding as shown in Schedules D-9 of Exhibits Historic 1, Future 1, and Fully Projected Future 1. PPL Electric is on track to exceed the 3% cap again in 2025 for the 2026 rate period.

Q. Are there any other proposals that the Company is making with respect to the SDER?

A. Yes. PPL Electric proposes to update the SDER such that the mechanism recovers from customers or refund to customers, as appropriate, only applicable expenses from non-reportable storms that are less than or greater than $10.5 million that are proposed to be recovered annually through base rates. In that respect, the Company would treat the storm damage expenses associated with non-reportable storms similarly to the costs associated with reportable storms.

Q. Why is this proposal reasonable and appropriate?

A. There are several reasons to support the Company's request. First, as explained by PPL Electric witness Lookup (PPL Electric St. No. 16), the Company is experiencing non-reportable storms in greater number, severity, and frequency. Although that experience and data supports an increased amount of storm damage expenses that should be recovered through base rates, they also justify a treatment of non-reportable storms similar to reportable storms. Critically, these storm damage expenses are easily identifiable and outside the Company's control, as are the expenses associated with

reportable storms.

Q. Why does the Company believe that this approach for the recovery of storm damage expenses associated with reportable storms and non-reportable storms is fair?

A. An important benefit of the SDER is that it is designed to recover only actual incurred storm costs, and if the Company has not incurred the level of storm costs recovered through base rates, it will refund, with interest, the difference to customers in a subsequent period. The amount of eligible storm damage expenses recovered through the SDER is based on actual storm damage expenses incurred through the 12-month period of December 1 through November 30 prior to the SDER effective date. Stated otherwise, the SDER only recovers actual storm damage expense experienced during the prior year. The SDER will recover from customers or refund to customers, as appropriate, only applicable expenses from reportable and non-reportable storms that are less than or greater than eligible storm damage expenses for reportable and non-reportable recovered annually through base rates. Moreover, by enabling the Company to timely recover these costs, PPL Electric can help reduce the risk of regulatory lag and potentially provide opportunities for the Company to optimize its expense budget. Thus, customers will not be subjected to overpaying for storm costs that are included in base rates between rate cases, nor will the Company suffer financially at the hand of storms for which recovery may be delayed for years until its next base rate case.

Q. How does the Company propose to handle the remaining amortization of major storms?

A. Under the Commission-approved SDER, expenses from major storm events are recovered over three years, with interest. recent examples, the event that occurred on February 13, 2024, qualified as an extraordinary storm. The Company deferred a total of $12,366,189 for this event and began amortizing the expense in 2025. As of June 30, 2025, there is an unamortized remaining balance of $10,272,167 from that event. Additionally, an event on November 21, 2024, qualified as extraordinary and resulted in expenses of $20,613,295 plus a remaining accrual amount of $87,052 for a total of $20,700,346. The Company will begin amortizing that balance over three years in the 2026 rate period.

VII. REVENUE FORECAST

Q. Please describe the development of the Company's revenue forecast.

A. The revenue forecast is developed by applying the forecast of sales (kWh or KW) by rate class and the forecasted number of customers by rate class as provided by the Sales Analysis and Forecasting group and described in the testimony of Mr. Schram (PPL Electric St. No. 4) to the applicable rate schedule pricing as set forth in PPL Electric's currently-effective Tariff-Electric PA P.U.C. No. 201 for base distribution rates and to forecasted rates for distribution riders. Schedule D-3, page 2 in Exhibit Fully Projected Future 1 provides a breakdown of the revenue forecast for the FPFTY. Schedule D-3, page 3 in Exhibit Fully Projected Future 1 illustrates the impact of that Company's proposed rate increase on the revenue forecast for the FPFTY.

Q. Do you believe the forecasted billing determinants for the forecasted test period are a reasonable basis for developing revenue forecasts?

It is my understanding that, based on Mr. Schram's testimony, the sales and load forecasts consider several factors which influence revenues, including number of customers, customer demand, and customer kWh. Given that, I believe it is appropriate to use the billing determinants as a basis for forecasting revenue.

Q. Does this conclude your direct testimony?

A. Yes, it does.

PPL Electric Utilities Corporation

Projected Write-offs by Customer Class

		Projected 7/1/26 to 6/30/27
Residential		
Total Residential Write-Offs	$	49,527,936
Total Estimated Residential Revenue[(1)]	$	2,749,464,155
As a % of Residential Revenue		1.80%
Small C&I		
Total Small C&I Write-Offs	$	3,921,487
Total Estimated Small C&I Revenue[(1)]	$	1,481,346,315
As a % of Small C&I Revenue		0.26%
Large C&I		
Total Large C&I Write-Offs	$	771,063
Total Estimated Large C&I Revenue[(1)]	$	260,659,058
As a % of Large C&I Revenue		0.30%
Total Write-offs	$	54,220,485

(1) Estimated revenue includes forecasted non-shopping base distribution and rider revenue and a forecast of estimated of shopping dollars received.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Docket No. R-2025-3057164

PPL Electric Utilities Corporation

Statement No. 14

Direct Testimony of Gregory Olsen

Topics: **Retail Tariff**
Street Light Replacement Program

Dated: September 30, 2025

I. INTRODUCTION

Q. Please state your name and business address.

A. My name is Gregory Olsen, and my business address is 827 Hausman Rd. Allentown, PA 18101

Q. By whom are you employed and in what capacity?

A. I am employed by PPL Electric Utilities Corporation ("PPL Electric"), a subsidiary of PPL Corporation ("PPL Corp."), as Supervisor – Distribution Interconnections & Tariff Rules.

Q. What are your responsibilities as Supervisor – Distribution Interconnections & Tariff Rules?

A. I am responsible for establishing PPL Electric's interconnection procedures, enforcing interconnection standards, interpreting and applying PPL Electric's Tariff and Rules for Electric Metering and Service Installations ("REMSI") for internal and external stakeholders, run load flow analysis for all new large Distributed Energy Resources (DER) customers and accurately scope the necessary system reinforcements to maintain PPL Electric's high standard of reliability and safety. This role also includes frequent customer interactions to help facilitate their projects from the start of the interconnection process, through completion when they are granted Permission to Operate ("PTO").

Q. What is your educational background?

A. I have a bachelor's degree in electrical engineering with a focus on power systems from Drexel University.

Q. Please describe your professional experience.

A. I have 2 years of experience as a Transmission Protection and Control Engineer where I gained technical experience developing protection relay settings for capacitor banks, 69 kV facilities, as well as compliance experience leading PPL Electric through a Reliability First audit. From that position I went to Operations where I became a PPL Electric Transmission System Operator for roughly 2 years where I monitored the Bulk Electric System ("BES") stability. My current role is in Distribution Planning described above.

Q. What is the purpose of your testimony?

A. My testimony supports the Company's proposed changes to its retail tariff, which are presented in Original Electric Pa. P.UC. No. 202 (PPL Electric Exhibit GEO-1) and are summarized in a prepared list of tariff changes (PPL Electric Exhibit GEO-2). I also will testify about the Company's Street Light Replacement Program.

Q. Are you sponsoring any exhibits in this proceeding?

A. Yes, I am sponsoring PPL Electric Exhibits GEO-1 and GEO-2 and co-sponsoring Exhibit Regs. IV-B.

II. TARIFF CHANGES

Q. You stated that you are sponsoring PPL Electric Exhibit GEO-1. Please briefly describe this document.

A. This exhibit contains a copy of Original Electric Pa. P.U.C. No. 202, which is the updated and proposed version of PPL Electric's retail tariff. Two copies of the retail tariff are presented in PPL Electric Exhibit GEO-1: (1) a clean version; and (2) a blackline version, showing all the changes to the Company's current tariff as of September 2025, in blackline. This retail tariff sets forth the rules and regulations, rate schedules, and rates applicable to services to end-use customers in the Company's service territory. Additionally, PPL Electric Exhibit GEO-2 provides a list of proposed revisions to PPL Electric's current retail tariff.

Q. Could you please describe some of the more substantial changes to the retail tariff?

A. Many of the changes involve grammatical and typographical edits, pagination changes, and other minor revisions. Some of the more substantial changes are as follows:

- Adding a Tariff Definitions section to the retail tariff;
- Changing Basic Utility Supply Service ("BUSS") terminology to default service;
- Updating Rule 3 governing line and service extensions;
- Updating Rule 5's submetering provisions;
- Revising Rule 6's standby service provisions and eliminating Rule 6A;
- Eliminating the automatic meter reading fee under Rule 8; Removing the separate water heating service provisions in Rate Schedule RS;

- Eliminating the Residential Thermal Storage (Rate Schedule RTS) and moving customers to residential Rate Schedule RS.
- Removing the separate space conditioning and water heating service (Rate Schedule GH-2) provisions in Rate Schedule GS-1.
- Updating Rate Schedule LP-5 regarding data centers and customer-owned substations;
- Updating Generation Supply Charge – 1 ("GSC-1") and Generation Supply Charge – 2 ("GSC-2") to reflect the Company's proposal to assign customers to those rates based on their "maximum registered peak load," as defined in the proposed tariff;
- Adding the Electric Vehicle ("EV") Time-of-Use ("TOU") Charging Rebate Program Rider;
- Updating PPL Electric's Net Metering for Renewable Customer-Generators Rider to include a deposit requirement for interconnection applications where the proposed generation facility requires the Company to undertake distribution system upgrades;
- Eliminating Smart Meter Rider – Phase 1 ("SMR 1") and Smart Meter Rider – Phase 2 ("SMR 2");
- Eliminating the Tax Cuts and Jobs Act Temporary Surcharge ("TCJA Rider");
- Eliminating the Competitive Enhancement Rider ("CER");
- Rolling-in and setting to 0% the Distribution System Improvement Charge ("DSIC"); and
- Updating the Storm Damage Expense Rider ("SDER").

Q. Please explain why the Company is adding a Definitions section to its retail tariff.

A. Currently, the definitions of various terms used in the Company's retail tariff are scattered throughout the entire tariff, which can make it difficult to find terms' definitions easily and, by extension, read and understand the tariff. By housing all the definitions in a Definitions section at the beginning of the retail tariff, PPL Electric believes that its tariff will become more reader-friendly and accessible to its customers and interested stakeholders. Additionally, through the process of compiling all those definitions into a single Definitions section of the retail tariff, PPL Electric has updated the definitions of certain terms or added definitions for other terms that were previously undefined. Those updates and additions are intended to provide more clarity and to reflect the other tariff changes being proposed by the Company in this proceeding.

Q. Why is the Company changing the BUSS terminology to "default service"?

A. From the Company's perspective, "default service" is a more commonly used term and is more easily understood by customers and interested stakeholders. Also, as currently defined in the Company's retail tariff, BUSS only includes the provision of "electric capacity and energy" to customers and does not include the provision of transmission service. Because the generation and transmission service components are included in default service rates, PPL Electric has updated the tariff to also include "transmission" in addition to "capacity" and "energy" when referencing the default service provided to default service customers.

Q. Please explain the Company's changes to the tariff rules governing line and service extensions.

A. Currently, the retail tariff provisions governing line and service extensions are spread across multiple rules, including Rule 4 that governs the supply of service to customers. In the proposed retail tariff, PPL Electric has reorganized those provisions and housed them in Rule 3, so that all the relevant line and service extension provisions (with the exception of the line and service extension provisions for Rate Schedule LP-5 customers that I describe later in my testimony) are contained within a single retail tariff rule. PPL Electric believes that this will make the tariff easier to read and apply.

In addition, PPL Electric proposes to require that customers record any line extension guarantees ("LEGs") with their deed. Right now, the Company believes that its current tariff and contract language can be improved to guarantee that, upon transfer or sale of property upon which a LEG exists, responsibility for the LEG will pass on to other entities, tenants, and future property owners. However, the Company's proposed change will ensure that the contractual obligations under a LEG will be fulfilled by future entities, tenants, or property owners upon transfer or sale of property upon which a LEG exists. This is important considering that the Company's current LEG contracts in total amount to $3,569,394.80, which amounts to $781,889.49 per year.

Q. What changes are being made to Rule 5's submetering provisions?

A. In the new Rule 5(F), PPL Electric has, among other things, adjusted the provisions about submetering, such that the Company can, at its discretion, permit submetering of electric service at both existing and new service locations when: (1) it is impractical for

the Company to separately bill each tenant; (2) each tenant has control of the majority of their electric energy use; (3) the customer is part of a U.S. Department of Housing and Urban Development ("HUD") funding Housing, Assisted Living, Nursing Home Care Rehabilitation facilities, Student Housing – higher education – Federal/State/County/City/Municipal/Public Housing; and/or (4) at the Company's discretion, it is not beneficial for the Company to meter individual tenants. The latter two conditions are not a part of the Company's retail tariff and would provide more flexibility for the Company to permit submetering when it is reasonable and appropriate.

Q. Please describe the changes being made to Rule 6 regarding standby service.

A. The current retail tariff contains Rule 6 (Auxiliary Service for Non-Qualifying Facilities) and Rule 6A (Standby Service for Qualifying Facilities). As explained in the direct testimony of PPL Electric witness Steven Wishart (PPL Electric St. No. 8), the Company is proposing changes to Rule 6 that would govern standby service and is proposing to eliminate Rule 6A as a result. For additional details and support for these changes, please see Mr. Wishart's direct testimony.

Q. What is the Company proposing with respect to its automatic meter reading fee?

A. Currently, Rule 8(G) of the retail tariff prescribes that "[u]pon customer request, the Company will secure an in-person meter reading to confirm the accuracy of an automatic meter reading when a customer disconnects service, or a new service request is received." The fee for that meter test is $30. PPL Electric is proposing to eliminate that fee. Instead, all meter testing fees will be governed by Rule 8(D), which should

simplify the tariff and avoid customer confusion over the applicable meter testing fee. PPL Electric has installed smart meters across its entire service territory which now enables the Company to read accurate metering information via the Advanced Metering Infrastructure ("AMI") network, eliminating the need for field personnel to visit customer locations to verify accuracy of metering information.

Q. Please explain the Company's proposed changes to the separate water heater service provisions in Rate Schedule RS.

A. PPL Electric proposes to remove those provisions from Rate Schedule RS. Under the current tariff, it states that separate water heating service is available only to service locations served under this application on and continuously after April 26, 1985. PPL Electric currently has approximately 100 customers who are receiving this service. However, it has become administratively burdensome to maintain this separate rate for that number of customers. Therefore, the Company proposes to remove the separate water heating service provisions and convert those customers' separate accounts to regular Rate Schedule RS.

Q. Please explain the Company's proposed changes to Rate Schedule RTS.

A. PPL Electric proposes to eliminate Rate Schedule RTS. Under the current tariff, it states that rate schedule is available only to service locations served under this application prior to December 31, 1995, and thereafter for the life of the existing thermal storage units. PPL Electric currently has approximately 11,500 customers who are receiving this service. However, it has become administratively burdensome to maintain this

separate rate for that number of customers. Therefore, the Company proposes to eliminate Rate Schedule RTS and convert those customers' separate accounts to regular Rate Schedule RS.

Q. Please explain the Company's proposed changes to the separate meter general space heating service provisions in Rate Schedule GH-2.

A. PPL Electric proposes to remove Rate Schedule GH-2. Under the current tariff, it states that separate meter space heating service is available only to service locations served under this application on and continuously after August 21, 1972. PPL Electric currently has approximately 1,508 customers who are receiving this service. However, it has become administratively burdensome to maintain this separate rate for that number of customers. Therefore, the Company proposes to remove the GH-2 rate schedule and transfer those customers to the regular Rate Schedule GS-1.

Q. Could you please describe the updates to Rate Schedule LP-5 concerning data centers and customer-owned substations?

A. As explained in PPL Electric witness Joseph Lookup's direct testimony (PPL Electric St. No. 16), the Company is making certain proposals to address large load interconnections, primarily with data centers, in the Company's service territory. In particular, the Company is proposing specific line and service extension provisions applicable to Rate Schedule LP-5 customers. Among other things, those provisions require the customer to pay all costs associated with line and service extensions to receive service under Rate Schedule LP-5, except when, in the Company's discretion,

it is determined that certain line extensions will provide reliability or other benefits to the Company's transmission system. Also, the provisions set forth the requirements for the revenue guarantee agreements that such customers must enter into with PPL Electric. Lastly, PPL Electric proposes adding a provision that would enable a Rate Schedule LP-5 customer to request, subject to the Company's discretion, that the Company construct, own, operate, and/or maintain the customer's transformation equipment. Collectively, these provisions would provide clear rules for data centers and other large load interconnections that would receive service under Rate Schedule LP-5, as explained in more detail in Mr. Lookup's direct testimony.

Q. Please explain the Company's proposed changes to GSC-1 and GSC-2 regarding the assignment of customers based on their maximum registered peak load.

A. The proposed changes to GSC-1 and GSC-2 are necessary to implement the Company's proposal to assign customers to GSC-1 or GSC-2 based on their maximum registered peak load. The justifications and details for that proposal can be found in the direct testimony of PPL Electric witness Castanaro (PPL Electric St. No. 15).

Q. Would you please describe the EV TOU Charging Rebate Program being incorporated into the tariff?

A. The Company is incorporating the terms and conditions of its proposed EV TOU Charging Rebate Program into its proposed retail tariff. For details about the EV TOU Charging Rebate Program proposal, please see the direct testimony of PPL Electric witness James Conrad (PPL Electric St. No. 20).

Q. Could you please explain the deposit requirement for certain interconnection applications that the Company proposes to incorporate into the tariff?

A. Yes. In the Net Metering for Customer-Generators Rider, the Company proposes to incorporate an explicit deposit requirement for interconnection applications, where the applicant's generation facility would require the Company to upgrade its distribution system in order to interconnect the facility safely and reliably. Specifically, the proposed tariff provides in pertinent part:

> When the Company determines that upgrades to its distribution system are necessary to interconnect the interconnection applicant's generating facility safely and reliably, the interconnection applicant shall be required to pay a deposit in advance of the Company performing final engineering and construction of the system upgrades. The amount of the deposit is in the discretion of the Company to ensure timely payment of system upgrade costs. If the interconnection applicant fails to pay such deposit within the communicated timeline of the Company's demand for the deposit, the interconnection applicant's project shall be removed from the interconnection queue. Unspent portions of the deposit shall be fully refundable. The interconnection applicant must pay all actual costs of the system upgrades, including but not limited to, the cost of studies, engineering, administering the interconnection request, equipment, and construction costs prior to interconnection of the interconnection applicant's generating facility. Any deposits paid by the interconnecting applicant will be credited towards what is owed to the Company in connection with the interconnection request.

(PPL Electric Exhibit GEO-1.)

Q. Why is the Company making this proposal?

A. There are two principal reasons. First, PPL Electric seeks to encourage "shovel-ready" projects in the interconnection queue, that is, projects that are ready to move forward, through its deposit requirement. In recent years, there has been an influx of Level 3

interconnection applications, which require the Company to study the distribution system upgrades necessary to interconnect the applicants' generation facilities in a safe and reliable manner. Many of these projects, however, do not move forward for a variety of reasons, such as the project's loss of financing or its failure to obtain necessary permits and approvals. The cancellation of projects has had downstream, negative effects on other applications in the queue, as those projects were waiting on that application's project to move forward and may have been relying on that application's project to cover the distribution system upgrade costs.

Second, the deposit requirement is designed to protect ratepayers from bearing unnecessary costs associated with these projects. Specifically, the Company incurs costs under its Interconnection Impact Review ("IIR") process, where PPL Electric: (1) models the impact of the proposed project on the Company's distribution system based on the project's design, location, and size; (2) performs several load flow and power flow analyses to determine how the distribution system will respond to the project's interconnection; and (3) based on the results of those analyses, accurately scopes the system reinforcements, if any, that are required to safely and reliability interconnect the project. Without a deposit, interconnection applicants would not have to pay toward those costs and, instead, those costs get passed onto ratepayers. Given that these costs are being incurred for these specific projects, PPL Electric believes that the interconnection applicants should pay toward them.

Q. What changes are being proposed to SMR 1 and SMR 2?

A. The proposed retail tariff eliminates SMR 1 and SMR 2 for the reasons provided in the direct testimony of PPL Electric witness Katelyn Arnold (PPL Electric St. No. 13).

Q. What changes are being proposed to the TCJA Temporary Surcharge?

A. The Company is proposing to eliminate the TCJA Temporary Surcharge Rider ("TCJA Rider"). The TCJA Rider was implemented to reflect tax savings realized by PPL Electric arising out of the Tax Cuts and Jobs Act between base rate cases. With this rate case, the Company is incorporating current tax rates into its revenue requirement, so the TCJA Rider is no longer needed.

Q. What modifications are being made to the CER?

A. As explained in PPL Electric witness Arnold's direct testimony (PPL Electric St. No. 13), the Company is proposing to eliminate the CER. The elimination of the CER is reflected in the proposed retail tariff. For details on the proposed elimination of the CER, please see Ms. Arnold's direct testimony.

III. STREET LIGHT REPLACEMENT PROGRAM

Q. Please describe the Company's proposed Street Light Replacement Program.

A. The Company is proposing a mass conversion of all street and area lights from Mercury Vapor ("MV") and High-Pressure Sodium ("H.P.S.") assets to Light Emitting Diode ("LED") assets. The Company is doing so due to the increased cost and significant decrease in availability of materials to support MV and H.P.S., as well as improving the

quality of system assets. These LED conversions will reduce the amount of asset failure, which in turn will reduce the amount of truck rolls required to replace failed equipment, leading to a reduction in Operating and Maintenance ("O&M") expense.

There are two ways in which LED conversions will occur. One will involve MV and H.P.S. customers initiating the process by utilizing an online web portal. The second will involve the Company proactively converting all remaining MV and H.P.S. assets. The MV and H.P.S replacements will also be bundled with required pole replacements to reduce the total cost and maximize efficiency of crews' time when possible. The H.P.S. assets will be replaced proactively upon six months' notice to the customer if their current SHS contracts are expired.

The Company is currently proactively replacing existing Rate Schedule SA assets containing MV and H.P.S. with LED assets to provide a cleaner and brighter area light for its customers at no additional charge for conversion. This SA LED equivalent will lower the customers' bill when compared to the MV and H.P.S. alternatives.

Q. How will the Company's proposal with respect to mass replacement of streetlights affect the Company's street light rate schedules?

A. The removal of the MV and H.P.S. assets will result in an elimination of the SM and SHS rate schedules. Once the conversion is complete, only three rate schedules will remain for street and area lighting: (i) SLE, for LED assets; (ii) SE, for customer-owned assets; and (iii) SA, for area light assets.

Q. What is the Company's current replacement procedure for MV and H.P.S. lighting assets?

A. The Company currently has a like-for-like replacement procedure, wherein a failed MV or H.P.S. asset will not be replaced with an LED asset, but with another MV or H.P.S. lighting asset. The Company only replaces MV and H.P.S. assets with LED assets on a per-request basis. Like-for-like spot replacement is an extremely inefficient strategy compared to proactive group re-lamping due to the amount of time required per replacement, largely due to the driving time for crews to get on site. Keeping MV and H.P.S. lighting assets is harmful to the Company due to the increase in cost per replacement with MV and H.P.S. assets, especially with lower quality of materials available on the market. The availability of the MV and H.P.S. materials is becoming increasingly scarce; in fact, it is unlawful to procure MV materials per Energy Policy Act of 2005 – Section 135 H.R. 6-39. MV and/or H.P.S. also fail considerably more frequently than LED assets, which cost the Company significantly more O&M annually.

Q. Does this conclude your direct testimony?

A. Yes, it does.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Docket No. R-2025-3057164

PPL Electric Utilities Corporation

Statement No. 15

Direct Testimony of Andrew Castanaro

Topics: **Maximum Registered Peak Load**

Dated: September 30, 2025

I. INTRODUCTION

Q. Please state your name and business address.

A. My name is Andrew Castanaro. My business address is 827 Hausman Road, Allentown, Pennsylvania 18104.

Q. By whom are you employed and in what capacity?

A. I am employed by PPL Services Corporation ("PPL Services"), an affiliate of PPL Electric Utilities Corporation ("PPL Electric" or the "Company") that provides services to PPL Electric, as the Energy Procurement Manager.

Q. What are your responsibilities as Energy Procurement Manager?

A: My primary responsibilities include managing PPL Electric's Default Service auctions and related activities; managing energy contracts and associated credit provisions; and managing the alternative energy credit ("AEC") contracts and associated state reporting obligations. I am also responsible for similar programs in other jurisdictions in which PPL Electric affiliates operate.

Q. What is your educational background?

A: I graduated from Columbia University in 2006 with a Bachelor of Arts in Economics.

Q. Please describe your professional experience.

A. I began my career in 2010 with PPL Services in the Risk Management Department as a Market Analyst. In 2015, I joined Talen Energy, where I held the same title. In 2016,

I returned to PPL Electric as a Financial Analyst. In 2017, I joined the Financial Planning & Analysis Department within PPL Services. In 2023, I was promoted to Manager of Energy Procurement within the Regulatory Affairs Department of PPL Services, which is the position I currently hold.

Q. What is the purpose of your testimony?

A. I will testify about the Company's proposal to assign default supply customers on the Generation Supply Charge ("GSC") to Rate GSC-1 and Rate GSC-2 based on their maximum registered peak load, as defined by the Company's proposed retail tariff submitted in this proceeding.

Q. Are you sponsoring any exhibits in this proceeding?

A. Yes, I am sponsoring PPL Electric Exhibits AC-1 through AC-3.

II. MAXIMUM REGISTERED PEAK LOAD

Q. Why is PPL Electric proposing to change how it classifies customers under GSC-1 and GSC-2?

A. When it comes to assigning a GSC rate schedule, accurate customer classification is essential to ensure that costs are allocated and recovered fairly and that the rate structure reflects the realities of energy usage and generation patterns. The Company is making changes to how customers are classified, specifically in response to evolving trends in net metering installations and their impact on the existing rate classes.

A key driver of this change is the notable increase in "no load" net metering installations. These projects typically feature generation capacities exceeding 1 MW and can reach up to the maximum allowed 3 MW. Unlike traditional commercial and industrial customers, these installations have little or no onsite electric load—meaning they consume minimal energy from the grid—but they generate large amounts of electricity, and export significant excess generation back to the system. Under the current structure, the split between GSC-1 ("Small C&I") and GSC-2 ("Large C&I") customers is determined by a threshold of 100 kW peak demand. Customers with demand below this limit are categorized as GSC-1. However, no load net metering installations, despite their substantial generation output, have negligible net demand and, therefore, fall into the GSC-1 Small C&I category.

This classification does not account for the true nature or impact of these projects. While labeled as "small," these customer-generators often have infrastructure, financial investment, and grid impacts more akin to those of Large C&I entities. Under net metering rules, when these customers generate excess energy and receive compensation, the costs associated with paying for this excess generation are recovered from the same customer class as the customer-generator. Currently, this means the costs are allocated to Small C&I (GSC-1) customers taking default service—even though the scale and influence of these installations align more closely with Large C&I customers. This misalignment can result in an unfair distribution of default service costs. Small C&I customers taking default service end up bearing the financial burden for projects that, by virtue of their size and output, should be classified as Large C&I. This undermines the principle of equity in cost recovery and can distort the rate structure for

default service customers in the Small C&I class. The Company is proposing to revise the definition of "maximum registered peak load" in its tariff to account for not only peak demand, but also peak export to rectify this misalignment.

Q. Could you please provide background on the "maximum registered peak load" as defined by the Commission's regulations?

A. Although I am not an attorney, my understanding is that the Commission's regulations define "maximum registered peak load" as "[t]he highest level of demand for a particular customer, based on the PJM Interconnection, LLC, 'Peak Load Contribution Standard,' or its equivalent, and as may be further defined by the [Electric Distribution Company ('EDC')] tariff in a particular service territory." 52 Pa. Code § 54.182. Based on this authority, PPL Electric proposes to further define "maximum registered peak load" in its retail electric service tariff and utilize that new definition for the purpose of classifying customers into their respective rate schedules.

Q. To your knowledge, are there any other regulatory provisions relevant to the "maximum registered peak load" and its impact on customer classification?

A. Yes. The Commission's regulations provide:

> (h) Default service rates may not be adjusted more frequently than on a quarterly basis for all customer classes with a maximum registered peak load up to 25 kW, to ensure the recovery of costs reasonably incurred in acquiring electricity at the least cost to customers over time. DSPs may propose alternative divisions of customers by maximum registered peak load to preserve existing customer classes.
>
> (i) Default service rates shall be adjusted on a quarterly basis, or more frequently, for all customer classes with a maximum registered peak load of 25 kW to 500 kW, to ensure the recovery of costs reasonably

> incurred in acquiring electricity at the least cost to customers over time. DSPs may propose alternative divisions of customers by maximum registered peak load to preserve existing customer classes.
>
> (j) Default service rates shall be adjusted on a monthly basis, or more frequently, for all customer classes with a registered peak load of equal to or greater than 500 kW to ensure the recovery of costs reasonably incurred in acquiring electricity at the least cost to customers over time. DSPs may propose alternative divisions of customers by registered peak load to preserve existing customer classes.

52. Pa. Code § 54.187(h)-(j).

Q. What is the Company proposing with respect to "maximum registered peak load"?

A. In its proposed retail tariff filed in this proceeding (PPL Electric Exhibit GEO-1), "maximum registered peak load" is defined as "a customer's net demand contribution impact to the Company's default service procurement activity, as determined upon the net power flow from or into the Company's distribution system." The maximum registered peak load used to assign customers to their applicable rate schedule will be the customer's highest maximum registered peak load (kW) in the most recent 12-month period ending September 30. For new customers without a 12-month billing history, the maximum registered peak load shall be based on the Company's estimate using factors such as, but not limited to, similarly equipped buildings, and similarly utilized buildings and square footage. As related to customer-generators, this estimate shall also be inclusive of the nameplate capacity of the generation system.

Q. Why is the Company making this proposal?

A. PPL Electric is projecting a substantial increase in the number of customer-generators participating in net metering who do not have independent load to offset their electric

usage. As a result, those customer-generators by design produce excess generation that is banked until the end of the PJM Planning Year on May 31, at which point their banked generation is cashed out at the Price-to-Compare. The costs associated with the net metering credits and cash-outs are recovered from the default service customers in the customer-generators' respective customer classes.

The Company's currently effective tariff, which was last updated in the 2015 Rate Case, does not classify customers based on their maximum registered peak load as set forth in the proposed retail tariff. Instead, for example, a small commercial customer's demand is determined based on their load independent of the nameplate capacity of any behind-the-meter generation. This current practice fails to reflect the stress that the behind-the-meter generation puts on PPL Electric's distribution system. Additionally, the current classification results in non-net metering Small C&I default service customers disproportionately subsidizing the annual cash-outs of customer-generators that are, effectively, merchant generators.

Q. You mentioned that the Company is projecting a substantial increase in the number of customer-generators participating in net metering that do not have independent load to offset their electric usage. What do you mean by independent load?

A. By independent load, I mean load that would rely on PPL Electric's system for a separate purpose other than to operate the customer's generation.

Q. What is the impact of such customer-generators on the annual net metering cash-outs for the Small C&I customer class?

A. As of March 31, 2025, the annual net metering cash-outs for the Small C&I customer class totaled approximately $11 million. However, based on the level of interconnections projected over the next few years, PPL Electric estimates that the annual cash-outs for the Small C&I customer class will be approximately $60 million to over $300 million by 2029. (PPL Electric Exhibits AC-1 through AC-3.)[1]

Q. If the proposal is approved, what will be the impact on the large no-load customer-generators?

A. The large no-load customer-generators will be reclassified as Rate Schedule GSC-2 customers. This means that their excess generation will be paid out based on the GSC-2 rate. Likewise, the costs to pay for the excess net-metered generation will be recovered from the GSC-2 rate class, as opposed to the Small C&I customers in the GSC-1 rate case. The GSC-2 is calculated using real-time pricing based on the hourly generation needs of the customer class. This differs from the Small C&I GSC-1 rate, which is based on a combination of load following 12 and 24 month full requirements contracts. The majority of Large C&I customers are more sophisticated in managing their energy needs and are less likely to be impacted by an increase in default service rates because of an influx of net-metered generation. The real-time nature of the GSC-2 rate, and the sophistication of the Large C&I customers in the GSC-2 rate class

[1] PPL Electric Exhibits AC-1, AC-2, and AC-3 show projections based on cancellation rates for interconnection projects of 36%, 50%, and 75%, respectively.

mitigates the risk that there will be cross-subsidization between Small C&I customers and the large no-load customer-generators.

Q. How would the Company implement its maximum registered peak load proposal?

A. The Company would calculate the customers' maximum registered peak load annually and provide that information to the billing team, which would then determine which accounts need to be reclassified. Updated classifications would then be communicated to the affected customers approximately 30-60 days before service under their new rate schedule begins in June.

Q. Has the Commission approved any proposals that are similar to the Company's maximum registered peak load proposal?

A. Yes. In the Default Service Plan V ("DSP V") proceeding for UGI Utilities, Inc. – Electric Division ("UGI Electric") at Docket No. P-2024-3049343, *et al.*, the Commission approved a very similar proposal, under which UGI Electric classifies customers based on their "supply peak load impact." Although the Company is using the term "maximum registered peak load" instead of "supply peak load impact," the customer classification methodologies are effectively the same. It is my understanding that the Commission's February 20, 2025 Opinion and Order in that proceeding is currently on appeal before the Commonwealth Court of Pennsylvania as of the date of submitting this testimony.

Q. Does the Company believe that any waivers of the Commission's regulations are required to implement its proposal?

A. No. As I noted above, the Company maintains that its proposal is authorized by the existing provisions in the Commission's regulations. However, to the extent necessary, PPL Electric respectfully requests a waiver of the customer groupings recommended in 52 Pa. Code §§ 54.187 and 69.1805, along with any other Commission regulations or requirements that may be necessary to implement its proposal.

Q. Does this conclude your direct testimony?

A. Yes, it does.

Year of Reconciliation/Cashout:	2024	2025	2026	2027	2028	2029	PTC at 12/1/30	
SCI Excess kWh for MGs (kWh Cashed Out)			60,202,851	391,960,372	932,128,980	1,430,455,085		<-- Updated 8/20/25
SCI PTC In effect (5/31)	$ 0.11386	$ 0.12114	$ 0.12114	$ 0.12575	$ 0.15067	$ 0.20474	$ 0.29515	
SCI Net Metering Expense from MGs			$ 7,292,672	$ 49,287,057	$ 140,441,077	$ 292,867,083		
Total Estimated SCI Net Metering Expense	$ 10,350,518	$ 10,841,474	$ 18,134,146	$ 60,128,531	$ 151,282,551	$ 303,708,557		<--cashout amount to be reflected in reconciliation for March of each column year, based on projected kWh balance for 5/31 of each column year
	^ Actual expense	*^ Actual expense*						

NOTES:
The amount of the net metering expense that is included in the reconciliation is only through March of a given year and the cashout kWh is through May of that same year, so some estimation is necessary due to timing
Utilizing Cashout kWh amount on 5/31 to calculate net metering expense used in 3/31 reconciliation

Year of Reconciliation/Cashout:	2024	2025	2026	2027	2028	2029	PTC at 12/1/30	
SCI Excess kWh for MGs (kWh Cashed Out)			30,101,426	195,980,186	466,064,490	715,227,542		<-- Updated 8/20/25
SCI PTC In effect (5/31)	$ 0.11386	$ 0.12114	$ 0.12114	$ 0.12358	$ 0.13580	$ 0.15898	$ 0.18888	
Incremental SCI Net Metering Expense			$ 3,646,336	$ 24,219,623	$ 63,291,558	$ 113,704,729		
Total Estimated SCI Net Metering Expense	$ 10,350,518	$ 10,841,474	$ 14,487,810	$ 35,061,097	$ 74,133,032	$ 124,546,203		<--cashout amount to be reflected in reconciliation for March of each column year, based on projected kWh balance for 5/31 of each column year
	^ Actual expense	*^ Actual expense*						

NOTES:
The amount of the net metering expense that is included in the reconciliation is only through March of a given year and the cashout kWh is through May of that same year, so some estimation is necessary due to timing
Utilizing Cashout kWh amount on 5/31 to calculate net metering expense used in 3/31 reconciliation

Year of Reconciliation/Cashout:	2024	2025	2026	2027	2028	2029	PTC at 12/1/30	
SCI Excess kWh for MGs (kWh Cashed Out)	90,905,656	95,266,876	15,050,713	97,990,093	233,032,245	357,613,771		<-- Updated 8/20/25
SCI PTC In effect (5/31)	$ 0.11386	$ 0.12114	$ 0.12114	$ 0.12250	$ 0.12855	$ 0.13920	$ 0.15095	
Incremental SCI Net Metering Expense			$ 1,823,168	$ 12,003,786	$ 29,956,761	$ 49,779,837		
Total Estimated SCI Net Metering Expense	$ 10,350,518	$ 10,841,474	$ 12,664,642	$ 22,845,260	$ 40,798,235	$ 60,621,311		<--cashout amount to be reflected in reconciliation for March of each column year, based on projected kWh balance for 5/31 of each column year
	^ Actual expense	*^ Actual expense*						

NOTES:
The amount of the net metering expense that is included in the reconciliation is only through March of a given year and the cashout kWh is through May of that same year, so some estimation is necessary due to timing
Utilizing Cashout kWh amount on 5/31 to calculate net metering expense used in 3/31 reconciliation

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Docket No. R-2025-3057164

PPL Electric Utilities Corporation

Statement No. 16

Direct Testimony of Joseph Lookup

Topics: **Reliability Performance**
Storm Restoration and Planning
Large Load Interconnections

Dated: September 30, 2025

I. INTRODUCTION

Q. Please state your name and business address.

A. My name is Joseph Lookup, and my business address is 827 Hausman Road, Allentown, Pennsylvania 18104.

Q. By whom are you employed and in what capacity?

A. I am employed by PPL Services Corporation ("PPL Services") as Vice President – Transmission and Distribution Planning and Asset Management and provide services to PPL Electric Utilities Corporation ("PPL Electric" or the "Company").

Q. What are your responsibilities as Vice President – Transmission and Distribution Planning and Asset Management?

A. I oversee the Transmission Planning, Asset Strategy, Portfolio Management, Project Development, Real Estate, Project Management and Construction Management Groups. This includes responsibility for Transmission system reliability, investment strategy and project execution.

Q. Please describe your professional experience.

A. Prior to working at PPL Electric, I worked as a consultant providing engineering, project management, construction management services for utility, industrial, commercial, and educational clients. At PPL Electric, I have worked in Engineering, Project and Construction Management, and Asset Management in various engineering and project leadership, and management roles.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is as follows:

- To explain the Company's reliability performance and describe proposals aimed at improving reliability performance;
- To discuss trends that the Company is seeing with respect to storms and describe Company's plan for addressing storm restoration for more frequent and intense storms; and
- To describe how the Company is meeting the challenges associated with interconnecting new large load customers.

Q. Are you sponsoring any exhibits in this proceeding?

A. No.

II. RELIABILITY PERFORMANCE

Q. Please describe your assessment of the Company's electric system reliability.

A. The Company's system reliability is generally better than most national utility peers, based on comparisons using the Institute of Electrical and Electronics Engineers ("IEEE") Annual Reliability Benchmarking Survey as well as the Edison Electric Institute ("EEI") Reliability Survey. The 2024 IEEE survey reported on reliability for over 70 million customers represented by 73 operating companies. PPL Electric has been a top quartile IEEE System Average Interruption Frequency Index ("SAIFI") performer since 2014. PPL Electric's 2024 IEEE SAIFI value was 0.661, versus an

IEEE panel median of 1.45. Similarly, PPL Electric ranked 11th out of 80 utilities for IEEE SAIFI on the 2024 EEI survey.

The Customer Average Interruption Duration Index ("CAIDI"), or average duration of a customer interruption, is slightly underperforming the median of 124 minutes with a value of 136.6. However, the Company's customers experience fewer annual minutes without electric service than do peer utilities. The Company's System Average Interruption Duration Index ("SAIDI"), or total minutes an average customer is without service in a year, is better than most peers (90 annual minutes per customer in 2024 and 92 minutes in 2023, versus panel medians of 137 minutes in 2024 and 119 minutes in 2023.). For Customers Experiencing Multiple Interruptions ("CEMI"), on the 2024 EEI survey PPL Electric ranked 14th out of 55 companies reporting values for percentage of customers seeing 3 or more interruptions ("CEMI3+") in 2024.

Although PPL Electric has generally performed well compared to its peers, the Company recognizes that improvement is still needed in this area to improve the overall customer experience. This was highlighted in the Pennsylvania Public Utility Commission's ("PUC" or "Commission") Management and Operations Audit issued in June 2024, and actions are in place to improve the Company's CEMI, CAIDI and SAIDI metrics, in addition to ongoing plans around SAIFI and Momentary Average Interruption Frequency Index ("MAIFI"). In particular, the Company will continue to evaluate opportunities for new storm hardening programs or acceleration of existing mitigation programs and/or projects for reliability to minimize outages associated with increased storm activity (as explained further below).

Q. Does the Company consider other factors as it reviews the reliability of its electric distribution system in addition to SAIFI, CAIDI, and SAIFI?

A. Beyond SAIFI, SAIDI, and CAIDI, PPL Electric routinely considers other reliability measures such as CEMI, Worst Performing Circuits, Worst Performing Segments, Customers Experiencing Recent Interruptions ("CERI") at the 7-day, 30-day, and 90-day measures. Customers Experiencing Long Interruption Duration ("CELID") and MAIFI are also considered. PPL Electric also monitors the reliability and health of assets through asset monitoring, routine maintenance activities, voltage monitoring, and tracking and trending of equipment failures.

Q. Please describe your overall assessment of the effectiveness of management as a result of your reliability analysis.

A. PPL Electric's analysis of reliability performance supports the Company's view that it is being effective and well-managed with respect to reliability. Benchmarking through vehicles like IEEE and EEI shows that performance in a variety of reliability measures is better than most peers, which management believes reflects the efforts and investments that have been made over the years to build a smarter, more resilient electrical infrastructure. The Company is a leader in the use of new technology in the industry, primarily due to the established culture that empowers management and personnel to innovate and never settle for status quo. Management uses a broad suite of dashboards and key performance indicators ("KPIs") to understand the leading and lagging indicators of reliability performance. These metrics allow management to make investment and operational decisions that are designed to improve the overall customer

experience and help ensure the Company meets its first quartile operational goals. In addition, the Company prides itself on being a learning organization, always finding ways to improve processes or procedures and learning from the past.

PPL Electric's culture of innovation is evidenced by the industry innovation awards it has won, including the 2025 Smart Electric Power Alliance ("SEPA") Resilience Power Player Award for predictive failure technology that proactively identifies failing electrical components before they cause outages; the 2024 Thomas F. Farrell II Safety Leadership and Innovation Award presented to Bill Farber for outstanding safety leadership; and the 2023 Charles Steinmetz Top Innovator Award from Public Utilities Fortnightly, recognizing Sal Salet and his team for advancements in smart grid automation, downed power line detection, and renewable energy integration. These honors reflect the Company's commitment to pioneering solutions that enhance grid reliability, safety, and sustainability.

Q. What programs, policies, or actions has the Company specifically implemented to achieve a level of reliability that is indicative of the Company being well-managed?

A. The Company began its increased investment in aging infrastructure following the development of its 2009 Maintenance Optimization Strategy ("MOS") Report to stem the increase of failures and reliability issues due to an aging fleet. Much of the investment was made into the transmission system since then, primarily focused on rebuilding aging 69kV transmission lines, replacing wood poles with more resilient steel structures, and replacing aging substation assets. As a result of these investments, the

Company's transmission system has seen a 90% improvement to transmission SAIFI over the years 2012-2024.

The Company also invested in replacing aging infrastructure on the distribution system over that period, but only enough to maintain existing reliability levels. Many of the improvements to distribution SAIFI came because of the Company's Smart Grid program in 2015. That program enables the Company to automatically identify and isolate faults on the distribution system and then sectionalize and restore customers without human intervention, restoring customers often in seconds or minutes.

The Company has recently experienced its worst storm performance and worst SAIFI performance in recent history due to a record number of storms in 2024. The Company is confident that an increased investment in the distribution system is needed now to strengthen and harden its system to be more resilient to the increase in storm and weather-related events and to improve the overall customer experience.

Q. How does PPL Electric determine what are the right investments to make?

A. PPL Electric has a comprehensive governance process in place to guide its capital investment decisions. This process ensures that investments are aligned with both system and customer needs, regulatory requirements, and corporate objectives. There are three main components of this governance process as I will describe below.

Asset Management Process: The Transmission and Distribution Asset Management department is responsible for identifying work and developing associated costs for infrastructure investments. These investments, once approved by management, are included in the business plan and ultimately approved at the PPL

Corporation board level. The department also reviews projects periodically, considering factors such as need, prioritization, cost, schedule, and scope of work. Project reviews and authorizations are conducted monthly through the Transmission Accountability Meeting ("TAM") and Distribution Accountability Meeting ("DAM") processes.

Business Planning Process: PPL Electric prepares a five-year business plan annually, which is aligned with PPL Corporation's overall business plan. The business plan includes capital investments that have been approved through the Asset Management Process. This iterative process involves submitting the plan to PPL Corporation until it is approved by the Board of Directors. The business planning process is informed by system needs, customer interconnections, regulatory requirements, and customer service needs.

Governance and Approval: Projects included in the approved five-year business plan move on to the Governance and Approval process. The Governance and Approval process includes several stages, from planning and development, engineering, construction, in-service, and close-out. This structured approach ensures that all projects are thoroughly evaluated and approved at various levels, including Director and Vice President levels, in accordance with Delegation of Authority policies and procedures.

This governance framework ensures that PPL Electric's capital investments are strategically planned, thoroughly evaluated, and aligned with both internal and external requirements. Additional discussion of PPL Electric's governance process can be found in the direct testimony of PPL Electric witness Dennis Urban (PPL Electric St. No. 2).

Q. Are there other factors that affect the Company's reliability performance?

A. Yes. While the Company has robust reliability measures and programs in place, as discussed above, that does not mean it is immune to external factors which can have an impact upon system reliability. As mentioned above, the Company has seen a record number of storms in 2024 and one of the worst years in recent history for reliability. The increase in storms has caused an extensive amount of outages and damage primarily due to trees and vegetation falling into lines. Because of this trend, there is a strong need to harden the Company's system to withstand these events. The Company has developed design and construction standards that will allow us to harden its facilities, including stronger poles, insulated conductor, and underground facilities. Implementing these solutions now is necessary to improve the system's reliability and the overall customer experience. The Company also has a program to manage vegetation, as explained in the direct testimony of PPL Electric witness Nicole Howell (PPL Electric St. No. 17). Vegetation management factors heavily into the Company's system reliability, especially considering dealings with invasive species, such as the emerald ash borer and spongy moth.

Q. Please explain further the problems caused by invasive bug species.

A. The invasive emerald ash borer and spongy moth are causing the mortality of Ash and Oak trees to rise across the Company's service territory. When these trees defoliate and die, they can fall on to Company infrastructure and cause outages. Approximately 30% of the trees that the Company removes are Ash Trees.

Q. Please describe the Company's proposal with regard to invasive bug species.

A. As discussed in the direct testimony of PPL Electric witness Nicole Howell (PPL Electric St. No. 17), the Company intends on increasing its vegetation management budget to proactively address invasive bug species. PPL Electric is also proposing a program to expand right-of-way ("ROW") rights to address off-ROW trees.

III. STORM RESTORATION AND PLANNING

Q. One of the three reasons for which the Company filed its last rate case in 2015 was because of the accelerated capital investments it was making to maintain and improve system reliability in the face of major storms. Briefly describe the Company's outlook on the frequency and severity of storms in 2015.

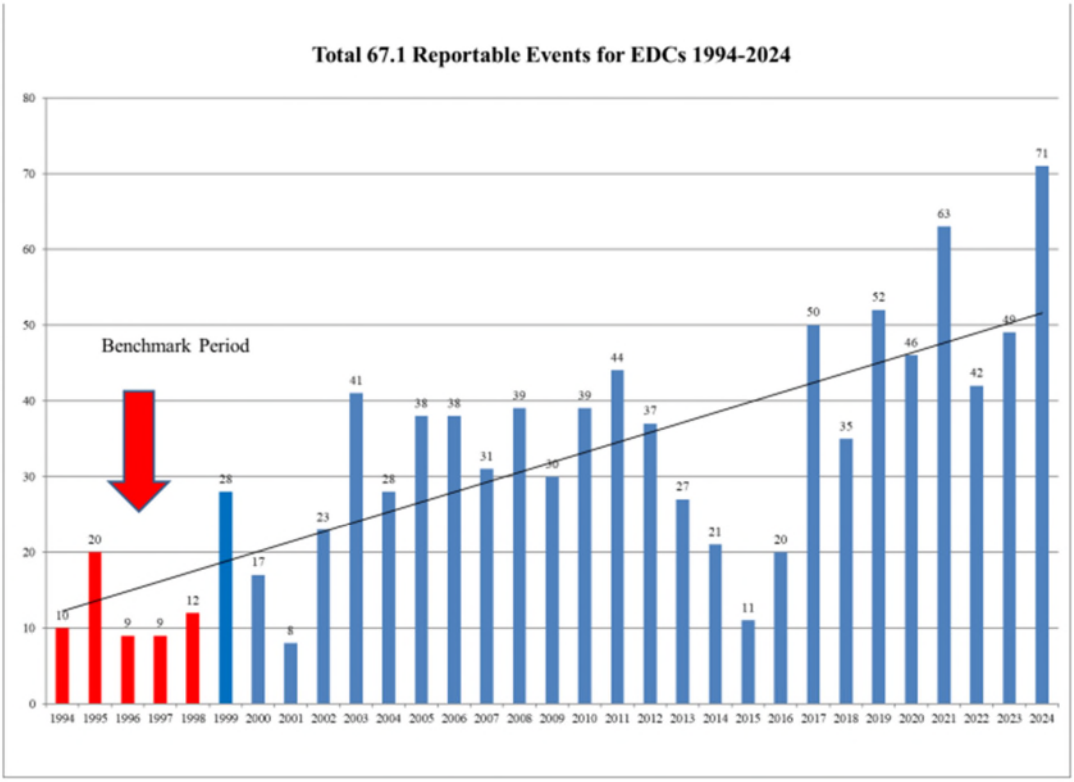
A. Concerns over storm hardening in the 2015 rate case stemmed from several recent major storms that the Company had experienced, namely Hurricane Irene in August 2011, the Halloween Snowstorm in October 2011, and Hurricane Sandy in October 2012. These storms prompted the Company to conduct a review of its system to determine how to reduce the impacts of major storms. From the Company's 2012 base rate proceeding to the Company's 2015 base rate proceeding, the Company had made efforts and undertaken initiatives to improve storm response and outage management. Part of this effort included the implementation of a Storm Damage Expense Rider ("SDER"). In the 2015 rate case, the Company proposed changes to the SDER which would, in part, address concerns regarding the unpredictable nature of storms.

Q. How has the Company's experience with the frequency and severity of storms changed since the 2015 rate case?

A. I would note that the frequency and severity of storms, as well as outages related to these more frequent and severe storms has increased for the Company and for Pennsylvania electric distribution companies ("EDCs") as a whole. In the Commission's most recent 2024 Pennsylvania Electric Reliability Report,[1] 2024 had the most reportable events for all EDCs in Pennsylvania since 1993. A copy of Table 4 from the 2024 Pennsylvania Electric Reliability report is reproduced below:

[1] https://www.puc.pa.gov/media/3565/24_electric-reliability-report_final.pdf,

Table 4 – Total 67.1 Reportable Events for EDCs 1994 through 2024



As seen above, EDCs across the Commonwealth experienced 71 reportable outage events in 2024, as compared to 49 events in 2023. Specific to PPL Electric, the Company experienced a significant number of storms, which resulted in 17 reported outage events in 2024. While it did not record a Major Event in 2024, it experienced 11 storms of 600 cases or higher, including six storms of over 1,000 cases.

However, reportable storms data does not tell the whole story. PPL Electric has experienced and expects to continue to experience increases in the number, severity and frequency of non-reportable storm events as well. In 2024, the Company experienced 20 non-reportable storm events, as compared to 31 in 2023 and its historic prior 10-year average of 17. In 2025, PPL Electric is on pace to be a record storm count year with 39

total storms (30 non-reportable) through September 14th, the most ever by this time of year. With respect to severity, PPL Electric notes that the trend in the average number of damage locations (cases) per PUC Reportable storm has been increasing by approximately 3% per year from 2016 to 2025. And, with respect to frequency, PPL Electric notes that it experienced an average of 40 total (reportable and non) storms per year from 2021-2024, versus and average of 23.6 for the 10 years prior to that period. Importantly, from an operational perspective, the costs incurred from non-reportable storms are of a similar nature as costs incurred from reportable storms and should be granted similar opportunities for cost recovery, as discussed further in the direct testimony of PPL Electric witness Katelyn Arnold (PPL Electric St. No. 13).

Essentially, 2024 presented one of the most challenging years for electric utilities, including PPL Electric, in history. The Company anticipates that these weather trends will continue, and that the number and frequency of severe storms will increase going forward, noting that 2025 is currently on pace to record the highest storm count in any single year.

Q. How has the Company's focus on storm response and proactive storm hardening evolved since the last rate case was filed?

A. Related to storm hardening, pursuant to its inspection and maintenance ("I&M") practices, PPL Electric recognizes that while it cannot control the frequency and severity of weather events it can implement proactive measures that prevent outages from occurring. In particular, PPL Electric has a specific focus on equipment performance,

and has four programs implemented under its I&M plan that are designed to improve equipment performance:

(1) Asset Health Management, which focuses on the use of data-driven failure probability models to optimize addressing aging infrastructure, the capturing of asset health and critically scores to refine its programs to deliver the most effective reliability impact per dollar invested, and the Company's Long-Term Infrastructure Improvement Plan ("LTIIP") that includes proactive installation of measures aimed at improving reliability and customer experience;

(2) Chronic Reliability Remediation, which most recently focuses upon the Company's 2024 initiative to "harden" its circuits including those most impacted by weather events given the increased number of storms that have been experience, and proactive circuit analysis that reviews every circuit on a four-year cycle to address operational and reliability characteristics for each circuit;

(3) Engineering Design Standards, which include the Company's Reliability Principles and Practices that ensure the Company plans, protects, and operates its electric distribution system under a consistent sent of principles to ensure system safety and reliability; and

(4) Smart Grid, which includes efforts by the Company since its last base rate case to enable it to react rapidly to changes occurring on the distribution system due to weather (or other) events.

PPL Electric also has robust vegetation management practices related to tree pruning, removal, re-clearing, and herbicide application inside of the ROW. PPL Electric also removes hazard trees outside of the ROW when possible. Additional information

regarding the Company's current and proposed enhanced vegetation management practices is provided by PPL Electric witness Nicole Howell (PPL Electric St. No. 17).

In summary, based upon the increased frequency and severity of weather events, the Company has enhanced its focus and its multi-faceted approach to both: (1) improve response and repair time to help ensure fewer customers are affected by storms outages for a shorter period; and (2) harden the distribution system to prevent weather-related outages from occurring in the first place.

Q. How is this additional focus on storm response and storm hardening measures driving the need for rate relief in this matter?

A. The Company's enhanced focus on storm response and storm hardening measures is one of the primary drivers of rate relief in this proceeding. Although the Company continues to ensure that it is allocating resources in an efficient manner (i.e., by ensuring that its portfolio of activities produces the best reliability result for a given expenditure), this involves additional expenditures in the form of both capital investments designed to improve system resilience and reliability, and O&M expenses designed to respond to storm events and improve how the system is maintained and decrease the risk of storms impacting existing facilities.

IV. LARGE LOAD INTERCONNECTIONS

Q. Please explain why the subject of data centers and other large load interconnections in the Company's service territory has emerged as an important issue.

A. Data centers and other large load customers are increasing in Pennsylvania. While these customers will provide the opportunity for significant economic development within the Company's service territory, they also represent a large load influx onto PPL Electric's system presenting new challenges. Pennsylvania is fast becoming an epicenter for data center innovation, and PPL Electric is seeing a significant portion of this growth in its service territory. Large load customers are attracted to the Company's modern and robust electric grid, and PPL Electric has an increasing number of data center projects in advanced development. The pipeline of projects exceeds the Company's current peak load of 7.8 GW. In practical terms, that means the Company is preparing to more than double its system demand in just 5–6 years—growth that took over a century to reach. This large-scale growth directly enhances the lives of PPL Electric's 1.5 million customers in eastern and central Pennsylvania. It drives down costs, improves grid reliability, and helps ensure that households and communities reap the rewards of robust infrastructure while supporting economic revitalization and job creation across the region. PPL Electric provides a robust transmission system that data centers need to operate efficiently, offering both high reliability and high capacity.

Q. What impact does the Company anticipate from the development of data centers and the resulting demand?

A. Data centers are driving substantial load growth at an unprecedented level. PPL Electric will need to make significant investments in the transmission system to interconnect these new customers. This will include investments that are paid for by the customer and investments that are paid for by the Company. With respect to investments that are put into rate base, the Company is mindful not to create stranded asset risk for other customers. Additionally, PPL Electric must account for the resource adequacy challenges created by this significant load growth. By carefully planning and executing these investments, PPL Electric aims to support the growth of new customers without compromising the service quality for existing customers.

Q. Does the Company have a planned response to the expected impact of data centers and other large load interconnections?

A. Yes, the Company is already implementing this plan through its existing electric service agreement ("ESA") process. Notably the current ESA includes minimum load guarantees (80% of contracted load until service commitment is satisfied), load ramp schedules, and security instruments to ensure that the customer pays enough in revenue to cover the cost of rate-based investments. Additionally, the agreement outlines early termination terms and conditions to protect both the Company and other customers from stranded cost risk. By adhering to these provisions, the Company aims to maintain a balanced and sustainable approach to managing the increased demand while mitigating stranded cost risk to other customers.

Q. Is PPL Electric proposing to adjust its tariff to address these issues as a part of this proceeding?

A Yes. The Company is proposing to revise its Rate Schedule LP-5 to mirror what it is currently requiring in its ESA with large customers. Under the proposed tariff language, any large load customer that requires upgrades that will be socialized through rates must provide adequate security that it will meet a revenue guarantee equal to the amount of costs placed into rates. As explained earlier, this involves minimum load guarantees for the term of the service commitment and security instruments covering the obligation in the event that the customer defaults.

Q. How has the Company handled such large load interconnection requests up to this point?

A. Under the Company's current retail tariff, service at or above 69 kV is provided under Rate Schedule LP-5, which generally requires the customer to pay for all interconnection costs. Historically, this approach has worked well, as the system upgrade facilities needed to interconnect the LP-5 customer only benefited the interconnecting customer, justifying the customer covering the cost. New large load customers have created the situation that they are necessitating upgrades that provide benefits to the entire grid. These include reliability benefits arising out of upgrading the networked bulk electric system. The Company has been extending service under its LP-5 rate schedule and including load commitment guarantee terms in the customer's ESA. The load commitment language in the ESA is similar to the Company's line extension

guarantee terms in Rule 3 of the tariff for lower voltage line extensions. In addition to the customer's contribution in aid of construction ("CIAC") obligation, the customer guarantees to take service in an amount that the customer will pay electric service rates equal to the upgrade costs that are socialized through transmission rates. This is designed to ensure that the investments to interconnect these customers are justified and that other customers will not be left paying for stranded assets.

Q. Has the Company's existing treatment of new large load interconnections in this manner been successful?

A. Yes. Although it is still early in the large load development trend, and there are not any current large load customers in service that are subject to the new ESA terms, the Company has not experienced any significant pushback to the ESA terms and has successfully executed ESAs with these terms for load additions in the pipeline.

Q. If the Company's use of its existing ESA process for new large load interconnections has been successful, why is the Company proposing to revise its Rate Schedule LP-5?

A. PPL Electric utilized its existing ESA process to try to meet the needs of the new large load customers. However, in the long term the Company wants to memorialize its large load interconnection terms in its tariff for transparency and consistency.

Q. How does the Company protect, or plan to protect, other customers from the risk that a planned large load may not materialize?

A. The proposed revisions to the LP-5 rate schedule require a customer to provide security in an amount that equals the costs being put into rates. In the event that the customer stops taking service prior to PPL Electric receiving revenue equal to the rate-based costs, the Company will draw down the security and apply those funds to reduce its plant in service amount. This has the effect of backing these costs out of rates, so that other customers do not pay for upgrades needed for load that did not materialize.

Q. Are there any benefits to other customers from interconnecting new large load customers?

A. Yes. First the upgrades to the bulk electric system will improve the reliability and resiliency of the transmission grid. In certain instances, these upgrades may create new transmission paths which will allow for additional generation to be brought online. Second, customers should see significant reductions in their transmission costs. PPL Electric recovers its costs for its transmission system through its Federal Energy Regulatory Commission ("FERC") formula rate. These costs are allocated to customers by the amount they contribute to the system peak. When these large loads are interconnected, they will represent a significant percentage of PPL Electric's system peak, and as a result lower the portion other customers are responsible for paying.

Q. Does this conclude your direct testimony?

A. Yes, it does.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Docket No. R-2025-3057164

PPL Electric Utilities Corporation

Statement No. 17

Direct Testimony of Nicole Howell

Topics: **Vegetation Management**

Dated: September 30, 2025

I. INTRODUCTION

Q. Please state your name and business address.

A. My name is Nicole Howell, and my business address is 827 Hausman Road, Allentown, PA 18104.

Q. By whom are you employed and in what capacity?

A. I am employed by PPL Electric Utilities Corporation ("PPL Electric" or the "Company"), a subsidiary of PPL Corporation, as Manager – Vegetation Management & Program Management.

Q. What are your responsibilities as Manager – Vegetation Management & Program Management?

A. I am responsible for leading the distribution and transmission vegetation maintenance program and the Pole Attachments Services program across the PPL Electric service territory.

Q. What is your educational background?

A. I obtained a Bachelor of Commerce from Toronto Metropolitan University in Toronto, Canada and a Master of Business Administration from Moravian University in Bethlehem, PA.

Q. Please describe your professional experience.

A. I have served in my current role since January of 2024, overseeing both Vegetation Management and Pole Attachment Services. I have held various positions over the past 10 years at PPL Electric, including Field Metering, Work Management and Portfolio Management.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to describe the Company's current vegetation management program and proposed enhancements to that program.

II. VEGETATION MANAGEMENT

Q. Please describe the Company's service territory with respect to vegetation management.

A. The vegetation coverage across PPL Electric's service territory is diverse and substantial, with a mix of urban, suburban, rural, and forested landscapes. Over 50% of PPL Electric's overhead distribution lines are tree exposed.

Q. What are the benefits of vegetation management?

A. Vegetation management improves system reliability, allows electric utilities to provide safe electric service, and plays a role in reducing wildfires. Vegetation encroachment into Company assets can make it difficult to access facilities during storm restoration. Providing clearance between PPL Electric's assets and vegetation will support safer

working conditions for line workers and tree trimmers and will allow for quicker restoration of service to customers after a storm.

Q. Please explain any issues that the Company faces within its service territory regarding vegetation management.

A. Approximately 46% of outages that PPL Electric customers experience is caused by vegetation (based on past 10 years of data). During storm events, about 77% of outages that PPL Electric customers experience is caused by vegetation. And, due to an increase in storm frequency and intensity as explained further in the direct testimony of PPL Electric witness Joseph Lookup (PPL Electric St. No. 16), instances of these vegetation-caused outages are increasing year-over-year.

Q. Please describe the Company's current vegetation management program.

A. PPL Electric employs a five-to-eight-year inspection and maintenance cycle for its distribution circuits. The vegetation on PPL Electric's transmission and distribution rights-of-way ("ROWs") is maintained utilizing a variety of vegetation management activities. These activities include tree pruning, tree removal, brush control, and herbicide application. Vegetation maintenance activities are budgeted and planned based on proximity and risk to PPL Electric's assets.

Q. How does the Company's current vegetation management program address the issues laid out above?

A. PPL Electric currently employs a condition-based five-to-eight-year inspection and maintenance cycle for its distribution circuits. The inspection and maintenance activities include trimming, removing hazard and danger trees (if permitted by ROW agreement or landowner permission), and brush control. To safeguard the reliability of its electric distribution system, PPL Electric employs this comprehensive program to manage vegetation around power lines. Keeping trees and other vegetation away from distribution lines is vital, as tree contacts can result in short-circuits and subsequent service outages. PPL Electric uses vegetation risk models to prioritize vegetation activities at the circuit and sub-circuit level. To combat the impact of storm season, PPL Electric uses vegetation risk models to prioritize circuits within its inspection and maintenance workplan. The risk models account for tree exposure, overstrike risk, and previous outage history to prioritize the potential for highest impact to customers from a vegetation outage risk perspective. The Company also deploys integrated vegetation management ("IVM") techniques including the use of herbicide applications. IVM is the most effective treatment approach known to maintain system reliability and safety by promoting desirable species for a more cost-effective way to manage vegetation. The Company prepares for the impacts of storm season by front-loading priority vegetation maintenance activities before the summer months, while balancing work and resources through the remainder of the year.

Q. Do you believe that the Company's current vegetation management program is sufficient to address the Company's vegetation management needs?

A. No. As I discussed above, PPL Electric is seeing more frequent and higher intensity storms. The Company also has experienced declines in forest health led by invasive species impacts like the emerald ash borer and spongy moth, which have significantly increased the number of unhealthy trees that are at risk of falling into distribution lines. Vegetation is the largest contributor to outages during storm events and is a significant area of opportunity to improve reliability for customers. Considering that over 50% of PPL Electric's distribution circuits are tree-exposed (see Table A below), the Company's reliability metrics are projected to see great improvements by decreasing the trim cycle in its vegetation management plan. A decreased trim cycle would allow the Company to better combat vegetation growth across its service territory.

Table A

Single-Phase		Multi-Phase		Total	
Tree Exposed Miles	% Exposure	Tree Exposed Miles	% Exposure	Tree Exposed Miles	% Exposure
11,864	62%	3,860	45%	15,724	57%

Q. Please explain the Company's proposal to enhance its vegetation management program.

A. To address the Company's ongoing challenges with vegetation management, a comprehensive two-pronged approach is being proposed. The first component involves an increase in the vegetation management budget in the Fully Projected Future Test Year ("FPFTY"). This expanded budget will support a higher frequency in the cycle of vegetation inspection and maintenance. By dedicating additional resources, the

Company aims to proactively identify and mitigate potential vegetation-related risks, thereby improving system reliability and reducing the likelihood of outages or safety hazards. The second prong of the strategy focuses on addressing off right-of-way ("Off-ROW") trees—those that exist beyond the current distribution ROW but nevertheless pose a threat to the distribution system. The Company plans to implement a program to acquire enhanced distribution ROW rights. This initiative will seek to obtain easement rights that will allow the Company to remove hazard and danger trees that are currently outside of PPL Electric's ROW. It will also allow the Company to return distribution corridors to width and height specifications that promote greater system reliability.

Q. Can you describe what PPL Electric is proposing with respect to its vegetation management budget?

A. The Company's budget for the distribution vegetation management program in the Historic Test Year ("HTY") is $35.6 million and Future Test Year ("FTY") is $31.8 million. PPL Electric is proposing an increase in the Fully Projected Future Test Year ("FPFTY") over present budget levels to approximately $50 million.

Q. What improvements will the Company achieve by increasing investment in the vegetation management program?

A. The Company's proposed investment will prioritize core vegetation maintenance and reliability enhancing vegetation activities. Specifically, PPL Electric will be able to increase the frequency of its vegetation maintenance cycle, return distribution ROW

corridors to Company specifications, mitigate potential wildfire risk, and improve safety for the public.

Q. Can you describe PPL Electric's plan with respect to the frequency of its vegetation maintenance cycle?

A. As mentioned above, PPL Electric currently performs a condition-based five-to-eight-year vegetation maintenance cycle. This means that every distribution circuit will be inspected and have any necessary maintenance activities performed at least once every five to eight years. The Company is proposing to increase its target frequency to once every 5 years. The increased inspection and maintenance frequency will allow the Company to proactively identify and address vegetation that may cause issues in the future. This has the benefit of potentially eliminating the cause of an outage before it happens, which improves reliability for customers and lessens storm response costs.

Q. How will the increased budget help the Company restore its distribution ROW corridors to Company specifications?

A. There are some instances where PPL Electric has inadequate easement rights to maintain its ROW corridor to current specifications. This has created a situation where there are circuits on the system with clearances less than the Company specifications of 15 feet for single-phase lines, and 25 feet for multi-phase lines. Additionally, the Company wants to strategically target areas with the highest reliability risk, and clear up to 30 feet for single phase, and 40 feet for multi-phase lines in certain areas. The increased budget

will allow the Company to maintain its distribution circuits to Company specifications making it less likely that the current established tree line will be below specifications.

Q. How does the Company's proposal help mitigate wildfire risk?

A. Proper vegetation management can contribute to a reduction in the ignition, spread, flame lengths, and severity of wildfires. Wildfire risk in Pennsylvania is greatest at the beginning and end of storm season – i.e., during the spring and fall months. Vegetation and its proximity to power lines plays a key role in the prevention of wildfire. It is important for the Company to maintain clearance across its distribution circuits to limit ignition sources.

Q. Describe how the Company's proposal promotes public safety.

A. An increased investment in vegetation maintenance activities will also provide a safer environment for PPL Electric's customers. Trees falling into lines can become a path to ground, potentially impacting members of the public who are in the area of a downed tree or wire from a vegetation hit. Additionally, limiting downed trees and wires makes it safer for first responders who may be responding to incidents in and around PPL Electric facilities.

Q. Can the Company quantify any projected reliability benefits from increasing its vegetation management budget?

A. PPL Electric is anticipating a 5% improvement within the next 5 years to System Average Interruption Frequency Index ("SAIFI") over the past 3-year performance as a result of increasing its vegetation management budget.

Q. Can you describe the Company's proposal to acquire additional ROW?

A. PPL Electric wishes to acquire additional rights which will allow it to clear vegetation more easily and eliminate further risk to its power lines and other assets. Specifically, the Company wants to acquire rights that will allow it to address hazard and danger trees outside of its existing ROW.

Q. Why does the Company need additional rights?

A. There are three primary reasons why the Company needs acquire targeted enhanced ROW rights. First, a significant portion of the Company's distribution facilities are located within public road ROW. This is an efficient use of public infrastructure but does not give PPL Electric rights on private property outside of the public road ROW to address vegetation maintenance.

Second, over the years PPL Electric's standards and specifications have changed. This creates a situation where an easement was acquired decades ago that was adequate for then current specifications but no longer provides enough rights to comply with current specifications.

And third, the Company has a portion of easements that were never recorded and only allow the Company to maintain vegetation to the current established tree line. I discuss the problems with unrecorded easements in more detail below.

Historically, although the Company obtained distribution easements which permitted it to clear and maintain a distribution line corridor and address hazard and danger trees outside of the corridor, these easements were not consistently recorded. Therefore, the easements did not run with the land if the property owner from whom PPL Electric originally obtained the easement sold the property, and the Company's rights to maintain an easement were restricted to where it has historically cleared and maintained the distribution corridor (commonly referred to as the "current established tree line"). The Company's current specifications for distribution line corridors are 15 feet for single-phase lines and 25 feet for multi-phase lines, but in many instances, trimming to the current established tree line is less than these specifications.

As I mentioned previously, the Company wants to enhance its current specifications to 30 feet ground to sky for single phase, and 40 feet ground to sky for multi-phase lines in certain areas that are prone to vegetation related outages. The enhanced vegetation management program, and specifically the proposal to acquire easement rights, will allow PPL Electric to restore, adopt and maintain a consistent, system-wide specification for distribution line easements, clearing rights and hazard and danger tree rights.

Q. Can you describe the Company's acquisition of ROW proposal in detail?

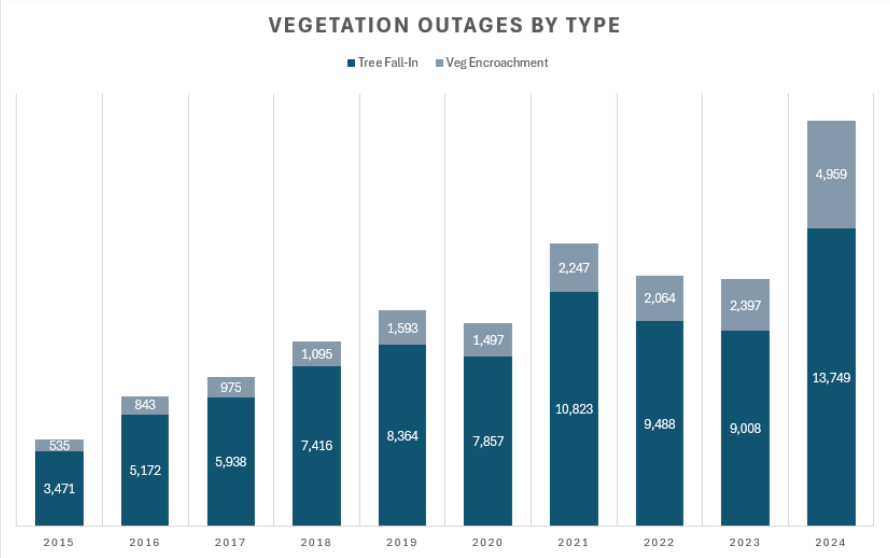
A. To address Off-ROW trees, the Company is proposing a program under which it will approach and negotiate with landowners to acquire and record enhanced easement rights, which will include hazard and danger tree rights. PPL Electric will seek these rights in targeted areas that can benefit the most from hazard and danger tree removal. It is anticipated that the identified hazard and danger trees will be removed soon after the additional hazard and danger tree rights are acquired. Furthermore, PPL Electric is proposing to capitalize the first removal of hazard and danger trees after the acquisition of these additional rights because this initial removal will permit PPL Electric to return its ROW to standard specifications, thereby improving the condition of the ROW.

Q. Are Off-ROW trees a problem on PPL Electric's distribution system?

A. Yes. In particular, the Company is increasingly concerned about the impact of Off-ROW trees on reliability. Approximately 82% of outages that occurred over the past 10 years have been caused by Off-ROW trees. PPL Electric has seen an increase in Off-ROW tree-related outages not only due to more variable weather events, but also due to large defoliation events that have led to forest health impacts and subsequent tree decline from invasive species like the emerald ash borer, spongy moth, and beech leaf disease. However, PPL Electric is limited in its ability to address Off-ROW trees because in many instances it lacks easement rights to remove hazard and danger trees.

As shown in the graphic below, Off-ROW "tree fall-ins" or trees failing and falling into PPL Electric's power lines account for approximately 80% of vegetation

caused outages. The remaining vegetation caused outages are associated with encroachment issues such as branches falling into power lines.



By attaining additional tree rights and prioritizing additional tree clearing of Off-ROW trees, PPL Electric can provide a safer and more reliable system for customers and the general public.

Q. Why are Off-ROW trees becoming an increasing cause of system outages?

A. It is mainly a combination of two factors. First is the increased volume and intensity of storms experienced across PPL Electric's service territory, and second is the impact of invasive bug species. The increased volume and intensity of storms is discussed in Mr. Lookup's direct testimony (PPL Electric St. No. 16). Storms stress the vegetation in the Company's service territory, and when there are more and stronger storms, it increases the likelihood of an outage being caused by vegetation. This is why the Company must proactively address Off-ROW trees to improve reliability.

With respect to invasive bug species, the emerald ash borer and spongy moth have caused the mortality of Ash and Oak trees to rise across the Company's service territory. When these trees defoliate and die, they can fall on to Company infrastructure and cause outages. Over the past 3 years, up to 30% of the trees the Company removes annually have been Off-ROW Ash trees that are dead or dying from the emerald ash borer.

Q. Will the Company target specific areas of its service territory to acquire enhanced ROW rights?

A. Yes. The enhanced ROW acquisition program will focus on areas where an engineering and construction solution is not feasible, therefore requiring additional tree removal, enhanced trimming or corridor widening. The targeted enhanced ROW acquisition program will focus on areas with the highest risk for customer interruptions based on tree risk conditions and outage impact. Specifically, PPL Electric will look to acquire enhanced ROW in areas where storm hardening work is already being performed. The Company will also identify and prioritize this enhanced vegetation reliability work by utilizing a combination of remote sensing and risk modeling techniques to map vegetation presence and model tree conditions/risk system wide. Models are developed using data sources, such as satellite imagery, Light Detection and Ranging ("LiDAR"), historical vegetation maintenance information, and outage data. This approach will also aid in the strategic acquisition of additional ROW with hazard and danger tree rights.

Q. Does the Company have a budget to acquire the enhanced ROW rights to address Off-ROW trees?

Y. Yes. PPL Electric has included $25 million in its capital budget for the FPFTY to acquire additional ROW rights. This will include the acquisition of the new easement rights, and costs associated with the first pass of restoring the ROW width and addressing Off-ROW hazard and danger trees. The Company anticipates that it will continue to pursue the program in the years after the FPFTY, which will be addressed in future rate cases.

Q. Will PPL Electric compensate landowners for these additional ROW rights, and if so, how will the compensation be determined?

A. It depends on the particular negotiations with landowners. There may be some landowners who are willing to grant additional ROW rights at no cost because the Company will remove dead or dying trees that put the landowner's property at risk. If the landowner wants compensation the Company will develop an offer based on the fair market value of similar property in the area.

Q. If a landowner is unwilling to grant additional easement rights will the Company pursue condemnation?

A. It is unlikely that Company would pursue condemnation against landowners who are unwilling to grant additional ROW rights. If the Company cannot negotiate additional ROW rights, it will likely pursue engineering and construction solutions to address reliability concerns. This could include storm hardening efforts like undergrounding or

the use of Hendrix cables. Only if the acquisition of additional ROW is the only option to resolve the reliability concern will the Company consider using eminent domain.

Q. Will PPL Electric record the new ROW rights?

A. Yes. Unlike past practices, it is the Company's intent to record these new easement rights in public land records to preserve them in perpetuity. Given the capital investment in these rights the Company believes it is prudent to record these rights so that they can be maintained into the future.

Q. Is the Company projecting any reliability improvements from acquiring enhanced ROW rights?

A. Yes. The Company is projecting an additional 7% improvement to SAIFI from acquiring these additional ROW rights over the next 5 years. This improvement will be achieved from activities that occur after the FPFTY, but the investment included in this rate case is needed to start the program to achieve the anticipated reliability benefits.

Q. Is the Company's proposal with respect to vegetation management consistent with industry best practices?

A. Yes. PPL Electric's proposal to increase its vegetation management budget and to acquire enhanced ROW rights to address Off-ROW trees is consistent with industry best practices. PPL Electric performed an internal review and industry benchmarking effort from 2024 to 2025 to enhance its vegetation management program for safety, reliability, efficiency, and customer experience. This benchmarking effort was performed through

the Southeastern Electric Exchange peer survey. As a result of this effort, the Company identified the above-described management program that combines cyclical maintenance activities to gain clearance with data driven, reliability enhancing vegetation activities. The enhanced ROW rights program focusses on areas where an engineering and construction solution is not feasible, therefore requiring additional tree removal, enhanced trimming or corridor widening. This proposal will enhance PPL Electric's vegetation management activities and is consistent with leading practices across the industry to ensure optimal reliability is delivered to customers.

Q. Does this conclude your direct testimony?

A. Yes, it does.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Docket No. R-2025- 3057164

PPL Electric Utilities Corporation

Statement No. 18

Direct Testimony of Lisa Norden

Topics: **Customer Service Performance**
Customer Benefits of IT Upgrades
Payment Transaction Fees
Universal Services Program Salaries and Wages
Universal Services CAP Cost Recovery Offset
Supplier Tariff

Dated: September 30, 2025

I. INTRODUCTION

Q. Please state your name and business address.

A. My name is Lisa Norden, and my business address is PPL Electric Utilities 827 Hausman Road, Allentown, PA 18104.

Q. By whom are you employed and in what capacity?

A. I am employed by PPL Electric Utilities Corporation ("PPL Electric"), a subsidiary of PPL Corporation, as Vice President Customer Services.

Q. What are your responsibilities as Vice President Customer Services?

A. I lead PPL Electric's customer service team, which is one of the most customer-facing functions at the Company. I oversee a broad range of customer relationship functions, such as metering system operations, contact center and support operations, billing, revenue collection, supplier services, universal service programs, energy efficiency programs and the key accounts team. I work to make sure that all activities within the team are conducted safely and in an efficient manner that enhances the overall customer experience.

Q. What is your educational background?

A. I have a Bachelor of Science degree in Accounting and Finance from the University of Maine.

Q. Please describe your professional experience.

A. I have been in my current role with PPL Electric from 2022 to present. Prior to that, I was the Chief Operating Officer of Reybold Group in 2021, held multiple positions with Qurate Retail Group from 2013 to 2020 (the last being Senior Vice President, Fulfillment), was the Principal Consultant for Portland Enterprise Partners in 2012, held multiple positions with L.L. Bean, Inc. from 1990 to 2011 (the most recent being Vice President, Customer Satisfaction) and was a Senior Auditor with Coopers & Lybrand from 1985 to 1989.

Q. What is the purpose of your testimony?

A. I will address the Company's customer service performance and planned initiatives to maintain and improve that level of performance. I will discuss changes to the Company's customer services Information Technology ("IT") investments to improve the Customer Information System ("CIS") and Customer Experience ("CX") systems. Additionally, I will testify about PPL Electric's proposals to include the cost of payment transaction fees in base rates, include the internal universal service employee salaries and wages to the universal service program rider, and eliminate the Customer Assistance Program ("CAP") cost recovery offset. Finally, I will testify about the Company's proposed changes to its supplier tariff, which include charging suppliers for the cost of electronic data interchange ("EDI") costs incurred to support them and adjusting the purchase of receivables ("POR") write off discount.

Q. Are you sponsoring any exhibits or schedules in this proceeding?

A. Yes, I am co-sponsoring Schedules D-11 of Exhibits Historic 1, Future 1, and Fully Projected Future 1. I am also sponsoring PPL Electric Exhibit LN-1, which is the Company's proposed Supplier Tariff, and PPL Electric Exhibit LN-2, which is a summary list of the proposed changes in the Supplier Tariff.

II. CUSTOMER SERVICE PERFORMANCE

Q. How much does the Company focus on its customer service performance?

A. Customer service is at the heart of the Company's vision, mission, and values. PPL Electric's employees are dedicated to providing the highest quality, safe, and affordable service to all customers at reasonable rates. To achieve those goals, PPL Electric emphasizes listening to the Company's customers, treating them with respect, and seeking their input to better service their needs. The Company also provides customers with useful information about their energy usage and billing and focuses on creating and maintaining programs that support their needs.

Q. Has the Company performed any surveys regarding its customer service?

A. Yes. The Company strives to make every customer interaction a positive one, and customer satisfaction is an important measure of PPL Electric's performance. The Company measures customer satisfaction through a collection of objective data generated in part through customer feedback. For example, when contacting the customer service department, customers are offered the opportunity to take a survey conducted by a third party to rate their satisfaction with the phone contact center

interaction. Using a scale of 1 to 5 (1 being Not Satisfied and 5 being Completely Satisfied), the "CE" customer experience rating from these surveys gives the Company critical information on the service experience through the phone contact channel. In 2024, PPL Electric's CE rating was 4.4 on 5.0 scale, which exceeded the Company's target of 4.0.

The Company also regularly monitors its J.D. Power survey data, which measures overall customer satisfaction for utility safety and reliability, billing and payment, corporate citizenship, customer care, price, and communications. PPL Electric ranked in the top half in the Large East region by J.D. Power in electric residential customer satisfaction among its peers in 2023, 2024 and year to date in 2025. These recognitions reflect the high level of commitment and resources the Company has consistently dedicated to customer satisfaction.

Q. Has the Company received any accolades for its customer service?

A. Yes. In 2025, PPL Electric received Escalent's Utility Trusted Brand & Customer Engagement study for "Easiest to do business with" utility award. The Company also received the following Hermes Creative Awards for its "Real Savings for Real People" campaign: (1) Platinum Award for an Integrated Marketing Campaign; (2) Platinum Award for a TV Ad Campaign; and (3) Gold Award for Interactive Creative. In 2024, PPL Electric received the ENERGY STAR Partner of the Year Award – Sustained Excellence and the ENERGY STAR Residential New Construction Market Leader Award, along with Escalent's Utility Customer Champions Award – Residential and the MarCom Platinum Award for Overarching Energy Efficiency Campaign. PPL Electric

also received the ENERGY STAR Partner of the Year Award – Sustained Excellence and the ENERGY STAR Residential New Construction Market Leader Award in 2023. Although the Company continually strives to maintain and improve on its current level of customer service performance, these awards recognize PPL Electric's success and achievement of goals.

III. CUSTOMER SERVICE BENEFITS OF IT UPGRADES

Q. Does the Company have any planned customer service system upgrades?

A. Yes. As discussed in PPL Electric witness Daniel Johnson's direct testimony (PPL Electric St. No. 19), the Company is undertaking upgrades to its IT systems.

Q. Please describe the Company's current Customer Information System ("CIS") and why updates are necessary.

A. The Company's current CIS is Customer/1 (CSS) and went into production for PPL Electric in 1999. As Mr. Johnson explains in his direct testimony, implementation of the new CIS will mitigate key risks, most importantly, cybersecurity and obsolescence risks with the Company's current systems.

Q. What is the new CIS platform the Company will be implementing?

A. PPL Corporation has chosen to implement SAP SE's ("SAP") cloud-based system as its CIS. This will enable PPL Electric to continue delivering high quality customer service.

Q. Please describe the Company's current Customer Experience ("CX") platforms and the proposed changes.

A. The Company's current CX platform includes several applications that allow customers to self-serve, including the Company's website (pplelectric.com) and Interactive Voice Response ("IVR") system, which is an integrated software-based call center platform with Natural Language Processing ("NLP") intended to help customers self-serve through human like conversation. PPL Electric also offers an event-based notification system for customers via multiple communication mediums including e-mail, phone and short message service ("SMS"). PPL Corporation plans to create more integrated CX platforms that better facilitate self-service for customers and allows customers to begin a transaction on one channel like phone, mobile app, and web or electronic communications and complete the transaction at a later time on another channel. The planned CX upgrades will allow for this capability and provide a better customer experience with the Company.

Q. What customer service benefits are expected to be created through the new CIS and CX?

A. These initiatives align with PPL Electric's commitment to improving customer service, providing better overall service to customers, providing customers with more options, and adding convenience. It also aligns with customers' expectations to be able to interact with the Company in a manner that is convenient and addresses their specific needs.

IV. PAYMENT TRANSACTION FEES

Q. Does PPL Electric have any specific proposals with regard to payment transaction fees?

A. Yes. PPL Electric wants to include the costs of payment transaction fees in base rates, rather than making the customer cover the transaction fee separately. This would apply to credit and debit card fees as well as electronic payment methods such as Venmo and PayPal. It has become an expectation of customers to be able to make payments in a method that is most convenient to them. Removing the separate transaction fee enables customers to focus on making payments on their accounts and is designed to improve customer satisfaction.

Q. How does PPL Electric currently handle payment transaction fees?

A. Currently, a customer who makes a one-time payment using a credit or debit card or makes a payment via a walk-in location, such as through Western Union or Fiserv, is charged a separate fee set by the outside vendor. The amount of that fee depends on the method and amount of the payment. Specifically, the current credit/debit card fees online or through apps such as Venmo and PayPal are $2.50 per transaction of up to $1,000 for residential customers and $7.50 per transaction of up to $1,500 for non-residential customers. The walk-in fee is $2.00 per transaction. PPL Electric proposes to no longer directly charge individual customers making one-time electric payments for those fees and, instead, recover the costs associated with the fees through base rates.

Q. Why does PPL Electric propose this change?

A. Customers expect convenient options for payment of their bills. Chief among those convenient options is payment of bills through devices connected to the Internet through mobile or online applications. However, the fees assessed for these transactions make these payment options less convenient and desirable. As a result, customers may be less willing to make timely payments for their electric service accounts. On the other hand, if these fees are recovered through base rates, the cost of the transaction fee would no longer play a part in the customer's decision-making. Instead, customers could simply pay their bills using the method that is most convenient for them.

Accordingly, the Company's proposal would provide the following benefits: (1) help customers avoid termination of service or late payments; (2) eliminate the burden of the transaction fee on customers; (3) reduce confusion between the third-party transaction fees and the Company's charges for electric service; (4) increase customer satisfaction; and (5) reduce the inconvenience of customers sending a check via mail.

Q. How may the Company's proposal benefit low-income customers specifically?

A. PPL Electric's proposal is particularly beneficial for low-income customers. By eliminating the separate assessment of these transaction fees on customers making the payments, PPL Electric's low-income customers will have a significant monetary burden lifted from their shoulders. In fact, PPL Electric estimates that low-income customer payments accounted for approximately 5.3 million of the 16.4 million total transactions that were assessed these fees. Moreover, low-income customers' transaction fees were approximately $2.1 million of the $3.8 million total fees assessed

between November 2023 and October 2024.[1] Therefore, while low-income customers accounted for approximately 32% of the transactions, their fees accounted for approximately 56% of the total transaction fees. Thus, low-income customers are poised to benefit greatly from the Company's proposal.

Q. Would the Company be working with any third-party vendors to implement this proposal?

A. Yes. PPL Electric plans to work with third party vendors to implement the proposal. The Company currently uses a third-party vendor today for the processing of these fees. The Company anticipates that the continued use of third-party vendors will make processing these transaction fees more efficient.

Q. What are the estimated costs associated with this proposal?

A. The estimated annual expense for this proposal is approximately $4.98 million. My understanding is that these costs will be allocated to the appropriate customer classes. The estimated costs were developed based on the Company's historical data for the transaction fee activities and assuming a 30% growth rate. The Company is anticipating a 30% growth rate in transaction fees because it is expecting more customers will utilize electronic payment methods now that they do not have to pay a separate transaction fee.

[1] This time period was chosen to include payment trends outside of and during the winter moratorium.

Q. Have any other electric and gas utilities operating in Pennsylvania made similar changes?

A. Yes. I am aware that Duquesne Light Company, FirstEnergy Pennsylvania Electric Company, and Philadelphia Gas Works recover the costs associated with one-time electronic payment fees in base rates.

V. UNIVERSAL SERVICES PROGRAM SALARIES AND WAGES

Q. Does the Company have any proposals regarding recovery of Universal Service and Energy Conservation Plan ("USECP") Employee salaries and wages?

A. Yes. PPL Electric proposes to recover those costs through its Universal Service Rider ("USR") as opposed to base rates.

Q. What are the USECP employees' job duties?

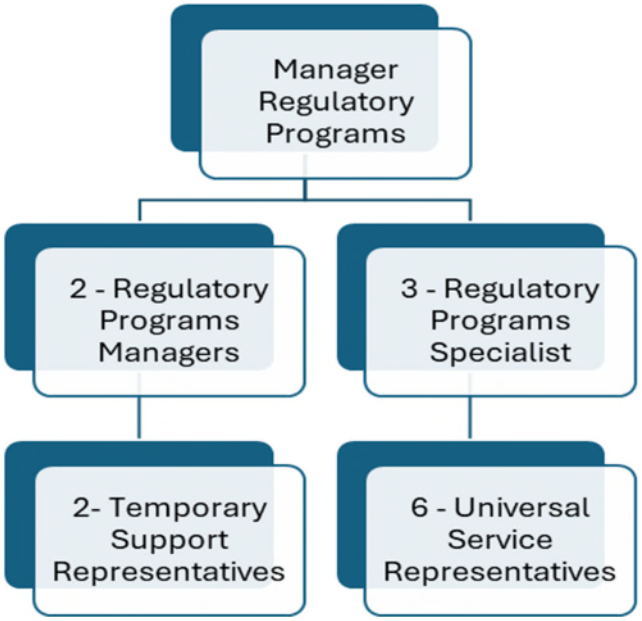
A. The employees administer the programs under the Company's USECP, which collectively provides several forms of assistance to customers to help them pay their electric service bills and pay down their balances in arrears. Specifically, the USECP contains the following programs: (1) OnTrack – PPL Electric's Customer Assistance Program ("CAP"); (2) WRAP – PPL Electric's Low-Income Usage Reduction Program ("LIURP"); (3) Operation HELP – PPL Electric's Hardship Fund; and (4) Customer Assistance and Referral Evaluation Service ("CARES") - PPL Electric's Special Referral Service for Customers with Temporary Hardships. In administering these programs, the USECP employees, among other things, conduct customer outreach, respond to customer inquiries, work with Information Technology ("IT") personnel to

update the Company's IT systems to incorporate regulatory requirements, and coordinate the operations of contractors and community-based organizations ("CBOs") that help implement the USECP. Below is a chart outlining the employees' roles and responsibilities.

Manager Regulatory Programs	Responsible for all Universal Service Programs, including regulatory requirements, strategic planning, and department management.
Regulatory Program Managers	Responsible for the design and implementation of the Universal Service programs including program strategy, communications, customer outreach, and resource management.
Regulatory Programs Specialists	Responsible for management support, auditing, quality assurance, and primary contact for partner organizations and contractors.
Universal Service Representatives	Support daily/weekly account level work associated with Universal Service Programs.
Temporary Support Representatives	Support daily/weekly account level work associated with LIHEAP.

Q. How many USECP employees does the Company have?

A. There are 14 employees that perform these tasks. Below is the organization chart for these employees.



Q. Why is it appropriate to recover those employees' salaries and wages through the USR, as proposed by the Company?

A. There are several reasons. First, by recovering these expenses through the USR instead of base rates, PPL Electric can better adapt and budget its internal staffing needs for the USECP programs, which are a critical component of the Company's electric service to low-income customers. Second, all other USECP program costs are recovered through the USR, so the inclusion of internal USECP employee salaries and wages in the USR will simplify the recovery of the USECP program costs. Third, the Company currently recovers the internal employee salaries and wages for its Act 129 Energy Efficiency and Conservation ("EE&C") Plan through its Act 129 Compliance Rider ("ACR"), so the Company's proposal would treat internal employee salaries and wages for the USECP programs essentially the same but through the USR instead of the ACR. Fourth, by including the expenses in the USR, the expenses will be subject to reconciliation,

assuring that any over- or under-recovery of these expenses will be trued up and subject to interest. If the costs are recovered in base rates, the salary and wage expenses would not be revisited until the Company's next base rate case. Finally, the Company's proposal would eliminate the regulatory lag in recovering USECP costs experienced through recovering internal salaries and wages through base rate recovery.

Q. What would the incremental impact of the Company's proposal be on the costs recovered through the USR?

A. PPL Electric estimates that approximately $1.4 million in internal employee salaries and wages for the USECP programs would be recovered through the USR in the Fully Projected Future Test Year ("FPFTY"). That additional cost would represent an overall increase of 1.1% in the amount of costs recovered through the USR currently. PPL Electric also projects that the incremental costs of approximately $1.4 million recovered through the USR under this proposal would result in a very minor increase in the USR charge. For example, if the approximately $1.4 million were included in the current USR charge of $0.01111 per kWh that is effective through December 31, 2025, the charge would increase to $0.01121 per kWh.

Q. Are there any tariff changes needed to implement this proposal?

A. Yes. The Company has updated the language in its tariff to reflect the recovery of the USECP employees' salaries and wages through the USR, which can be found in the Company's proposed retail tariff. (PPL Electric Exhibit GEO-1.) Please see the direct

testimony of PPL Electric witness Gregory Olsen, who is sponsoring the proposed retail tariff. (*See* PPL Electric St. No. 14.)

VI. UNIVERSAL SERVICES CAP COST RECOVERY OFFSET

Q. Could you please provide background on the current USR offset credit for Customer Assistance Program ("CAP") customers?

A. Under Paragraph 47 of the Commission-approved 2015 Rate Case Settlement, it provides:

> To address the bad debt, arrearage forgiveness, and Cash Working Capital issues raised in OCA Statement No. 4, PPL Electric will provide a fixed Universal Service Rider ("USR") credit of $100 per month for all CAP customers above 44,000. The Joint Petitioners further agree to evaluate further revisions in the USR credit and arrearage forgiveness and to recommend additional changes in the Company's next universal service proceeding. The Joint Petitioners retain the right to review and file testimony concerning any such proposals as permitted by the normal Commission process for review of the Universal Service Plan.

Q. Is the Company proposing any adjustments to that $100 credit?

A. Yes. PPL Electric proposes to eliminate that $100 credit.

Q. Why does the Company want to do this?

A. PPL Electric's proposal to eliminate this CAP recovery offset should be approved because it more appropriately reflects how the Company recovers its bad debt expense. Specifically, when non-CAP customers fail to pay their bills, that bad debt expense is included in the Company's normalized claim for bad debt expense in a base rate case. When CAP customers have balances in arrears written off due to their participation in the program, PPL Electric recovers the written-off balances with other USECP costs

through the USR. The Company does not include projections of bad debt expense from CAP customers in its base rates.

Furthermore, although the number of CAP customers can change over time, my understanding is that the CAP recovery offset is still unnecessary. As currently constructed, the offset only works in one direction, that is to reduce the USR's recovery if CAP customer participation goes above a specified level after distribution base rates are established. However, if CAP customer participation goes below the amount, the Company's base rates remain the same.

In addition, I am advised by counsel that the Commission has recently rejected OCA's proposed inclusion of a bad debt offset in a universal service rider Specifically, in PGW's 2023 Rate Case, the Commission rejected the OCA's proposed bad debt offset in PGW's Universal Service and Energy Conservation ("USEC") surcharge.[2] Therefore, although I am not a lawyer, I believe that the Company's proposal aligns with this recent decision.

VII. SUPPLIER TARIFF CHANGES AND PAYMENT FOR ELECTRONIC DATA INTERCHANGE (EDI) TRANSACTIONS

Q. Is the Company making any proposals with respect to its Supplier Tariff?

A. Yes. PPL Electric is proposing to adopt a new Supplier Tariff, Tariff – Electric Pa. P.U.C. No. 2S. Both clean and blackline versions of the proposed Supplier Tariff are provided in PPL Electric Exhibit LN-1. The Company's current Supplier Tariff initially became effective back on August 27, 1998, during the advent of retail electric supply

[2] *Pa. PUC v. Phila. Gas Works*, Docket Nos. R-2023-3037933, *et al.*, at 238-39 (Order entered Nov. 9, 2023) ("*PGW 2023 Rate Case Order*").

market. Although some provisions have been modified since that time, the Supplier Tariff is well overdue for an update to address current policies and procedures governing PPL Electric's interaction with and charges to EGSs and other issues.

Q. Is there a list of changes that summarizes the proposed tariff changes?

A. Yes. This list can be found in PPL Electric Exhibit LN-2.

Q. Are there any of those changes to the Supplier Tariff that you would like to point out specifically?

A. Yes. PPL Electric proposes to charge Electric Generation Suppliers ("EGSs") for the costs that the Company incurs to process their EDI transactions. To do so, the Company would offset its payments to EGSs by an allocated amount of the EDI transaction fees incurred by PPL Electric. To the extent that any EGSs do not participate in the POR Program, PPL Electric would bill those EGSs for the EDI transactions separately in the Coordination Services Charge on a monthly basis. Each EGS's allocated amount will be based on the EGS's number of EDI transactions compared to the total EDI transactions for that payment period.

Q. Are there any other costs associated with the EDI transactions that PPL Electric is proposing to charge EGSs as part of this proposal?

A. Yes. PPL Electric also will include the costs of testing a new Data Universal Numbering System ("DUNS") that the Company needs to set up for each EGS. There are two types of fees: (1) "Full" testing, which is to test DUNS activity for a new supplier; and (2)

"Abbreviated" testing, which is to test DUNS activity for an existing supplier requesting an additional DUNS number. Currently, these costs are $4,867.20 for full testing and $2,215.98 for abbreviated testing. These costs will be directly assigned to the EGS and included in the Coordination Services Charge.

Q. Why does PPL Electric propose to implement this change?

A. PPL Electric believes that these costs are better recovered from the entities directly causing the costs' incurrence (i.e., EGSs) as opposed to the Company's general customer base, which includes both shopping and non-shopping customers. Moreover, these EDI transactions and testing costs are a necessary component of the EGSs' ability to do business in PPL Electric's service territory, so it is reasonable and appropriate for them to be responsible for the costs associated with those transactions. Furthermore, the EDI transaction costs will be applied on a per-transaction basis. This methodology will encourage EGSs to more efficiently use Company resources.

Q. What is the annual expense associated with the EDI transactions that PPL Electric currently incurs?

A. Over the 12-month period July 1, 2024, through June 30, 2025, the EDI transaction fees totaled approximately $929,000. For the FPFTY, the Company projects that the EDI transaction fees will total approximately $960,000. PPL Electric projects an increase in these fees based on the estimated level of shopping for the FPFTY. If the Company's proposal to charge EGSs for these transaction fees is not adopted, PPL Electric should

be permitted to recover the projected costs associated with those EDI transaction fees for the FPFTY through base rates to ensure that the Company still recovers those costs.

Q. Would the Company need to adjust its revenue requirement if it is not permitted to charge the DUNS and EDI transaction costs to suppliers?

A. Yes. The proposed FPFTY budget assumes that the DUNS and EDI transaction costs will be recovered from suppliers. If this proposal is not approved, the Company would need to adjust its revenue requirement to recover these costs in base rates.

Q. Does this conclude your direct testimony?

A. Yes, it does.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Docket No. R-2025-3057164

PPL Electric Utilities Corporation

Statement No. 19

Direct Testimony of Daniel Johnson

Topics: **IT Upgrades**

Dated: September 30, 2025

I. INTRODUCTION

Q. Please state your name and business address.

A. My name is Daniel Johnson. My business address is 280 Melrose Street, Providence, Rhode Island 02907.

Q. By whom are you employed and in what capacity?

A. I am Senior Vice President, Chief Information Officer for PPL Services Corporation ("PPL Services"), a subsidiary of PPL Corporation and an affiliate of PPL Electric Utilities Corporation ("PPL Electric" or the "Company").

Q. What are your responsibilities in that role?

A. I am responsible for innovation, digital technology, customer technology, field operations technology, grid-pipeline-generation technology, enterprise technology, infrastructure and technology operations, and Agile transformations. I supervise all technologies, applications, enterprise architecture, including security and middleware, data analytics, and Artificial Intelligence ("AI") platforms. I lead a team of 7 senior management professionals.

Q. What is your educational background and professional experience?

A. A complete statement of my education and work experience is attached to this testimony as Appendix A.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to explain the current state of the Company's information technology ("IT") infrastructure and discuss the need for upgrades to modernize and streamline this infrastructure. I will report on the state of the Company's customer-facing, business-facing, operations, and cybersecurity IT systems, as well as the Company's multi-year assessment of the operational risks of the current systems. I will explain why investment in upgrades to IT systems is necessary to secure critical infrastructure, streamline customer service and billing processes, ensure cost efficiency across all systems, and better evaluate and leverage new technologies in the future.

II. IT INFRASTRUCTURE OVERVIEW, RISKS, AND SYSTEMS

Q. Please describe the role of IT Infrastructure in the Company's operations.

A. The Company's IT infrastructure is essential to every part of its operations. Operating an efficient, modern utility means storing, processing, and utilizing large quantities of data every single day. In the past, the number of employees that were directly accessing and working with the Company's IT was limited. However, in an interconnected, modern utility, nearly everyone relies on dependable IT systems to do their jobs. Whether they are linemen, generation unit engineers, accountants, or customer service personnel, the Company's employees constantly transmit and receive information and important communications through the Company's platforms. To continue providing reliable and reasonably priced electric service to customers, the Company must ensure that this information is safe from predatory outside groups, maintained on a stable platform, and efficiently organized so it can be used effectively.

Q. Describe how the IT landscape has changed since the Company's 2015 rate case and the challenges presented by those changes.

A. Both the utility and technology industries have seen significant changes in the past decade. It has been a decade-long sprint through innovation, disruption, and reinvention. We have seen societal shifts in how we live, work, and connect with people. The pandemic accelerated remote work adoption, but the groundwork was laid prior to the start of the pandemic. Since the filing of the last rate case in 2015, the Company has achieved significant operating efficiencies via remote meetings, file sharing systems, and other mainstream workflow software.

But evolution of technology has also introduced new and complex challenges to the Company' IT operations. These challenges include rapid growth of new technologies associated with demand side management ("DSM") programs, and increasingly complex behind-the-meter generation operations. These advancements have added new complexity to what was previously a simpler, one directional movement of energy to customers. To meet the challenges presented by this complexity, now more than ever, accessing understandable, useful real-time information is critical to effective operations.

There are also new expectations for customer service. The electrification of vehicles and homes has made customers more conscious of their energy bills. This has led to customer demand for transparent, accessible information about their bills and energy usage so that customers can maximize their savings. As customer needs continue

to evolve, it is likely that the Company will become even more dependent on an efficient, stable IT infrastructure to meet these new expectations.

Most importantly, the Company's IT infrastructure is more essential than ever to keeping its operations secure. The Company is responsible for both critical energy infrastructure and vast amounts of highly sensitive customer, business, and contractor information, all of which is subject to threats by hostile actors. These hostile groups are constantly adopting new tactics, so outdated security systems or unwary staff can create a significant risk that critical information and systems will be compromised. The rapid evolution of AI has made these attacks even more effective and frequent.

Q. Describe the Company's current IT infrastructure.

A. The Company's current IT infrastructure consists of an array of interconnected platforms that fall into a handful of categories. Field operations, cybersecurity, business-side IT (often called enterprise resource planning, or "ERP"), customer-side IT, and content management platforms. Many of these components are currently run "on premise" using the Company's own hardware. Current software applications include:

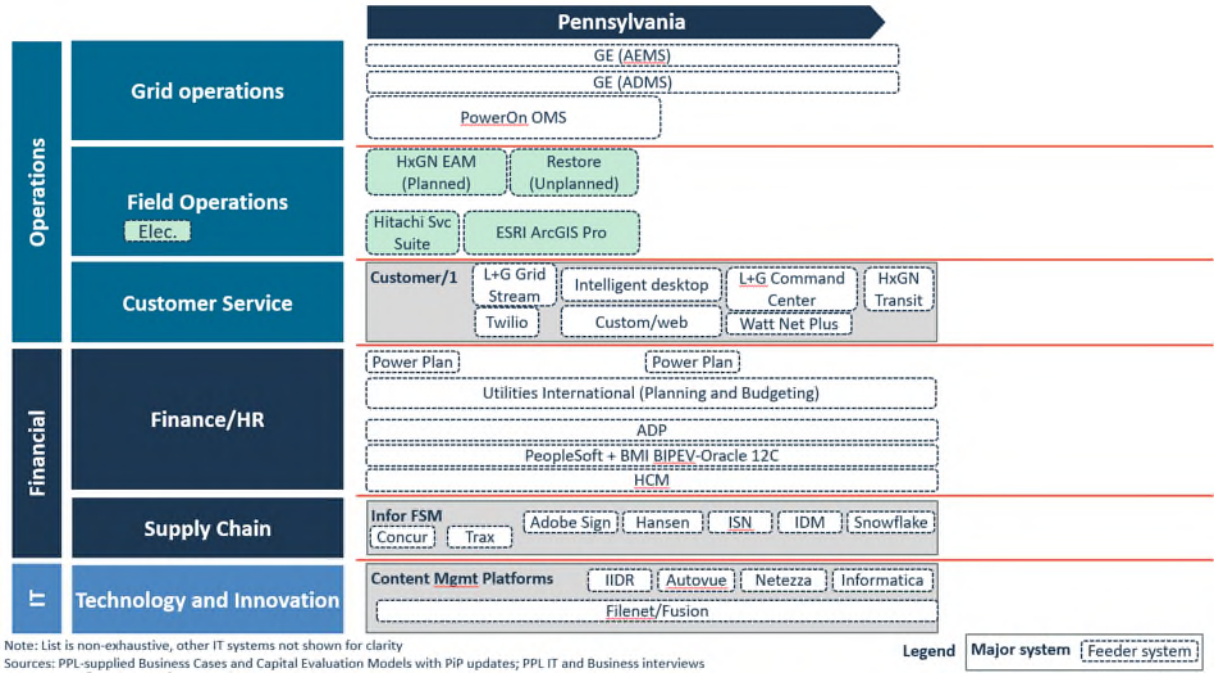
- **Field Operations:** The Company's field operations rely on Hexagon EAM product suite and Oracle's Primavera for work scheduling, resource, and cost management. In addition, the Company uses Environmental Systems Research Institute, Inc.'s ("ESRI") suite of Geographic Information Systems ("GIS") tools for system mapping needs.

- **Grid Management:** The grid management systems include Advanced Distribution Management System ("ADMS") for the distribution system, and Advanced Energy Management System ("AEMS") for the transmission system. These grid management systems are utilized to provide safe and reliable power to the Company's customers during normal day-to-day operation, as well as in the event of unplanned disturbances to the grid. These systems are provided by GE Vernova ("GEV").
- **Cybersecurity:** The Company uses an array of cybersecurity products to ensure that staff and customers are protected against unauthorized security breaches or cyberattacks, and it employs numerous staff who are dedicated to cybersecurity on a full-time basis.
- **ERP:** The Company operates its finance systems on the PeopleSoft General Ledger (GL) platform and its human resources system uses Oracle HCM (Human Capital Management) including timekeeping. Oracle HCM was implemented in May 2020 and has a vendor subscription agreement and support through May 2028. Because the PeopleSoft GL system does not have all the functions needed to meet the Company's financial requirements, including treasury, remittance processing and budgeting, the Company supplements the system with additional applications including FIS (treasury management system and accounts payable hub), Deluxe (utility customer remittance processing), Utilities International (budgeting and forecasting). And, because Oracle HCM does not have all the functions to meet the Company's human resources requirements, including recruiting and goals plus performance management, the Company must supplement the system with

additional applications including iCIMS (recruiting) and PeopleFluent to fill these gaps. Additionally, native Oracle HCM shortcoming requires the Company to invest in middleware to connect Oracle HCM to multiple legacy systems.

- **Customer Information System ("CIS"):** The Company currently uses the Accenture Customer/1 customer system that is COBOL-based and challenging to support. PPL Electric's instance of Customer/1 in PA was first implemented 25 years ago.
- **Customer Experience ("CX"):** The Company's CX platform – which powers the channels that customers use to interact with the Company – consists of the Twillio platform for multichannel communication.
- **Content Management Platforms:** The Company relies on an array of different content management platforms to share projects and information between groups and with third parties.

A visual representation of these systems is depicted in the table below:



Q. Does the Company's existing IT infrastructure position it to efficiently serve customers in the future?

A. No. Although the Company's current IT infrastructure remains capable of carrying out day-to-day functions in the near term, managing these disparate systems and maintaining aging hardware and software infrastructure requires roughly 90% of the Company's IT resources. This leaves few IT resources remaining to identify and work on applications, systems, and software that will position the Company to serve its customers reliably in the future.

In addition, there are barriers to sharing information across the disparate platforms within PPL Corporation, which are only overcome through manual entry, requiring time and effort from non-IT staff. In short, the Company's current IT infrastructure could maintain the status quo in the near term, but is growing increasingly costly, is becoming less reliable, and, ultimately, is hampering the Company's ability to

find forward-thinking, more efficient ways to serve its customers. This is not a sustainable approach to managing this important part of the Company's long-term success.

Q. What specific risks and challenges have been identified in the Company's IT infrastructure?

A. Many systems are either aging, nearing the end of their service contracts, or reaching "end-of-life," which is the point at which an IT product is no longer maintained or supported by its manufacturer. Obsolescence is looming for many of the Company's existing systems. For example:

- Customer/1: This system is rigid and built for cost times consumption-based rates. To adapt and customize Customer/1 to new rate structures such as time varying rates or compliance with Federal Energy Regulatory Commission ("FERC") Order 2222, the Company will have to engage in the costly and inefficient coding of rates. Customer/1 is out of support with the vendor and makes integrations with third party technologies such as Meter Data Management Systems ("MDMS") increasingly difficult to support. Support costs are expected to rise, as is the complexity to support Customer/1.
- Financial and HR Systems: PPL Corporation recognized the importance of moving to a more integrated operating model, and appreciated the business, cost, and personnel efficiencies that could be realized by such a change. As a result, beginning in 2021, PPL Corporation began to pursue a "One PPL" strategy, aiming to create a shared services model where decision-making, maintenance, and

business activities would happen at the PPL Corporation enterprise level, with input from individual operating companies. PPL Corporation has recognized many benefits the transition to such a strategy could provide, but the disparate software that currently supports PPL Corporation's different operating companies is not equipped for the complex needs of a modern-day utility. PPL Corporation has determined that a key element to support the move to a "One PPL" strategy and improve current business processes is the implementation of a single Enterprise Resource Planning system ("ERP"). This ERP system will manage all HR, Supply Chain, and Finance functions across all four operating companies and will improve not only functionality at the operating company level, but greatly improve information gathering, reporting, and the ability to make data-driven decisions across the entire business.

As these platforms lose vendor support and vendors move towards offering cloud-based services, the Company's IT infrastructure – which is not well-suited for a migration to cloud-based services – will likely require bespoke, fit-for-purpose software patches and fixes to maintain the existing systems.

Q. Do the Company's IT infrastructure challenges affect the cost of providing utility service?

A. Yes.

Q. How so?

A. As stated above, most of the Company's IT resources are spent keeping systems running – fixing hardware, patching software errors, and keeping the IT infrastructure stable so that the Company can carry out its day-to-day obligation to provide service. The cost-burden that this places on PPL Electric's customers is two-fold.

First, as these systems continue to age and lose support resources, the Company will be forced to invest more to keep its infrastructure at an acceptable level of efficiency, safety, and reliability. These necessary expenses will eventually be borne by customers, leading to higher rates with no consequent improvements for the customers; rather, those higher rates will be incurred to maintain aged systems.

Second, making capital investments to maintain these aging and inflexible IT systems stunts innovation and improvement. Focusing the efforts of the Company's IT personnel on keeping day-to-day operations running prevents the Company from taking a long-term view of its IT operations. If the Company's IT staff is solely dedicated to the day-to-day, they cannot evaluate new ways to leverage IT systems and new processes to improve customer experience, streamline operations-side efficiency, and allow the Company to most effectively use its resources to serve its customers.

III. PLANNED IT UPGRADES

Q. How does the Company plan to address the challenges you have identified in your testimony?

A. The Company has developed a five-year plan to overhaul its aging IT infrastructure, reorient the Company's IT expenditures towards improving its IT operations, and

develop an understanding of how to use emerging technologies to effectively improve its operations. The plan was created as part of PPL Corporation's efforts to operate more efficiently by improving cooperation and information sharing across its jurisdictional utilities. Beginning in late 2023, PPL Corporation determined that it needed to better align the IT systems maintained by different utilities within the organization and to identify and study weaknesses and risks in the IT infrastructures of each utility. To carry out this goal, PPL Services engaged in a comprehensive IT systems review.

Q. What was the scope of that review?

A. PPL Services examined the systems supporting the field, grid, customer service, ERP, and data management operations of its different jurisdictional utilities. In all, these systems account for between 50-60% of all IT expenditure across PPL Corporation's jurisdictional utilities.

Q. What were the findings of PPL Services' review?

A. Overall, the review confirmed what PPL Corporation had already suspected – that the lack of a consolidated organizational platform created inefficiencies for the organization. The review also identified numerous risks stemming from the age, complexity, and inflexibility of its current IT infrastructure. Overall, PPL Services concluded that a number of the utility's systems were not meeting the needs of its customers or employees and were hindering PPL Corporation's efforts to operate

efficiently, share ideas within PPL Corporation's jurisdictional utilities and adapt to new challenges.

Q. Please provide some examples of the issues that the IT infrastructure was experiencing.

A. The comprehensive IT systems review identified the following issues, for example:

- More frequent than desired outages to high and middle priority IT systems;
- Few applications and systems running on the cloud;
- Low rates of resolution for help tickets handled by automated systems with no human intervention;
- Proliferation of applications across operating utilities, many performing similar functions, and lack of integration of those systems at the Company level;
- Higher levels of expenditure on hardware maintenance and software patching than on preventative maintenance; and
- Many systems are at or near obsolescence risk, with as many as 10% of the operating systems, 32% of storage systems, and 52% of the network switches reaching end of life at or before 2025.

Q. How has PPL Corporation responded to the findings of its IT systems review?

A. PPL Corporation determined that in addition to immediate repairs to stabilize and secure its IT infrastructure, it must make strategic changes to how it manages and maintains IT infrastructure. In 2024, PPL Corporation launched a targeted and strategic plan to consolidate its systems, overhaul its processes, and become more flexible to future

changes in IT. This plan includes the consolidation of platforms used across PPL Corporation's jurisdictional utilities into one unified platform to be used across all of the jurisdictional utilities. PPL Corporation anticipates that this migration to a unified platform will establish one set of shared costs that can be allocated across different affiliates, resulting in savings relative to each affiliate maintaining its own system

Q. Please explain PPL Corporation's plan to upgrade IT systems.

A. PPL Corporation organized its plan around a number of different "value streams" – which are simply categories of solutions and people who build those solutions for a broader business objective. The value streams included in the plan are: (1) Advanced Customer Operations and Engagement, which includes CIS, customer experience platforms, and metering modernization; (2) Predictive Field Operations and Asset Management, which includes Work and Asset Management Consolidation; (3) Grid and Pipeline of the Future, which includes unified GIS and intelligent grid operations across all utilities; (4) Enterprise Technology, which includes human resources solutions and corporate and financial enterprise solutions; (5) Data analytics and AI; (6) Cybersecurity; and (7) Infrastructure and Other. Across all value streams, PPL Corporation's plan further includes three overlapping phases: Run, Grow, and Transform. The "Run" phase of plan is focused on stabilizing and securing day-to-day operations by replacing obsolete hardware and software systems. During this phase, PPL Services will also free up its IT resources for more proactive projects by contracting these more basic IT support operations to a managed services company. The "Grow" phase will focus on preparing PPL Corporation's different utilities and employees to

implement a more cohesive and efficient IT infrastructure. Finally, the "Transform" phase of the plan will focus on bringing PPL Services' IT systems and capabilities into the future.

IV. RUN PHASE

Q. How will day-to-day operations change during the "Run" phase?

A. The Run phase of the IT upgrade strategy, which began in 2025, focuses on making changes that will meet the immediate needs of the Company's employees and customers while freeing up resources to carry out PPL Electric's long term IT goals. This is expected to produce short-term improvements by reducing the number of recurring IT incidents, increasing the number of issues resolved through automated fixes, reducing backlogs, and adding new and improved security services.

Q. How does the Company plan to free up IT employees and focus on long-term goals?

A. The Company has entered into a Managed Services Agreement with a vendor to manage and stabilize its day-to-day IT and cybersecurity operations.

Q. What services are included as part of the Managed Service Agreement?

A. The Managed Services Agreement covers three primary IT functions previously performed by PPL Electric employees: (1) application managed services; (2) managed security services; and (3) infrastructure managed services. By transferring these functions to an outside vendor, PPL Electric expects to reduce IT operations risk, reduce duplication of applications and systems, increase automation, and add new and

improved IT security services, thereby making the Company's systems more secure and more efficient.

Q. How will the Managed Services Agreement create cost-savings?

A. The Managed Services Agreement includes a commitment by the vendor to reduce PPL Electric's IT operations costs for functions within the scope of the MSA by 50% over a five-year span. In addition, the vendor has agreed to partner with PPL Electric to share in the costs to transition to the managed services structure.

Q. How will the Managed Services Agreement enable PPL Electric to focus on its long-term IT goals?

A. By transferring employee time devoted to day-to-day operations and cutting IT operation costs, the Managed Services Agreement will free up PPL Electric's employee capacity for investment in skills training as well as identifying and implementing its new consolidated platforms.

V. GROW PHASE

Q. Why does the IT upgrade plan contain a "Grow" phase?

A. The Grow phase is intended to make sure that the correct IT policies, organizational structures, and talent are in place before PPL Electric makes extensive investments in new operations.

Q. Describe the policies that PPL Electric will implement to ensure that the upgrades to IT systems are cost effective.

A. To use new IT systems to meaningfully improve its operations, PPL Electric will maximize the value the new systems can bring, measure that value, and ensure that employees are positioned to take advantage of value-added systems. To that end, the Grow phase will implement the following policies:

- **Modernize IT Financial Management:** IT Financial Management is a way for companies to track the financial performance of their IT infrastructure. By adopting tools and identifying metrics that will track the performance of its IT systems in real time, the Company will be better able to evaluate the state of its IT infrastructure and the actual benefits produced by different IT system changes.
- **Scaled Agile Framework (SAFe):** PPL Electric will train its employees to implement the SAFe approach. SAFe relies on groups of employees from across different operations teams and prioritizes flexible decision making, collaboration, and solutions that best serve PPL Electric's end-goal. The Company will implement SAFe training for its business, IT, and Field Operations Teams, alongside more conventional IT skills development.
- **Value Realization Office:** The creation of a Value Realization Office, with a staff of individuals dedicated to overseeing the IT upgrades, tracking and reporting the effectiveness of different parts of the plan, and assisting operations teams in implementing these new systems.

- **Assessment and Preparation for New Programs:** PPL Electric is undertaking an organization-wide assessment of its work efficiency and determining the best way to incorporate new IT systems to make its operations more efficient and effective.
- **Skills Development:** PPL Electric is investing in training its employees to adjust to working with the new, consolidated platforms and managed services arrangements, learning how SAFe will function, and implementing uniform cybersecurity best practices.
- **Data & AI:** PPL Electric is actively recruiting individuals who have a background in data analytics and AI to build a team that will be able to determine how to implement new machine learning and AI technologies in a way that meaningfully improves operations.

Q. When will these policies be implemented?

A. While implementing these policies and programs will be an ongoing project, the majority of these policies and organizational changes will be fully adopted by the end of 2025. Programs such as building up the capabilities of the Data & AI value stream and identifying automation efficiencies are expected to be ongoing throughout the implementation of IT upgrades.

VI. <u>TRANSFORM PHASE</u>

Q. Describe the Transform phase of the Company's plan to upgrade IT systems.

A. The Transform phase is the implementation of PPL Electric's selected next-generation IT systems through different value streams, and the creation of a Data and AI team

within IT dedicated to studying advancements in and possible uses for AI and other emerging technologies.

Q. Will the Company implement all of these IT changes simultaneously?

A. No. The Company will roll out platform changes over time, beginning with its CIS and ERP operations.

Q. Has the Company determined which platforms it will use for its CIS and ERP platforms?

A. Yes. The Company has chosen to implement SAP's cloud-based systems as its "wall-to-wall" CIS and ERP platforms.

Q. How did the Company select the SAP platform?

A. PPL Electric issued a request for quotes ("RFQ") to qualified vendors that have experience in the utility industry and have the capabilities necessary to meet current and future needs. PPL Electric then reviewed and evaluated the responses to the RFQ using standardized criteria.

Q. What CIS and CX needs did the Company identify?

A. The Company determined that adequate CIS and CX platforms deployed across all jurisdictional utilities would need the following:

- **Billing:** PPL Electric's billing involves multiple rate structures, such as time-of-use, time variable (real-time pricing), demand-based, and tiered pricing. The CIS

platform must support these complex billing models, ensuring that customers are billed accurately. In addition, automated billing, payment processing through various channels (online, mobile, paper), and integration with financial institutions are critical.

- **AMI & Smart Grid Integration:** The CIS platform must be able to integrate with advanced metering infrastructure ("AMI") technologies. This integration allows for real-time data collection and analysis, supporting load forecasting, outage management, and efficient resource allocation. Processing these large datasets and generating useful recommendations will help the Company maintain grid reliability.
- **Customer Self-Service:** Modern customers expect transparency and control over their utility accounts. PPL Electric's next CX platforms must include intuitive web and mobile self-service portals where customers can view usage data, make payments, and report issues. The systems should also use different communications channels – such as e-mail and SMS text messages– to ensure that customers receive timely notifications about outages, billing updates, and other critical information.
- **Automated Regulatory Reporting:** Given the regulatory landscape, the CIS must facilitate automated reporting to various oversight agencies. An effective regulatory reporting system should provide secure data management, audit trails, and features that help the utility maintain compliance with state and federal regulations. This not only minimizes legal risks but also builds trust with customers and regulators alike.

Q. What risks are managed or mitigated by the implementation of a new CIS?

A. Moving forward with one modern CIS system will address a number of key risks, most importantly, cybersecurity and obsolescence risks with the Company's current systems. A modern, integrated CIS will enable consistent and centralized security procedures across PPL Corporation's operating companies as opposed to the inconsistent approvals and versions they currently work in.

Q. What are the expected capital costs to the Company for the Advanced Customer Operations and Engagement projects?

A. As I noted earlier in my testimony, CIS and CX are considered along with other system upgrades and enhancements as a suite of solutions in a value stream called "Advanced Customer Operations and Engagement." PPL Electric expects to spend $82 million in capital on this suite of solutions, including CIS and CX, during the Fully Projected Future Test Year ("FPFTY"). Capital spending for this area during the Historic Test Year ("HTY") was $73.3 million. Capital spending for this area during the Future Test Year ("FTY") will be $82 million.

Q. What ERP needs did the Company identify?

A. The Company determined that an adequate ERP system would need the following:

- **Financial Management:** An ideal financial management system would enable accounting and budgeting to occur at the same level of detail. The ERP system must support utility-specific financial management functions, including budget and forecasting, as well as multi-entity financial consolidation. Accurate financial

reporting and regulatory compliance are essential for ensuring transparency and stakeholder confidence.

- **Asset and Supply Chain Management:** An ERP platform must offer asset management features for the full lifecycle of an asset. This includes an asset's procurement, maintenance, maintenance scheduling, and eventual replacement planning. Effective supply chain management is vital to ensure that parts and equipment are available at all these stages.
- **Human Capital Management ("HCM"):** An ERP system that incorporates human capital management can streamline workforce scheduling, payroll processing, and compliance with labor regulations. This is especially important for managing the Company's crucial Field Operations. An effective HCM module ensures that the right personnel are available to handle operational tasks.
- **Business Intelligence and Analytics:** PPL Electric's next ERP platform will include analytics capabilities that track key performance indicators ("KPIs"), predict maintenance needs through AI, and support long-term thinking.

Q. Did the Company consider any other factors in selecting a platform?

A. Yes. In addition to these criteria, PPL Electric evaluated the platforms based on their ability to integrate with other systems, vendor support, adaptability to new conditions such as regulatory requirements, and total cost. Additionally, PPL Electric determined that a cloud-based platform was optimal due to overall advantages in support, reduced overhead, and cyber-security support. For example, many vendors are investing in new capabilities and features for cloud-supported products that are not available for legacy

on-premises systems. Cloud-based systems are also advantageous in that system updates are automatically pushed to customers, eliminating the need for scheduling and implementation of updates, some of which may be critical to system security. Cloud-hosted products also offer additional business continuity and disaster recovery capabilities by increasing redundancy and decreasing the costs of conducting disaster recovery testing. Cloud providers offer multiple data centers and include redundant infrastructure to enable secure data storage. This redundancy protects against significant downtime or failure of infrastructure. Cloud-hosted products also decrease dependence on internal resources for disaster recovery testing and planning.

Q. When will the Company implement the new systems?

A. By the end of 2027, the SAP platform will be fully implemented for ERP operations PPL Corporation wide and for CIS operations for PPL Electric. However, portions of this platform will be in service by the end of the FPFTY, which is why there are capital costs associated with the ERP platform are included in this rate case.

Q. What are the expected capital costs of the Company for the planned upgrades to the ERP and other Enterprise Technology?

A. For the Enterprise Technology value stream, which includes ERP but also standard enterprise-level projects, the Company expects to spend approximately $36 million in capital during the FPFTY. Capital spending in this area during the HTY was approximately $11.6 million. Capital spending in this area during the FTY is expected to be approximately $37 million.

Q. What other IT infrastructure improvements will the Company implement?

A. Over time, all PPL utilities will implement additional changes to customer service interfaces and across grid and field operations. On the Customer side, the Company plans to create more integrated customer experience ("CX") platforms that better facilitate self-service for customers and allow them to switch seamlessly between phone, mobile app, and web or electronic communications with the Company. This will include upgrades to the current IVR systems.

For field operations, the Company plans to implement updated systems that will modernize field-time entry, enable real-time field information sharing by its employees, and will examine the use of predictive technologies to improve vegetation management.

Finally, the Company's grid and pipeline operations plan to unify its GIS systems with PPL Corporation's other jurisdictional utilities, use predictive weather models to better assess system risks, and employ the use of drones for asset inspections.

Q. Has the Company determined what system it will use to implement these new improvements?

A. Not yet, but we are nearing final selection of some systems that will serve the functions described above. We are continuously monitoring industry implementation of technological improvements and – as with the ERP and CIS platforms – determine the criteria for selecting the right systems.

Q. What are the expected capital costs to the Company for the planned upgrades to IT systems to support Grid & Pipeline and Field Operations and Asset Management?

A. For the Grid and Pipeline of the Future value stream, the Company expects to spend approximately $7 million in capital during the FPFTY. Capital spending for this area during the HTY was approximately $30 million. Capital spending for this area during the FTY is expected to be approximately $23 million.

For the Field Operations and Asset Management value stream, the Company expects to spend approximately $9 million in capital during the FPFTY. Capital spending for this area during the HTY was approximately $16 million. Capital spending for this area during the FTY is expected to be approximately $20 million.

Q. How do you plan to manage reliability risks from implementing new technologies?

A. Given the critical role that the Company serves and the importance of IT systems in supporting that role, careful evaluation of emerging technologies is even more important. The goal of the Transform initiative is not to place the Company on the bleeding edge of technological advancement – it is to carry out long-term, thoughtful assessments and implementations of emerging technologies and their use cases. By thinking about transformative technologies early and carefully, we will be positioned to implement any technological innovations in a way that makes financial and practical sense for the Company and its customers.

Q. How will AI be utilized in the Transform phase of the upgrade plan?

A. Developments in AI include promising technologies that may revolutionize grid management, cybersecurity, customer engagement, and data processing. If these technologies live up to their billing, the potential benefits to customers in the form of savings and operational efficiency will be significant. However, the Company's top priority remains the safe and reliable delivery of energy to customers, and there are still serious questions about these technologies that must be resolved before they can be relied on in sensitive parts of operations.[1] Therefore, the Company is committed to closely studying industry use-cases to determine where AI can create efficiencies, and where it creates unacceptable risks.

Q. Are there any areas where the Company expects to implement AI?

A. Yes. PPL Electric believes that there are ways to immediately free up resources using AI and other automation systems to carry out low-level, time-consuming, and repetitive tasks. These include cataloguing incidents, maintaining data sets and processing data to generate reports, managing login credentials and user access, and fixing and patching routine IT problems. In addition, the Data & AI team will use AI to examine asset planning and look for other organization-wide efficiencies.

[1] *See DOE Delivers Initial Risk Assessment on Artificial Intelligence for Critical Energy Infrastructure*, DOE (Apr. 29, 2024), https://www.energy.gov/ceser/articles/doe-delivers-initial-risk-assessment-artificial-intelligence-critical-energy.

Q. What are the expected capital costs to the Company for the planned upgrades to IT systems to support Data & AI and any other IT Infrastructure?

A. For the Data & AI value stream, the Company expects to spend approximately $9.1 million in capital during the FPFTY. Capital spending for this area during the HTY was approximately $3 million. Capital spending for this area during the FTY is expected to be approximately $6.5 million. For the Infrastructure and Other value stream, the Company expects to spend approximately $17 million in capital during the FPFTY. Capital spending for this area during the HTY was approximately $12 million. Capital spending for this area during the FTY is expected to be approximately $20 million.

VII. CYBERSECURITY

Q. What is the primary goal of the Company's cybersecurity operations?

A. The primary goal of the Company's cybersecurity operations is to protect critical infrastructure, which includes grid operations and the operational technologies and the IT systems that keep these operations running.

Q. What is the current state of the cybersecurity landscape for utilities?

A. Like the rest of its business operations, the current cybersecurity landscape for utilities has been complicated by new technologies such as interconnected management systems and smart grid systems. These interconnected technologies produce new layers of sensitive data containing customer and business information such as personal data, usage information, time of use information, and other information that can be exploited by savvy threat actors. Utilities in general are susceptible to cyberattacks due to their

broad geographic footprint and the number of "smart" devices deployed in the field and the interdependence between those devices and the software required to make them valuable.[2] They are also targets for sophisticated cyber criminals and nation states because of the potential scope of disruption that can be caused by a successful cyberattack.

In short, cybersecurity incidents pose tremendous risks to utilities and their customers and have the potential to result in disruption of energy delivery, destruction of physical and cyber assets, exposure of sensitive business and customer data, and disruption of day-to-day business operations, among other risks.

Q. What common cybersecurity threats does the Company experience?

A. The Company is generally faced with two major forms of cybersecurity threats. Computerized attacks, such as malware and ransomware, are designed to exploit vulnerabilities in the Company's IT systems to extract information or halt operations. Social engineering attacks, such as phishing, attempt to deceive employees or others with access to sensitive information or system access information into revealing that information to gain unauthorized access to systems. These two types of threats are often used together – for example, a social engineering attacker may include malware in a document, or a computerized attack may have been set up by obtaining sensitive information about IT systems through social engineering.

[2] E.g., The energy-sector threat: How to address cybersecurity vulnerabilities. | McKinsey.

Q. Please explain how cybersecurity strategy has evolved to combat these new threats.

A. In the past, utilities typically viewed cybersecurity as a one-time investment – vendors sold technology that met perceived threats, utilities purchased these solutions, and they then updated them as needed. Today, cybersecurity requires continuous attention, maintenance, employee training, and updates. Given the Company's reliance on its IT infrastructure to run their critical infrastructure, cybersecurity is now a central focus of our security operations, and a regular topic of discussion for all of the Company's operations.

Q. Does the current IT infrastructure contain vulnerabilities that could be exploited by threat actors?

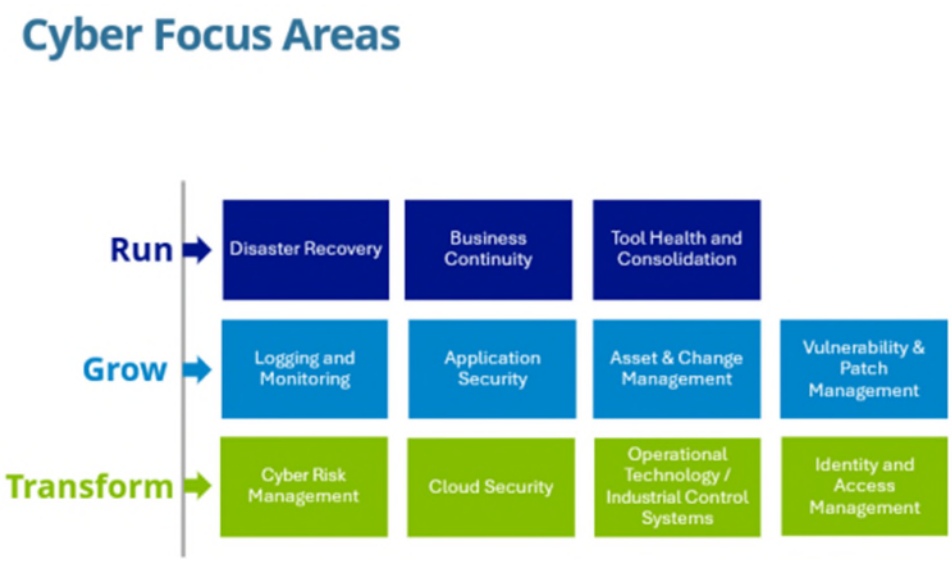
A. Yes. Certain potential vulnerabilities were identified in PPL Electric's overall review of its systems. Many of the identified issues stem from the absence of a consolidated IT infrastructure with standardized processes and information access policies. As long as the Company maintains different systems across operating companies, many of these vulnerabilities will continue to exist.

Q. Will the planned IT upgrades address these vulnerabilities?

A. Yes. Overall, the planned upgrades will improve cybersecurity across the PPL Corporation utilities by consolidating all IT systems, which will mitigate many of the risks identified in PPL Electric's overall review of its systems. In addition, PPL Electric will reassess and strengthen different parts of cybersecurity infrastructure during each stage of the upgrade plan.

Q. Please explain how the different phases of the planned upgrades will support the Company's cybersecurity infrastructure.

A. The "Run," "Grow," and "Transform" phases of the upgrade plan will support the Company's cybersecurity infrastructure. In the "Run" phase, through its managed services agreement, the Company will solidify its recovery planning operations, which will ensure that in the event of an incident the Company will be capable of restoring its systems. The Company will also assess the different cybersecurity tools in use and consolidate them into one modern cybersecurity toolkit. As the upgrade plan moves into the "Grow" phase, we will assess application security, develop better protocols for vulnerability management and threat monitoring, and invest in cybersecurity skills training for employees. These are intended as organization wide preparations to make it easier to implement future cybersecurity programs. In the "Transform" phase, once a set of uniform protocols and systems is in place, our cybersecurity operations will implement advanced cybersecurity risk management, cloud security programs, more advanced identity and access management systems, and investments in specialized staff to secure the Company's operational technology. A visual depiction of the plan is included below:



Q. Does the Managed Services Agreement include cybersecurity protection?

A. Yes. Although the Company plans to maintain its own technology security team, the Managed Services Agreement will help the Company with additional cybersecurity resources for 24x7 security monitoring and detection, along with disaster recovery and business continuity operations when faced with cybersecurity threats or incidents.

Q. What are the expected capital costs to the Company for the planned upgrades to the cybersecurity value stream?

A. The Company expects to spend approximately $8.4 million in capital for cybersecurity initiatives during the FPFTY. However, once the systems and processes described in my testimony are fully implemented, the capital costs for cybersecurity are expected to decrease. Capital spending in this area during the HTY was approximately $3 million. Capital spending in this area during the FTY is expected to be approximately $8.1 million.

VIII. BENEFITS OF PLANNED IT UPGRADES

Q. Will the planned IT upgrades create benefits for the Company's customers?

A. Yes. While the primary motive for the upgrades is the long-term security and stability of IT systems and the Company's critical infrastructure, they will also create long-term benefits for the Company's customers. PPL Electric witness Lisa Norden summarizes the customer-services benefits of the upgrades in more detail in her testimony (PPL Electric St. No. 18), but they include new and enhanced self-service options for customers that will operate across integrated platforms, along with the ability for customers to begin interactions on one device and continue on another device.

Q. How will the upgrades drive operational efficiencies that will benefit customers?

A. The upgrades are expected to achieve the following operational efficiencies, among others: (1) support and licensing of multiple systems and efficiencies through centralized support at the PPL Corporation level; (2) streamlined implementation of new system functionality across all operating companies, including potential implementation of AI advancements; (3) reduction in manual data reconciliation and data collection to support enterprise-wide insights and analysis; (4) billing and process automations and handling time efficiencies for customer services operations; (5) reduction in clerical, engineering, and scheduler manual administrative work to support field operations; and (6) overall reduction in system maintenance and manual process for enterprise services.

Q. Does this conclude your direct testimony?

A. Yes, it does.

Appendix A

DANIEL JOHNSON

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CHIEF TECHNOLOGY OFFICER

Technology Innovation | Revenue Growth | Cost Control | Process Improvements | Team Leadership & Development

Innovative technology executive offering a proven record of success directing global teams, developing, and leading a forward-looking support structure and scalable infrastructure, along with delivering an architecture that fully aligns with business needs while allowing future development and growth. Valued for providing technical leadership for enterprise systems and security architecture, engineering, and implementations, specializing in digitization, automation and operational streamlining. Demonstrated ability to build and lead technical and non-technical teams that deliver high-performance in the maintenance, management, and enhancement of secure and stabler computing environments. Highly purposeful and driven by data-driven decision-making, consistently striving for measurable results and continuous improvement.

Core Competencies

- IT Strategy Development
- Information Security
- Enterprise Implementations
- Artificial Intelligence (AI)
- Technical Project Management
- Solution Design, Testing, Deployment
- Enterprise Vendor Management
- Disaster Recovery / Business Continuity
- Cross-Functional Team Leadership
- IT Governance
- Service Delivery
- Mergers & Acquisitions
- Process Optimization & Automation
- Budget Planning / Management
- Executive & Board Presentations
- Public & Private Clouds
- DevOps / Data Center Virtualization
- Data Analytics & Insights

Professional Experience

2024 – Present • PPL • Providence, RI

Chief Information Officer

Manage an organization of over 500 individuals with an annual IT budget exceeding $450 million. Responsible for innovation, digital technology, customer technology, field operations technology, grid-pipeline-generation technology, enterprise technology, infrastructure and technology operations, and Agile transformations. Supervise all technologies, applications, enterprise architecture, including security and middleware, data analytics, and AI platforms. Lead a team of 7 senior management professionals.

- Delivered technology solutions for a $9B US utility business offering a wide range of products and services across Kentucky, Pennsylvania, and Rhode Island.
- Implementing a 5-year IT reinvention strategy with an investment of $1.5 billion to enhance digital customer experience, modernizing grid and field operations, adopting a cloud-first infrastructure, enabling data-driven decision making, upgrading ERP systems, and establishing an agile IT operating model.
- Achieving a reduction in net operating costs, with projected IT Operations and Maintenance (O&M) savings of $128 million over five years. These savings are anticipated to be realized by 2029 through strategic optimization and cost management initiatives.
- Stabilized IT operations and drove operational excellence by targeting a 10% reduction in Mean Time to Recover (MTTR) from incidents by Q4 2025, enhancing system reliability and response efficiency.
- Enhanced planning and delivery effectiveness by advancing SAFe Agile practices, targeting the launch of 20+ Agile Release Trains (ARTs) by 2026 to drive enterprise agility and alignment.
- Increased financial visibility and transparency by driving a 3x improvement in speed to financial and value insights in 2025, enabling faster, data-driven decision-making.
- Upskilled the workforce by launching 20+ technology learning paths by 2026, fostering continuous learning and strengthening organizational technical capabilities.
- Enabling growth and innovation by driving a 4x increase in capital allocation toward growth-focused investments by 2029, aligning funding with strategic priorities.
- Improved ease of doing business for customers and colleagues by driving 85%+ adherence to out-of-the-box functionality and delivering a unified technology platform to enable a consistent colleague experience by 2025.
- Delivering business outcomes across value streams by enabling $261 million in IT reinvention lead Operations & Maintenance (O&M) savings over 5 years, aligning technology transformation with enterprise cost optimization goals.

2013 – 2024 • GUARDIAN LIFE • New York, NY

Chief Technology Officer and Head of Technology

Directed an organization of 2,800+ individuals with an annual $400+ MM IT budget, overseeing innovation, divisional CIOs, digital technology, enterprise technology, technology operations, and Agile transformations. Oversee divisional CIOs, enterprise technologies, all applications, enterprise architecture, including security and middleware, data analytics, and AI platforms. Manage a team of 8 senior management professionals, including one in India. Serve as a voting member of strategic investment leadership team.

- Delivered technology solutions for a $12B insurance business offering a wide range of products and services.
- Evolved a technology portfolio spanning 5 decades, including systems such as a policy admin system built 52 years ago and the recently launched digital consumer business, GuardianDirect.com.
- Led the modernization of workplace technology by implementing Office365, streamlining communication and collaboration tools, and enhancing productivity across the organization.
- Spearheaded the innovation of the desktop experience by introducing Macs, providing users with a more intuitive and efficient computing environment while ensuring compatibility with industry-standard software and tools.
- Orchestrated the migration of 80% of applications to cloud-based platforms, leveraging the scalability, flexibility, and cost-efficiency of cloud computing to modernize the organization's technology infrastructure.
- Established a robust data lake on cloud infrastructure, enabling advanced data storage, processing, and analysis capabilities to drive informed decision-making and support data-driven initiatives across the organization.
- Significantly enhanced reporting and analytics capabilities by implementing over 30 machine learning models, empowering the organization with actionable insights and predictive analytics to drive strategic decision-making and operational efficiency.
- Successfully migrated the customer experience to digital platforms, expanding the organization's digital footprint to over 25 million customer touchpoints, resulting in increased accessibility, streamlined interactions, and enhanced customer satisfaction.
- Integrated digital technologies into various aspects of business process, operations, and customer experiences.
- Spearheaded the use of technologies including cloud computing, data analytics, artificial intelligence, and automation to enhance efficiency, agility, and innovation, resulting in significant increases in digital adoption and digitally enhanced capabilities.
- Drove a cloud-first strategy, leveraging 120+ Software-as-a-Service solutions, migrating 80% of total applications to AWS, and achieving the highest levels of system stability over the past 20 months.
- Enabled a truly data-driven organization with advanced analytics, intelligent automation, data visualization, and reporting.
- Supported the collection, processing, and scheduling of data to inform human and automated business decision making, including claim fraud detection and predictability of claim incidence.
- Implemented artificial intelligence-enabled solutions across the enterprise including automated digital customer experience, cognitive agents, process optimization, digital enrollment, computer vision for dental claims review, and email automation.
- Fostered a culture of innovation, cultivating strong partnerships, hackathons, thought exchanges, and technology roadmaps, resulting in the submission of 4450+ ideas and the launch of new capabilities benefiting consumers and colleagues.
- Worked closely with the business teams to launch over 100 teams, 39 of which are organized into 8 Agile Release Trains.
- Trained over 3800 resources with 60+ employees certified as SAFe professionals, resulting in an average team happiness rating of 4 out of 5.
- Collaborated with deal teams to identify and diligence potential direct investments in start-ups, prototype and pilot commercial solutions, and leverage insights for Guardian’s core businesses.

2007 – 2013 • NBC UNIVERSAL, COMCAST • New York, NY

Chief Technology Officer and Senior Vice President

Led a technology organization of 800 individuals and managed an annual budget of $190 MM, overseeing architecture, engineering, and 24/7/365 operations for all technology, from desktop to data center. Implemented an IT Service Provider model, fostering collaboration across digital, workplace, software, platform, infrastructure, service delivery, and service management teams.

- Provided cutting-edge technology solutions for a $26B media & entertainment business spanning 10 industries and 40+ brands, with major operations in New York, Los Angeles, Washington DC, Miami, and London.
- Led the evolution of a robust technology portfolio encompassing 120 projects, 800 applications, 2,300 application platform instances, 8,000 servers, 11 petabytes of storage, 5 data centers, and 2,800 network devices connecting 26 countries with 500 circuits and 40,000 desktops, tablets & smartphones.

- Spearheaded the 5 most productive years for Technology during historic times, delivering over 600 business initiatives, including high-profile events such as the Super Bowl, (5) Olympic Games, (5) US Elections, SAP ERP, Ad Sales Upfronts, Universal & Comcast Integrations, and prevented 35,000 defects from being released into production.
- Partnered with NBC Olympics to design, build, and support technology solutions for the 2012 London, 2010 Vancouver, 2008 Beijing summer and winter games, ensuring rapid deployment and flexibility to deliver cost-effective content acquisition, production, and distribution solutions.
- Collaborated closely with the NBC News Elections team to provide uninterrupted event coverage support for 200+ hours during 22 Live Primaries, ensuring 100% uptime during the 24-hour studio coverage for Super Tuesday, resulting in significant cost savings through innovative network solutions.
- Introduced fresh perspectives on modernizing the technology portfolio, creating flexibility, reducing costs, and enhancing performance. Implemented full-stack application private cloud solutions, achieved $15MM in savings, and drove adoption of Enterprise Data Warehouse environment across key business areas.
- Successfully leveraged public and private cloud technology to host services related to human resources, payroll, employee benefits, and corporate systems during the NBCUniversal and Comcast merger, driving innovation and improving financial performance.
- Collaborated with business partners to consolidate worldwide financials, supply chain, and human resource systems into a centralized SAP system, ensuring compliance with banking and reporting standards and providing a seamless solution for multiple currencies, time zones, and languages.
- Worked closely with the Ad Sales and Research team to improve data warehouse loads by 25%, streamlining access to critical ratings and sales data, optimizing data schemas, and enabling informed decision-making on $6 billion of revenue.
- Introduced game-changing technologies at every layer of the technology stack, including enterprise data warehousing (Teradata), virtualized desktops and servers (VMWare), SAN Replication (RecoverPoint), backup deduplication (Data Domain), Nexus network switching (Cisco), and core WAN (ASR 9000).

2004 – 2007 • NBC UNIVERSAL, GENERAL ELECTRIC (GE) • New York, NY

Vice President, Technology Governance

Established and spearheaded the inaugural Technology Governance organization at General Electric, overseeing a global team of 80 individuals and managing a sizable $15MM budget. Cultivated strategic partnerships with senior business leaders, leveraging four years of relationship-building to gain insight into their challenges and devise optimal technical solutions. Directed Information Security, Quality Operations, 24/7/365 IT Operations Center, Technical Account Management, and International service delivery to ensure operational excellence and client satisfaction.

- Pioneered and enforced compliance for critical processes, including Technology Green Light (NTI), Technology Stack Standardization, Top 40 (Demand Management), Bottom 10, 2-Minute Drill, Design Reviews, Organizational Maturity, Change Control, Long-Term Triage, and Resource Allocation, ensuring adherence to industry standards and best practices.
- Drove the consolidation, design, and implementation of regional core compute solutions across multiple regions, resulting in a substantial annualized savings of $11MM. Enhanced the compute infrastructure in Washington DC by significantly boosting bandwidth and storage capacity, consolidating compute functions, refreshing network components, and migrating to a new IP core at News Channel. Successfully delivered a $1.4MM project focused on technology and operations consolidation for NBC News, CNBC Europe, and Universal properties based in London.
- Headed the integration of Media Technology, facilitating the acceleration of Digital Media growth by consolidating Internet & Broadband, Software Development, and Air & Production technology teams, and transitioning over 250 personnel into new roles.
- Orchestrated the infrastructure divestiture for TVS Media General, facilitating the sale of four sites for $600MM and ensuring seamless transition within 61 days of the announcement. Completed the extensive planning required to sustain services post-close or transition systems from NBCU to MG control, minimizing disruption to the stations' operations.
- Led the integration of iVillage for NBC Universal with a budget of $2.8MM, streamlining back-office infrastructure, launching new business initiatives, and providing technical solutions for channel expansion and divestiture, all while optimizing resources and maximizing efficiency.
- Oversaw CTO service delivery for Olympic Games in 2006 Torino and 2004 Athens, collaborating with centralized technology teams and the NBC Olympics team to build a robust infrastructure supporting online, event, and remote operations.
- Steered the increased utilization of shared services within the Television Operations & Production Services organization, optimizing projects such as Artworks, Today Show HD, WNBC HD, NFL HD, Edit CoE, Elections 2006, Start-Over (Time Warner), Disaster Recovery, NOC Firewall Audit, and Media Content Distribution for NBC Network Projects.

2000 – 2004 • GENERAL ELECTRIC (GE) • New York, NY

Client CIO, Business Solutions

Headed a dynamic team of 110 contractors and employees, managing a substantial $17MM budget while spearheading IT strategy, software development, business digitization, technology rationalization, and Six Sigma delivery for the GE Energy Products Commercial and Finance divisions, driving operational excellence and fostering innovation.

- Quarterbacked the digitization of a $900MM China deal involving 5 customers, 4 design institutes, and 2 joint ventures, establishing infrastructure, implementing applications, and providing comprehensive training and support across 9 locations. Empowered 40 design reviews over 5 months, yielding significant $1MM savings. Leveraged the success of the China Bundle Buy digitization to develop and deploy a model for European projects, resulting in $3MM in savings in 2004.
- Managed the stabilization of the Customer Collaboration tool, the most accessed application on gepower.com, catering to over 20,000 registered users, 12,500 unique users, and 1.4MM page views per week. Enabled $12MM in savings in 2002 by renegotiating supplier contracts, achieving a 25% reduction in license payments and a decrease in on-going maintenance from 20% to 13% of the license fee. Led a cross-functional team to stabilize performance and availability, improving response time by 24% and decreasing variation by 68%.
- Conceptualized and implemented the pioneering Materials Management (eTag) program, recognized as the leading use of RFID technology for Asset Management in the industry and featured in Info Week. Forged a strategic partnership with IBM for a for-profit collaboration, highlighting a keen ability to leverage industry-leading technology for operational excellence.
- Achieved a remarkable 50% reduction in fixed costs, amounting to $1MM in 2003, through the strategic rationalization of applications, scope reduction to break-fix, and leveraging GDC contractors, demonstrating a strong commitment to enhancing efficiency and optimizing resources.

Education & Certifications

Double Master of Business Administration (MBA) Information Systems and Finance
Fordham University, New York, NY

Bachelor of Science, Management Information Systems (MIS)
LeMoyne College, Syracuse, NY

Training & Professional Development

Guardian: Justice, Equity, Inclusion, and Diversity (J.E.D.I) Master
Six Sigma Certification: Certified Black Belt, led team delivery of $1MM in savings over 15 projects (2001-2003)
Executive Leadership: Graduated Experience Information Management Programs (2021)
GE Crotonville: Attended several leadership training courses (2000-2006)

Professional Affiliations

Member, NPower National Advisory Council (Creates pathways to economic prosperity by launching digital careers for military veterans and young adults from underserved communities.)
President, Bethlehem Lacrosse Club (a 501c3 organization that provides an enjoyable development experience with the program while learning lacrosse for boys and girls from Kindergarten to 6th grade.)

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Docket No. R-2025-3057164

PPL Electric Utilities Corporation

Statement No. 20

Direct Testimony of James Conrad

Topics: Electric Vehicles

Dated: September 30, 2025

I. INTRODUCTION

Q. Please state your name and business address.

A. My name is James Conrad, and my business address is 827 Hausman Road, Allentown, PA 18104.

Q. By whom are you employed and in what capacity?

A. I am employed by PPL Services Corporation ("PPL Services"), a subsidiary of PPL Corporation and an affiliate of PPL Electric Utilities Corporation ("PPL Electric" or the "Company") as Senior Director of T&D Smart Grid & Automation.

Q. What are your responsibilities as Senior Director of T&D Smart Grid & Automation?

A. As Senior Director of T&D Smart Grid & Automation, I direct several teams that support the Company: PPL Electric's Distribution Control Center ("DCC") Engineering team that supports the Company's ADMS system and its advanced applications; the Company's Transmission and Distribution ("T&D") Supervisory Control and Data Acquisition ("SCADA") team that provides engineering and programming of remote devices; the Company's Distribution Automation team that performs programming of pole-top device controllers; its DER Management team that supports the PPL Electric Distributed Energy Resources ("DER") Management Pilot Program; and the Company's team that sets the enterprise strategy for integrating DERs and two-way power flow into the Distribution system.

Q. What is your educational background?

A. I received a B.S. degree in Electrical Engineering from Pennsylvania State University in May 2005 and a Master's degree in Systems Engineering from Pennsylvania State University in December 2010.

Q. Please describe your professional experience.

A. I have worked at several companies since I graduated from Penn State in May of 2005, including 13 years in the energy industry and 7 years in the defense industry. Below is a list of my positions since joining the Company in 2016.

- January 2016 – November 2016 – Senior Engineer at PPL Electric – I was responsible for developing Engineering and Construction Specifications, programming, and work methods, primarily around remote-operable Distribution sectionalizing devices.
- November 2016 – December 2018 – Supervisor of Distribution Standards at PPL Electric – I led a group of engineers responsible for creating Engineering and Construction specifications for Distribution system hardware.
- December 2018 – June 2020 – Manager of Relay Test at PPL Electric – I led a group of 50 supervisors, engineers, and technicians supporting the testing, troubleshooting, and installation of relay equipment at Distribution and Transmission substations.
- June 2020 – April 2021 – Manager of Distribution Control Center at PPL Electric – I led a group of 50 supervisors, operators, and dispatchers supporting the 24/7 real-time operation of the electric distribution grid, which included storms and emergent work.

- April 2021 – May 2022 – Director of Distribution Operations at PPL Electric – I led a group of about 120 operators, linemen, and engineers. This group was responsible for overseeing the 24/7 operation of the electric distribution grid, which included storms and emergent work. My duties also included work towards the Company's DER Management Pilot and emerging strategies and technologies.
- May 2022 – September 2024 – Director of IT Product at PPL Services Corporation – I oversaw an IT product portfolio including Asset Management, Electric Control, and Gas Management applications. My duties included successful implementation and integration of these technologies at Rhode Island Energy as part of PPL Corp.'s acquisition from National Grid.
- September 2024 – present – Senior Director of T&D Smart Grid & Automation – My job responsibilities are listed above.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to describe the Company's proposed Electric Vehicle ("EV") Time-of-Use ("TOU") Charging Rebate Program, which is designed to help ensure that the distribution system is prepared to handle the challenges presented by EV charging.

Q. Are you sponsoring any exhibits in this proceeding?

A. No.

II. ELECTRIC VEHICLES

Q. Please describe the challenge that EVs pose to the distribution system.

A. As EV adoption accelerates across Pennsylvania, it presents both opportunities and significant challenges for PPL Electric, particularly in how the Company plans, operates, and invests in its distribution system. While EVs represent a critical step toward decarbonizing the transportation sector, their widespread adoption introduces new dynamics that were not contemplated in traditional electric load growth models or infrastructure design standards.

At present, the most significant operational impacts can stem from load variability, unpredictability, and congestion risks at the distribution level. EV charging behavior (particularly residential Level 2 charging during evening hours) tends to increase net load during PPL Electric's peak demand periods. This can create operational stress on local feeders and substations such as increased transformer loading, especially in high-adoption neighborhoods. While this evolution requires careful planning and investment, it also presents the potential to improve grid flexibility, reliability, and overall system efficiency.

Q. What is the Company doing to meet future challenges to the grid presented by vehicle electrification?

A. To help mitigate future impacts of EV charging on the PPL Electric distribution grid, particularly during peak periods, the Company is proposing a Residential EV TOU Charging Rebate program.

Q. Please provide a description of the Company's proposed Residential EV TOU Charging Rebate program.

A. The program's parameters are set forth in the proposed retail tariff submitted in this proceeding (see PPL Electric Exhibit GEO-1). As described therein, program participants will agree to charge their EVs using Level 2 chargers during the off-peak hours established for this program (i.e., 4:00 PM to 7:00 PM in the summer months of June, July, and August, and two daily periods in the winter months of December, January, and February - 6:00 AM to 9:00 AM and again 6:00 PM to 8:00 PM). Customers will register for this program through the Company's website, and their charging sessions will be verified via approved telematics, Level 2 EV chargers, or both. Scheduling the charging sessions will be the customer's responsibility.

If the customer conducts at least 80% of their charging during the off-peak hours in the applicable billing period, the Company will provide a flat rebate of $10 to the customer in each billing period for which the criteria are met. All residential customers who own or purchase an EV will be eligible for the program, provided their EV charging is conducted with equipment that is on a list of compatible equipment certified by the Company. The program will be open to all residential EV owners for participation, but the participation will be capped at 2,000 customers. Additionally, PPL Electric may conduct targeted marketing to customers in areas where EV growth is forecasted to start causing system constraints in the next 5-7 years.

Q. Why is the Company proposing this program?

A. First, the program could help mitigate the operational challenges that EV charging poses to the distribution system and potentially defer distribution system improvement projects, the costs of which are passed onto customers. Although residential EV interconnections typically do not require system upgrade costs to be borne by the customer; if installed in large enough quantities, residential EV charging could cause constraints on the distribution system that are traditionally alleviated by new capacity projects on feeders and substations – thereby increasing the cost to all customers. However, given the nature of EV charging, the grid likely only needs to serve this type of load for short periods. As such, if PPL Electric planners were confident that EV charging would occur substantially off-peak, capacity projects could potentially be deferred.

Second, the program could help determine the capability to shift load caused by EV charging, enable PPL Electric to gather data on the magnitude of load that can be shifted through customer incentives, and help develop future EV charging programs or adjustments to this program as tools that can improve grid reliability.

Q. Describe the data collection and verification that the Company plans in connection with this proposed program.

A. Charging session validation and data collection will be conducted via approved telematics or Electric Vehicle Supply Equipment ("EVSE") platforms. Customers will authorize data collected to be used by the Company for internal planning and operational purposes. Data collected as part of this program will be used by PPL Electric's

engineering teams to improve planning practices, update standards and improve operational efficiency. Some examples of the ways in which this data may be used include: (1) determining EV charging load shapes, peak kW loading, and kWh capacity; (2) identifying or confirming the location of EV charging and associated growth rates for more accurate load forecasting and project planning; and (3) forecasting day-ahead load and associated distribution system constraints.

Q. Are you aware of similar programs that other electric utilities have implemented?

A. Yes. PPL Electric's proposed Residential EV TOU Charging Rebate program is informed by other utilities' residential EV charging programs that both relieve grid strain and provide consumer incentives. For instance, Duquesne Light Company's Smart Charging Rewards program offers up to $80/year to customers by pausing their EV charging during up to 15 summer events.

Q. Does this conclude your direct testimony?

A. Yes, it does.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Docket No. R-2025-3057164

PPL Electric Utilities Corporation

Statement No. 21

Direct Testimony of Jason Hunt

Topics: **Economic Development**

Dated: September 30, 2025

I. INTRODUCTION

Q. Please state your name and business address.

A. My name is Jason Hunt, and my business address is 320 Market Street, 4th Floor, Strawberry Square, Harrisburg, 17101.

Q. By whom are you employed and in what capacity?

A. I am employed as Manager of Business and Economic Development by PPL Services Corporation ("PPL Services"), a subsidiary of PPL Corporation.

Q. What are your responsibilities as Manager of Business and Economic Development?

A. As the Manager of Business and Economic Development, I work to help companies locate and expand their businesses within PPL Electric Utilities Corporation's ("PPL Electric" or the "Company") service territory. In this role, I work in partnership with consultants, economic developers, and state government stakeholders.

Q. What is your educational background?

A. I have a Bachelor of Arts degree in Political Science and History from Duquesne University. I also have a master's degree in international relations from the University of Chicago.

Q. Please describe your professional experience.

A. Prior to joining PPL Electric in 2024, I served as the director of international business attraction for the Pennsylvania Department of Community and Economic Development's Office of International Business Development ("OIBD"). On the OIBD team, I oversaw authorized investment representatives abroad and a team of project managers in Harrisburg. This group worked with partners across Pennsylvania to help international companies to choose Pennsylvania for their U.S. business expansions. Before joining OIBD in 2016, I worked in Washington, D.C. for four years, where I focused on international economic development, peacebuilding, and foreign policy in roles with the United States government and internationally focused nonprofits.

Q. What is the purpose of your testimony?

A. I will testify about the Company's economic development proposal, which will help support communities and spur economic development in PPL Electric's service territory.

Q. Are you sponsoring any exhibits in this proceeding?

A. No.

II. ECONOMIC DEVELOPMENT

Q. What is the Company's economic development proposal in this proceeding?

A. PPL Electric proposes to implement its Opportunity Pennsylvania Program, which is a proactive initiative to support communities in securing funding through the

Pennsylvania SITES ("PA SITES") initiative and other state, federal, or regional programs. In total, the economic development proposal would have an annual budget of $400,000.

Q. Why is economic development important to the Company's customers?

A. Economic vitality in the communities served by PPL Electric is critical, and I believe that the Pennsylvania Public Utility Commission has an important role to play in furthering economic development. Economic development ensures better-paying jobs for families, increased tax revenues for local governments, and an overall higher quality of life for residents. By supporting business attraction, retention, and expansion through reliable infrastructure and strategic partnerships, PPL Electric can help foster sustainable growth and prosperity across its service territory.

Utility investment in economic development directly benefits customers by creating stronger, more resilient communities and a more efficient, cost-effective electric system. When utilities extend electric infrastructure to support new business sites, those upgrades—whether to transmission lines, substations, or distribution networks—often do not just serve the new customer. They can improve reliability and resiliency for the entire system. Every investment in the grid has the potential to reduce outages, enhance service quality, and prepare the system for future growth.

Also, as new companies connect to the grid, they increase overall system utilization, which helps spread fixed costs across a broader customer base. This helps put downward pressure on rates and improve affordability for all customers. In other words, a more efficiently used grid is a more cost-effective one.

The benefits extend well beyond the technical upgrades. The proposed Opportunity Pennsylvania Program is intended to support the Company's communities by catalyzing site development across both developed and underserved regions. It is designed to attract new industries that generate jobs and stimulate local economies. Construction activity alone creates demand for materials, contractors, and services. Once operational, these businesses require everything from logistics and legal support to restaurants and retail—creating opportunities for small businesses and entrepreneurs to grow.

For residential customers, especially in areas that previously lacked major employers, this means access to new career paths, workforce training, and higher household incomes. Property values often rise in areas experiencing infrastructure investment and economic growth, giving homeowners increased equity and communities a stronger tax base. That, in turn, supports better schools, emergency services, and public amenities.

In short, utility investment in economic development is not just about powering new businesses, it is about empowering opportunity. It strengthens the grid, supports affordability, and helps communities thrive.

Q. What are some of the factors impacting economic development and site selection today?

A. Site selectors, or site selection consultants, are professionals that help companies find new business locations and they are widely recognized as influencers and experts in the economic development field. In a recent study done by the Site Selectors Guild, a trade

association for site selectors, utilities/infrastructure was the number one factor impacting the manufacturing site selection last year. Large manufacturing projects and data centers became more prevalent within the last year and a half, and these projects are the primary drivers of the site selectors feedback. Workforce/labor availability was the second most noted factor, followed by the availability of development-ready sites.

Q. What is the Company proposing to help address some of these concerns?

A. PPL Electric commissioned a third-party analysis in 2024 to better understand how these national dynamics were playing out in its service territory. This study identified opportunities and challenges from an economic development and site selection perspective. One key finding was that PPL Electric's service territory had few high-quality industrial sites being marketed. Additionally, the territory was underrepresented in the first round of PA SITES awards from the Pennsylvania Department of Community and Economic Development, largely due to uncompetitive or absent applications. Recognizing this gap, PPL Electric aims to encourage economic development by helping communities prepare stronger applications and improve site readiness, thereby creating more sites for impactful investment projects and ultimately driving long-term growth and regional vitality.

Q. What is the Opportunity Pennsylvania Program?

A. The Opportunity Pennsylvania Program is a proactive economic development initiative that offers two key forms of support to communities within PPL Electric's service

territory: (1) reimbursement funding for completed site development work; and (2) technical assistance to help communities secure additional state and federal funding.

Under this program, PPL Electric would provide direct reimbursement funding to local governments and nonprofit economic development organizations to support site studies, due diligence, and infrastructure improvements. These grants would not only prepare strategic sites for future development but also serve as private sector match funding—an important criterion for PA SITES competitiveness.[1]

In addition, the program would fund expert consultants or grant writers to help communities—especially those with limited capacity—to prepare and submit competitive PA SITES applications. This technical support would enable communities to improve existing sites or gain control of strategic land, increasing their readiness for future development. As PA SITES funding is time-limited, this technical assistance ensures communities can act quickly to access available dollars. If successful, this support could be extended beyond PA SITES lifespan and adapted to help communities pursue other state or federal funding opportunities.

The Opportunity Pennsylvania Program is modeled after a successful program implemented by the Company's regulated affiliate utilities, Louisville Gas and Electric Company ("LG&E") and Kentucky Utilities Company ("KU"), in Kentucky. The affiliate utilities have been recognized as top utilities in economic development by *Site Selection Magazine* in 12 of the last 15 years. While PPL Electric's operations are structured differently here, the Company plans to build on its affiliates' experience and implement many of the best practices they have developed to position PPL Electric's

[1] https://dced.pa.gov/programs/pennsylvania-strategic-investments-to-enhance-sites-program-pa-sites/

communities for growth and investment. In particular, the program in Kentucky is a reimbursement grant program. For the Opportunity Pennsylvania program, however, the Company proposes adding a technical assistance component, aimed at directly addressing some of the weaknesses identified by the above-referenced third-party analysis. Specifically, communities in PPL Electric's service territory with land available are not taking full advantage of the PA SITES funding that is only available to them for a limited time. Many communities in PPL Electric's service territory do not have the level of site preparation experience needed to prepare successful applications. The Company believes that the proposed program with the provided technical assistance will help fill this gap and encourage the communities served by PPL Electric to utilize resources that are available to them.

Q. What will be the focus of the Opportunity Pennsylvania Program?

A. The Opportunity Pennsylvania Program is designed to help communities take a proactive approach to attracting job creation and private investment through strategic site development. The goal is to improve "speed to market," helping communities become more competitive for high-impact investments and advancement of economic development.

Through a combination of technical assistance and reimbursement grants, the program encourages communities to complete key pre-development activities—such as geotechnical studies, environmental reviews, zoning and permitting, land clearing, and grading. These foundational steps are often underfunded but are essential to making sites competitive and ready for investment. Infrastructure remains a key consideration

in site selection and this initiative would support initial due diligence for communities in preparing a site for development, including assessments of electric infrastructure requirements. As part of this critical groundwork, the Company will provide insights on electrical infrastructure upgrades or extensions required to serve high-impact projects on a subject site.

The program also is intentionally flexible to meet the diverse needs of different sites. PPL Electric proposes to provide a mix of technical assistance to help communities prepare strong applications for PA Sites funding and other state or federal programs, and/or reimbursement grants to cover the cost of completed site readiness work.

This dual approach ensures that communities are not only rewarded for taking initiative but also equipped to leverage additional public funding sources. By reimbursing eligible work after it is completed, the program ensures that funding supports real progress and maximizes impact.

Further, by making sites within the Company's service territory truly investment-ready, the program will help catalyze job creation and attract new and expanding businesses, which has benefits for infrastructure investments in the Company's service territory and overall economic expansion.

Q. Are there other reasons why the costs associated with this economic development proposal are appropriate for recovery in the Company's distribution rates?

A. PPL Electric maintains that the costs associated with economic development are prudently incurred to provide service and contribute to the economic well-being of the community. Additionally, by attracting and retaining large customers, economic

development spending can help the Company avoid losing load and the associated revenue. This reduces the risk of fixed costs being spread over a smaller customer base. By reducing that risk, it can lead to lower rates for existing customers than would otherwise be implemented without those additional customers.

Q. How will the Company administer the Opportunity Pennsylvania Program?

A. PPL Electric will administer the Opportunity Pennsylvania Program directly, utilizing a set of guidelines and a governance structure based on its affiliates' Opportunity Kentucky Program. To ensure that PPL Electric's communities can benefit fully from the PA SITES program, the Company plans to go beyond the reimbursement grant model in Kentucky and utilize third-party vendors to provide the technical assistance that some of the communities may require to conduct due diligence and submit competitive grant applications for PA SITES funding. No vendors have been selected yet, but costs of such resources would be included within the proposed $400,000 total program budget.

Q. What experience does the Company have in administering economic development programs?

A. As noted previously, the Opportunity Pennsylvania Program is modeled after a successful program implemented by the Company's Kentucky affiliates, LG&E and KU. Since the inception of the Opportunity Kentucky Program in 2020, those companies have invested $2.2 million in communities across their service territories, resulting in 893 new jobs and $347 million of capital investment. The Opportunity

Kentucky Program investments have helped communities served by LG&E and KU draw in an additional $62 million in state funding, multiplying the impact of its investments.

The proposed Opportunity Pennsylvania Program draws upon that experience and adapts this program to a Pennsylvania context. For the reimbursement grant portion of the Opportunity Pennsylvania Program, the Company will utilize similar program guidelines, processes, and governance. The technical assistance portion of the Opportunity Pennsylvania program is uniquely adapted to the needs, challenges, and opportunities before the communities that PPL Electric serves in Pennsylvania. While the Opportunity Pennsylvania Program will be new, it will be rooted in the successful experience in Kentucky.

Q. Does this conclude your direct testimony?

A. Yes, it does.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Docket No. R-2025-3057164

PPL Electric Utilities Corporation

Statement No. 22

Direct Testimony of Sharon Leskowsky

Topics: Filing Requirements and Exhibits

Dated: September 30, 2025

I. INTRODUCTION

Q. Please state your name and business address.

A. My name is Sharon Leskowsky, and my business address is 645 Hamilton Street, Suite 9, Allentown, PA 18101.

Q. By whom are you employed and in what capacity?

A. I am employed as Assistant Controller by PPL Corporation, which is the parent company of PPL Electric Utilities Corporation ("PPL Electric" or the "Company").

Q. What are your responsibilities as Assistant Controller?

A. My responsibilities include financial accounting and reporting for PPL Corporation's utility operating companies including PPL Electric. This includes oversight of Regulatory, Revenue, Asset and Gas Accounting and FERC and Pennsylvania Public Utility Commission ("PUC" or "Commission") reporting.

Q. What is your educational background?

A. I have a Bachelor of Science degree in Accounting from Pennsylvania State University.

Q. Please describe your professional experience.

A. A complete statement of my professional experience is attached to my direct testimony as Appendix A.

Q. Have you previously testified as a witness in other Commission proceedings or any other jurisdiction's proceedings?

A. No.

Q. What is the purpose of your testimony?

A. I will sponsor or co-sponsor certain of the Company's filing requirements and exhibits in this case, particularly those concerning PPL Electric's accounting and financial records and the Company's pro forma adjustments for interest on certain amounts, such as customer deposits.

II. FILING REQUIREMENTS AND EXHIBITS

Q. Could you please provide a list of the filing requirements and exhibits that you are sponsoring?

A. Yes, I am sponsoring or co-sponsoring the following filing requirements and exhibits submitted by the Company in this proceeding:

- Schedule II-B-3;
- Schedules II-D-1, 3 through 5, 7, and 9 through 13;
- Schedule III-A-2;
- Schedules III-F-1 and 4;
- Schedules V-A-3 and 4;
- Schedules VI-A through D;
- Exhibit Historic 1, Schedules B-1 through 4;
- Exhibit Historic 1, Schedules C-2, 3, and 5;
- Exhibit Historic 1, Schedules D-4, 5, 9, 10, 12, and 15;
- Exhibit Future 1, Schedules C-2 and 3;
- Exhibit Future 1, Schedules D-9, 10, and 15; and
- Exhibit Fully Projected Future 1, Schedules C-2 and 3, and D-9, 10, and 15.

Q. Were the filing requirements and exhibits that you are sponsoring or co-sponsoring prepared by your or under your supervision?

A. Yes.

Q. Is the information set forth in those filing requirements and exhibits true and correct to the best of your information, knowledge, and belief?

A. Yes.

Q. Could you please explain the adjustments to operating revenues shown in Exhibit Historic 1, Schedules D-3 and 4?

A. Schedule D-3 reflects the annualizations of sales and base rate revenues for changes in customer usage and growth which is discussed in more detail in PPL Electric St. No. 4, the direct testimony of Charles Schram. Schedule D-4 reflects the adjustment made to normalize distribution operating revenue for the test period by eliminating unbilled revenue.

Q. What adjustments are being made to Wages and Benefits in Exhibit Historic 1, Schedule D-5?

A. The number of PPL Electric employees can vary throughout any given year. This, in turn, impacts the wages and benefits incurred or projected for that period. Schedule D-5 annualizes transmission and distribution wages, payroll taxes and benefits based on the number of transmission and distribution-related individuals to be employed at the

end of each test year, and the corresponding average monthly T&D-related wages to expense per employee.

Q. Would you please describe the adjustments to Deferred Storm Expenses shown in Schedules D-9 in Exhibits Historic 1, Future 1, and Fully Projected Future 1?

A. On April 3, 2014, the PUC approved PPL Electric's Storm Damage Expense Rider ("SDER") to be used for recovery of storm damage expenses exceeding the $14.7 million in base rates at Docket No. R-2012-2290597. The Order caps the amount to be recovered in base rates at 3% of the Company's total intrastate operating revenues to be billed to customers, permits the Company to establish a regulatory asset for eligible storm costs in excess of the 3% cap, and allows the Company to request recovery of those excess expenses in its next base rate case. The Company established a regulatory asset of $11,336,169 for the portion of the costs that would be recoverable from customers in its next base rate case. PPL Electric is proposing to amortize these costs over 5 years. PPL Electric witness Katelyn Arnold provides more details in her direct testimony (PPL Electric St. No. 13).

Q. Could you please explain the adjustment for Infrastructure Investment and Jobs Act ("IIJA") deferral shown in Schedules D-10 in Exhibit Historic 1, Exhibit Future 1, and Exhibit Fully Projected Future 1?

A. Pursuant to the PUC's Order issued on July 13, 2023, at Docket No. P-2022-3032929, PPL Electric submitted notice that the Company established a regulatory asset for certain IIJA-related incremental expenditures for costs incurred in order to prepare,

apply, administer, and otherwise execute on IIJA funding opportunities. PPL Electric is making a claim for approximately $633 thousand, amortized over three years for a claim of $211 thousand.

Q. What adjustments are being made to Interest Expense on Customer Deposits in Exhibit Historic 1, Schedule D-12?

A. The adjustment on Schedule D-12 shows the adjustment for interest related to customer deposits for projects. The Commission, in its Final Order at Docket No. R-80031114, determined that it was appropriate to include the interest expense on customer deposits in PPL Electric's operation and maintenance expense when the deposits are used as a reduction to rate base. The interest rate applied is in accordance with the Company's Tariff – Electric Pa. P.U.C. No. 201 as well as the proposed No. 202.

Q. Please explain what is presented in Schedules D-14 of Exhibit Historic 1, Exhibit Future 1, and Exhibit Fully Projected Future 1 regarding the Company's proposed capitalization of certain Information Technology ("IT") expenditures.

A. As explained further in the direct testimony of Christopher Garrett (PPL Electric St. No. 3), the Company is requesting capital treatment of certain IT costs. Schedule D-14 shows the adjustments to operating expenses and depreciation expense should capital treatment be approved and the regulatory asset is reclassified to property, plant, and equipment in the fully projected future test year.

Q. Could you please explain the adjustment to Depreciation Expense shown in Schedules D-15 in Exhibit Historic 1, Exhibit Future 1, and Exhibit Fully Projected Future 1?

A. As part of PPL Electric's distribution base rate filing, it prepares and provides a depreciation study and requests approval of new depreciation rates. Schedule D-15 provides an adjustment to depreciation expense to account for the change in depreciation rates.

Q. Does this conclude your direct testimony?

A. Yes, it does.

APPENDIX A

Sharon A. Leskowsky

Professional Experience

PPL:

Assistant Controller – November 2024-present

Director, Finance & Accounting Integration – April 2022-November 2024

Director, Accounting & Financial Reporting – March 2020-April 2022

Director, Financial Reporting & Technical Accounting – June 2013-March 2020

Special Project Leader – April 2012-June 2013

Air Products & Chemicals, Inc.:

Manager, External Reporting & Specialized Accounting – September 2008-March 2012

Manager, International & Specialized Accounting – March 2006-September 2008

Supervisor, Cost Collection & Rebillable Projects – February 2003-March 2006

Operational Analyst – August 2001-February 2003

FASB & SEC Accounting Specialist – September 1997-August 2001

Corporate Auditor – September 1995-September 1997

The Eagle's Eye:

General Ledger Supervisor – June 1994-September 1995

KPMG:

Senior/Staff Auditor – July 1990-June 1994