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E-FILE

July 31, 2025

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

**Re: PPL Electric Utilities Corporation
Quarterly Reliability Report for the
Period Ended June 30, 2025
Docket No. M-2023-3039027**

Dear Secretary Homsher:

Enclosed for filing on behalf of PPL Electric Utilities Corporation ("PPL Electric") is the **NON-CONFIDENTIAL** version of PPL Electric's Quarterly Reliability Report for the Period Ended June 30, 2025. The report is being filed pursuant to 52 Pa. Code § 57.195(d).

Pursuant to 52 Pa. Code § 1.11, the enclosed document is to be deemed filed on July 31, 2025, which is the date it was filed electronically with the Commission's E-Filing System.

A proprietary and confidential version of this report has also been filed with the Commission on this date via overnight delivery.

If you have any questions regarding this document, please call me at (610) 774-5696.

Respectfully submitted,

A handwritten signature in blue ink that reads "Kimberly A. Klock". The signature is fluid and cursive, with the first name being the most prominent.

Kimberly A. Klock

Enclosures

cc via email: Darryl Lawrence, Esquire
NazAarah Sabree

John Van Zant



PPL Electric Utilities

PPL Electric Utilities Corporation
Quarterly Reliability Report
to the
Pennsylvania Public Utility Commission

July 2025

- 1) A description of each major event that occurred during the preceding quarter, including the time and duration of the event, the number of customers affected, the cause of the event and any modified procedures adopted in order to avoid or minimize the impact of similar events in the future.***

No major events occurred during the second quarter of 2025.

2) **Rolling 12-month reliability index values (SAIFI, CAIDI, SAIDI, and if available, MAIFI) for the EDC's service territory for the preceding quarter. The report shall include the data used in calculating the indices, namely the average number of customers served, the number of sustained customer interruptions, the number of customers affected, and the customer minutes of interruption. If MAIFI values are provided, the report shall also include the number of customer momentary interruptions.**

The following table provides data for the 12 months ending June 30, 2025.

SAIFI	BM 0.98	0.95
	STD 1.18	0.95
CAIDI (Benchmark = 145; Rolling 12-month Std. = 174)	BM 145	284
	STD 174	284
SAIDI (Benchmark = 142; Rolling 12-month Std. = 205)	BM 142	271
	STD 205	271
MAIFI		10.8
Average Number of Customers Served ¹		1,472,294
Number of Sustained Customer Interruptions (Trouble Cases)		26,504
Number of Customers Affected		1,404,651
Customer Minutes of Interruptions (CMI)		399,215,714
Number of Customer Momentary Interruptions		15,843,491

During the second quarter, there were no (0) PUC Major Events, six (6) PUC reportable events, and fourteen (14) other storms that did not rise to the level of reportability.

For the rolling four quarters ending on 6/30/2025, storm impacts remain highly elevated by historical standards. Although calendar year 2025 is currently on a record storm-count pace at 32 storms through the first six months, PPL Electric's metrics improved versus the prior quarter with SAIFI improving by 10%, SAIDI by 23%, and CAIDI by 15%.

Because weather has a significant impact on volatility in reliability metrics, PPL Electric's IEEE Metrics are shown below. The IEEE 1366 Standard is a widely used methodology that allows for weather normalized performance evaluation that better reflects system performance during non-major storm events. The table below lists PPL Electric's IEEE performance metrics compared to the 2023 performance quartiles for large utilities

¹ PPL Electric calculates the annual indices using customers served at the end of period. This is consistent with the method used to calculate PPL Electric's benchmarks.

nationally, as issued by the IEEE Annual Reliability Survey². This survey comprises 73 utilities serving 74 million customers across the country.

	IEEE CAIDI	IEEE SAIFI	IEEE SAIDI
2021	124	0.68	84
2022	121	0.74	89
2023	143	0.64	92
2024	137	0.66	90
Rolling 4Q ending 6/30/2025	145	0.73	106
IEEE First Quartile Ceiling	110	0.74	85
IEEE Second Quartile Ceiling	136	0.98	119

PPL Electric has been a top quartile IEEE SAIFI performer since 2014.

² <https://cmte.ieee.org/pes-drwg/benchmarking/>

3) Rolling 12-month reliability index values (SAIFI, CAIDI, SAIDI, CMI, and if available, MAIFI) and other pertinent information such as customers served, number of interruptions, customer minutes interrupted, number of lockouts, and so forth, for the worst performing 5% of the circuits in the system. An explanation of how the EDC defines its worst performing circuits shall be included.

The following table provides PUC reliability values for the worst performing 5% of the circuits in the system for the 12 months ending at the current quarter. An explanation of how PPL Electric defines its worst performing circuits is included in Appendix A.

WPC Rank	Feeder ID	SAIDI	SAIFI	CAIDI	Customers	Cases of Trouble	Customer Minutes Interrupted (CMI)	Customer Interruptions (CI)
1	14009	3,849	7.3	531	155	26	596,562	1,124
2	12402	2,144	6.4	332	569	81	1,220,155	3,670
3	40601	1,012	4.1	249	877	44	887,327	3,564
4	42101	119	1.0	119	24	1	2,861	24
5	28602	960	2.8	344	1,980	45	1,901,079	5,529
6	24602	2,731	5.0	548	1,451	122	3,962,048	7,234
7	41802	235	0.7	317	534	38	125,235	395
8	13603	1,190	5.3	224	550	30	654,338	2,925
9	18001	1,222	4.1	301	699	76	854,299	2,838
10	43401	1,392	4.1	341	1,016	77	1,414,516	4,150
11	27102	1,743	4.2	413	985	83	1,717,158	4,156
12	23504	613	2.2	279	457	4	280,197	1,003
13	25801	1,021	4.0	254	1,869	99	1,907,946	7,506
14	20401	155	0.9	179	1,330	50	206,231	1,155
15	16802	1,354	2.0	672	894	55	1,210,727	1,801
16	14008	1,159	4.3	267	802	70	929,739	3,484
17	13601	1,145	4.5	257	1,138	65	1,303,173	5,065
18	47002	263	1.0	255	2,063	73	542,793	2,129
19	43101	298	3.0	99	770	27	229,443	2,327
20	28604	488	2.6	190	1,853	65	905,146	4,765
21	18501	1,124	2.7	409	1,467	54	1,648,743	4,031
22	26704	1,969	3.0	652	939	53	1,848,639	2,834
23	23510	567	3.2	175	115	5	65,159	373
24	23401	1,973	5.2	380	1,756	132	3,464,608	9,119

WPC Rank	Feeder ID	SAIDI	SAIFI	CAIDI	Customers	Cases of Trouble	Customer Minutes Interrupted (CMI)	Customer Interruptions (CI)
25	59201	1,079	3.4	318	192	17	207,072	652
26	25501	3,105	3.1	986	1,721	136	5,344,027	5,420
27	53601	449	2.9	155	1,127	51	505,950	3,272
28	46302	1,809	4.0	457	1,118	75	2,022,343	4,422
29	28102	5,016	4.6	1,081	1,103	85	5,532,391	5,116
30	26602	2,818	6.6	428	667	26	1,879,360	4,389
31	16801	510	2.0	252	1,675	79	854,575	3,391
32	16803	898	2.6	352	1,142	71	1,025,905	2,915
33	10601	664	2.2	302	1,697	116	1,126,966	3,730
34	11003	1,074	1.9	559	723	34	776,174	1,388
35	58301	174	0.6	277	86	1	14,967	54
36	45002	326	2.5	129	1,465	45	477,592	3,709
37	54201	59	1.2	49	628	17	36,983	755
38	15704	476	3.1	156	1,299	66	618,664	3,973
39	63403	1,695	3.7	459	1,525	65	2,585,506	5,633
40	10904	1,133	3.6	315	1,743	165	1,974,411	6,276
41	53803	2,194	3.2	682	348	20	763,424	1,120
42	26001	2,488	3.1	814	1,473	125	3,664,509	4,502
43	54101	522	2.2	242	1,709	70	891,903	3,681
44	46701	1,438	7.5	192	671	54	965,195	5,025
45	24603	2,492	3.6	699	1,410	109	3,513,390	5,023
46	26603	2,090	4.9	428	1,053	77	2,200,345	5,136
47	58402	403	2.6	157	1,783	47	718,226	4,565
48	49804	269	1.1	253	1,376	67	369,849	1,461
49	64802	655	6.0	109	1,305	91	854,412	7,823
50	45101	17,267	50.9	339	24	7	414,419	1,222
51	22601	2,538	5.4	467	1,254	84	3,182,231	6,809
52	24401	5,238	3.7	1411	1,276	110	6,684,269	4,737
53	10401	456	1.5	299	641	26	292,194	978
54	59202	622	3.7	169	1,798	85	1,117,981	6,600
55	20601	162	0.5	316	1,491	38	241,474	764
56	15701	418	2.0	209	1,188	50	497,159	2,377
57	46004	235	2.5	94	2,092	67	491,331	5,252
58	24203	458	2.1	219	670	10	306,839	1,398
59	21203	3,834	4.2	906	1,200	70	4,601,005	5,077
60	13703	517	2.0	253	22	3	11,363	45
61	16101	810	2.9	277	1,584	105	1,283,564	4,628
62	42401	900	3.5	260	715	33	643,222	2,474
63	25402	649	1.8	353	1,837	77	1,192,062	3,380
64	55002	335	2.3	147	787	56	263,740	1,789

Specific remedial efforts taken and planned for the worst performing 5% of the circuits identified in paragraph (3).

01 Circuit 14009 -- SELLERSVILLE 40-09

Remedial Actions

Year	Remediation	Complete
2025	Install fusing	Y
2025	Evaluate installing sectionalizing devices	N
2025	Evaluate reconductoring	N
2025	Evaluate removing section of conductor	N
2025	Install Smart Grid devices	N
2025	Relocate sections of conductor	N

02 Circuit 12402 -- MILFORD 24-02

Remedial Actions

Year	Remediation	Complete
2024	Perform full circuit trimming	Y
2024	Replace reclosers	Y
2025	Install fusing	Y
2025	Evaluate single-phase relocation	N
2025	Evaluate tree-shielding cable	N
2025	Install animal guarding	N
2025	Replace single-phase reclosers	N
2026	Construct tie lines	N
2026	Extend section of conductor	N
2026	Install Smart Grid devices	N
2026	Reconductor single-phase sections	N
2026	Upgrade poles	N

03 Circuit 40601 -- PINE GROVE 06-01

Remedial Actions

Year	Remediation	Complete
2024	Perform hot spot tree trimming	Y
2024	Replace poles	Y
2025	Evaluate storm hardening	N
2025	Install fusing	N
2025	Install proactive fault sensors	N
2025	Replace poles	N
2026	Install Smart Grid devices	N
2026	Perform storm hardening	N
2026	Reconductor sections of line	N

04 Circuit 42101 -- FRAILEY 69/23 KV LINE 21-01

Remedial Actions

Year	Remediation	Complete
2025	Rebuild substation	Y
2025	Install new conductor	N
2025	Install poles	N
2025	Relocate conductor	N
2025	Replace Smart Grid devices	N
2026	Construct tie lines	N
2026	Convert circuit to 12kV to improve tie capability	N

05 Circuit 28602 -- BLYTHEBURN 86-02

Remedial Actions

Year	Remediation	Complete
2024	Install sectionalizing devices	Y
2024	Perform hot spot tree trimming	Y
2024	Perform full circuit trimming	Y
2025	Review and optimize coordination and protection	N
2025	Construct three-phase tie line	N
2025	Evaluate storm hardening	N
2025	Install fusing	N

06 Circuit 24602 -- VARDEN 46-02

Remedial Actions

Year	Remediation	Complete
2024	Perform full circuit trimming	Y
2024	Replace underground conductor	Y
2024	Upgrade reclosers to Smart Grid devices	Y
2024	Upgrade Smart Grid devices	Y
2025	Replace poles	Y
2025	Replace single-phase reclosers	Y
2025	Install animal guarding	N
2025	Install proactive fault sensors	N
2025	Replace cross-arms	N
2026	Perform storm hardening	N

07 Circuit 41802 -- GOWEN CITY 18-02

Remedial Actions

Year	Remediation	Complete
2024	Install proactive fault sensors	Y
2024	Replace cross-arms	Y
2024	Replace poles	Y
2025	Reconductor sections of line	N
2025	Replace cross-arms	N
2025	Replace poles	N
2026	Construct three-phase tie line	N
2026	Relocate sections of conductor	N
2026	Replace Smart Grid devices	N

08 Circuit 13603 -- RICHLAND 36-03Remedial Actions

Year	Remediation	Complete
2024	Install proactive fault sensors	Y
2024	Perform full circuit trimming	Y
2024	Replace reclosers	Y
2025	Evaluate installing sectionalizing devices	N
2025	Evaluate reconductoring	N
2025	Evaluate single-phase reclosers	N
2025	Evaluate single-phase tie lines	N
2025	Evaluate three-phase tie line	N
2025	Evaluate tree-shielding cable	N
2025	Install fusing	N
2025	Relocate poles	N
2025	Upgrade fuse to recloser	N
2025	Reconductor section of circuit	N
2025	Install single-phase reclosers	N

09 Circuit 18001 -- ZIONSVILLE 80-01Remedial Actions

Year	Remediation	Complete
2024	Install proactive fault sensors	Y
2024	Perform full circuit trimming	Y
2024	Replace cross-arms	Y
2024	Replace poles	Y
2025	Install reclosers	Y
2025	Evaluate constructing tie line	N
2025	Evaluate storm hardening	N
2025	Evaluate ties	N
2025	Evaluate tree-shielding cable	N
2025	Install Smart Grid devices	N
2025	Relocate single-phase conductor	N
2025	Replace poles	N
2026	Underground sections of conductor	N
2026	Install tree-shielding cable	N

10 Circuit 43401 -- BENTON 34-01

Remedial Actions

Year	Remediation	Complete
2024	Relocate single-phase conductor	Y
2024	Review and optimize coordination and protection	Y
2025	Install fusing	N
2025	Install sectionalizing devices	N
2025	Perform storm hardening	N
2025	Relocate and reconductor line sections	N
2025	Remove conductor sections	N
2025	Underground three-phase conductor	N

11 Circuit 27102 -- GREENFIELD 71-02

Remedial Actions

Year	Remediation	Complete
2025	Replace poles	Y
2025	Review and optimize coordination and protection	N
2025	Install proactive fault sensors	N
2025	Relocate sections of conductor	N
2025	Install animal guarding	N
2026	Perform storm hardening	N

12 Circuit 23504 -- GEORGETOWN 35-04

Remedial Actions

Year	Remediation	Complete
2024	Perform infrared scanning	Y
2024	Replace transformers	Y
2024	Replace underground conductor	Y
2024	Re-sag conductor	Y
2025	Perform Proactive Circuit Analysis	N

13 Circuit 25801 -- SULLIVAN TRAIL 58-01

Remedial Actions

Year	Remediation	Complete
2024	Install proactive fault sensors	Y
2024	Relocate single-phase conductor	Y
2024	Perform hazard tree removal	Y
2025	Transfer section of conductor to neighboring circuit	N
2026	Underground single-phase conductor	N
2026	Underground three-phase conductor	N
2026	Relocate single-phase conductor	N
2026	Construct three-phase tie line	N

14 Circuit 20401 -- ASHFIELD 04-01

Remedial Actions

Year	Remediation	Complete
2024	Install fusing	Y
2024	Install proactive fault sensors	Y
2024	Install single-phase reclosers	Y
2024	Install Smart Grid devices	Y
2024	Remove conductor sections	Y
2025	Install Smart Grid devices	Y
2025	Replace Smart Grid devices	Y
2026	Construct three-phase tie line	N
2026	Relocate and reconductor line sections	N
2026	Split and relocate section of conductor	N
2026	Upgrade conductor from single-phase to three-phase	N
2026	Upgrade conductor from two-phase to three-phase	N

15 Circuit 16802 -- WAGNERS 68-02

Remedial Actions

Year	Remediation	Complete
2024	Install sectionalizing devices	Y
2024	Install single-phase reclosers	Y
2024	Replace cross-arms	Y
2024	Replace poles	Y
2025	Construct three-phase tie line	N
2025	Install animal guarding	N
2025	Install single-phase reclosers	N
2025	Replace poles	N
2027	Perform storm hardening	N
2028	Perform full circuit trimming	N
2025	Install proactive fault sensors	N
2026	Install three-phase reclosers	N
2026	Install single-phase reclosers	N

16 Circuit 14008 -- SELLERSVILLE 40-08

Remedial Actions

Year	Remediation	Complete
2024	Install proactive fault sensors	Y
2024	Reconfigure single-phase sections	Y
2025	Underground single-phase conductor	N
2025	Relocation of single-phase conductor	N
2025	Evaluate three-phase tie lines	N
2025	Evaluate Smart Grid devices	N
2025	Evaluate tree-shielding cable	N
2025	Install animal guarding	N
2025	Install fusing	N
2025	Install single-phase reclosers	N
2025	Reconfigure single-phase sections	N
2025	Upgrade fuse to recloser	N
2026	Install three-phase tie lines	N
2027	Perform full circuit trimming	N

17 Circuit 13601 -- RICHLAND 36-01

Remedial Actions

Year	Remediation	Complete
2024	Replace reclosers	Y
2025	Evaluate relocating three-phase sections	N
2025	Pursue additional trimming right-of-way	N
2025	Evaluate constructing tie line	N
2025	Evaluate tree-shielding cable	N
2025	Evaluate Smart Grid devices	N
2025	Evaluate reconductoring	N
2025	Evaluate fusing	N

18 Circuit 47002 -- HUGHESVILLE 70-02

Remedial Actions

Year	Remediation	Complete
2024	Relocate single-phase conductor	Y
2025	Install animal guarding	N
2025	Upgrade reclosers to Smart Grid devices	N
2025	Upgrade Smart Grid devices	Y
2026	Construct three-phase tie line	N
2026	Install Smart Grid devices	N
2026	Perform storm hardening	N
2026	Reconductor single-phase sections	N
2026	Remove conductor sections	N

19 Circuit 43101 -- SOUTH MILTON 31-01

Remedial Actions

Year	Remediation	Complete
2025	Perform Proactive Circuit Analysis	N
2025	Install single-phase reclosers	N
2025	Relocate sections of conductor	N
2025	Replace poles	N
2026	Relocate Smart Grid device	N
2027	Perform full circuit trimming	N

20 Circuit 28604 -- BLYTHEBURN 86-04

Remedial Actions

Year	Remediation	Complete
2024	Perform full circuit trimming	Y
2025	Install fusing	Y
2025	Replace single-phase reclosers	Y
2025	Construct three-phase tie line	N
2025	Install Smart Grid devices	N
2025	Relocate single-phase conductor	N
2025	Relocate three-phase conductor	N
2025	Replace Smart Grid devices	N
2025	Transfer section of conductor to neighboring circuit	N

21 Circuit 18501 -- CANADENSIS 85-01

Remedial Actions

Year	Remediation	Complete
2024	Install proactive fault sensors	Y
2024	Perform hot spot tree trimming	Y
2024	Replace cross-arms	Y
2024	Replace poles	Y
2024	Replace Smart Grid devices	Y
2025	Install animal guarding	N
2025	Install tree-shielding cable	N
2025	Replace poles	N
2025	Replace reclosers	N
2025	Replace Smart Grid devices	N
2025	Upgrade transformers	N
2026	Perform full circuit trimming	N
2026	Install single-phase reclosers	N

22 Circuit 26704 -- HEMLOCK FARMS 67-04

Remedial Actions

Year	Remediation	Complete
2024	Construct three-phase tie line	Y
2024	Remove conductor sections	Y
2024	Replace poles	Y
2024	Replace reclosers	Y
2025	Install fusing	Y
2025	Install Smart Grid devices	Y
2025	Install animal guarding	N
2025	Install proactive fault sensors	N
2025	Replace porcelain cutouts	N
2029	Perform full circuit trimming	N

23 Circuit 23510 -- GEORGETOWN 35-10

Remedial Actions

Year	Remediation	Complete
2024	Re-sag conductor	Y
2024	Inspect all underground connections	Y
2025	Transfer section of conductor to neighboring circuit	Y
2025	Install sectionalizing devices	N
2025	Install Smart Grid devices	N

24 Circuit 23401 -- HONESDALE 34-01

Remedial Actions

Year	Remediation	Complete
2024	Reconductor single-phase sections	Y
2024	Perform hot spot tree trimming	Y
2024	Install fusing	Y
2025	Replace poles	Y
2025	Install proactive fault sensors	N
2025	Replace porcelain cutouts	N
2025	Install animal guarding	N
2025	Replace reclosers	N
2026	Perform full circuit trimming	N
2026	Perform storm hardening	N

25 Circuit 59201 -- THOMPSONTOWN 92-01

Remedial Actions

Year	Remediation	Complete
2024	Install proactive fault sensors	Y
2024	Perform full circuit trimming	Y
2025	Install fusing	Y
2025	Evaluate reconductoring	N

26 Circuit 25501 -- MADISONVILLE 55-01

Remedial Actions

Year	Remediation	Complete
2024	Install Smart Grid devices	Y
2024	Replace poles	Y
2024	Replace single-phase reclosers	Y
2025	Install proactive fault sensors	Y
2025	Install animal guarding	N
2025	Reconductor sections of line	N
2025	Upgrade reclosers to Smart Grid devices	N
2026	Perform storm hardening	N
2027	Perform full circuit trimming	N

27 Circuit 53601 -- DALMATIA 36-01

Remedial Actions

Year	Remediation	Complete
2024	Install proactive fault sensors	Y
2024	Install three-phase reclosers	Y
2025	Install fusing	Y
2025	Evaluate reinforcement of three-phase tie line	N
2025	Evaluate relocation of single-phase conductor	N
2025	Evaluate relocation of three-phase conductor	N
2025	Evaluate reconductoring	N
2026	Construct three-phase tie line	N
2027	Perform full circuit trimming	N

28 Circuit 46302 – ROHRSBURG 63-02

Remedial Actions

Year	Remediation	Complete
2025	Relocate section of single-phase conductor	Y
2026	Extend sections of conductor	N
2026	Install Smart Grid devices	N
2026	Perform storm hardening	N
2026	Reconductor sections of line	N
2026	Relocate sections of conductor	N
2026	Underground section of three-phase conductor	N

29 Circuit 28102 – TWIN LAKES 81-02

Remedial Actions

Year	Remediation	Complete
2024	Install single-phase reclosers	Y
2024	Replace poles	Y
2025	Install proactive fault sensors	Y
2025	Replace lightning arrestor	Y
2025	Perform Proactive Circuit Analysis	N
2025	Install Smart Grid devices	N
2025	Replace porcelain cutouts	N
2025	Install animal guarding	N
2025	Replace cross-arms	N
2025	Replace poles	N
2026	Perform full circuit trimming	N

30 Circuit 26602 – BROOKSIDE 66-02

Remedial Actions

Year	Remediation	Complete
2024	Perform full circuit trimming	Y
2025	Replace poles	Y
2025	Replace transformers	Y
2025	Construct tie line	N
2025	Install proactive fault sensors	N
2025	Optimize recloser settings	N
2025	Review and optimize coordination and protection	N

31 Circuit 16801 – WAGNERS 68-01

Remedial Actions

Year	Remediation	Complete
2024	Replace poles	Y
2024	Replace Smart Grid devices	Y
2025	Install animal guarding	N
2026	Construct single-phase tie line	N
2026	Install single-phase reclosers	N
2026	Install Smart Grid devices	N
2026	Install tree-shielding cable	N
2026	Reconductor single-phase sections	N
2026	Perform storm hardening	N

32 Circuit 16803 – WAGNERS 68-03

Remedial Actions

Year	Remediation	Complete
2024	Install sectionalizing devices	Y
2024	Replace transformers	Y
2024	Replace poles	Y
2025	Install single-phase reclosers	Y
2025	Install animal guarding	N
2025	Evaluate tie line	N
2025	Replace poles	N

33 Circuit 10601 – BLOOMING GLEN 06-01

Remedial Actions

Year	Remediation	Complete
2025	Relocation of single-phase sections	N
2025	Reconductor single-phase sections	N
2025	Install tree-shielding cable	N
2025	Install Smart Grid devices	N
2025	Perform storm hardening	N
2025	Install fusing	N
2026	Underground conductor	N

34 Circuit 11003 – EAST GREENVILLE 10-03

Remedial Actions

Year	Remediation	Complete
2025	Transfer section of conductor to neighboring circuit	Y
2025	Evaluate constructing three-phase tie line	N
2025	Evaluate installing Smart Grid devices	N
2025	Evaluate reconductoring	N
2025	Evaluate tree-shielding cable	N
2026	Evaluating installing Fusing on Single-phase	N
2026	Install proactive fault sensors	N
2027	Perform full circuit trimming	N

35 Circuit 58301 – NOTTINGHAM 83-01

Remedial Actions

Year	Remediation	Complete
2025	Install single-phase reclosers	N
2025	Evaluate reconductoring	N
2025	Evaluate fusing	N

36 Circuit 45002 – LIMESTONE 50-02

Remedial Actions

Year	Remediation	Complete
2024	Install fusing	Y
2025	Evaluate hot spot tree trimming	N
2025	Install Smart Grid devices	N
2025	Evaluate storm hardening	N
2026	Upgrade substation transformer	N
2027	Construct three-phase tie line	N
2027	Perform full circuit trimming	N

37 Circuit 54201 – PENNSBORO 42-01

Remedial Actions

Year	Remediation	Complete
2024	Perform full circuit trimming	Y
2025	Evaluate reconductoring	Y
2025	Evaluate fusing	N
2025	Install animal guarding	N
2025	Install fusing	N
2025	Install proactive fault sensors	N

38 Circuit 15704 – TANNERSVILLE 57-04

Remedial Actions

Year	Remediation	Complete
2024	Replace poles	Y
2024	Replace Smart Grid devices	Y
2025	Install single-phase reclosers	Y
2025	Replace transformers	Y
2025	Install animal guarding	N
2025	Install Smart Grid devices	N
2025	Install voltage regulator	N
2025	Perform full circuit trimming	N
2025	Relocate single-phase conductor	N
2025	Replace poles	N
2026	Install single-phase reclosers	N

39 Circuit 63403 – HONEYBROOK 34-03

Remedial Actions

Year	Remediation	Complete
2024	Install fusing	Y
2024	Perform hot spot tree trimming	Y
2025	Replace cross-arms	Y
2025	Replace poles	Y
2025	Evaluate reconductoring	N
2025	Evaluate transfer of section to neighboring circuit	N
2025	Install fusing	N
2025	Install proactive fault sensors	N
2025	Install single-phase reclosers	N
2025	Evaluate tie to another circuit	N
2026	Reconductor single-phase sections	N
2026	Rebuild single-phase section to underground	N
2027	Perform full circuit trimming	N

40 Circuit 10904 – COOPERSBURG 09-04

Remedial Actions

Year	Remediation	Complete
2025	Install fusing	Y
2025	Construct tie lines	N
2025	Evaluate three-phase reconductor	N
2025	Evaluate three-phase ties	N
2025	Evaluate single-phase reconductor	N
2025	Reconductor single-phase sections	N
2025	Reconfigure single-phase sections	N
2025	Upgrade poles	N
2025	Upgrade reclosers to Smart Grid devices	N
2026	Perform full circuit trimming	N
2026	Upgrade substation	N

41 Circuit 53803 – MILLERSBURG 38-03

Remedial Actions

Year	Remediation	Complete
2025	Install fusing	Y
2025	Evaluate fusing	Y
2025	Install fusing	N
2025	Install proactive fault sensors	N
2025	Evaluate reconductoring single-phase sections	N
2025	Evaluate relocating three-phase conductor	N

42 Circuit 26001 -- WEST DAMASCUS 60-01

Remedial Actions

Year	Remediation	Complete
2024	Install animal guarding	Y
2024	Replace cross-arms	Y
2024	Replace reclosers	Y
2025	Install proactive fault sensors	N
2025	Install single-phase reclosers	N
2025	Replace poles	N
2025	Replace porcelain cutouts	N
2025	Replace reclosers	N
2025	Replace transformers	N
2025	Upgrade Smart Grid devices	N
2026	Evaluate storm hardening	N
2026	Perform storm hardening	N

43 Circuit 54101 -- S SHERMANSDALE 41-01

Remedial Actions

Year	Remediation	Complete
2023	Install proactive fault sensors	Y
2024	Install fusing	Y
2024	Perform full circuit trimming	Y
2025	Convert recloser to remote operability	N
2025	Evaluate constructing tie line	N
2025	Evaluate converting recloser to three-phase operability	N
2025	Evaluate re-sourcing single-phase section	N
2025	Evaluate single-phase reconductoring	N
2025	Evaluate single-phase relocation	N
2025	Evaluate three-phase reclosers	N
2025	Evaluate three-phase tie line	N
2025	Install fusing	N
2025	Install single-phase reclosers	N

44 Circuit 46701 -- RENOVO 67-01

Remedial Actions

Year	Remediation	Complete
2024	Install animal guarding	Y
2024	Install proactive fault sensors	Y
2024	Upgrade reclosers to Smart Grid devices	Y
2025	Evaluate hot spot tree trimming	Y
2025	Evaluate relocation and reconductoring of substation getaway	N
2025	Evaluate tree-shielding cable	N
2025	Install sectionalizing devices	N
2026	Perform storm hardening	N

45 Circuit 24603 -- VARDEN 46-03

Remedial Actions

Year	Remediation	Complete
2024	Remove conductor sections	Y
2024	Replace reclosers	Y
2024	Replace poles	Y
2025	Install proactive fault sensors	N
2025	Install single-phase reclosers	N
2025	Perform full circuit trimming	N
2025	Replace porcelain cutouts	N
2025	Replace reclosers	N
2025	Replace poles	N

46 Circuit 26603 -- BROOKSIDE 66-03

Remedial Actions

Year	Remediation	Complete
2025	Replace poles	Y
2025	Underground single-phase conductor	N
2025	Install proactive fault sensors	N
2025	Relocate sections of conductor	N
2025	Perform full circuit trimming	N
2025	Install tree-shielding cable	N
2025	Reconductor sections of line	N
2025	Perform storm hardening	N
2025	Construct tie line	N
2025	Replace reclosers	N

47 Circuit 58402 -- MOUNT ROCK 84-02

Remedial Actions

Year	Remediation	Complete
2024	Install fusing	Y
2025	Construct tie line	Y
2025	Evaluate converting tie line to remote operability	Y
2025	Evaluate re-sourcing single-phase section	Y
2025	Evaluate fusing	N
2025	Install proactive fault sensors	N
2026	Install single-phase reclosers	N
2026	Install three-phase sectionalizing devices	N
2026	Reconductor single-phase sections	N
2026	Convert tie line to remote operability	N

48 Circuit 49804 -- UNIVERSITY 98-04

Remedial Actions

Year	Remediation	Complete
2024	Construct three-phase tie line	Y
2024	Install fusing	Y
2024	Perform Proactive Circuit Analysis	Y
2024	Review and optimize coordination and protection	Y
2025	Evaluate conductor relocation	N
2025	Perform full circuit trimming	N
2025	Reframe lines outside of substation	N
2025	Underground single-phase conductor	N
2025	Underground three-phase conductor	N
2026	Perform storm hardening	N
2026	Reconductor single-phase sections	N
2026	Reconductor three-phase section	N
2026	Refeed section of conductor	N
2026	Relocate sections of conductor	N

49 Circuit 64802 -- MOUNT NEBO 48-02

Remedial Actions

Year	Remediation	Complete
2024	Install proactive fault sensors	Y
2024	Upgrade reclosers to Smart Grid devices	Y
2025	Perform hot spot tree trimming	Y
2025	Additional fusing to be installed	N
2025	Additional single-phase recloser to be installed	N
2025	Install Smart Grid devices	N
2025	Evaluate reconductoring	N
2026	Perform full circuit trimming	N
2026	Evaluate relocations	N

50 Circuit 45101 -- CASS 69/23 KV LINE 51-01

Remedial Actions

Year	Remediation	Complete
2025	Convert circuit to 12kV to improve tie capability	N
2025	Relocate sections of conductor	N
2025	Construct tie lines	N
2025	Rebuild substation	N
2025	Install poles	N
2025	Replace poles	N
2026	Perform full circuit trimming	N

51 Circuit 22601 -- KIMBLES 26-01

Remedial Actions

Year	Remediation	Complete
2025	Install animal guarding	Y
2025	Install single-phase reclosers	N
2025	Replace reclosers	N
2025	Replace poles	N
2027	Perform full circuit trimming	N

52 Circuit 24401 -- TINKER 44-01

Remedial Actions

Year	Remediation	Complete
2024	Replace voltage regulators	Y
2025	Replace poles	Y
2025	Replace reclosers	Y
2025	Install proactive fault sensors	N
2025	Install single-phase reclosers	N
2025	Relocate sections of conductor	N
2025	Replace porcelain cutouts	N
2025	Perform full circuit trimming	N
2026	Replace reclosers	N

53 Circuit 10401 -- LITTLE GAP 04-01

Remedial Actions

Year	Remediation	Complete
2025	Install Smart Grid devices	Y
2025	Evaluate upgrade to covered conductor or tree-shielding cable	N
2025	Evaluate undergrounding	N
2027	Perform full circuit trimming	N

54 Circuit 59202 -- THOMPSONTOWN 92-02

Remedial Actions

Year	Remediation	Complete
2024	Install proactive fault sensors	Y
2024	Repair section of conductor	Y
2025	Replace switch(es)	Y
2025	Evaluate conductor relocations	N
2025	Evaluate reconductoring single-phase sections	N
2025	Evaluate reconductoring three-phase sections	N
2025	Evaluate re-sourcing sections	N
2025	Evaluate single-phase reclosers	N
2025	Evaluate three-phase reclosers	N
2025	Evaluate undergrounding	N
2025	Install single-phase reclosers	N
2025	Replace reclosers	N
2025	Evaluate three-phase tie	N
2025	Upgrade remote tie	N

55 Circuit 20601 -- GREENWOOD 06-01

Remedial Actions

Year	Remediation	Complete
2024	Replace single-phase conductor	Y
2025	Replace Smart Grid devices	Y
2026	Construct three-phase tie line	N
2026	Convert existing sectionalizers to Smart Grid devices	N
2026	Install Smart Grid devices	N
2026	Relocate and upgrade conductor	N
2026	Relocate conductor	N
2027	Perform full circuit trimming	N

56 Circuit 15701 -- TANNERSVILLE 57-01

Remedial Actions

Year	Remediation	Complete
2025	Install fusing	Y
2025	Replace poles	Y
2025	Replace reclosers	Y
2025	Upgrade reclosers to Smart Grid devices	Y
2025	Extend section of conductor	N
2025	Install animal guarding	N
2025	Install proactive fault sensors	N
2025	Install single-phase reclosers	N
2025	Install Smart Grid devices	N
2026	Relocate section of conductor	N

57 Circuit 46004 -- BERWICK 60-04

Remedial Actions

Year	Remediation	Complete
2024	Perform full circuit trimming	Y
2024	Review and optimize coordination and protection	Y
2025	Evaluate three-phase tie line	Y
2025	Perform Proactive Circuit Analysis	N
2026	Perform storm hardening	N
2026	Relocate sections of conductor	N
2026	Underground single-phase conductor	N

58 Circuit 24203 -- PROVIDENCE 42-03

Remedial Actions

Year	Remediation	Complete
2025	Perform full circuit trimming	N
2025	Replace cross-arms	N
2025	Replace poles	N

59 Circuit 21203 -- EAST CARBONDALE 12-03

Remedial Actions

Year	Remediation	Complete
2025	Install animal guarding	Y
2025	Perform hot spot tree trimming	Y
2025	Replace reclosers	Y
2025	Install proactive fault sensors	N
2026	Perform full circuit trimming	N
2026	Replace reclosers	N

60 Circuit 13703 -- SCHNECKSVILLE 37-03

Remedial Actions

Year	Remediation	Complete
2025	Evaluate loop for underground section	N
2025	Evaluate replacing underground cable	N
2026	Perform full circuit trimming	N

61 Circuit 16101 -- BINGEN 61-01

Remedial Actions

Year	Remediation	Complete
2024	Reconfigure single-phase sections	Y
2024	Perform hot spot tree trimming	Y
2024	Install single-phase switches	Y
2024	Install lightning arrestors	Y
2024	Install animal guarding	Y
2024	Replace poles	Y
2025	Underground single-phase conductor	N
2025	Reconductor single-phase sections	N
2025	Upgrade single-phase reclosers	N
2025	Construct tie lines	N
2025	Upgrade poles	N
2027	Perform full circuit trimming	N

62 Circuit 42401 -- GIRARD MANOR 24-01

Remedial Actions

Year	Remediation	Complete
2024	Review and optimize coordination and protection	Y
2024	Replace Smart Grid devices	Y
2024	Install fusing	Y
2025	Reconductor three-phase sections	N
2025	Relocate sections of conductor	N
2025	Install Smart Grid devices	N
2025	Replace cross-arms	N
2025	Install fusing	N
2025	Replace poles	N
2027	Perform full circuit trimming	N

63 Circuit 25402 -- LAKE HARMONY 54-02

Remedial Actions

Year	Remediation	Complete
2025	Refeed section of conductor	Y
2025	Install Smart Grid devices	Y
2025	Install fusing	Y
2025	Perform full circuit trimming	N
2027	Perform storm hardening	N

64 Circuit 55002 -- NEWPORT 50-02

Remedial Actions

Year	Remediation	Complete
2024	Install proactive fault sensors	Y
2024	Install fusing	Y
2025	Evaluate constructing three-phase tie line	N
2025	Evaluate relocating single-phase sections	N
2025	Reconductor single-phase sections	N
2025	Perform full circuit trimming	N

5) *A rolling 12-month breakdown and analysis of outage causes during the preceding quarter, including the number and percentage of service outages, the number of customers interrupted, and customer interruption minutes categorized by outage cause such as equipment failure, animal contact, tree related, and so forth. Proposed solutions to identified service problems shall be reported.*

The following table shows a breakdown of service interruption causes for the 12 months ended at the current quarter.

Cause Description	Trouble Cases	Percent of Trouble Cases	Customer Interruptions	Percent of Customer Interruptions	Customer Minutes	Percent of Customer Minutes
Animals	4,041	15.2%	64,620	4.6%	4,457,792	1.12%
Contact / Dig-In	165	0.6%	7,651	0.5%	723,410	0.18%
Directed by Non-PPL Authority	54	0.2%	3,821	0.3%	329,217	0.08%
Equipment Failures	5,706	21.5%	305,352	21.7%	42,600,789	10.67%
Improper Design	5	0.0%	1,997	0.1%	94,379	0.02%
Improper Installation	4	0.0%	1,679	0.1%	296,524	0.07%
Improper Operation	10	0.0%	5,619	0.4%	138,114	0.03%
Nothing Found	1,239	4.7%	68,024	4.8%	9,562,982	2.40%
Other Controllable	72	0.3%	11,455	0.8%	1,586,625	0.40%
Other Non Control	385	1.5%	25,246	1.8%	3,163,286	0.79%
Other Public	34	0.1%	11,010	0.8%	2,012,603	0.50%
Tree Related	13,977	52.7%	771,881	55.0%	319,657,585	80.07%
Unknown	2	0.0%	4	0.0%	1,910	0.00%
Vehicles	810	3.1%	126,292	9.0%	14,590,497	3.65%
Total	26,504	100.0%	1,404,651	100.0%	399,215,714	100.0%

Analysis of causes contributing to the majority of service interruptions:

Weather Conditions: PPL Electric records weather conditions, such as wind or lightning, as contributing factors to service interruptions, but does not code them as direct interruption causes. Therefore, some fluctuations in cause categories, especially tree and equipment related causes, are attributable to weather variations. For the current reporting period, weather was considered a significant contributing cause in 55% of cases, 63% of customer interruptions, and 94% of CMI.

Tree Related: Vegetation is one of the largest single contributors to the number of cases of trouble, customer interruptions and customer minutes. For the current reporting period, approximately 83% of the cases of trouble, 84% of the customer interruptions and 94% of the customer minutes attributed to tree related outages were weather-related.

Animals: Animals accounted for approximately 15% of PPL Electric's cases of trouble. Although this represents a significant number of cases, the effect on SAIFI and CAIDI is small because approximately 74% of the number of cases of trouble were associated with individual distribution transformers. PPL Electric has distribution and substation animal guarding programs to focus on systematically protecting existing facilities most at risk of incurring animal-caused interruptions. All PPL Electric substations are animal guarded.

Vehicles: Although vehicles cause a small percentage of the number of cases of trouble, they can account for a larger percentage of customer interruptions and customer minutes, because main distribution lines generally are located along major thoroughfares with higher traffic densities. In addition, vehicle-related cases often result in extended repair times to replace broken poles. PPL Electric has a program to identify and relocate poles that are subject to multiple vehicle hits.

Equipment Failure: Equipment failure is one of the largest single contributors to the number of cases of trouble, customer interruptions and customer minutes. However, approximately 35% of the cases of trouble, 43% of the customer interruptions and 57% of the customer minutes attributed to equipment failure were weather-related and, as such, are not considered to be strong indicators of equipment condition or performance.

Nothing Found: This description is recorded when the responding crew can find no cause for the interruption. That is, when there is no evidence of equipment failure, damage, or contact after a line patrol is completed. For example, during heavy thunderstorms, when a line fuse blows and, when closed for test, the fuse holds, and a patrol reveals nothing.

6) *Quarterly and year-to-date information on progress toward meeting transmission and distribution inspection and maintenance goals/objectives. (For first, second and third quarter reports only.)*

Inspection & Maintenance Goals/Objectives	Annual Budget (units)	2nd Quarter		Year-to-date	
		Budget	Actual	Budget	Actual
Transmission					
Transmission C-tag poles (# of poles)	43	18	18	19	19
Transmission arm replacements (# of arms)	1	1	1	1	1
Transmission air break switch inspections (# of switches)	2	2	2	2	2
Transmission surge arrester installations (# of sets)	11	2	2	3	3
Transmission structure inspections (# of activities)	7,327	1,314	1,314	4,218	4,218
Transmission tree side trim-Bulk Power (linear feet)	N/A		3,338		18,808
Transmission herbicide-Bulk Power (# of acres)	N/A		23		88
Transmission reclearing (# of miles) BES Only	712		24		404
Transmission reclearing (# of miles) 69 kV	1,557		170		561
Transmission reclearing (# of miles) 138 kV	204		6		86
Transmission danger tree removals-Bulk Power (# of trees)	N/A		271		1,707
Substation					
Substation batteries (# of activities)	0	0	11	0	175
Circuit breakers (# of activities)	0	0	0	0	5
Substation inspections (# of activities)	1,460	365	336	730	719
Transformer maintenance (# of activities)	632	158	176	316	205

Inspection & Maintenance Goals/Objectives	Annual Budget (units)	2nd Quarter		Year-to-date	
		Budget	Actual	Budget	Actual
Distribution					
Distribution C-tag poles replaced (# of poles)	2500	625	1280	1250	2501
C-truss distribution poles (# of poles)	500	0	0	0	0
Capacitor (MVAR added)	0	0	3.9	0	10
OCR Replacements (# of)	200 - 230	50	31	100	72
Distribution pole inspections (# of poles)	104,000	37,457	37,457	43,654	43,654
Distribution line inspections (miles)	4,700	2,602	2,602	2,602	2,602
Group re-lamping (# of lamps)	0	0	0	0	0
Test sections of underground distribution cable	N/A		107		211
Distribution tree trimming (# of miles)	3,100		473		1,666
Distribution herbicide (# of acres)	N/A		123		261
Distribution >18" removals within R/W (# of trees)	N/A		N/A		N/A
Distribution hazard tree removals outside R/W (# of trees)	N/A		1,711		4,261
LTN manhole inspections (# of)	0	0	0	0	0
LTN vault inspections (# of)	0	0	0	0	0
LTN network protector overhauls (# of)	0	0	0	0	1
LTN reverse power trip testing (# of)	0	0	0	0	0

7) *Quarterly and year-to-date information on budgeted versus actual transmission and distribution operation and maintenance expenditures in total and detailed by the EDC's own functional account code or FERC account code as available.*

The following table provides the operation and maintenance (O&M) expenses for PPL Electric which includes the work identified in response to Item (6).

Activity	2nd Quarter			Year-to-date	
	Annual Budget (000s)	Budget (\$000)	Actual (\$000)	Budget (\$000)	Actual (\$000)
Provide Electric Service	7,012	1,972	2,121	3,943	4,365
Vegetation Management	33,351	6,734	6,059	17,216	17,048
Customer Response	60,298	15,075	19,175	30,148	36,408
Reliability Maintenance	16,964	4,309	8,172	8,570	13,544
System Upgrade	92	0	175	0	186
Customer Service/Accounts	187,078	34,525	38,559	86,230	78,782
Others	48,886	12,587	8,268	25,650	19,893
Total O&M Expenses	353,681	75,201	82,529	171,758	170,226

8) *Quarterly and year-to-date information on budgeted versus actual transmission and distribution capital expenditures in total and detailed by the EDC's own functional account code or FERC account code as available.*

The following table provides the capital expenditures for PPL Electric which includes transmission and distribution (“T&D”) activities.

Activity	2nd Quarter			Year-to-date	
	Annual Budget (000s)	Budget (\$000)	Actual (\$000)	Budget (\$000)	Actual (\$000)
New Service/Revenue	138,754	38,334	57,551	82,847	111,117
System Upgrade	400,888	83,683	87,875	208,830	175,851
Reliability & Maintenance	657,008	174,926	169,066	328,018	304,810
Customer Response	76,363	13,559	22,731	30,836	44,951
Other	27,106	6,029	33,155	11,090	17,612
Total	1,300,121	316,532	370,378	661,621	654,340

PPL Electric Utilities Corporation

Worst Performing Circuit Definition

PPL Electric uses a weighted circuit SAIDI and circuit SAIFI contribution over the previous three years to define the worst performing circuits on its system. IEEE Major Event days, transmission outages, and scheduled outages are excluded. This ranking system was put in place as of the first quarter of 2025.

PPL Electric Utilities Corporation

Job Descriptions

Transmission and Distribution

Groundhand	<ul style="list-style-type: none">• Performs manual labor and assists employees in higher job classifications.
Helper	<ul style="list-style-type: none">• Performs semi-skilled labor at any work location on de-energized overhead and underground transmission, and distribution facilities to prepare the employee for entrance into the Journeyman Lineman Apprenticeship Program.
Journeyman Lineman	<ul style="list-style-type: none">• Works alone or as part of a crew on the maintenance, operation, and construction activities of the transmission and distribution systems associated with, but not limited to, PPL Electric facilities.
Journeyman Lineman-Trainee	<ul style="list-style-type: none">• Works alone or as part of a crew on the maintenance, operation, and construction activities of the transmission and distribution systems associated with, but not limited to, PPL Electric facilities.
Lineman Leader	<ul style="list-style-type: none">• Responsible for completing assigned work by directing one or multiple groups of employees involved in the maintenance, operation, and construction activities of the transmission and distribution systems associated with, but not limited to, PPL Electric facilities.• Engage in and perform work along with providing the necessary leadership, all-around knowledge, program, judgment, and experience to produce a quality job.• Performs all the direct duties of the Journeyman Lineman when not acting as a Lineman Leader.
Troubleman	<ul style="list-style-type: none">• Investigates and resolves trouble calls, voltage abnormalities on transmission and distribution systems associated with, but not limited to, PPL Electric facilities.

Appendix B

Electrical

Electrician Leader - Substation - Network - Underground	<ul style="list-style-type: none">• Responsible for completing assigned work by directing one or multiple groups of employees involved in the construction and maintenance activities of the transmission and distribution systems associated with, but not limited to, PPL Electric facilities.• Engage in and perform work along with providing the necessary leadership, all-around knowledge, program, judgment, and experience to produce a quality job.• Performs all direct duties of the Journeyman Electrician when not acting as a leader.
Helper - Substation - Network - Underground	<ul style="list-style-type: none">• Performs manual labor at any work location including those areas containing non-exposed energized electrical equipment, and to prepare the employee for entrance into the Apprenticeship Program.
Laborer - Substation - Network - Underground	<ul style="list-style-type: none">• Performs manual labor and assists employees in higher job classifications.
Journeyman Electrician - Substation - Network - Underground	<ul style="list-style-type: none">• Normally under limited supervision performs and is responsible for work associated with, but not limited to, PPL Electric facilities involving the highest degree of skill in construction and maintenance work associated with substations, LTN or underground distribution and transmission.• Uses microprocessor-based equipment for troubleshooting and revising relay logic and its control systems related to the field services electrical discipline.

Appendix B

<p>Journeyman Electrician - Trainee</p> <ul style="list-style-type: none">- Substation- Network- Underground	<ul style="list-style-type: none">• Normally under limited supervision performs and is responsible for work associated with, but not limited to, PPL Electric facilities involving the highest degree of skill in construction and maintenance work associated with substations, LTN or underground distribution and transmission.• Uses microprocessor-based equipment for troubleshooting and revising relay logic and its control systems related to the field services electrical discipline.
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