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May 1, 2023

BY ELECTRONIC FILING

Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street, Filing Room
Harrisburg, PA 17120

Re: Pike County Light and Power Company; Docket No. M-2016-2522508;
Annual Electric Reliability Report 2022 System Performance

Dear Secretary Chiavetta:

Enclosed for filing with the Public Utility Commission is Pike County Light & Power Company's Annual Electric Reliability Report 2022 System Performance.

Should you have any questions or comments, please feel free to contact me directly.

Very truly yours,

/s/ Whitney E. Snyder

Thomas J. Sniscak
Whitney E. Snyder

WES/das
Enclosure

cc: John Van Zant (jvanzant@pa.gov)
Per Certificate of Service



Pike County Light & Power Company
Annual Electric Reliability Report
2022 System Performance

Submitted by:
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May 1, 2023

INTRODUCTION

Pursuant to the requirements of 52 Pa. Code §57.195, Pike County Light & Power Company (“Pike”, “PCL&P” or the “Company”) submits this Annual Reliability Report (“Report”) to the Pennsylvania Public Utility Commission (“PAPUC”) for its 2022 system performance. Pike, a wholly owned utility subsidiary of Corning Energy Holding Company, is an electric distribution company (“EDC”) which had 5,302 electric distribution customers as of December 31, 2022, thereby making it a “smaller EDC” for purposes of 52 Pa. Code §57.195 (c).

§57.195. (b)(1)

An overall assessment of the state of the system reliability in the EDC's service territory including a discussion of the EDC's current programs and procedures for providing reliable electric service.

Overall Current Assessment

The PCL&P service territory is primarily fed from two 34.5 kV feeders that originate from Orange and Rockland Utilities ("ORU"). The Borough of Matamoras is served by two 13.2 kV feeders from a Substation with backup tie capability to distribution circuitry from Orange and Rockland Utilities. The substation is normally fed by a 34.5 kV circuit feed (ORU circuit 116-2-34) with backup service being provided by a second 34.5 kV circuit feed (ORU Circuit 116-4-34) through an automatic transfer scheme at the substation. The western portion of the Pike service territory is supplied by a radial feed from ORU circuit 116-4-34.

Historically, the majority of outages, customers affected and customer-minutes of interruption are the result of vegetation contacts. In prior years, the Company has been effective in removing danger trees, however, in recent years, external environmental factors such as the emerald ash borer have increased the risk associated with tree contact outages to the Company's distribution system. The Company prioritizes and aggressively removes danger trees within utility right-of-way zones and works with individual customers and municipalities to remove those that exist outside of the Company's right-of-way areas. PCL&P also works with the Milford Shade Tree Commission to address danger trees that represent a hazard to the general public as well as the Company's electrical system located within and outside of right-of-way areas.

With Covid limiting the Company's ability to perform its normal inspection programs in 2020 and 2021, the 2022 inspection program was accelerated from 750 pole inspections to 880 poles inspections, resulting in 51 poles failing the inspection. Another 20 poles were identified as deficient through normal day-to-day operations. Of the total 71 poles that failed inspection, 60 were replaced during the year.

The PAPUC's service reliability standards for Pike, last revised on August 17, 2006, are as follows:

- 12-Month System Average Interruption Frequency Index ("SAIFI", or "Frequency") of 0.82 interruptions per customer served;
- 12-month Customer Average Interruption Duration Index ("CAIDI" or "Restoration") of 235 minutes of interruption per customer interrupted; and
- 12-month System Average Interruption Duration Index ("SAIDI" or "Duration") of 195 minutes per customer served.

In 2022 the Pike service territory experienced a Frequency of 0.50 interruptions per customer served, a Restoration of 159 minutes, and Duration of 79 customer-minutes of interruption. SAIFI was 18% better

than the benchmark, CAIDI was 15 minutes below the benchmark, and SAIDI was 27 minutes below the benchmark. These results are detailed on Page 7 of this Report, along with the most recent three-year history for these indices.

The three-year reliability standards for Pike are as follows:

- Three-year annualized SAIFI of 0.67 interruptions per customer served;
- Three-year annualized CAIDI of 191.4 minutes of interruption per customer interrupted; and
- Three-year annualized SAIDI of 129 minutes per customer served.

For the three-year period ended December 2022, Pike experienced an annualized Frequency of 0.77 interruptions per customer served, a Restoration of 161 minutes, and Duration of 124 customer minutes of interruption.

There were four major events that affected Pike's service territory during 2022 that were accepted by the PAPUC for exclusion from the reliability statistics. These major events affected 10,918 customers and are detailed in the next section of this Report (starting on Page 5).

The table on Page 8 summarizes, by cause, Pike customer interruptions experienced in 2022, with pre-arranged and major events removed. The leading cause of outages was tree contacts, with 22 interruptions affecting 1,325 customers for a total of 239,263 customer-minutes.

The service reliability program targeted to manage these outages is the 34.5 kV circuit three-year, cycle-based tree clearance program and 13.2 kV is on 5-year cycle and the pole inspection and defective pole replacements.

The most recent 34.5 kV vegetation management cycle was completed in 2021/22. The most recent 13.2 kV circuit cycle was initiated in December 2022 and continued into the first quarter of 2023. In addition to the 13.2 kV vegetation management cycle initiated at the end of 2022, emphasis has been placed on hazard tree removals along Avenue C on the 34.5 kV system. Specific focus was also placed on the area of the distribution system along Delaware Drive in an area known for tree contact outages.

The distribution inspection and maintenance goals/objectives and capital expenses are listed starting on Page 10 of this Report. Pike has no transmission lines.

§57.195. (b)(2)

A description of each major event that occurred during the year being reported on, including the time and duration of the event, the number of customers affected, the cause of the event and any modified procedures adopted to avoid or minimize the impact of similar events in the future.

Major Events

Date	Cause	Time	Duration (hours)	Customers Affected	Customer Minutes of Int
6/18/22	Non-Company Accident	12:09 p.m.	4.02	2,157	204,807
6/23/22	Non-Company Accident	8:55 a.m.	2.08	2,157	195,437
9/5/22	Loss of feed	11:55 p.m.	2.27	1,847	251,192
9/12/22	Non-Company Accident	3:30 p.m.	25.57	4,757	3,820,796
Totals				10,918	4,472,232

a. June 18, 2022

At approximately 12:09p.m. a private tree contractor dropped tree branches on primary conductors. The branches broke the conductor causing a fault that tripped recloser CR1 open until it locked out. As a result of the recloser lockout 2,157 customers lost electric service. The total Customer Minutes of Interruption was 204,807 minutes. Weather had no impact on this outage or it's restoration.

b. June 23, 2022

At approximately 8:55 a.m. a motorist drove their vehicle into pole 38188/48922. This caused a phase B conductor upstream of the pole to break free resulting in a phase-to-ground fault. As designed, phase B of the upstream recloser tripped open interrupting electric to 775 customers. In order to safely effect repairs, the other two phases were opened as well raising the total number of customers affected to 2,157. The total Customer Minutes of Interruption for this event was 195,437 minutes. Weather had no impact on this outage or it's restoration.

c. September 5, 2022

At approximately 11:55 p.m. downed wires in the Orange and Rockland (O&R) service territory caused the overhead protection scheme to operate, de-energizing the feed to the Matamoras substation. PCL&P has automated devices installed on its system, designed to operate in the event of a loss of voltage. These devices did not operate resulting in the loss of electric service to 1,847 customers. A cursory investigation provided that the battery intended to operate the switches and

transfer load between primary and backup sources did not have sufficient charge to perform the switching operations. A review of substation inspection records revealed that the battery was inspected on July 27 of this year, which is consistent with Pike's maintenance plan, and the battery indicator light showed normal. In response to this event, Pike plans to replace the battery and then perform a functional test of the switch as soon as practical. The total Customer Minutes of Interruption for this event was 251,192 minutes. Weather reports indicate heavy rain in the vicinity of the downed O&R wires.

d. September 12, 2022

At approximately 3:30 pm Monday afternoon, a dump truck driving with its bed in the upright position clipped a telephone wire running across Westfall Town Drive in Westfall. As the truck continued driving, it pulled down two utility poles on Route 209. The two poles carried the main feeder serving Milford and areas at the western end of PCL&P's service territory, interrupting service to 2,910 customers. During switching to restore the customers via the alternate feed, phases burned down along a ROW running from the Matamoras Substation to I84. This second fault caused the O&R feed to lockout interrupting service to an additional 1,847 customers served by the Matamoras Substation. This second fault location was isolated, and the Matamoras Substation was restored in approximately 20 minutes. It is unclear what compromised the conductors causing them to burn down (weak spot from a previous lightning strike, etc.), however, the area in question was inaccessible by bucket truck due to heavy rains earlier in the day so a decision was made to focus on repairing the initial fault location. Crews worked throughout the night and were preparing to restore all customers when the report of a second motor vehicle accident was received at approximately 9:45 a.m. Tuesday morning. A crew was dispatched to the reported location and verified that another pole had been hit and was down. This pole also supported the main feeder for the area. The pole was isolated to allow for restoration up to that point. All customers downstream of the isolation point would remain out until the pole was replaced. The total Customer Minutes of Interruption for this event was 3,820,796 minutes. Weather was not a contributing factor to this outage.

§57.195. (b)(3)

A table showing the actual values of each of the reliability indices (SAIFI, CAIDI, SAIDI, and if available, MAIFI) for the EDC's service territory for each of the preceding 3 calendar years. The report shall include the data used in calculating the indices, namely the average number of customers served, the number of sustained interruptions, the number of customers affected, and the minutes of interruption. If MAIFI values are provided, the number of customer momentary interruptions shall also be reported.

Year	SAIFI	CAIDI	SAIDI	Average No. of Customers Served	No. of Interruptions	Customers Affected	Customer Minutes of Interruption
2019	0.39	177	69	4,819	42	1,870	331,355
2020	0.45	184	83	5,227	55	2,356	432,428
2021	1.40	153	216	4,891	66	6,890	1,058,853
2022	0.50	159	79	5,299	63	2,646	420,975

MAIFI data is not currently available.

§57.195. (b)(4)

A breakdown and analysis of outage causes during the year being reported on, 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 identify service problems shall be reported.

Causes of Interruption				
Cause Description	No. of Inter.	% of Inter.	Customers Affected	Customer Minutes
Animal Contact	6	9.5%	99	4,979
Tree Contact	22	34.8%	1,325	239,263
Equip. Failure	19	30.2%	715	126,922
Non-Comp Acc.	2	3.2%	26	2,405
Loss of Feed	3	4.8%	54	11,232
Unknown-Other	11	17.5%	427	36,174
Totals	63		2,646	420,975

As noted in the above table, the primary cause of interruptions in 2022 was “Tree Contact”, followed by “Equipment Failure”.

The effects of Pike’s reliability programs such as: the combination of the hot spot tree trimming and select hazardous tree removals; the accelerated pad-mount transformer/underground cable end inspection; and the accelerated pole inspection and replacement programs results continue to be reflected in its performance indices. As compared to Pike’s historical performance, total interruptions, customers affected and customer-minutes remain steady despite an increase in the number of customers served. These programs are expected to have an ongoing positive impact on Pike’s performance.

§57.195(b)(5)

A list of the major remedial efforts taken to date and planned for circuits that have been on the worst performing 5% of circuits list for a year or more.

Pursuant to Pike’s exemption as set forth in §57.195(c), Pike is not required to address this subsection.

§57.195. (b)(6)

A comparison of established transmission and distribution inspection and maintenance goals/objectives versus actual results achieved during the year being reported on. Explanations of any variances shall be included.

T/D Inspection/Maintenance Goals/Objectives

Goals/Objectives vs. Results

For distribution goals and objectives, the Company focused on completing all scheduled preventive maintenance on its distribution facilities. As set forth below, Pike met these goals. Pike has no transmission facilities.

Distribution Vegetation Management

In 2022, primarily hot spotting of the distribution system was implemented along with some danger trees removals in Matamoras and Milford Boroughs on an as needed basis. The cycle-based tree clearance program for the 34.5 kV circuits (58.75 miles, three-year cycle) began in December 2021 and was completed in the first quarter of 2022. The 13.2 kV vegetation management program (42 miles, five-year cycle) commenced in December of 2022 per the Company's line clearance specifications.

In 2022 the Company also responded to several requests from customers and municipalities for tree trimming and hazard tree removal. In addition, known hot spot areas are scheduled each year to be trimmed.

Pole Inspection Program

Distribution poles are inspected on a twelve-year cycle. PCL&P planned to inspect 750 poles in 2022. As mentioned earlier in this report, 880 poles were inspected.

Distribution Overhead Line Inspections

Infrared and pole top equipment inspections of all three-phase circuitry were last completed in 2021.

Power Quality

The 2022 maintenance program required inspection of seven capacitors and five regulators, which PCL&P completed as planned. There has not been a power quality customer complaint since before 2017.

Recloser Program

The recloser maintenance program requires visual inspection of all reclosers annually, and a functional test every three years. Pike completed the four visual inspections with no identified problems. No functional tests were required this year.

Substation Maintenance and Inspection Program

The 2022 maintenance program required completion of all Class 1 inspection and maintenance requirements as listed in Appendix I for the Matamoras Substation. The monthly visual inspections were performed.

Transformer Inspection Program

PCL&P is required to inspect all overhead distribution transformers on a two-year cycle as part of the overhead distribution line inspection program. All overhead distribution transformers were last inspected in 2018. PCLP was unable to complete this inspection in 2022 but will return to the two-year schedule in 2023.

§57.195. (b)(7)

A comparison of budgeted versus actual transmission and distribution operation and maintenance expenses for the year being reported on in total and detailed by the EDC's own functional account code or FERC account code as available. Explanations of any variances 10% or greater shall be included.

T/D Operation and Maintenance

2022 O&M Expenditures	2022 Budget (\$,000)	2022 Actual (\$,000)
5800 OPERATION SUPERVISION AND ENGINEERING	12	9
5810 LOAD DISPATCHING	0	0
5820 STATION EXPENSES	0	0
5830 OVERHEAD LINE EXPENSES	0	0
5840 UNDERGROUND LINE EXPENSES	0	0
5870 CUSTOMER INSTALLATIONS EXPENSES	0	0
5880 MISCELLANEOUS DISTRIBUTION EXPENSES	0	0
5890 RENTS	0	0
5920 MAINTENANCE OF STATION EQUIPMENT DISTRIBUTION	1	1
5930 MAINTENANCE OF OVERHEAD LINES DISTRIBUTION	568	338
5940 MAINTENANCE OF UNDERGROUND LINES DISTRIBUTION	0	0
5970 MAINTENANCE OF METERS	17	17
5980 MAINTENANCE OF MISCELLANEOUS DISTRIBUTION PLANT	3	3
Total Distribution	585	351

Actual Operation and Maintenance Expenses in 2022 underran the budgeted amount by \$234 (40%). The underrun was due to capital infrastructure construction to accommodate new business residential projects and additional LTIP spending.

§57.195. (b)(8)

A comparison of budgeted versus actual transmission and distribution capital expenditures for the year being reported on in total and detailed by the EDC's own functional account code or FERC account code as available. Explanations of any variances 10% or greater shall be included.

T/D Capital Expenditures

Account#	Capital Project	2022 Budget (\$,000)	2022 Actual (\$,000)
1070	NEW INSTALLATIONS	244	(472)
1070	OTHER REPLACEMENT	50	(34)
1070	POLE REPLACEMENT	600	1,045
1070	RESIDENTIAL METERS	75	93
1070	NON-RESIDENTIAL METERS	105	0
1070	VOLTAGE REGULATION	0	0
1070	TRANSFORMERS	286	222
1070	SAFETY EQUIPMENT	0	0
1070	SYSTEM REINFORCEMENT	436	1,511
1070	COMPUTERS/PRINTERS	0	19
Total Capital		1,796,000	2,384,000

Overall Capital Expenditures in 2022 were \$588,000 (32%) above the budget. The overrun was due to capital infrastructure construction to accommodate new business residential projects and additional LTIIP spending.

§57.195. (b)(9)

Quantified transmission and distribution inspection and maintenance goals/objectives for the current calendar year detailed by system area (that is by transmission, substation and distribution.)

T/D Inspection and Maintenance Goals/Objectives Quantified

Inspection and maintenance programs, designed with the intention of improving frequency of interruption and minimizing the resultant increases in restoration (as frequency is improved), have been in effect in Pike’s service territory for over ten years. In addition, the “Biennial Inspection, Maintenance, Repair and Replacement Plan” became effective on January 1, 2012. This plan along with the associated programs are focused on field facilities and customer satisfaction, and are effective in minimizing the probability of an interruption while limiting the number of customers affected per interruption. The major programs are:

Distribution Vegetation Management

The not to exceed five-year cycle trimming and various spot trimming and hazard tree removal are performed as conditions are identified.

Pole Inspections Planned

750 poles are scheduled to be inspected in 2023.

Power Quality

All capacitors and regulators will be inspected in accordance with the 2023 annual maintenance program.

Recloser Program

All reclosers will be visually inspected and functionally tested in 2023.

Substation Maintenance and Inspection Program

A Class 4 inspection will be performed on the Matamoras Substation in 2023 as outlined in in Appendix I.

Distribution Overhead Line Inspections

All circuit 3 phase mainlines are planned to be inspected in the next inspection cycle scheduled for 2023.

Distribution Transformer Inspections

Inspections of all overhead transformers are scheduled to be completed in 2023. The pad mounted transformers inspections were 100% completed in 2019/20.

§57.195. (b)(10)

Budgeted transmission and distribution operation and maintenance expenses for the current year in total and detailed by the EDC's own functional account code or FERC account code as available.

T/D Operation and Maintenance

O&M	Capital Project	2023 Budget (\$,000)
5800	OPERATION SUPERVISION AND ENGINEERING	15
5920	MAINTENANCE OF STATION EQUIPMENT DISTRIBUTION	125,000
5930	MAINTENANCE OF OVERHEAD LINES DISTIBUTION	1,300,000
5940	MAINTENANCE OF UNDERGROUND LINES DISTIBUTION	367,000
5970	MAINTENANCE OF METERS	20
Total Distribution		1,792,035

§57.195. (b)(11)

Budgeted transmission and distribution capital expenditures for the current year in total and detailed by the EDC's own functional account code or FERC account code as available.

T/D Capital Expenditures

Account#	Capital Project	2023 Budget (\$,000)
362	ELECTRIC-SUBSTATION	24,000
364	ELECTRIC-POLE AND DEVICES	215,000
364	DEF POLE REPL A	630,000
364	ROW Improvement 116-2-34 - Matamoras Sub to I84	700,000
365	ELECTRIC-OVERHEAD CONDUCTORS	180,000
367	ELECTRIC- UNDERGROUND CONDUCTORS	85,000
368	ELECTRIC-OH TRANSFORMER	240,000
368	ELECTRIC-UG TRANSFORMER	240,000
369	ELECTRIC-NEW INSTALLATION	88,000
369	ELECTRIC-REPLACEMENT	24,000
370	ELECTRIC-RESIDENTIAL METER	6,000
370	ELECTRIC-NON-RESIDENTIAL METER	18,000
373	ELECTRIC-STREET LIGHTS	60,000
Total Capital		2,510,000

§57.195. (b)(12)

Significant changes, if any, to the transmission and distribution inspection and maintenance programs previously submitted to the PAPUC.

T/D Inspection and Maintenance Programs - Significant Changes

Inspection & Maintenance Changes

There were no significant changes to Pike’s Inspection and Maintenance programs in 2022. Inspection programs in 2023 will be performed in accordance with the Company’s “Biennial Inspection, Maintenance, Repair and Replacement Plan” filed with the PAPUC.

Appendix I Substation Maintenance and Inspection Program

Item Description:

Examine individual utility substation maintenance programs to validate proper maintenance procedures and verify that maintenance is being performed. Review recent operating data to verify that no adverse trends exist.

PCL&P Program:

The following details the different class inspections and maintenance programs performed by the Substation Operations Department, and their associated time cycles. Intervals vary dependent on equipment type, style and maintenance history.

CLASS #1 INSPECTION - Monthly

- Visual inspection of transformers for oil leaks, oil levels, nitrogen pressure, connections and condition of bushings.
- Visual inspection of battery banks, chargers, control board indicating lights, control house lights, yard lights.
- Visual inspection of minor equipment including Potential Transformers (PTs), Current Transformers (CTs), Capacitive Coupled Potential Devices (CCPDs), disconnect switches and bus connections.
- Visual inspection of all structures, fences and yard surfaces.
- Counter readings taken of breakers, the Vista switch and tap changers.

CLASS #2 STATION BATTERY TESTS – Quarterly

- Measure specific gravity and cell voltage. Test battery impedance, clean batteries and check cell levels.

CLASS #3 FANS, PUMPS, HEATERS AND COMPRESSORS - Annually

- Check for proper operation prior to winter for heaters and compressors and prior to summer for fans and pumps.

CLASS #4 INSPECTION - Every Three - Ten Years

Transformers

Includes, but is not limited to the following items:

- Test oil - Take oil sample from each power transformer compartment and analyze for combustible gas content.
- TTR - Test, Megger test;
- Inspect all connectors, bushings;
- Inspect for leaks (oil - nitrogen);
- Check CT connections, alarm systems on banks; and
- Doble Power Factor Test.

Load Tap Changer

Includes, but is not limited to the following items:

- Test Oil in LTC cabinet; and
- Test LTC control for proper operation.
- Clean, test and calibrate as required all relays involved in protective relay schemes. After testing and calibrating, perform a trip test to assure proper operation.

VCB's

Includes, but is not limited to the following items:

- DLRO (Ductor Test) before and after;
- Inspect all contacts (action to be taken, if needed);
- Inspect and test all Micro and Aux. contacts (close and trip circuit); and
- Operational Testing

CERTIFICATE OF SERVICE

I hereby certify that I have this day served a true and correct copy of the foregoing document upon the parties, listed below, in accordance with the requirements of 52 Pa. Code § 1.54 (relating to service by a party).

VIA ELECTRONIC MAIL ONLY

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/s/ Whitney E. Snyder
Thomas J. Sniscak
Whitney E. Snyder

DATED: May 1, 2023