

April 18, 2024

E-FILED

Ms. Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
2nd Floor, Room-N201
400 North Street
Harrisburg, PA 17120

Re: **Wellsboro Electric Company 2023 Annual Electric Reliability Report Docket No.**
~~M-2016-2522508~~ M-2023-3039027 YDD 4/18/24

Dear Secretary Chiavetta:

Please find enclosed for filing Wellsboro Electric Company's 2023 Annual Electric Reliability.

If you have any questions regarding the information contained in this filing, please contact me at (570)724-6701 or barneyf@ctenterprises.org.

Sincerely,

Byron Farnsworth Jr.
President/CEO

Enclosure
c (w/ enc.):

Bureau of Technical Utility Services (jvanzant@pa.gov, dsearfoorc@pa.gov,
hbidelspac@pa.gov)
Office of Consumer Advocate (pcuceri@paoca.org)
Office of Small Business Advocate (tereswagne@pa.gov)

2023 Annual Electric Reliability Report

to the

Pennsylvania Public Utility Commission

Wellsboro Electric Company
33 Austin Street
Wellsboro, PA 16901

April 18, 2024

**WELLSBORO ELECTRIC COMPANY
ANNUAL ELECTRIC RELIABILITY REPORT**

Filed April 18, 2024

52 Pa Code §57.195 Reporting Requirements

- (a)(2) The name, title, telephone number and e-mail address of the persons who have knowledge of the matters, and can respond to inquiries.**

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Tyler Mead – Director of Engineering & Operations
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- (b)(1) An overall current assessment of the state of the system reliability in the electric distribution company's service territory including a discussion of the electric distribution company's current programs and procedures for providing reliable electric service.**

Wellsboro Electric Company has maintained excellent reliability indices during 2023. The Company experienced 8 major events throughout 2023 including rain, wind, and heavy snow events that impacted reliability. The number of major events has decreased for 2023 compared to the previous 4 years where we have averaged over 10. By decreasing the number of major events, the Company recognizes this will increase some of our indices because the outages will be much smaller and be pushed out to the extremities of our system which will not allow them to qualify as a major event. The Company will continue trimming 70-75 miles per year which amounts to a circuit or a portion of a circuit each year and keeps us around a 5-year cycle. The Company identified hot spot trimming on the downtown three phase portion of the system. Danger trees were identified In and Out of ROW during the year and urgent removals were dealt with immediately and other Danger trees are prioritized and removed as funding is available.

In 2023 the Company reconnected 6 miles of line, and installed other group operated switches to create tie points in the system. In 2024 the Company plans to reconnector another 6 miles of line and work to build another tie point. This will provide reliability to the circuits allowing an alternate feed. The Company is pursuing grant funds from the PADEP to continue resiliency and automation work on the circuits where a loop exists.

The Company continues to participate in and gather information from various industry best practice groups. These groups include members from diverse utility groups such as the Pennsylvania Rural Electric Association, the Energy Association of Pennsylvania, and the National Rural Electric Cooperative Association. The Company will continue to implement best practices defined by these groups as appropriate.

The Company does not own or maintain any transmission facilities.

Current Maintenance Programs

| Program | Description | Cycle |
|---------------------------------|--|--|
| Infrared Inspection | All substation equipment monthly, and overhead lines as needed. | Monthly |
| Vegetation Management | Each year, primary lines are visually inspected on 4 circuits. This comprehensive field inspection allows us to identify areas that require trimming. We are striving to maintain a 5–6 year trimming cycle and the Boro is inspected annually to help identify unexpected “hot spots.” Based on a bid the winning bidder. Trimmed 70 miles by the end of 2023. | 2 Years – Visual 5-6 Years – Trimming |
| Visual Line Inspection | 4 distribution circuits lines and pole hardware are visually inspected each year during preparation of tree trimming contract. Line sections receiving infrared inspection are also inspected visually during that process. Drones are used on a limited basis in tough to access ROWs to inspect structures, equipment and tree conditions. AppSuite is being used to capture specific information which is then transferred into our IVUE system to run reports. | 2 Years |
| Overhead Transformer Inspection | Overhead equipment on 4 circuits are visually inspected each year to identify and correct any developing problems or safety concerns. | 2 Years |
| Padmount Transformer Inspection | Padmounted equipment on 2 circuits are visually inspected each year to identify and correct any developing problems or safety concerns. | 4 Years |
| Line Equipment Inspection | Air switches, circuit tie switches, capacitors, regulators, and reclosers are visually inspected during the Line Inspections each year. Where applicable, proper operation of control equipment is verified, and counter readings are recorded. | Annual |
| Pole Inspection | Poles are inspected at the ground line with a sonic and bore style test. | 8 Years |
| Reject Pole Replacements | Replace condemned poles identified during pole inspection. | As needed, annually |
| Substation Equipment Inspection | Entire station is visually inspected. Equipment batteries are tested, communications equipment operation is verified, fans are tested, various gauge and counter readings are recorded. An infrared inspection is performed on all equipment monthly. | Monthly |
| Regulator/OCR Maintenance | Tripsaver reclosers will be inspected during the Line Inspections each year. Regulators are visually inspected monthly | Monthly - Regulators Annually – OCR’s |

(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 in order to avoid or minimize the impact of similar events in the future.

| Date | Time | Duration of Event (Minutes) | #of Customers Affected | Cause |
|------------|----------|-----------------------------|------------------------|-------------------|
| 2/3/2023 | 16:14 PM | 49,406 | 738 | High wind |
| 2/21/2023 | 14:02 PM | 219,247 | 3703 | High wind |
| 4/1/2023 | 14:30 PM | 1,493,292 | 4429 | High wind |
| 7/27/2023 | 03:27 AM | 276,180 | 1723 | Off ROW tree |
| 8/8/2023 | 16:46 PM | 55,519 | 1726 | Tree limb |
| 9/22/2023 | 10:11 AM | 15,417 | 1124 | Unknown |
| 10/4/2023 | 18:55 PM | 140,556 | 713 | Equipment failure |
| 11/21/2023 | 15:17 PM | 239,049 | 1175 | High wind |
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(b)(3) A table showing the actual values of each of the reliability indices (SAIFI, CAIDI, SAIDI, and if available, MAIFI) for the electric distribution company’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 customer minutes 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.

**RELIABILITY BENCHMARKS AND STANDARDS
Wellsboro Electric Company****

| | SAIDI | SAIFI | CAIDI | MAIFI |
|-----------------------|--------------|--------------|--------------|--------------|
| 2023 | 155 | 1.37 | 114 | * |
| 2022 | 142 | 1.09 | 130 | * |
| 2021 | 133 | .93 | 144 | * |
| | | | | |
| 3 Year Average | 143 | 1.13 | 127 | * |
| | | | | |

* Sufficient information to calculate MAIFI is unavailable.

** System Performance Measures with Major Events and Planned Outages Excluded

Formulas Used in Calculating the Indices

$$\text{SAIFI} = \frac{\text{Number of Customers experiencing an Interruption}}{\text{Average Customers served}}$$

$$\text{SAIDI} = \frac{(\text{Total Cust.-minutes interrupted}) - (\text{Cust.-minutes for a major event})}{\text{Average Customers served}}$$

$$\text{CAIDI} = \text{SAIDI/SAIFI}$$

(b)(4) A breakdown and analysis of outage causes during the year being reported on, including the number and percentage of service outages 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.

January 1, 2023 through December 31, 2023

| Outage Cause | Number of Interruptions | % of Interruptions | Number of Customers Affected | Customer Interruption Minutes |
|------------------|-------------------------|--------------------|------------------------------|-------------------------------|
| Animal | 31 | 14.8% | 502 | 27,196 |
| Equipt Failure | 23 | 11.0% | 640 | 49,926 |
| Tree, On, R.O.W. | 3 | 1.4% | 31 | 2,334 |
| Tree, Off R.O.W. | 126 | 60.3% | 6611 | 834,774 |
| Unknown | 25 | 12.0% | 1036 | 88,180 |
| Lightning | 1 | 0.5% | 2 | 608 |
| Total | 209 | 100.0% | 8822 | 1,003,019 |
| | | | | |
| | | | | |

January 1, 2022 through December 31, 2022

| Outage Cause | Number of Interruptions | % of Interruptions | Number of Customers Affected | Customer Interruption Minutes |
|------------------|-------------------------|--------------------|------------------------------|-------------------------------|
| Animal | 57 | 24.9% | 1277 | 180,514 |
| Equipt Failure | 35 | 15.3% | 1351 | 255,308 |
| Tree, On, R.O.W. | 5 | 2.2% | 64 | 10,310 |
| Tree, Off R.O.W. | 89 | 38.9% | 3315 | 386,547 |
| Unknown | 35 | 15.3% | 974 | 79,415 |
| Lightning | 8 | 3.5% | 43 | 3,281 |
| Total | 229 | 100.0% | 7024 | 915,376 |
| | | | | |
| | | | | |

January 1, 2021 through December 31, 2021

| Outage Cause | Number of Interruptions | % of Interruptions | Number of Customers Affected | Customer Interruption Minutes |
|------------------|-------------------------|--------------------|------------------------------|-------------------------------|
| Animal | 34 | 16.0% | 288 | 13,823 |
| Equipt Failure | 38 | 17.8% | 1393 | 170,500 |
| Tree, On, R.O.W. | 17 | 8.0% | 537 | 60,863 |
| Tree, Off R.O.W. | 93 | 43.7% | 3082 | 543,827 |
| Unknown | 27 | 12.7% | 590 | 56,900 |
| Lightning | 4 | 1.9% | 32 | 4,193 |
| Total | 213 | 100.0% | 5922 | 850,106 |
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