April 21, 2021

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 2020 Annual Electric Reliability Report Docket No. M-2016-2522508**

Dear Secretary Chiavetta:

Please find enclosed for filing Wellsboro Electric Company's 2020 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 (dgill@pa.gov, dsearfoorc@pa.gov, dawashko@pa.gov)
Office of Consumer Advocate (TMcCloskey@paoca.org)
Office of Small Business Advocate (ra-sba@pa.gov)

2020 Annual Electric Reliability Report

to the

Pennsylvania Public Utility Commission

Wellsboro Electric Company
33 Austin Street
Wellsboro, PA 16901

April 21, 2021

WELLSBORO ELECTRIC COMPANY
ANNUAL ELECTRIC RELIABILITY REPORT

Filed April 12, 2021

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.

Byron Farnsworth Jr. – President/CEO
(570)724-6701, barneyf@ctenterprises.org

Tyler Mead – Director of Operations
(570)724-6725, tylerm@ctenterprises.org

(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 2020. The Company experienced several major events throughout 2020 including rain, wind, and heavy snow events that impacted reliability as well as supplier interruptions while Penelec was building the new transmission line and had Wellsboro on a backup 34.5 kv circuit. The Company will continue trimming 70 miles per year which amounts to a circuit or a portion of a circuit each year and gets us back 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 removed as funding is available.

In 2020, the Company has started to install new reclosers to help isolate outages to a smaller area, which has improved reliability on the system. In 2020 we focused on the Charleston circuit, but moving forward we will be replacing mechanical OCR's as well as installing new equipment across the entire system in 2021 and finish in 2022.

The Company continues to participate in and gather information from various industry best practices 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 82.5 miles by the end of 2020.	2 Years – Visual 7 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 and treated at the ground line. External and/or internal decay inhibitors are applied where appropriate.	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	OCR counters recording faults are read and every 3 years hydraulic reclosers are removed from service and replaced with new/refurbished units. We are moving to vacuum OCR's that will reduce the need to replace units from every 3 years to 10 years. 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
4/14/2020	9:20:00 AM	239	1515	Equipment failure
5/9/2020	2:38:00 PM	61	6283	Power Supplier
5/23/2020	7:01:00 PM	59	1705	Tree Off ROW
6/18/2020	2:38:00 PM	21	1505	Unknown
6/27/2020	6:26:00 AM	190	767	Equipment failure
7/30/2020	1:16:00 PM	24	1515	Unknown
8/4/2020	6:38:00 AM	112	6302	Power Supplier
8/8/2020	12:03:00 AM	72	6301	Power Supplier
8/19/2020	10:23:00 AM	217	1041	Animal contact
8/23/2020	7:34:00 PM	157	869	Unknown
10/15/2020	9:50:00 AM	65	1517	Tree Off ROW
10/21/2020	2:01:00 PM	96	714	Equipment failure

(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
2020	115	1.18	97	*
2019	81	0.76	107	*
2018	178	1.36	131	*
3 Year Average	125	1.10	114	*

* Sufficient information to calculate MAIFI is unavailable.
** System Performance Measures with Major Events and Planned Outages Excluded

Formulas Used in Calculating the Indices

SAIFI = Number of Customers experiencing an Interruption / Average Customers served

SAIDI = (Total Cust.-minutes interrupted) - (Cust.-minutes for a major event) / Average Customers served

CAIDI = 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, 2020 through December 31, 2020

Outage Cause	Number of Interruptions	% of Interruptions	Number of Customers Affected	Customer Interruption Minutes
Animal	34	16.3%	581	40,799
Equipt Failure	41	19.7%	2633	184,652
Tree, On, R.O.W.	19	9.1%	662	89,914
Tree, Off R.O.W.	65	31.3%	2522	350,714
Unknown	45	21.6%	1074	62,225
Wind	4	1.9%	71	5,776
Total	**208**	**100.0%**	**7543**	**734,081**

January 1, 2019 through December 31, 2019

Outage Cause	Number of Interruptions	% of Interruptions	Number of Customers Affected	Customer Interruption Minutes
Animal	54	27.4%	299	15415
Elec Overload	5	2.5%	860	76144
Equipt Failure	38	19.3%	1239	166358
Lightning	3	1.5%	197	6892
Tree, On, R.O.W.	34	17.3%	789	102485
Tree, Off R.O.W.	23	11.7%	479	53967
Unknown	40	20.3%	952	93642
Wind	0	0.0%	0	0
Total	**197**	**100**	**4815**	**514,904**

January 1, 2018 through December 31, 2018

Outage Cause	Number of Interruptions	% of Interruptions	Number of Customers Affected	Customer Interruption Minutes
Animal	77	21.2	1486	144,221
Vehicle	2	0.6	122	5,100
Decay	1	0.3	10	11,650
Elec Overload	1	0.3	5	164
Equipt Failure	39	10.7	1502	144,554
Fire	1	0.3	17	4,239
Lightning	5	1.4	7	255
No Cause Code	17	4.7	349	14,651
Public Contact	7	1.9	165	51,253
Tree, On, R.O.W.	80	22.0	1930	390,685
Tree, Off R.O.W.	48	13.2	1733	262,015
Unknown	80	22.0	1130	91,440
Wind	5	1.4	109	6,675
Total	**363**	**100**	**8565**	**1,126,900**