Wellsboro Electric Company

P. O. Box 138 • 33 Austin Street • Wellsboro, PA 16901 • (570) 724-3516 • FAX (570) 724-1798

April 21, 2020

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 2019 Annual Electric Reliability Report Docket No. M-2016-2522508**

Dear Secretary Chiavetta:

Please find enclosed for filing Wellsboro Electric Company's 2019 Annual Electric Reliability Report reflecting updated reliability indices in sections (b)(3) and (b)(4).

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)

2019 Annual Electric Reliability Report

to the

Pennsylvania Public Utility Commission

Wellsboro Electric Company
33 Austin Street
Wellsboro, PA 16901

April 21, 2020

WELLSBORO ELECTRIC COMPANY
ANNUAL ELECTRIC RELIABILITY REPORT

Filed April 21, 2020

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 experienced increases in reliability indices during 2019. The Company experienced several major events throughout 2019 including rain, wind, and heavy snow events that impacted reliability. The Company will continue trimming 70 miles per year which amounts to a circuit or a portion of a circuit each year. 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 cut as funding is available. In 2019, we identified and removed Off ROW danger trees (roughly 100) on a 3 mile section of the Middlebury circuit, this improved the reliability of the circuit.

The Company has moved the last two circuits in Wellsboro to the newer substation during Feb 2019 and Aug 2019. This has increased reliability on these circuits which feed the downtown area and they have provided two locations for installing new tie-points. The Company continues to add new technology, AppSuite is now being used for inspection of our system as well as mapping for the outside crews.

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 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 will trim 82.5 miles by the end of the 4th quarter 2020.	2 Years – Visual 7 Years – Trimming
Visual Line Inspection	2 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	Airswitches, 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. 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
2/24/2019	5:46:00 PM	168	2057	OCR malfunction on Stony Fork circuit
4/3/2019	12:46:00 PM	156	709	Tree Off ROW
4/15/2019	8:01:00 PM	29	707	Tree Off ROW
6/14/2019	8:40:00 AM	433	1505	MVA
7/19/2019	5:59:00 PM	230	2132	Tree Off ROW
8/11/2019	4:41:00 PM	217	750	Lightning
9/21/2019	7:24:00 AM	267	1150	Equipment Failure
10/9/2019	1:01:00 PM	42	6343	Power Supplier
10/28/2019	1:01:00 PM	71	6343	Power Supplier
10/31/2019	9:40:00 PM	885	2485	Heavy Wind & Rain
12/2/2019	5:00:00 AM	1350	3315	Snow & Ice

(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
2019	81	0.76	107	*
2018	178	1.36	131	*
2017	96	1.06	91	*
3 Year Average	137	1.20	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, 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**

January 1, 2017 through December 31, 2017

Outage Cause	Number of Interruptions	% of Interruptions	Number of Customers Affected	Customer Interruption Minutes
Animal	67	36.0	372	16,861
Vehicle	1	0.5	51	377
Decay	1	0.5	17	1,049
Elec Overload	1	0.5	1	88
Equipt Failure	25	13.4	1601	53,558
Lightning	2	1.1	7	415
No Cause Code	1	0.5	1	15
Tree, On, R.O.W.	6	3.2	572	59,065
Tree, Off R.O.W.	61	32.8	3354	334,601
Unknown	17	9.1	494	109,649
Wind	4	2.2	205	32,943
Total	**186**	**100**	**6675**	**608,621**