

WELLSBORO ELECTRIC COMPANY

QUARTERLY RELIABILITY REPORT
57.195 REPORTING REQUIREMENTS
Docket Number M-2016-2522508

Fourth quarter 2021

October-December 2021

SUBMITTED BY

Byron Farnsworth Jr.
President/CEO
570-724-6701

barneyf@ctenterprises.org

Tyler Mead
Director of Operations
570-724-6725

tylerm@ctenterprises.org

57.195 Reporting Requirements

Section (e) Item (5)

A rolling 12-month breakdown and analysis of outage causes during the receding 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.

<u>Outage Cause</u>	<u># Customers Affected</u>	<u># of Outages</u>	<u>Customer Minutes</u>	<u>Percentage of Outages</u>
Animal	288	34	13823	16.0%
Elec Overload	0	0	0	0.0%
Equipt Failure	1393	38	170500	17.8%
Lightning	32	4	4193	1.9%
Tree, Off, R.O.W.	3082	93	543827	43.7%
Tree, On R.O.W.	537	17	60863	8.0%
Unknown	590	27	56900	12.7%
Wind	0	0	0	0.0%
Total	5922	213	850106	100%

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.

Date	Time of Event	Time Restored	# Cust Affected	Cause
10/16/2021	2:53:00 PM	5:00:00 PM	1729	off ROW tree
10/26/2021	4:08:00 PM	5:16:00 PM	757	off ROW tree
10/27/2021	4:44:00 PM	5:13:00 PM	647	Equipment failure
11/11/2021	2:15:00 PM	1:35:00 AM	1815	High wind
12/11/2021	1:58:00 PM	12/13/2021 10:20:00 AM	2885	High wind
12/16/2021	12:46:00 PM	1:04 PM	648	Equipment failure

Cause	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-21	Feb-21	Mar-21	
NUMBER OF OUTAGES													
Animal	2	0	5	4	5	1	4	8	4	0	1	0	34
Elec Overload	0	0	0	0	0	0	0	0	0	0	0	0	0
Equipt Failure	2	1	3	8	4	4	2	4	2	1	4	3	38
Lightning	0	0	2	2	0	0	0	0	0	0	0	0	4
Tree, Off, R.O.W.	6	4	2	15	9	10	8	3	30	0	0	6	93
Tree, On R.O.W.	2	1	2	1	1	4	0	0	1	1	1	3	17
Unknown	0	2	2	7	4	1	6	1	0	1	0	3	27
Wind	0	0	0	0	0	0	0	0	0	0	0	0	0
	12	8	16	37	23	20	20	16	37	3	6	15	213

Cause	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-21	Feb-21	Mar-21	
CUSTOMERS AFFECTED													
Animal	2	0	68	25	70	4	6	46	66	0	1	0	288
Elec Overload	0	0	0	0	0	0	0	0	0	0	0	0	0
Equipt Failure	3	7	13	266	595	386	4	101	4	1	8	5	1393
Lightning	0	0	30	2	0	0	0	0	0	0	0	0	32
Tree, Off, R.O.W.	123	26	2	895	340	148	110	134	1196	0	0	108	3082
Tree, On R.O.W.	54	1	2	3	250	54	0	0	72	12	9	80	537
Unknown	0	58	48	105	89	101	88	28	0	69	0	4	590
Wind	0	0	0	0	0	0	0	0	0	0	0	0	0
	182	92	163	1296	1344	693	208	309	1338	82	18	197	5922

Cause	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-21	Feb-21	Mar-21	
Customer Minutes													
Animal	133	0	2893	1040	3166	197	225	1397	4582	0	191	0	13823
Elec Overload	0	0	0	0	0	0	0	0	0	0	0	0	0
Equipt Failure	263	1304	676	37268	96953	18788	554	12774	268	169	925	557	170500
Lightning	0	0	4030	163	0	0	0	0	0	0	0	0	4193
Tree, Off, R.O.W.	14683	3887	292	133121	49399	23847	10321	29785	267737	0	0	10754	543827
Tree, On R.O.W.	2013	65	156	164	15833	3830	0	0	26794	938	821	10248	60863
Unknown	0	4221	3908	8392	16963	9861	7132	2527	0	3646	0	250	56900
Wind	0	0	0	0	0	0	0	0	0	0	0	0	0
	17092	9477	11956	180149	182314	56523	18232	46483	299381	4753	1937	21809	850106

Rolling 12-Month reliability index values (SAIFI,CAIDI,SAIDI) for the EDC'S service territory for the receding quarter. The report shall include the data used in calculating the indices, namely the average number of customers served, the number of sustained customers interruptions, the number of customers affected, and the customer minutes of interruption.

WELLSBORO ELECTRIC COMPANY**ROLLING TWELVE MONTH INTERRUPTION INDEXES****4th Quarter 2021**

SAIDI
133

SAIFI
0.93

CAIDI
144

ROLLING TWELVE MONTH STANDARD AS ESTABLISHED BY THE PUC

SAIDI
278

SAIFI
1.66

CAIDI
167

ROLLING THREE YEAR AVERAGE INTERRUPTION INDEXES

SAIDI
109

SAIFI
0.95

CAIDI
115

ROLLING THREE YEAR AVERAGE STANDARD AS ESTABLISHED BY THE PUC

SAIDI
185

SAIFI
1.12

CAIDI
136

AVERAGE NUMBER OF CUSTOMERS SERVED

6399

Wellsboro Electric Company

Reliability Index

SAIDI

<u>Month</u>	<u>Total Customer Minutes</u>	<u># Customers Served</u>
Jan-21	4753.2	6391
Feb-21	1937.4	6391
Mar-21	21809.4	6391
Apr-21	17092	6395
May-21	9477	6395
Jun-21	11956	6395
July-21	180149	6400
Aug-21	182314	6401
Sept-21	56523	6404
Oct-21	18232	6403
Nov-21	46483	6411
Dec-21	299381	6411
Totals	850107	76788

Average # Customers Served **6399**

ROLLING TWELVE MONTH AVERAGE SAIDI INDEX **132.85**

Wellsboro Electric Company

Reliability Index

SAIFI

<u>Month</u>	<u># Customers Interrupted</u>	<u># Customers Served</u>
Jan-21	82	6391
Feb-21	18	6391
Mar-21	197	6391
Apr-21	182	6395
May-21	92	6395
Jun-21	163	6395
July-21	1296	6400
Aug-21	1344	6401
Sept-21	693	6404
Oct-21	208	6403
Nov-21	309	6411
Dec-21	1338	6411
Totals	5922	76788

Average # Customers Served 6399

Rolling Twelve Month Average SAIFI Index 0.93

Wellsboro Electric Company

Reliability Index

CAIDI

<u>Month</u>	<u>Total Customer Minutes</u>	<u># Customers Interrupted</u>
Jan-21	4753.2	82
Feb-21	1937.4	18
Mar-21	21809.4	197
April -21	17092	182
May-21	9477	92
June-21	11956	163
July-21	180149	1296
Aug-21	182314	1344
Sept-21	56523	693
Oct-21	18232	208
Nov-21	46483	309
Dec-21	299381	1338
Totals	850107	5922

Rolling Twelve Month Average CAIDI Index

143.55

ROLLING THREE YEAR WORKSHEET

4th Quarter 2021

<u>QTR</u>	<u>SAIDI</u>	<u>SAIFI</u>	<u>CAIDI</u>
4-19	11.00	0.10	113.00
3-19	23.00	0.21	111.00
2-19	26.00	0.31	84.00
1-19	21.00	0.15	144.00
4-21	57.00	0.29	196.00
3-21	65.00	0.52	126.00
2-21	6.00	0.07	88.00
1-21	4.00	0.05	96.00
4-20	23.00	0.16	141.00
3-20	50.00	0.47	106.00
2-20	33.00	0.45	72.00
1-20	8.00	0.08	98.00
	327	2.86	1375
	109	0.953333	114.5833

Summary

Trees caused (51.7%) of the outages (8.0% ON-ROW and 43.7% OFF-ROW)

Equipment failures (17.8%) these outages were associated with cutouts, arrestors, and jumpers.

Animal-contacts caused (16%) of the outages

Unknown (12.7%)

Lightning (1.9%)

The Company filed an exemption for 6 major events in the 4th quarter of 2021 due to two high wind events,

two equipment failures, and two off ROW trees.

The Company continues to add new devices to the system to help sectionalize outages and cut down on the amount of outage times.

For the 4th quarter of 2021 the company saw several high wind events in our service area. These high winds caused several

on and off ROW trees to fall causing outages to 3619 customers (604,690 minutes).