

M-2016-2522508

April 26, 2018

Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission
PO Box 3265
Harrisburg, PA 17105-3265

RECEIVED

APR 26 2018

PA PUBLIC UTILITY COMMISSION
SECRETARY'S BUREAU

Dear Rosemary Chiavetta

Subject: Annual Reliability Report

Enclosed is the Annual Reliability Report to the PUC for the year 2017 for Wellsboro Electric Co.

If we can be of further assistance, or if you have any questions, feel free to contact me at 570-724-3516.

Sincerely,



Tyler Mead
Technical Assistant, Engineering and Operations
Wellsboro Electric Company

Wellsboro Electric Company
33 Austin St.
Wellsboro, PA 16901

Annual Reliability Report for the Year 2017

Report Submitted by: Tyler Mead, Technical Assistant, Engineering and Operations

57.195 Section (a) Item2

Wellsboro Electric Company

The name, title, telephone number and e-mail address of the person who has knowledge of the matters and can respond to inquiries.

Tyler Mead

Technical Assistant, Engineering and Operations

Phone: 570-724-3516

E-Mail: tylerm@ctenterprises.org

Address: P.O. Box 138, 33 Austin St. Wellsboro, PA 16901

An overall current 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.

SUBSTAION:

Wellsboro electric is currently working on the conversion of one of our 4 kv substations. With the conversion of this circuit it has allowed us to utilize more automated metering on this circuit.

Transformers in the Buena Vista substation had maintenance on the tap changers completed in 2017.

Wellsboro electric purchased an infrared imager in 2017 so inspections of substation equipment and select parts of the distribution system were performed.

DISTRIBUTION SYSTEM:

1500 distribution poles will be inspected in 2018

Distribution Voltage Regulators and Reclosers will be visual inspected on a Semi-Annual inspection.

Vegetation management inspections will be completed on 4 circuits, Vegetation clearing will be conducted on 60 miles of the distribution circuit.

Wellsboro Electric will continue to install both overhead and underground fault indicators on select overhead and underground circuits.

Wellsboro Electric will continue to install AMI advanced meters on our system, we currently 96% of our active accounts have an advanced meter.

57.195 Section (b) Item 2

Wellsboro Electric Company

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 eliminate the impacts of similar events in the future.

Major Events

Date	Time of Event	Date & Time Restored	# Customers Affected	Cause Code
5/6/2017	09:01	5/6/2017 12:05	6341	Loss of Power Supply

A table showing the actual values of each of the reliability indices (SAIFI, CAIDI, SAIDI) for the EDC'S service territory for each of the preceding Three (3) calendar years. The report shall include the data used in calculating the indices, namely the average number of customers affected and the minutes of interruption.

RELIABILITY INDEX TABLE FOR SAIFI, SAIDI and CAIDI

	SAIFI	SAIDI	CAIDI
2015	1.06	81	76
2016	1.84	172	94
2017	1.08	97.1	90.15

2015 OUTAGE DATA

AVERAGE NUMBER OF CUSTOMERS SERVED 6276

Cause Code	# of Outages	# of Customers Affected	Customer Minutes
Animals	69	2596	146658
Vehicles	1	193	1444
Equip Failure	35	730	44704
Lightning	8	39	2269
Tree, On ROW	6	32	3482
Tree, Off ROW	49	1617	298145
Unknown	2	2	101

2016 OUTAGE DATA**AVERAGE NUMBER OF CUSTOMER SERVED 6308**

Cause Code	# of Outages	# of Customer Affected	Customer Minutes
Animals	64	694	48660
Vehicles	1	42	8005
Elec Overload	9	2009	95626
Equip Failure	60	4575	537433
Lightning	7	107	4614
Public Contact	3	93	121615
Tree, On ROW	5	193	16900
Tree, Off ROW	61	2396	251344
Unknown	6	6	572
Wind	1	23	1754

2017 OUTAGE DATA**AVERAGE NUMBER OF CUSTOMER SERVED 6321**

Cause Code	# of Outages	# of Customer Affected	Customer Minutes
Animals	68	373	13725
Vehicles	1	51	8005
Contractor	1	17	1049
Elec Overload	1	1	87
Equip Failure	27	1655	53624
Lightning	2	8	434
Tree, On ROW	8	680	27564
Tree, Off ROW	59	3246	102308
Unknown	26	515	86789
Wind	4	205	4074
Planned	2	65	142

A rolling twelve-month breakdown and analysis of outage causes during the preceding 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.

4th Qtr. 2017 Average number of Customers Served 6321

Outage Cause	# Customers Affected	# of Outages	Customer Minutes	Percentage of Outages
Animals	307	67	13535	30.2%
Vehicles	4	1	6602	0.5%
Contractor	17	1	1049	0.5%
Member Caused	251	3	126	1.4%
Decay	0	0	0	0.0%
Dig-in	0	0	0	0.0%
Electrical Overload	1	1	87	0.5%
Equipment Failure	1527	21	39319	9.5%
Fire	17	1	249	0.5%
Ice,Sleet,Frost	0	0	0	0.0%
Lightning	8	2	415	0.9%
Public Contact	0	0	0	0.0%
Power Supplier	0	0	0	0.0%
Phone/Cable Co	0	0	0	0.0%
Rain	0	0	0	0.0%
Trees	0	0	0	0.0%
Tree, On R.O.W.	969	22	28331	9.9%
Tree, Off R.O.W.	1347	29	84969	13.1%
Unknown Cause	1110	64	87950	28.8%
Vandalism	0	0	0	0.0%
Wind	173	4	2379	1.8%
Planned	119	6	626	2.70%
	5850	222	265637	100.00%

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

Code	Description	Goal/Objective	Actual
593.8	Substation Chemical Spraying	All Substations	100% Complete
593.8	Pole Testing	1500 Poles	100% Complete
593.8	Visual Line Inspection	Four Circuits	100% Complete
593.8	Infrared Imaging	Substations	100% Complete
593.1	Right of Way Clearing	60 Miles	100% Complete
593.9	Voltage Regulator Replacement	One Unit	100% Complete
592.11	Substation Inspections	Monthly	100% Complete
593.9	OCR Replacement	three Units	100% Complete
593.81	OCR/Regulator Inspections	Inspection of all units	
	On distribution system by visual inspection twice a year		100% Complete
594.11	Underground Inspection	All underground on	
		Charleston #	100% Complete
592	Substation Maintenance	Buena Vista	100% Complete

57.195 Section (b) Item 7

Wellsboro Electric Company

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

Program	Budget	Actual	Comment
Vegetation management	305,000	301,714	
Overhead line inspection	34,033	23,902	
Maintenance of overhead lines	126,167	166,951	
Maintenance of URD	17,192	23,640	replaced more than expected due to failure of old cable
Maintenance substation	20,848	45,400	replacement of tap changer parts
Meter maintenance	33,853	36,137	

57.195 Section (b) Item 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 codes or FERC account code as available. Explanations of any variances 10% or greater shall be included.

Program	Budget	Actual	Comment
pole replacements	425,000	543,349	contractor cost to replace off road structures
voltage conversion	200,000	125,529	winter weather stopped progress
line relocation	58,000	76,427	added additional section to job
infrared imager	10,000	9,195	
meters	45,000	61,365	

Quantified transmission and distribution inspection and maintenance goals/objectives for the current calendar year detailed by system area.

Substations

593.8 Substation Chemical Application	100% of all Substations
593.8 Infrared Imaging	100% of all Substations and Select parts of system
592.11 Substation Inspections	Inspect Monthly
592 Hilltop Substation	Complete inspection and maintenance

Distribution System

593.1 Right of Way Clearing	Trim / clear 60 Miles
593.1 Right of Way Tree Notes	As needed for Storm Work and Hazard Tree's
593.1 Right of Way Chemical	As needed for distribution system and cut tree Stump treatment
593.8 Pole Testing	Test 1500 Poles
593.9 Regulator and OCR Repairs	Replace and test six oil circuit reclosers
593.2 Overhead Line Inspections	Complete Inspection of four circuits
593.81 OCR/Regulator Inspection	Inspect all units on distribution system by visual Inspection and infrared twice a year
594.11 Underground Inspection	Inspect all pad mounted equipment and Transformers on stony fork circuit.
593.2 Vegetation Management Inspection	Complete inspection of four of the eight circuits

57.195 (b) Item 10

Wellsboro Electric Company

Budgeted Transmission and Distribution Operations and Maintenance expenses for the current year in total and detail by the EDC'S own functional account codes or FERC Code.

Program	GL Code	Budget \$
Total Operations	588	300,838
Total Maintenance	590's	729,392
	Total	\$1,030,230

57.195 Section (b) Item 11

Budgeted Transmission and Distribution capital expenses for the current year in total and detailed by the EDC'S own account codes or FERC Codes.

Program	Budget \$
Maintenance/construction	1,322,500
Vehicle Capital leases	260,000
Total	\$1,582,500