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October 27, 2021

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

RE: Docket No. M-2016-2522508 – Quarterly Reliability Report

Dear Secretary Chiavetta,

Please find the enclosed Third Quarter Reliability Report for Citizens' Electric Company. Please contact me at 570-522-6143 or johnsonn@citizenselectric.com if I can answer any questions.

Best Regards,

A handwritten signature in black ink, appearing to read "Nathan Johnson", written over a light blue horizontal line.

Nathan Johnson, PE
Vice President of Engineering & Operations

cc: Dan Searfoorce (via email)
John Van Zant (via email)

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Serving the Wonderful Lewisburg-Buffalo Valley since 1911

Citizens' Electric Company
Quarterly Service Reliability Report
Third Quarter, 2021

Prepared by Nathan Johnson, PE
Vice President of Engineering & Operations
570-522-6143
johnsonn@citizenselectric.com
October 27, 2021

§ 57.195(e)(1) - 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	Duration (Minutes)	Customers Affected	Cause
8/11/2021	16:41	312	1,038	At approximately 1840hrs on August 18, 2021, during a period of heavy rain, a tree fell from outside the right-of-way onto a section of three-phase line, interrupting 1,038 customers on the circuit. Shortly after restoration, another tree fell and interrupted power again to 105 of the originally affected customers.
8/20/21	07:57	17	883	At approximately 0730hrs on 8/20/21, Citizens' was notified by Union County 911 of a tree on a line and burning on SR192. As the crew arrived and prepared to clear the tree, it sagged into the line again, tripping the circuit to lockout and interrupting all 833 customers at 0757.

§ 57.195(e)(2) - Rolling 12-month reliability index values (SAIFI, CAIDI, SAIDI, and if available, MAIFI) for the EDC’s service territory for the preceding quarter. The report shall include the data used in calculating the indices, namely the average number of customers served, the number of sustained customer interruptions, the number of customers affected, and the customer minutes of interruption. If MAIFI values are provided, the report shall also include the number of customer momentary interruptions.

Rolling 12-Month Reliability Indices	
Index	Value
SAIFI	0.23
SAIDI	21.8
CAIDI	94.1

Reliability Indices – Supporting Data			
Total # of Customers Served	# of Interruptions	# of Customers Affected	Customer Minutes
7,067	59	1,634	153,747

The following outages were approved for exclusion as Major Events during the preceding 12-month period and are not included in the above calculations:

Major Event Exclusions		
Date	# of Customers Affected	Customer Minutes
11/15/20	1,326	116,984
2/16/21	875	237,475
3/1/21	760	87,159
4/11/21	1,460	100,570
4/30/21	880	71,076
6/30/21	3,009	431,161
8/11/21	1,038	81,734
8/20/21	883	15,320

§ 57.195(e)(5) - A rolling 12-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. Proposed solutions to identified service problems shall be reported.

Outage Analysis by Cause				
Outage Cause	Number of Interruptions	% of Interruptions	Number of Customers Affected	Customer Interruption Minutes
Off R/W Trees	30	51%	1,315	128,936
On R/W Trees	0	0%	0	0
Animal	6	10%	51	2,188
Weather	8	14%	23	1,988
Equipment	12	20%	110	11,688
Vehicle	1	2%	8	2,612
Other	2	3%	127	6,335
Total	59		1,634	143,747

Discussion

The third quarter was markedly stormier than the preceding two in 2021, with Citizens' experiencing 28 outages in Q3 versus 22 outages from the first two quarters combined. This rise correlates to a nearly threefold increase in thunderstorms from the same period in 2020¹. As a result, SAIFI and SAIDI indices rose to slightly above benchmark levels, but still within the standard.

Major causes of outages were off right-of-way trees, equipment failures and weather, respectively. Weather is not typically a top contributor to outages, but an unusually high occurrence of lightning-related outages—underscoring the stormy nature of the quarter—drove it to exceed animal contacts in Q3. The company is monitoring this cause to see if a trend develops, but it appears to be driven solely by the frequency of storms, and not by any underlying deficiencies with equipment or construction.

¹ Based upon NWS – State College seasonal climatology report.
(<https://forecast.weather.gov/product.php?site=CTP&issuedby=IPT&product=CLS&format=CI&version=1&glossary=0>)