



UGI Utilities, Inc.
1 UGI Drive
Denver, PA 17517

January 28, 2022

VIA E-FILING

Ms. Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street
Harrisburg, PA 17120

**RE: UGI Utilities, Inc. – Electric Division
Quarterly Electric System Reliability Report
12 Months Ending December 31, 2021
Docket No. M-2016-2522508**

Dear Secretary Chiavetta:

Pursuant to the Commission's May 7, 2004 Final Rulemaking Order amending Electric Service Reliability Regulations (52 Pa. Code §§57.191 - 57.197) at Docket No. M-2016-2522508, UGI Utilities, Inc. - Electric Division ("UGI") hereby files its Quarterly System Reliability Report. This report contains SAIDI, SAIFI, and CAIDI results on a 12-month rolling basis for the period ending December 31, 2021 along with the raw data from the same period. Also included is a breakdown of outages by cause for the 12 months ending December 31, 2021.

The Office of Consumer Advocate, the Office of Small Business Advocate, the Bureau of Audits, and the Bureau of Technical Utility Services are each being served with copies of this filing.

-Questions related to the attached report should be directed to Kyle Stair at (570) 407-2641 or email kstair@ugi.com.

Sincerely,

Eric Sorber
Vice President & General Manager - Electric Division

Attachment



UGI Utilities, Inc. – Electric Division
System Reliability Report:
Quarterly Update

January 28, 2022

**UGI Utilities, Inc. – Electric Division
System Reliability Report**

§ 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.

There were no major events during the preceding quarter.

§ 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.

The 12 month rolling reliability results for UGI’s service area are as follows:

	SAIDI	SAIFI	CAIDI
12-Month Standard	256	1.12	228
12-Month Benchmark	140	0.83	169
12 months Ended December 31, 2021	127	0.95	134

SAIDI: System Average Interruption Duration Index
SAIFI: System Average Interruption Frequency Index
CAIDI: Customer Average Interruption Duration Index

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System Reliability Report**

Raw Data: January 2021 through December 2021

Month	SI	TCI	TCB	TMCI
Jan-2021	21	1,074	62,378	114,691
Feb-2021	16	3,210	62,376	117,691
Mar-2021	140	7,622	62,267	1,985,209
Apr-2021	36	1,427	62,354	336,618
May-2021	42	2,734	62,418	407,821
Jun-2021	52	14,530	62,335	1,170,473
Jul-2021	121	12,318	62,329	1,504,939
Aug-2021	32	4,573	62,329	890,796
Sep-2021	79	4,560	62,269	434,968
Oct-2021	29	2,294	62,349	306,713
Nov-2021	29	3,035	62,384	277,390
Dec-2021	53	1,615	62,396	380,213
TOTAL	650	58,992	62,349 *	7,927,522

* 12-month arithmetic average

SI: Sustained Interruptions
 TCI: Total Customers Interrupted
 TCB: Total Customer Base
 TMCI: Total Minutes Customer Interruption

SAIDI

The SAIDI value for the 12 months ending December 2021 is 127. This result remains the same as results reported through September 2021.

SAIFI

The 12-month rolling SAIFI index decreased from 0.96 in our last quarterly report to 0.95 for the period ending December 2021.

CAIDI

The CAIDI result of 134 for the 12-month reporting period ending December 2021 has increased 2% from our last report.

SAIDI and CAIDI are both below the 12-Month Standard and the 12-Month Benchmark. SAIFI falls below the 12-Month Standard and above the 12-Month Benchmark. UGI conducted a review of the quarter and found that the most significant contributions to the reliability metrics were associated with few vegetation/storm related outages that affected large numbers of customers. UGI continues to target areas vulnerable to large outages by adding additional circuit protection and sectionalizing devices, as well as tie lines that can be used to energize customers after faulted sections of line are isolated.

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§57.195(e)(5)–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 the 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 by Cause: January 2021 through December 2021

Outage Cause	% Of Total Incidents	Number of Interruptions	Customers Interrupted	Minutes Interrupted
Animal	7.38%	48	2,507	208,358
Company Agent	1.23%	8	8,101	632,943
Construction Error	0.15%	1	10	10,820
Customer Problem	0.15%	1	6	1,692
Dig In	0.31%	2	20	1,679
Equipment Failure	15.69%	102	11,010	457,833
Lightning	3.69%	24	3,492	684,877
Motor Vehicle	2.92%	19	2,011	472,666
Other	2.00%	13	194	47,695
Public	1.54%	10	822	48,788
Structure Fire	0.31%	2	39	10,550
Trees	59.38%	386	28,836	4,874,240
Unknown	4.00%	26	760	236,646
Weather Related	0.77%	5	1,176	226,606
Weather/Snow	0.00%	0	0	0
Weather/Ice	0.00%	0	0	0
Weather/Wind	0.46%	3	8	12,129
TOTAL	100.00%	650	58,992	7,927,522

Proposed Solutions to Identified Problems:

Tree related outages during severe weather events continues to be the primary outage cause. The UGI system experienced an uptick in severe events during the year more in-line with 2018 & 2019 which were historically bad from a weather perspective. UGI continues to focus on key capital reliability initiatives in addition to maintaining an aggressive vegetation management program to reduce the frequency of interruptions. Construction of inter-substation tie-lines along with sectionalizing is a primary area of focus. UGI continues to replace aging system components through our Long-Term Infrastructure Improvement Plan (LTIIIP), including wood poles, porcelain insulators, underground cable and open wire secondary. To address vegetation related outages UGI has added additional vegetation resources to increase hazard tree removals and to begin the process of reducing the vegetation trim cycles from nearly 6 years to a goal of 4.5 years. Finally, UGI continues to add Distribution Automation (DA) devices, controllable

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from its Control Center, reducing outage duration by providing remote switching capability. When eventually coupled with fault location, isolation and service restoration technology (FLSR), UGI expects to reduce customer outage minutes on several worst performing feeders.