



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

January 25, 2023

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 September 30, 2022
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, 2022 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, 2022.

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

cc: **VIA ELECTRONIC MAIL**

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

January 25, 2023

**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, 2022	135	0.87	156

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

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Raw Data: January 2022 through December 2022

Month	SI	TCI	TCB	TMCI
Jan-2022	43	2,103	62,475	354,547
Feb-2022	54	4,473	62,451	577,419
Mar-2022	57	7,785	62,416	980,913
Apr-2022	44	3,339	62,619	1,839,206
May-2022	27	2,947	62,498	293,984
Jun-2022	54	7,697	62,561	662,471
Jul-2022	132	8,629	62,588	1,995,307
Aug-2022	55	3,836	62,512	229,286
Sep-2022	63	6,443	62,558	628,767
Oct-2022	40	1,059	62,434	257,124
Nov-2022	46	3,505	62,463	330,500
Dec-2022	55	2,259	62,499	288,226
TOTAL	670	54,075	62,506 *	8,437,750

* 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 2022 is 135. This result has decreased 1% from the results reported through September 2022.

SAIFI

The 12-month rolling SAIFI index remained at 0.87, which is the same result as reported for the period ending September 2022.

CAIDI

The CAIDI result of 156 for the 12-month reporting period ending December 2022 has decreased 1% 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 high-wind weather events which had initiated off-right-of-way vegetation related outages. UGI continues to storm harden the system through infrastructure upgrades, such as constructing tie lines, relocations, adding sectionalizing points, and maintaining an aggressive vegetation management program to mitigate damages from frequent weather events.

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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 2022 through December 2022

Cause	% of Total Incidents	Number of Interruptions	Customers Interrupted	Minutes Interrupted
Animal	15.37%	103	977	83,650
Company Agent	2.09%	14	14	1,199
Construction Error	0.15%	1	1,205	15,832
Customer Problem	0.00%	0	0	0
Dig In	0.60%	4	36	1,315
Equipment Failure	15.07%	101	11,697	1,023,600
Lightning	0.75%	5	645	80,882
Motor Vehicle	3.43%	23	2,336	560,236
Other	1.49%	10	444	24,144
Public	0.75%	5	232	11,422
Structure Fire	0.90%	6	649	210,434
Trees	49.85%	334	28,197	4,334,474
Unknown	6.12%	41	1,300	219,048
Weather Related	1.94%	13	5,735	1,565,695
Weather/Snow	0.15%	1	1	87
Weather/Ice	0.60%	4	275	231,629
Weather/Wind	0.75%	5	332	74,103
TOTAL	100.00%	670	54,075	8,437,750

Proposed Solutions to Identified Problems:

Off right-of-way tree related outages during severe weather events continues to be the primary outage cause. 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. Additionally, UGI is re-evaluating its animal protection standards to add further protection and find gaps in current substation protection. 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)

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devices, controllable from its Control Center, reducing outage duration by providing remote switching capability. When eventually coupled with fault location, isolation and service restoration technology (FLISR), UGI expects to reduce the amount of sustained customer interruptions and customer minutes interrupted on many poorly performing feeders.