



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

October 30, 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  
3<sup>rd</sup> Quarter Electric System Reliability Report  
12 Months Ending September 30, 2023  
Docket No. M-2023-3039027**

Dear Secretary Chiavetta:

Pursuant to 52 Pa. Code §57.195(d), 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 September 30, 2023, along with the raw data from the same period. Also included is a breakdown of outages by cause for the 12 months ending September 30, 2023.

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](mailto:kstair@ugi.com).

Sincerely,

Eric Sorber  
Vice President & General Manager - Electric Division

Attachment

cc: **VIA ELECTRONIC MAIL**

Office of Consumer Advocate  
555 Walnut Street, 5th Floor  
Harrisburg, PA 17101  
[ra-oca@paoca.org](mailto:ra-oca@paoca.org)

Steven C. Gray, Esquire  
Commonwealth of PA  
Office of Small Business Advocate  
555 Walnut Street, 1st Floor  
Harrisburg, PA 17101  
[sgray@pa.gov](mailto:sgray@pa.gov)

Kelly Monaghan, Director  
Bureau of Audits  
Pennsylvania Public Utility Commission  
Commonwealth Keystone Bldg.  
3<sup>rd</sup> Floor, F East  
Harrisburg, PA 17101  
[kmonaghan@pa.gov](mailto:kmonaghan@pa.gov)

Dan Searforce  
John Van Zant  
Harry Bidelspach  
Bureau of Technical Utility Services  
Commonwealth Keystone Building  
3<sup>rd</sup> Floor  
400 North Street  
Harrisburg, PA 17120  
[dsearfoorc@pa.gov](mailto:dsearfoorc@pa.gov)  
[jvanzant@pa.gov](mailto:jvanzant@pa.gov)  
[hbidelspac@pa.gov](mailto:hbidelspac@pa.gov)



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

October 30, 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.**

No major events occurred 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
<b>12-Month Standard</b>	<b>256</b>	<b>1.12</b>	<b>228</b>
<b>12-Month Benchmark</b>	<b>140</b>	<b>0.83</b>	<b>169</b>
12 months Ended September 30, 2023	113	0.69	165

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

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**Raw Data: October 2022 through September 2023**

<b>Month</b>	<b>SI</b>	<b>TCI</b>	<b>TCB</b>	<b>TMCI</b>
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
Jan-2023	31	5,470	62,428	507,155
Feb-2023	32	2,951	62,650	632,356
Mar-2023	45	1,829	62,598	284,612
Apr-2023	58	3,510	62,423	275,427
May-2023	34	3,250	62,435	363,679
Jun-2023	65	4,540	62,388	454,974
Jul-2023	63	2,251	62,371	353,739
Aug-2023	57	1,918	62,405	216,667
Sep-2023	115	10,355	62,470	3,108,843
<b>TOTAL</b>	<b>641</b>	<b>42,897</b>	<b>62,464 *</b>	<b>7,073,302</b>

\* 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 September 2023 is 113. This result has increased 13% from the results reported through June 2023.

**SAIFI**

The 12-month rolling SAIFI index is 0.69, which has decreased 9% since the result reported for the period ending June 2023.

**CAIDI**

The CAIDI result of 165 for the 12-month reporting period ending September 2023 has increased 25% from our last quarterly report.

SAIFI, SAIDI, and CAIDI are all below the 12-Month Standard and the 12-Month Benchmark.

Please note that the data contained within this report is heavily influenced by a weather system that affected UGI territory over the span of four days from 15:39 on September 7th until 14:00 on September 11th. In total, this event accounts for 7,415 customer interruptions and 2,767,551 minutes of interruptions. Of the rolling year-to-date totals, this single event accounts for 17.3% of all customer interruptions and 39.1% of all customer minutes interrupted. The causes of those outages were primarily vegetation, lightning, or other weather-related issues.

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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: October 2022 through September 2023**

Cause	% of Total Incidents	Number of Interruptions	Customers Interrupted	Minutes Interrupted
Animal	15.29%	98	2,232	130,797
Company Agent	2.50%	16	1,019	15,988
Construction Error	0.31%	2	11	1,097
Customer Problem	0.00%	0	0	0
Dig In	0.31%	2	80	11,450
Equipment Failure	12.17%	78	6,646	845,963
Lightning	2.34%	15	2,479	1,045,898
Motor Vehicle	2.65%	17	2,086	413,266
Other	1.56%	10	58	34,359
Public	1.09%	7	1,192	347,948
Structure Fire	0.31%	2	7	1,133
Trees	53.51%	343	25,835	4,009,957
Unknown	6.86%	44	1,126	119,653
Weather Related	0.94%	6	125	95,475
Weather/Snow	0.00%	0	0	0
Weather/Ice	0.00%	0	0	0
Weather/Wind	0.16%	1	1	318
<b>TOTAL</b>	<b>100.00%</b>	<b>641</b>	<b>42,897</b>	<b>7,073,302</b>

**Proposed Solutions to Identified Problems:**

UGI conducted a review of the quarter and found that the most significant contributions to the reliability metrics were associated with vegetation, lightning, and other weather-related issues. Off right-of-way tree related outages initiated by severe weather events continue 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 during high-wind and other severe weather events. Of note regarding vegetation management, UGI continues operating at an elevated resource level to increase hazard tree

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removals and to begin the process of reducing the vegetation trim cycles from nearly 6 years to a goal of 4.5 years.

To address equipment failures, UGI continues to replace aging system components through our Long-Term Infrastructure Improvement Plan (LTIIP), including wood poles, porcelain insulators, underground cable and open wire secondary. The Company has also recognized a high number of animal related substation outages over the last year which has resulted in additional steps to increase animal guard protection in substations. Moving forward, the Company has incorporated animal guard protection as a specific component of all future substation designs.

Weather has been identified as a significant factor for initiating vegetation related outages. UGI continues to storm harden the system through infrastructure upgrades, such as constructing inter-substation tie lines, relocations, adding sectionalizing points, and maintaining an aggressive vegetation management program to mitigate damages from frequent weather events. To aid in overall system reliability, UGI continues to add Distribution Automation (DA) 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.