



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

October 24, 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 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 September 30, 2022 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, 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](mailto:kstair@ugi.com).

Sincerely,

A handwritten signature in blue ink, appearing to read 'Eric Sorber', is positioned above the typed name.

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

October 24, 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
<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, 2022	136	0.87	157

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

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

**Raw Data: October 2021 through September 2022**

Month	SI	TCI	TCB	TMCI
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
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
TOTAL	640	54,196	62,484 *	8,526,216

\* 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 June 2022 is 136. This result remained the same as the results reported through June 2022.

**SAIFI**

The 12-month rolling SAIFI index decreased from 0.91 in our last quarterly report to 0.87 for the period ending September 2022.

**CAIDI**

The CAIDI result of 157 for the 12-month reporting period ending September 2022 has increased 5% 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 vegetation/storm related outages, some of which affected large numbers of customers. UGI continues to target areas vulnerable to large outages by adding additional circuit protection and sectionalizing devices that can reduce the extent of outages. Furthermore, UGI continues developing tie lines that can be used to energize uncompromised portions of circuit after faulted sections of the line are isolated, greatly reducing the amount of customer minutes interrupted.

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

**§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 2021 through September 2022**

Cause	% of Total Incidents	Number of Interruptions	Customers Interrupted	Minutes Interrupted
Animal	16.25%	104	3,044	256,600
Company Agent	1.88%	12	12	1,160
Construction Error	0.16%	1	1,205	15,832
Customer Problem	0.00%	0	0	0
Dig In	0.47%	3	35	1,162
Equipment Failure	14.84%	95	10,558	862,721
Lightning	0.78%	5	645	80,882
Motor Vehicle	3.59%	23	1,368	327,591
Other	1.72%	11	445	24,406
Public	1.09%	7	561	27,305
Structure Fire	0.94%	6	649	210,434
Trees	50.16%	321	28,198	4,649,323
Unknown	4.69%	30	1,155	199,835
Weather Related	1.88%	12	5,713	1,563,146
Weather/Snow	0.16%	1	1	87
Weather/Ice	0.63%	4	275	231,629
Weather/Wind	0.78%	5	332	74,103
<b>TOTAL</b>	<b>100.00%</b>	<b>640</b>	<b>54,196</b>	<b>8,526,216</b>

**Proposed Solutions to Identified Problems:**

Off right-of-way 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 (LTIP), 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,

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

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 customer outage minutes on many poorly performing feeders.