



UGI Utilities, Inc.
1 UGI Center
Wilkes-Barre, PA 18711

October 28, 2021

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, 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 September 30, 2021 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, 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

October 28, 2021

**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.

A major event occurred on August 12, 2021 beginning at approximately 1400 hours and affecting 10,182 customers in total. The outages were caused by severe weather on August 12, 2021. Although the forecast on Thursday August 12, 2021 only predicted a slight risk of thunderstorms, the hot and humid conditions with a heat index of over 100, were conducive to the formation of severe thunderstorms. The weather-related outage event began at approximately 1400 hours on the 12th, when the first wave of severe thunderstorms storms impacted the UGI service territory knocking out power to over 5,800 customers. With restoration efforts underway a second severe thunderstorm at 2200 hours, moved through UGI’s service area and added over 3,200 additional customer outages. The storms impacted Luzerne and Wyoming Counties, causing damage to conductors, poles, and other equipment.

UGI was granted an exemption for this major event by Secretarial Letter dated September 15, 2020 at Docket No. M-2021-3028449. As such the interruption data related to this major event is excluded from the calculation of the metrics in this quarterly update.

§ 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 September 30, 2021	127	0.96	132

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 2020 through September 2021

Month	SI	TCI	TCB	TMCI
Oct-2020	29	759	62,370	60,295
Nov-2020	91	6,458	62,341	831,071
Dec-2020	20	511	62,398	57,739
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
TOTAL	679	59,776	62,347 *	7,912,311

* 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 2021 is 127. This result is 22% higher than results reported through June 2021.

SAIFI

The 12-month rolling SAIFI index increased from 0.71 in our last quarterly report to 0.96 for the period ending September 2021.

CAIDI

The CAIDI result of 132 for the 12-month reporting period ending June 2021 has decreased 10% 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 frequent storm events occurring throughout July and August. These events were less frequent in September but still the primary contributing factor for the month.

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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 2020 through September 2021

Outage Cause	% Of Total Incidents	Number of Interruptions	Customers Interrupted	Minutes Interrupted
Animal	5.74%	39	2,975	129,322
Company Agent	0.88%	6	8,099	632,678
Construction Error	0.15%	1	10	10,820
Customer Problem	0.15%	1	6	1,692
Dig In	0.29%	2	20	1,679
Equipment Failure	16.94%	115	11,387	555,526
Lightning	3.53%	24	3,492	684,877
Motor Vehicle	2.80%	19	2,038	422,040
Other	1.62%	11	192	47,344
Public	1.03%	7	712	37,811
Structure Fire	0.29%	2	39	10,550
Trees	61.41%	417	28,540	4,865,523
Unknown	4.12%	28	1,083	273,997
Weather Related	0.59%	4	1,175	226,323
Weather/Snow	0.00%	0	0	0
Weather/Ice	0.00%	0	0	0
Weather/Wind	0.44%	3	8	12,129
TOTAL	100.00%	679	59,776	7,912,311

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 (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, controllable

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System Reliability Report**

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.