

UGI Utilities, Inc. 2525 North 12th Street Suite 360 Post Office Box 12677 Reading, PA 19612-2677

(610) 796-3400 Telephone

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April 30, 2010

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Mr. James J. McNulty, Secretary Pennsylvania Public Utility Commission Commonwealth Keystone Building 400 North Street Harrisburg, PA 17120 PA PUBLIC UTILITY COMMISSION SECRETARY'S BUREAU

SENT VIA FEDERAL EXPRESS

Dear Secretary McNulty:

RE: Annual Electric System Reliability Report - 3 Years Ending December 31, 2009

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 Nos. L-00030161 and M-00991220, UGI Utilities, Inc. - Electric Division ("UGI") hereby files an original and six copies of its Annual System Reliability Report. This report contains SAIDI, SAIFI, and CAIDI results on a 3-year rolling basis for the period ending December 31, 2009 along with the raw data from the same period. Also included are the Inspection & Maintenance Goals, Operations & Maintenance Expense, and Capital Budget data.

The Office of Consumer Advocate, the Office of Small Business Advocate, the Bureau of Audits, and the Bureau of Conservation, Economics and Energy Planning have each been served with copies of this filing.

Questions related to the attached report should be directed to Ms. Abigail J. Hemmerich at (610) 796-3431 or email ahemmerich@ugi.com.

Kindly acknowledge receipt of this filing by date stamping the enclosed copy of this letter and returning it in the enclosed stamped, self-addressed envelope.

Sincerely,

Robert R. Stoyko

WAR Sto

Vice President - Northern Region

Attachments

c: <u>FEDERAL EXPRESS</u>

Irwin A. Popowsky
Office of Consumer Advocate
555 Walnut St.
5th Floor, Forum Place
Harrisburg, PA 17101-1921

William R. Lloyd
Office of Small Business Advocate
Suite 1102, Commerce Bldg.
300 North Second St.
Harrisburg, PA 17101

Carl Lesney
Bureau of Audits
Pennsylvania Public Utility Commission
Commonwealth Keystone Bldg.
3rd Floor, F East
Harrisburg, PA 17101

Darren Gill
Supervisor of Electric Reliability
Bureau of Conservation, Economics and Energy Planning
Commonwealth Keystone Building
400 North Street
Harrisburg, PA 17120

ELECTRONIC MAIL

Darren Gill Supervisor of Electric Reliability Bureau of Conservation, Economics and Energy Planning dgill@state.pa.us

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UGI Utilities, Inc. – Electric Division Annual System Reliability Report 2009

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PA PUBLIC UTILITY COMMISSION SECRETARY'S BUREAU

April 30, 2010

§ 57.195(b)(1) – An overall current assessment of the state of the system reliability in the EDC's service territory including a discussion of the EDC's current programs and procedures for providing reliable electric service.

A key objective of UGI Utilities, Inc. – Electric Division ("UGI" or "Company") is to provide its customers with safe, reliable electric service. Providing reliable service is not a program unto itself, but rather it is an inherent part of every element of the service delivery process. Each segment of service delivery, including system design, construction, and operation and maintenance, has service reliability as its main objective.

The overall performance of the UGI delivery system in 2009 was satisfactory. This is evidenced by UGI's SAIDI, SAIFI, and CAIDI indices. These measurements have consistently fallen well within the established standards and benchmarks.

System Design

System design is fundamental to providing reliable electric service. To that end, UGI has incorporated service reliability into all aspects of its system design. Planning standards, construction standards, component selection, engineering, engineering training, engineering instructions and System Control and Data Acquisition ("SCADA") integration programs all have service reliability as a fundamental consideration.

Construction

No matter how well an electrical system is designed, the components making it up must be properly assembled in order for it to function as intended. UGI construction personnel possess the necessary knowledge and skills to effectively perform their duties. Post construction inspection programs assure that additions and improvements to the system are completed properly.

Operation

Inspection programs prescribe specific schedules for inspecting the transmission lines, substations and distribution lines. The frequency that a particular facility is inspected varies by the type of facility and is based upon manufacturer's recommendations and/or prevailing industry standards. Substations are inspected monthly. Transmission lines and distribution lines are patrolled annually. Switches and line equipment are inspected on a five year cycle. Transmission and distribution poles are inspected and treated on a ten-year cycle. Underground facility inspections, including neutral integrity testing, are performed on a ten-year cycle. Thermograph inspection of key overhead facilities is done on a three-year cycle.

A continuously staffed operations center is in place to assure quick response to interruptions on the delivery system. The center is staffed by system operators who diagnose system problems and mount a rapid and appropriate response to trouble on the system.

There are service personnel on duty eight hours a day during weekdays and on Saturdays. UGI added an extended-hours trouble truck in 2008 to lower response time on interruption calls received after normal business hours. Call-out rosters are in place to mobilize staff when service personnel are not on duty or when additional resources are required.

UGI has in place a trouble reporting system, which allows it to gather information on system interruptions. The information accumulated in this system is analyzed to spot equipment failure trends and outage clusters. This information is also used to spot weaknesses in the system and to make decisions on allocation of resources for maintenance and/or system upgrades.

Maintenance

All equipment on the system is subject to defined maintenance programs. Maintenance cycles for substation and line equipment vary with the type and class of device and are based on manufacturer's recommendations and/or current industry standards. Transmission line maintenance follows an annual transmission line inspection program. Maintenance of underground and overhead lines, including rebuild, is based upon the results of the inspection programs and their performance. Additionally, UGI will accelerate these schedules if we observe equipment that is not operating normally or as expected.

UGI has in place an aggressive tree-trimming program that emphasizes tree removal and herbicide application. All lines are patrolled annually to assess tree encroachment. Trimming is scheduled as needed based upon our assessment of tree encroachment and circuit performance. Trim cycles vary from three years in urban areas to seven years in rural areas.

UGI also has a line-rebuilding program in place. Most of the four-kilovolt distribution lines have been rebuilt and converted to thirteen-kilovolt operation. In addition, loading and service voltage on distribution lines are reviewed semi-annually. Lines identified as loaded near their capacity are upgraded or reinforced as necessary.

UGI has determined that it is has been experiencing a larger than expected number of failures of a fuse cutout purchased from A. B. Chance in the 1990 thru 1998 timeframe. The failure of these devices caused an increase in the number of outages attributed to equipment failures. While UGI contends these devices are failing due to a manufacturer defect, the manufacturer denies the failure rate is abnormal. UGI estimates having installed approximately 3,500 of these devices on its distribution system. An aggressive program was established to replace these devices as they were identified in the field. All of the identified devices were replaced by the end of 2009. Additional interruptions due to equipment failure resulted from two large underground feeder outages that affected a significant number of customers. These underground feeder getaways were near end-of-life and will be replaced in 2010.

§ 57.195(b)(2) – A description of each major event that occurred during the year being reported on, including the time and duration of the event, the number of customers affected, the cause of the event and any modified procedures adopted to avoid or minimize the impact of similar events in the future.

- (i) Under Title 52, Pa. Code §57.192, a major event is defined as either:
 - a) An interruption of electric service resulting from conditions beyond the control of the electric distribution company which affects at least 10% of the customers in the EDC's service territory during the course of the event for a duration of 5 minutes each or greater. The event begins when notification of the first interruption is received and ends when service to all customers affected by the event is restored.
 - b) An unscheduled interruption of electric service resulting from an action taken by an electric distribution company to maintain the adequacy and security of the electrical system, including emergency load control, emergency switching and energy conservation procedures, as described in §57.52 (relating to emergency load control and energy conservation by electric utilities), which affects at least one customer.
- (ii) A major event does not include scheduled outages in the normal course of business or an electric distribution company's actions to interrupt customers served under interruptible rate tariffs.

No major events occurred during the 2009 reporting year. A major event occurring in 2008 has been discussed in previous reports.

§ 57.195(b)(3) – A table showing the actual values of each of the reliability indices (SAIFI, CAIDI, SAIDI, and if available, MAIFI) for the EDC's service territory for each of the preceding 3 calendar years. The report shall include the data used in calculating the indices, namely the average number of customers served, the number of sustained customer minutes interruptions, the number of customers affected and the minutes of interruption.

The reliability results for UGI's service area over the last three years are as follows:

2007 - 2009 Reliability Statistics

	SAIDI	SAIFI	CAIDI
3-Year Avg. Standard	170	0.91	186
UGI 3-Yr. Rolling Avg.	95	0.70	135

	SAIDI	SAIFI	CAIDI
12-Month Standard	256	1.12	228
12-Month Benchmark	140	0.83	169
2009 UGI Results	80	0.76	105
2008 UGI Results	90	0.67	135
2007 UGI Results	114	0.68	167

The 3-year rolling averages for SAIFI, SAIDI and CAIDI are performing within the standards established by Commission Order at Docket No. M-00991220 on May 7, 2004. Extreme weather events during the last three years resulted in significant outages and the on-going problems associated with the A. B. Chance distribution fuse cutouts impacted UGI's reliability results.

Data necessary to calculate a Momentary Average Interruption Frequency Index (MAIFI) is not available for UGI's service area. As previously discussed with the Commission, UGI currently has no plan to install the equipment required to track momentary interruptions on the hundreds of operating distribution devices located throughout its territory. The basis for this decision is the high cost associated with the purchase and installation of these devices with little commensurate benefit.

Raw Data Reported Indices

	SI	TCI	тсв	TMCI	SAIDI	SAIFI	CAIDI
January-2009	17	526	62,377	70,175	1	0.01	133
February-2009	28	2,038	62,352	424,380	7	0.03	208
March-2009	18	7,144	62,340	273,496	4	0.11	38
April-2009	36	7,485	62,245	853,750	14	0.12	. 114
May-2009	37	8,639	62,155	808,467	13	0.14	94
June-2009	51	5,948	62,120	575,300	9	0.10	97
July-2009	28	6,488	62,092	439,522	7	0.10	68
August-2009	31	4,387	62,017	958,462	15	0.07	218
September-2009	24	317	61,944	47,667	1	0.01	150
October-2009	32	1,095	62,002	77,320	1	0.02	71
November-2009	23	748	62,055	133,143	2	0.01	178
December-2009	22	2,420	62,145	315,604	5	0.04	130
2009 Total	347	47,235	62,154	4,977,286	80	0.76	105
January-2008	28	3,512	62,218	631,227	10	0.06	180
February-2008	30	725	62,249	103,682	2	0.01	143
March-2008	21	3,631	62,169	137,517	2	0.06	38
April-2008	24	513	62,140	47,534	1	0.01	93
May-2008	18	3,079	62,121	363,112	6	0.05	118
June-2008	43	2,802	61,966	705,586	11	0.05	252
July-2008	84	5,902	62,000	1,223,717	20	0.10	207
August-2008	38	6,551	62,135	1,017,365	16	0.11	155
September-2008	38	923	62,115	194,404	3	0.01	211
October-2008	23	2,051	62,172	357,582	6	0.03	174
November-2008	17	897	62,234	132,135	2	0.01	147
December-2008	33	11,094	62,309	705,417	11	0.18	64
2008 Total	397	41,680	62,152	5,619,278	90	0.67	135
January-2007	12	242	62,085	19,314	0	0.00	80
February-2007	13	91	62,134	10,983	0	0.00	121
March-2007	28	1,173	62,163	132,863	2	0.02	113
April-2007	77	6,367	62,001	968,682	16	0.10	152
May-2007 .	26	857	61,909	232,644	4	0.01	271
June-2007	123	10,461	61,854	2,481,067	40	0.17	237
July-2007	45	3,185	61,892	295,789	5	0.05	93
August-2007	. 68	11,557	61,944	1,436,147	23	0.19	124
September-2007	35	1,111	61,918	219,664	4	0.02	198
October-2007	30	1,196	62,072	221,771	4	0.02	185
November-2007	57	5,019	62,128	903,226	15	0.08	180
December-2007	29	1,157	62,209	149,658	2	0.02	129
2007 Total	543	42,416	62,026	7,071,808	114	0.68	167
3-YEAR AVERAGE	429	43,777	62,111 *	5,889,457	95	0.70	135

^{*} annual arithmetic average

SI: System Interruptions

TCI: Total Customers Interrupted

TCB: Total Customer Base

TMCI: Total Minutes Customer Interrupted

§ 57.195(b)(4) - A breakdown and analysis of outage causes during the year being reported on, including the number and percentage of service outages, the number of customers interrupted, and 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 2009 through December 2009

Outage Cause	% Of Total Incidents	Number of Interruptions	Customers Interrupted	Minutes Interrupted
Animal	17.58%	61	458	46,263
Company Agent	1.15%	4	48	5,012
Construction Error	0.00%	0	0	0
Customer Problem	0.86%	3	9	3,519
Equipment Failure	36.60%	127	19,099	1,404,823
Lightning	8.36%	29	2,736	181,908
Motor Vehicle	4.90%	17	5,190	792,812
Other	0.29%	1	89	10,658
Public	. 2.59%	9	293	55,099
Structure Fire	0.29%	1	8	2,000
Trees	18.44%	64	9,921	1,572,117
Unknown	3.46%	12	4,648	154,523
Weather Related	0.86%	3	203	8,279
Weather/Snow	0.00%	0	0	0
Weather/Ice	0.00%	0	0	0
Weather/Wind	<u>4.61%</u>	<u>16</u>	<u>4,533</u>	740,273
TOTAL	100.00%	347	47,235	4,977,286

Proposed Solutions to Identified Problems:

Approximately thirty-seven percent of the outages reported above resulted from equipment failure. A portion of these equipment failures are attributed to a problem with the A. B. Chance fuse cutouts utilized on the UGI system. As discussed in previous reports, UGI implemented an aggressive replacement program to actively identify and replace these defective parts. By the end of 2009 all of the identified cutouts were replaced. However UGI believes there are still some unidentified Chance cutouts on its system as well as other porcelain style cutouts that may be subject to similar failures. As UGI finds these cutouts on its system, they will be replaced.

CONFIDENTIAL/PROPRIETARY MATERIAL FOLLOWS:

NO SCANNED IMAGE AVAILABLE

ACTUAL DOCUMENT IN CONFIDENTIAL FILE FOLDER

§ 57.195(b)(12) – Significant changes, if any, to the transmission and distribution inspection and maintenance programs previously submitted to the Commission.

UGI continues to focus on replacing the fuse cutouts mentioned earlier. Otherwise, there have not been any significant changes to the transmission and distribution inspection and maintenance programs outlined in previous reports submitted to the Commission.

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UGI UTILITIES, INC 100 KACHEL BOULEVARD, SUITE 400

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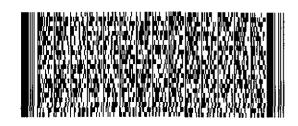
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James McNulty

Pennsylvania Public Utility Commiss **400 North Street**

Harrisburg, PA 17120



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