

**UGI Utilities, Inc. – Gas Division
2020 Winter Reliability Data Requests**

November 24th, 2020

UGI Utilities, Inc. – Gas Division, (“UGI” or the “Company”) is a natural gas distribution company (“NGDC”) committed to delivering reliable, safe and affordable energy to approximately 670,000 customers in 45 counties in Pennsylvania and one county in Maryland. Safety and reliability are core values at UGI and our system is designed to meet the peak winter needs of our customers.

Winter Reliability Data Requests

1. Winter Readiness

Provide a summary of your company’s winter preventative maintenance program(s) which directly facilitate safe and reliable service over the heating season. Provide a description of any potential best practices including any new leak detection programs.

UGI continues to make significant investments in infrastructure to improve the reliability, integrity, and safety of our gas transmission and distribution systems. Among peer NGDCs in Pennsylvania, UGI ranks highest for the proportion of its system constructed from contemporary materials. UGI continues to deliver upon its commitment to replace all remaining cast iron mains by 2027 and bare steel mains by 2041. Moreover, as explained in the Company’s Second Long Term Infrastructure Improvement Plan (“LTIIP”) (“Second LTIIP”)¹, the accelerated pace of planned infrastructure improvements may allow the Company to complete its replacements in advance of the 2041 deadline. At the rate of bare steel replacements reflected in the Second LTIIP, and continued into the future with the necessary regulatory approvals, the Company will be on pace to replace all bare steel main by 2038. Meeting this target will depend on factors intrinsic to the gas business (e.g., state and municipal projects, private construction projects, regulatory changes, etc.) permitting the Company to maintain its present course. Approximately 66 miles of cast iron and bare steel mains are planned for replacement before the end of the calendar year 2020.

In advance of the winter season, UGI works to reduce its pending leak inventory to minimize the number of repairs and the extent of monitoring activities, which would otherwise be required during winter conditions. In recent years, UGI has aggressively reduced its total leak inventories. UGI’s most recent 3-year average demonstrates a reduction in UGI’s B leak inventory by 47% compared to UGI’s previous 3-year average.

Before and during the winter 2020-2021 frost season, UGI will undertake additional and accelerated leak survey measures. After November 1, 2020, walking leak surveys will occur over higher risk main facilities as determined by: building proximity, wall-to-wall paving locations, open and repaired leak amounts and classifications, and main materials. From January 1, 2021 through March 31, 2021 (or earlier due to accumulation of Frost Degree Days), all cast iron mains will be surveyed with mobile leak detection instruments at least bi-weekly to mitigate the risk of cast iron main breaks due to frost. In addition to the bi-weekly patrols of all cast iron main, a separate independent third-party contractor will complete monthly leak surveys of high-risk steel and cast iron mains identified through UGI’s segment-based Distribution Integrity Management Plan (“DIMP”). These surveys will mitigate the risk of hazardous leaks occurring under frost cover. Finally, to reduce the risk of wintertime failure of certain mechanically-coupled medium

¹ See *Petition of UGI Utilities, Inc. – Gas Division for Approval of its Second Long-Term Infrastructure Improvement Plan*, Docket No. P-2019-3012337 (Opinion and Order issued December 19, 2019).

pressure curb valves, targeted leak surveys of service lines, known to contain these valves, will occur during the winter frost season.

In late fall, UGI issues customer communications to increase awareness of winter hazards. Notices include topics such as: recognizing carbon monoxide, venting of appliances, avoiding gas meters while clearing snow, identifying gas odors, and providing emergency contact information. Subsequently, throughout the winter, and particularly during major weather events, supplemental winter messaging is issued to customers reinforcing the importance of these topics.

Each fall, coordination meetings and calls are held with large interruptible service customers to discuss interruption plans as weather conditions and system performance may dictate. The general expectations around the timing of interruptions, communication protocols, and the requirements for backup fuel are addressed. The Company also holds a collaborative meeting for the Natural Gas Suppliers (“NGS”) of the Company’s transportation customers. Upcoming supply issues related to UGI’s transportation programs are discussed.

Notable reliability projects since the prior winter include the following projects:

- In Jim Thorpe, temporary liquid natural gas (“LNG”) facilities were rebuilt and LNG services were renewed to support medium pressure system endpoints.
- In Williamsport, a high pressure pipeline loop consisting of 13,400 feet of 12” steel from the transmission supply point was completed to improve reliability.
- In Lancaster, a 12” steel pipeline loop was installed to support the medium pressure distribution system in Willow Street, south of Lancaster.
- In Carlisle, 5,500 feet of 12” plastic gas main was installed to support the Carlisle medium pressure distribution system.
- UGI’s city gate meter and regulation station facilities serving Wind Gap and Pen Argyl were rebuilt to improve reliability.

2. Employee Safety/Readiness

Provide a description of any procedures and/or training protocols your company uses to ensure personnel are adequately prepared and staffed for the heating season. Also, Provide a summary of your organization’s participation in emergency preparedness exercises over the past 12 months, whether internal or with external stakeholders. Describe the general scenarios simulated.

UGI’s Gas Control, Operations, Engineering, and other supporting departments play key roles in maintaining the safety and reliability performance of our distribution system. From the central control room in Wyomissing, PA, Gas Controllers continually monitor system pressures and flows at key points within UGI’s systems using a Supervisory Control and Data Acquisition (“SCADA”) system. Abnormal operating conditions (“AOC”) are identified through pre-determined alarm set points as dictated by local Engineering groups. Once an alarm activates, specific actions are taken to address any alarms, as appropriate. Engineering utilizes network models to predict system performance under peak operating conditions. Model results are validated against actual system operating conditions using data from SCADA, system regulator station charts, and winter survey gauges. These models form the basis for determining locations where reliability projects are required to improve system pressures or to increase system capacity, as needed to maintain design criteria.

Annual winter planning meetings were conducted virtually in early November 2020 with approximately 150 internal employees across multiple departments in attendance. Winter Planning meetings ensure appropriate preparations are in place prior to the winter season. Emergency scenarios / mock drills were conducted to test winter operational protocols and incident command structure. Additionally, winter planning meetings cover a wide range of preparedness topics including:

- Employee safety considerations – winter operational protocols
- Changes to system operations – new and replaced assets
- System reinforcement projects – completed / pending
- Facilities management – snow removal, maintaining access to critical facilities
- Locations of emergency materials
- Communications protocols
- Pennsylvania Public Utility Commission reporting requirements and courtesy notifications
- Mutual aid protocols – requesting and providing resources
- Gas control alarm management and system change protocols
- Dispatch of peaking assets – propane/air, LNG, and communication protocols
- Interruptible customer notifications
- Fleet availability and preparedness
- Enhanced Emergency Response Plan – Training module to refresh UGI First Responders prior to the upcoming winter season

UGI closely monitors weather forecasts from the National Weather Service and State Weather Bulletins throughout the winter and adjusts staffing plans in response to adverse weather forecasts. UGI currently subscribes to two weather services, MDA EarthSat and Telvent DTN. On cold weather mornings, crews are staged at critical system facilities to ensure proper equipment operation during peak periods of demand. System low points are monitored via SCADA systems or survey gauges. Shifts are implemented to ensure crew availability for weather related emergencies. In advance of forecasted snow and ice precipitation, vehicles, equipment, and personnel are staged geographically to minimize the distances travelled over dangerous roadways.

UGI performed internal Tabletop exercises virtually this past year in conjunction with its winter planning meetings. Exercises included pipeline emergency response and involved relevant departments affected by such emergencies. Due to the nature of the exercises, simulations were conducted in real time precluding the use of presentation material and/or information packets. The tabletop exercises utilized real life gas scenarios that help assess emergency response preparedness. UGI also participated in a tabletop emergency response exercise facilitated by PJM on October 21, 2020 along with representatives from Enbridge Texas Eastern Pipeline and PSE&G to strengthen operational coordination, identify any gaps in procedures or policies, and to improve the parties' mutual understanding of gas/electric dependencies and sensitivities.

UGI participates in both the American Gas Association (“AGA”) and Northeast Gas Association (“NGA”) Mutual Assistance Programs to ensure that supplemental resources are available in the event of a large-scale emergency. The AGA Mutual Assistance Program is intended to supplement local, state and regional mutual assistance programs in the event of man-made or natural disasters that result in widespread service interruptions or damage to gas pipeline infrastructure. UGI also utilizes GPS enabled Fleet solutions to track vehicle locations for employees that respond to emergency events in order to minimize emergency response times.

UGI has approximately 600 trained and qualified field employees dedicated to emergency response who address system reliability, perform system maintenance, and complete emergency capital improvements.

In addition, UGI utilizes a large complement of contractor resources to supplement our internal workforce. Annually, staffing levels and varied shifts are reviewed and prospectively adjusted, as required, to meet the needs of the business. During peak periods, both supervisory and field resource levels are further flexed to maximize Operation's coverage.

3. Communications Outreach

Provide a summary of the communications procedures your company has in place to effectively manage potential crisis events during the heating season. Include a description of outreach activities and any exercises done with local and regional emergency management organizations to coordinate emergency response procedures.

UGI's Communications, Community Relations and Outreach Programs are designed to keep customers, employees, community residents, elected and appointed officials, media, and other key members of the public informed on matters such as the safe use of energy, conservation, and Company-sponsored programs available to assist customers in managing their utility bills. These programs also provide key audiences with links and information regarding additional resources provided by the Company, the natural gas industry, and the government. Communications to key audiences are delivered through a variety of traditional, web and social media channels. We believe this outreach is even more critical this heating season than in prior years because of the impact that the COVID-19 pandemic has had on our community. UGI's efforts will provide customers with important information about several enhanced and expanded customer assistance programs offered by the Company (e.g., the COVID-19 Emergency Relief Program).

Communication Channels and Tools

The UGI Communications and Community Relations Department and the Company's Customer Service Department work to ensure customers receive additional information on conservation, the safe use of energy, and bill payment options during the cold weather season. For example, multiple advisories regarding the safe use of energy as well as recommendations and tips on staying warm inside the home are provided throughout the heating season. When service area communities experience extreme weather, or when emergency situations arise, the Company's Communications and Community Relations Department and Outreach Program staff provide additional information regarding special initiatives to customers. The communication channels and tools UGI utilizes include:

- UGI's Call Center, including use of our outbound dialer
- Bill messages and inserts
- UGI's website
- Outbound email
- Social media platforms including:
 - Facebook
 - Twitter
 - Instagram
 - Linked-In
- Proactive media, including public service announcements
- Paid web, broadcast, and print advertising, and
- Personal contacts, including face-to-face sessions, UGI-sponsored community meetings, and participation in widely-attended customer awareness events (as permitted by social distancing guidelines issued by the Commonwealth).

UGI's Interactive Voice Response ("IVR") system was updated in the past year to be fully available in Spanish, allowing Spanish-speaking customers to more easily navigate our phone menu.

Weather Event and Emergency Communications

In the event of a weather emergency, UGI deploys a broad-front, integrated external communication approach to provide customers and communities with critical information. For example, the UGI Call Center has an outbound dialer, which can be used to proactively communicate with customers in targeted areas. The outbound dialer calls provide messages that include important safety, energy use, and outage restoration information.

In addition, the UGI phone system's pre-recorded messages and prompts are adjusted and updated to speed response to emergency calls. Other messages can be added to the system that provide important information to customers concerning the emergency, as well as information on resources that can provide additional information. To manage increased call volumes that may arise during an emergency, the UGI Call Center is positioned to implement enhanced staffing that can expand live operator coverage to 24 hours a day, seven-day-a-week coverage.

Customers can also interact with Customer Service, and Communications and Community Relations Departmental staff via social media. The Company's social media platforms are constantly monitored, and specific customer concerns are individually addressed. The goal of this effort is to ensure that customer questions and concerns posted to social media platforms receive a timely response.

Mainstream communication channels are also used, such as: public service announcements released to media outlets; UGI's website postings; outbound emails; and UGI's social media channels on Facebook, Twitter, Linked-In and Instagram.

LIHEAP Communications

At the beginning of each heating season, UGI extensively promotes the availability of customer assistance programs to qualifying customers, including those who meet the State-determined eligibility requirements for LIHEAP. UGI launched its LIHEAP outreach campaign for this heating season on November 2, 2020. At the same time, UGI commenced its annual LIHEAP training session for all Company Call Center representatives. This training included an overview of this year's LIHEAP information, as well as the delivery of a LIHEAP information tool to each UGI Call Center Representative. The LIHEAP Information tool is a document which serves as a reminder to each Call Center representative to provide information and promote awareness of LIHEAP during a customer contact call.

The Company also participates in a range of events that promote LIHEAP awareness and provide information on the application process. UGI uses the following communication channels to urge qualifying customers to apply for LIHEAP, including:

- Media announcements
- Bill inserts
- Outbound telephone campaigns
- Special mailings
- Website updates that include a link for customers to print a LIHEAP application

Additionally, UGI operates its own hardship fund for qualifying customers experiencing difficulty in paying their UGI utility bills. This fund is called Operation Share and has been in place for more than 30

years assisting UGI's customers-in-need. UGI donates corporate funds to Operation Share, and solicits donations from our customers, employees and others in the community. UGI increased its annual corporate donation to the Operation Share fund in 2020 from \$165,000 to \$665,000 to further support our customers in need during this heating season.

This year due to COVID-19, UGI worked with stakeholders to provide an additional \$2 million in Operation Share funding to continue supporting customers during these difficult times. UGI promotes Operation Share via WARM events, customer inserts, direct communications with qualifying customers and online checks through the UGI website at: <https://www.ugi.com/customerassistance>. UGI provides information on its customer assistance programs in English and Spanish language versions.

UGI offers a number of additional customer assistance programs:

- For a limited enrollment time, UGI's Emergency Relief Program is designed to assist its Pennsylvania natural gas customers who have been financially impacted by the COVID-19 pandemic and are struggling to make timely natural gas bill payments. The ERP consists of two components to help qualifying customers with their outstanding energy bills: 1) an Installment Plan that addresses outstanding balances of both residential and business customers; and 2) a one-time Grant for eligible residential customers with a past due balance of up to \$400 . Eligible customers include those who qualified for the Federal CARES Act Economic Impact Payment or who filed for unemployment benefits after March 13, 2020. The ERP is designed for customers who do not qualify for other UGI Universal Services Programs.
- UGI's Customer Assistance Program ("CAP") offers qualifying income-eligible customers a more manageable monthly energy bill. Through CAP, participants are billed an equal CAP charge amount based on a percent of income basis or an average bill basis, whichever provides the most affordable monthly CAP payment. When CAP bills are paid on or before the bill due date, the difference between the amount billed and the actual amount used may be forgiven.
- The Low-Income Usage Reduction Program, or Weatherization, offers free installation of energy conservation measures to qualifying low-income households to help make energy bills more affordable. Possible energy saving measures include ceiling insulation; floor, duct and hot water pipe insulation; caulking and weather-stripping, gas heater repairs and water flow restrictors.
- C.A.R.E.S. (Customer Assistance and Referral Evaluation Service) can provide referrals to other helpful assistance programs in the community. These programs can include LIHEAP, budget counseling, and State Weatherization or Office of Aging programs.
- UGI also can assist eligible customers by setting up a Payment Plan. If a customer's bill is higher than expected and there is difficulty paying the entire amount, UGI can set up a Payment Plan to help spread arrearage payments over a set period of time.

UGI offers several programs to assist customers with managing bill payments. Under the Budget Billing Plan, UGI will estimate annual energy usage and spread out that amount evenly over the budget billing period to calculate the monthly amount a customer pays. UGI reviews each customer's Budget Billing Plan every three months to determine actual energy usage and make any necessary adjustments to monthly payments. This service is free of charge, and any active UGI customer who is current on their bill is eligible for Budget Billing.

UGI encourages customers who may qualify for any of these programs to contact the Company. UGI is committed to assisting customers who need their energy service restored or are working to avoid termination of service as circumstances warrant.

Customer Safety Communications

Regarding safe and reliable use of natural gas in customers' homes and businesses, UGI issues regular media releases and social media postings throughout the year regarding safety, proper appliance and chimney maintenance, and carbon monoxide (CO) awareness. Since the onset of cooler weather this Fall, UGI has:

- Issued multiple news releases encouraging residents to take steps to safely, reliably and efficiently operate appliances
- Issued multiple CO awareness public service announcements (PSA's) promoting awareness of the signs and symptoms signaling the presence of CO in homes or businesses
- Issued a news release on the opening of this year's LIHEAP Program
- Included Customer Assistance information in recent editions of Firstline, a UGI newsletter delivered to elected and appointed officials in Harrisburg and across the Commonwealth
- Posted all of the above items on UGI's website and social media channels.

UGI uses customer newsletter bill inserts to provide safety information to customers. In addition, the UGI website has an extensive section devoted to safety-related topics. UGI also continues to offer an "Energy Safe Kids" section on our website, which provides age-appropriate information to children and youths on the safe use of energy. For customers who have had appliances in their home 'red tagged', UGI provides a follow up notice with local code enforcement office contact information. In addition, UGI has an HVAC contractor finder tool on its website (www.ugi.com/contractor) that displays those HVAC contractors servicing customers in a specific service area. UGI also provides cross referrals to the Department of Community and Economic Development ("DCED") for customers that are eligible and need furnace repair or replacement.

4. Gas Supply and Planning

Describe the methods and protocols your company uses to ensure reliable gas delivery at least cost during the heating season. Include how your company plans to manage peak demand days, capacity planning, interstate supply coordination, storage, curtailment, and weather forecasting. Provide a description of any best practices, including communications and coordination with natural gas suppliers and interruptible service customers on your system ahead of anticipated peak usage.

UGI's focus for gas supply portfolio planning is to meet the demands of its core market customers throughout the winter, especially on the coldest days when deliveries are the most critical. UGI contracts for primary firm supplies and capacity reserves to meet the demands of core market customers during peak day and sustained cold weather periods. UGI ensures reliability of supplies through diversification, enhanced force majeure language, and requiring primary firm delivery rights for each service.

UGI's supply portfolios are developed and maintained to access a multitude of source points for diversity, liquidity, and reliability. The source points for UGI's gas supplies include the Gulf of Mexico, Louisiana, Texas, Appalachian Mountains, Marcellus/Utica Shale region in Pennsylvania, and on-system peaking plants. Where possible, UGI has shifted its portfolio sources to take advantage of locations closer in proximity to its service territory (e.g., the Marcellus Shale region or on-system peaking plants) for economic

and reliability benefits. UGI also continues to look for opportunities to build redundancy into the portfolio to enhance reliability and reduce dependencies on a single pipeline.

UGI contracts for firm supply in advance via RFP or other form of competitive bidding as appropriate. The diversity and liquidity which UGI has built into its supply portfolio means that UGI will stand a better chance of obtaining alternate supplies if any particular supply source is interrupted. In the case of natural gas storage, UGI buys natural gas and injects it into underground storage fields in the summer. During the winter season, UGI withdraws this gas from the storage fields to supplement base load purchases. UGI requires strict contractual force majeure provisions to ensure firmness and reliability of supply. This language is non-negotiable when contracting for new services with suppliers.

UGI's obligation as the supplier of last resort for core market customers is met through the procurement of services that are backed by a physical supply interconnected with UGI's distribution system or supported by primary firm delivery rights to UGI's city gates. These services include primary firm transportation, primary firm storage, primary firm delivered supply, and primary firm peaking services from a mix of seven interstate pipeline companies, local production meters and gathering systems, and four suppliers. Over the last several years, there has been a notable increase in the number of interstate pipeline capacity constraints which have curtailed holders of capacity with non-primary rights. These constraints have been caused by a variety of factors including extreme cold weather, changing flow dynamics due to Marcellus and Utica Shale production, and unanticipated pipeline outages. Most recently, as a result of pipeline incidents on Texas Eastern Transmission Pipeline Company ("Texas Eastern") in August 2019 and May 2020, the Pipeline and Hazardous Materials Safety Administration ("PHMSA") placed a Corrective Action Order ("COA") on Texas Eastern. In response, Texas Eastern began work to address the COA by reducing operating pressures across its entire system and enforced internal mandates to reinforce pipeline integrity. Throughout the pressure reduction period, Texas Eastern has negatively impacted their ability to deliver on their contractual firm transportation obligations with UGI. However, in early November 2020, Texas Eastern received approval from PHMSA to return the segments of pipe serving the UGI territory back to full operating pressure.

UGI continues to develop contingency plans in the event that the Texas Eastern operating pressure reductions and resulting capacity reductions return prior to the winter heating season. These efforts include, but are not limited to, procuring additional supply options, planning for expanding interruptions to interruptible customers, and seeking voluntary demand reductions from core market customers. As an example, in UGI's 2020 Section 1307(f) annual filing, UGI increased the peak day contingency from 2.5% to 5% to account for interstate pipeline reliability concerns.

UGI has required all supply services to have primary firm delivery rights. Primary firm capacity holders have the highest priority on the pipeline and would be the last to experience any supply curtailments from the pipeline. All non-primary firm capacity holders would be curtailed to zero before primary firm capacity is reduced. Therefore, UGI's procurement of primary firm, asset-backed capacity is essential for supply reliability, not only during severe cold weather, but, also in the case of unanticipated pipeline capacity reductions.

In the event of a natural gas emergency where curtailment may be necessary, UGI follows the procedure as defined in its PUC-approved tariff. UGI's priority will be to preserve service for residential and for firm critical and essential human needs commercial customers. To accomplish this, UGI may interrupt all interruptible customers, issue operational flow orders or daily flow directives, or call for voluntary usage reductions by customers.

5. Natural Gas Demand from Electric Generators

Provide your company's view on any potential concerns about fuel availability over the winter heating season given the increased demand for natural gas as an electric generation fuel source and possible increased use of firm gas transportation service. Include any new protocols or plans your company may have in place to manage this new dynamic.

UGI's electric generation natural gas customers are on UGI tariff transportation rate schedules and are not classified as core market customers. UGI's priority will be to preserve service for its residential, firm critical and essential human needs commercial customers.

In addition, the fuel consumption patterns of certain gas fired electric generators can be intermittent throughout a typical 24 hour gas day as a result of differences in the gas and electric markets. While typical gas usage is measured on daily consumption, electric generators utilize an hourly dispatch schedule to determine run times. Over the past several years, this has become of more concern to interstate pipelines as natural gas demand from gas fired generation plants has increased. The potential hourly needs from gas fired electric generation facilities can cause additional strain and operational concerns. In an effort to address these issues, interstate pipelines have become more proactive to protect operations through the use of restrictions or potential tariff requirements in regards to ratable hourly consumption. As an example, Columbia Gas Pipeline ("Columbia") filed a revised tariff pursuant to Section 4 of the Natural Gas Act ("NGA") (FERC Docket No. RP20-1060-000) specifically addressing this issue. While not yet approved, UGI is preparing for more stringent requirements for ratable hourly consumption anticipated to be effective February 2021 such that electric generators and core customer use is in line with interstate pipeline requirements.

UGI's tariffs include a Gas Emergency Planning section addressing how UGI would potentially curtail service to gas-fired generators in order to protect the integrity of UGI's distribution system to maintain firm service to essential human needs customers. UGI's gas emergency plan includes a customer notification procedure as well as an emergency shutdown procedure. Every effort will be made by UGI to provide the electric generator the opportunity to complete a controlled reduction in demand. However, if the electric generator's usage threatens to jeopardize the integrity of UGI's distribution system, UGI will turn off gas flow to the electric generator.