

UGI Utilities, Inc. – Gas Division
UGI Penn Natural Gas, Inc.
UGI Central Penn Gas, Inc.
2015 Winter Reliability Data Requests

November 18, 2015

UGI Utilities, Inc. – Gas Division, UGI Penn Natural Gas, Inc. and UGI Central Penn Gas, Inc. (collectively, “UGI” or “we” or the “Company”) each is a natural gas distribution company committed to delivering reliable, safe and affordable energy to over 600,000 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.

1. Winter Readiness

UGI continues infrastructure investments to improve reliability, integrity, and safety of our gas transmission and distribution systems. UGI ranks high in Pennsylvania among peer gas distribution utilities for the proportion of its system constructed from contemporary materials. More than 85 percent of UGI’s natural gas pipelines are comprised of high-density plastic or coated steel. UGI continues to make progress according to schedule on our commitment to replace all remaining cast iron mains within 14 years and bare steel mains within 30 years. More than 64 miles of cast iron and bare steel mains are planned be replaced before the end of the calendar year 2015.

UGI has reduced the inventory of pending leaks by over 20% compared to the same pre-winter period a year ago. The reduction in inventory has reduced the number of repairs and the extent of monitoring which would have otherwise be required during winter conditions.

Before and during the winter frost season, UGI plans to undertake additional and accelerated leak survey measures through the winter of 2015-2016. Commencing after November 1st, 2015, a walking leak survey will be conducted over higher risk main facilities as determined by the proximity to buildings, locations under wall to wall paving, amount and classification of open and repaired leaks, and main materials. From January 1st through March 31st, 2016 (or earlier due to accumulation of Frost Degree Days), all cast iron 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 conjunction with this cast iron frost patrol, on a pilot basis over cast iron systems in the cities of Williamsport, Wilkes Barre, Scranton and Carbondale, surveyors will use a Remote Methane Leak Detector (RMLD®) to leak survey behind the curb in order to search for migrating gas not venting in the street.

In addition to the bi-weekly patrols of all cast iron main, a separate independent third-party contractor will complete bi-weekly leak surveys of high risk steel and cast iron mains identified through UGI’s segment-based Distribution Integrity Management Plan to mitigate the risk of hazardous leaks occurring under frost cover. Finally, to reduce the risk of wintertime failure of

certain mechanically-coupled medium pressure curb valves, targeted leak surveys will be conducted in February through March, 2016 over the subject service lines.

In late fall UGI issues customer communications to increase awareness of winter hazards. Notices include carbon monoxide awareness, venting of appliances, and avoidance of gas meters while clearing snow, identification of gas odors, and emergency contact information.

In summer and fall, coordination meetings and calls were held with large interruptible service customers to discuss coordination of interruption plans as weather conditions and system performance dictates. The general expectations around the timing of interruptions, communication protocols, and the requirement for backup fuel were addressed.

2. Employee Safety/Readiness

UGI Operations and Engineering departments play key roles in maintaining the safe and reliable performance of our system. Operations and Engineering continually monitor UGI's system to ensure the system is operating in a safe and reliable manner. System models are built to predict system performance under peak operating conditions. Model results are validated against actual system operating conditions from the prior winter using data from SCADA, system regulator station charts, and winter survey gauges. Specific reliability projects are identified to improve system pressures or increase system capacity as may be needed to maintain design criteria.

Each fall planning meetings are conducted throughout the company to ensure appropriate preparations have been made prior to the winter season. These meetings include a review of any previous system issues, a discussion of recent growth, a review of potential interruptible/large customer impacts, and an overview of any areas forecasted to experience reduced pressures under peak conditions. Any changes in typical system operations are discussed and locations for winter survey gauges are reviewed. Communication protocols are reviewed to ensure physical system operation remains consistent with supply contracts. Additionally, a review of the major incident command structure and protocols for communicating with emergency responders is covered.

Resource planning includes a review of emergency stock levels and adjustments as may be required. Additional emergency response / repair crew resources are evaluated seasonally and added to scheduled shifts and on call rosters during winter months in anticipation of increased activity.

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. 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 treacherous roadways.

UGI participates in the American Gas Association (“AGA”) Mutual Assistance Program 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.

3. Communications and Outreach

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 the safe use of energy, as well as energy conservation. These programs also provide key audiences with links and information on how to access additional safety-related resources from the Company, the industry as well as government sources. Communications to key audiences utilize a variety of traditional, web and social media channels throughout the year.

Communication Channels and Tools

The UGI Communications, Community Relations and Outreach Programs escalate during the cold weather season. In particular, additional Communications, Community Relations and Outreach Program initiatives are provided during extreme weather events, or if an emergency situation arises. The communication channels and tools UGI utilizes include:

- Bill messages and inserts
- UGI website content, outbound email and social media platforms including Facebook, Instagram, Twitter and Linked-In
- UGI’s Call Center, including use of our outbound dialer
- Proactive media, including public service announcements
- Paid web, broadcast and print advertising, and
- Personal contacts, including face-to-face session, UGI-sponsored town meetings, and participation in customer awareness events.

Weather Event and Emergency Communications

In the event of a wide-spread emergency event, it is UGI’s practice to take 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 targeted customers important safety, energy use, or service-related information. In addition, UGI’s interactive voice response (“IVR”) phone system’s pre-recorded messages and prompts can be adjusted and updated to limit the non-emergency options available in our Call Center to ensure that emergency-related calls are handled in a timely fashion. Other messages can be added to the system providing important information to customers concerning the emergency situation, as well as inform callers of resources or options available to access additional information. To manage increased call volumes, the Call Center is positioned to implement emergency staffing protocols and expand live operator coverage to a 24 hour a day / 7 day a week schedule, if necessary.

Key information provided via UGI's Call Center assets are also made available to customer and community audiences through public service announcements released to media outlets; on the UGI website; via outbound email; and on UGI's social media channels on Facebook, Twitter, LinkedIn and Instagram.

LIHEAP Communications

At the beginning of each heating season, UGI extensively promotes the availability of customer assistance programs to eligible customers. Immediately prior to State-determined program opening date, UGI announces and participates in events promoting the Low Income Home Energy Assistance Program, or LIHEAP. In its communications, UGI urges qualifying customers to apply for LIHEAP through a variety of means, including:

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

All UGI Call Center representatives attend special annual training sessions on LIHEAP, and are provided scripts to ensure customers receive consistent information regarding the LIHEAP program.

UGI operates its own "hardship" fund for qualifying customers experiencing difficulty in paying their utility bills. This fund is called Operation Share. UGI donates corporate funds to Operation Share, and solicits donations from our customers, employees and others in the community. UGI promotes Operation Share via customer inserts, direct communications with qualifying customers and the UGI website.

Customer Assistance Program and Bill Payment Communications

As the winter heating season begins, UGI conducts and participates in a number of information sessions aimed at providing customers with resources to assist them in safely using natural gas to heat their homes. These sessions include 'Be Winter-wise' events sponsored by the Company, by elected and appointed officials, and by community agencies, such as the American Red Cross, among others.

UGI offers customer assistance programs to qualifying customers experiencing difficulty in paying their bills. Eligible customers can participate in the Company's Customer Assistance Program ("CAP"). UGI's CAP program offers qualified, income-eligible customers a more manageable monthly energy bill. UGI provides CAP participants with a personalized, monthly payment amount based on gross income, household size and energy usage at the property. In most cases this program makes UGI bills more affordable. Over time, following consistent program payments, participants' past debt to UGI can be forgiven. Customers interested in more information about the CAP program can learn details via the UGI Call Center, on the Company website,

through UGI service territory social agency partners, or by CAP enrollment campaigns conducted by UGI to inform known low-income customers. The Low Income Usage Reduction Program (“LIURP”), or Weatherization, offers free energy conservation measures to high usage, low income households to help make energy bills more affordable. UGI also offers the Rehabilitation Program. This program allows UGI Utilities, Inc. to contribute funding for the installation of approved energy efficient measures at the time of new construction or rehabilitation of an existing property. Through the program, UGI partners with community based organizations throughout the service territory to distribute funds to housing projects. Customers interested in more information about the LIURP program can learn details via the UGI Call Center, on the Company website, or through UGI service territory social agency partners. Community based organization interested in more information about the Rehabilitation program can learn details via the UGI Call Center or via information posted on the Company website.

UGI conducts a Customer Assistance and Referral Evaluation Services (C.A.R.E.S.) program. CARES can provide referrals to other helpful assistance programs in a customer’s community. These programs can include the Low Income Home Energy Assistance Program (LIHEAP), budget counseling, and Pennsylvania Weatherization or Office of Aging programs. Customers interested in more information about UGI’s CARES program can contact the UGI Call Center.

In addition, each year UGI completes a survey of customers whose service has been terminated within the past year. Communications include letters, phone calls, and field visits to advise customers of available assistance programs in an attempt to get service reconnected. UGI continues efforts aimed at restoring service to customers with community-based organizations throughout the heating season.

Finally, UGI offers payment programs like budget billing and automatic deduction as well as electronic bill pay options to assist customers in managing bill payments. Information about these payment programs is provided to customers by a range of channels such as: bill inserts and bill messages, IVR messages to customers calling the UGI Call Center, and on the UGI website.

4. Gas Supply & Planning

The past two winters of colder than normal weather have highlighted the need for prudent planning for gas supply deliveries. UGI’s focus is to meet the demands of its core market customers throughout the winter, especially on the coldest days when deliveries would be the most critical. UGI contracts for firm supplies to meet the demands of core market customers not only on a peak day but for sustained cold weather as we experienced last year. 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 and liquidity. The source points for UGI’s gas supplies span from the Gulf of Mexico, Louisiana, Texas, and Oklahoma/Panhandle region to the Appalachian Mountains and Marcellus/Utica Shale region in Pennsylvania. Where possible, UGI has been shifting its portfolio to take advantage of locations closer in proximity to its service territory like the Marcellus Shale region. Even though UGI is shifting to Marcellus, UGI’s non-Marcellus supply locations continue to be liquid. Due to pipeline infrastructure still being developed in the Marcellus Shale region,

UGI contracts for firm supply at certain Marcellus supply locations 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. The likelihood of supply interruptions has declined over the past few years due to the significant growth in the Marcellus and Utica Shale regions

UGI requires strict contractual force majeure provisions to ensure firmness and reliability of supply. This language is present 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 service interconnected with UGI's distribution system with 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 nine interstate pipeline companies and three 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. Therefore, UGI's procurement of primary firm, asset-backed capacity is essential for supply reliability, especially during severe cold.

In the case of 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.

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

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 core market customers, which consist of residential and firm critical and essential human needs commercial customers. To accomplish this, UGI may issue hourly or daily flow directives to electric generators or interrupt them entirely.

UGI has procedures in place to take action in the event an electric generator needs to be interrupted to preserve service to core market customers. These procedures include 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.

6. Polar Vortex Analysis

On January 7, 2014, all three UGI natural gas divisions set records for deliveries. During the 2015 winter, UGI Gas Division and UGI Central Penn Gas again set record deliveries and UGI Penn Natural Gas nearly reached the 2014 levels. Each division experienced peak days on different dates this past winter, with aggregate peak day deliveries exceeding 1.2 billion cubic feet.

UGI Gas Division, which primarily serves the central and southeastern regions of Pennsylvania including Harrisburg, Lancaster, Reading, Allentown, Bethlehem and Easton, distributed 688,578 dekatherms from 10 a.m. January 13 to 10 a.m. January 14, exceeding the previous peak of 664,008 dekatherms set on January 7, 2014.

UGI Penn Natural Gas, which serves Northeast Pennsylvania including Scranton, Wilkes-Barre and Williamsport, distributed 387,120 dekatherms from 10 a.m. February 15 to 10 a.m. February 16, just below the previous record of 398,631 dekatherms set on January 7, 2014.

UGI Central Penn Gas, which serves communities across the state, distributed 184,596 dekatherms from 10 a.m. February 19 to 10 a.m. February 20, exceeding its previous peak of 176,871 dekatherms set on January 7, 2014.

The record low temperatures and record high send out experienced in January 2014, January 2015, and February 2015 provided an opportunity for UGI to stress test the reliability of its transmission and distribution systems. As a whole, the UGI systems demonstrated a high degree of reliability; however, performance in some areas identified additional needs for reliability investments in certain geographic areas.

Reliability investments since the prior winter include the following projects:

- In the UGI-PNG system, reinforcement projects have been commissioned to improve system pressures in the Clark's Summit and Milford systems. Additionally, modifications to the Lackawanna station have been implemented to increase capacity.
- In Mechanicsburg, the first phase of a multi-year system reinforcement project will be in service. Initially the project will elevate pressures locally while subsequent phases will enhance pressures in the greater Harrisburg West Shore.
- In Lancaster, a system reinforcement will reduce pressure drop into the Lancaster plant and improve downstream pressures into Millersville.
- Also in Lancaster, the first phase of reinforcement project along Pitney Road will improve downstream system pressures to Willow Valley. Subsequent project phases will extend the reinforcement benefits as growth continues in this area.

- In Lehighton, a high pressure reinforcement project will improve pressures into Jim Thorpe. Additionally, provisioning is underway for a temporary LNG peaking service for additional system reinforcement benefit.
- In Easton multiple distribution reinforcements have been completed including rebuilding of several low pressure regulator stations to increase capacity.

Along with others, the aforementioned system improvements will increase the resiliency and reliability of the UGI distribution systems.