

## UGI Energy Services Testimony before the Senate and House Veterans Affairs & Emergency Preparedness Committee

## Emergency Preparedness & Response Measures for Natural Gas/Petroleum Pipeline Infrastructure

November 16, 2016

Good morning Chairman Vulakovich, Chairman Barrar and members of the Senate and House Veterans Affairs and Emergency Preparedness Committees.

Thank you for inviting me to participate in this important discussion about the natural gas industry's role in emergency response and preparedness regarding pipeline infrastructure. Transporting natural gas by pipeline is the safest mode of transportation. While natural gas demand has increased, serious pipeline incidents have declined by 90% over the past three decades. Even with this incredible safety record, there have been incidents. It is incumbent on the industry to safely design and install pipeline infrastructure to minimize the potential for incidents and to work with our first responders to ensure that they are prepared to assist in a response if needed.

My comments will be centered on the safety measures that are incorporated into the design, construction and installation of pipeline infrastructure that work in concert with post-construction monitoring as well as the outreach that UGI Energy Services (UGIES) does with the first responder community to provide training and education.

First, however, I would like to provide a little background on UGI Energy Services. UGI Energy Services, LLC is a homegrown Pennsylvania company. It is the marketing, midstream and power generation subsidiary of UGI Corporation. UGIES was created in 1985 as GASMARK, one of the first marketers of natural gas to business customers when natural gas was deregulated. The

name was changed to its current UGI Energy Services in 1995. In addition to being a marketer and retail supplier of both natural gas and electricity, we also operate LNG facilities with LNG storage capacity in strategic locations. We own and operate a 130 MW natural gas fired electric generating station near Wilkes-Barre, we are a partner in and operate the Conemaugh coalfired electric generating station and also own two renewable energy electric generating facilities; one using landfill gas and the other being a solar facility at the Crayola Crayon manufacturing facility in Easton. Keeping with the subject of today's hearing, Energy Services also owns and operates 72.4 miles of transmission pipeline and 53 miles of gathering lines.

UGI Corporation has deep roots in Pennsylvania having been formed in 1882 in Philadelphia as United Gas Improvement Corporation. It was the first public utility holding company in the United States. Those deep roots and sense of commitment to the Commonwealth and region have carried through to how UGI Energy Services looks at business opportunities and how we construct and operate our assets. Pipeline design, construction and installation are no different.

As with my colleagues here sitting with me today, safety is UGIES's number one priority. When a pipeline project is in design one of the many requirements of the US Department of Transportation (US DOT) is to design and then test the pipeline to ensure that it can safely withstand the maximum operating pressure required to transport the desired volume of gas. To accomplish this, DOT requires that the pipeline be tested to at least one and a half times the maximum desired operating pressure. UGIES, however, takes this pressure test and pipeline design a step further. For example, the PennEast Pipeline, which is proposed to run 120 miles from Luzerne County to Mercer County, NJ and is in the process of receiving its Certificate of Convenience and Public Necessity from the Federal Energy Regulatory Commission, (FERC) has been designed and will be hydrostatically tested to between 90 and 100 percent of the pipe's yield strength which is a test pressure that is much greater than the code requires. The pressure test has to be held for a minimum of eight consecutive hours. As well, UGIES implements a minimum of class 2 wall thickness design requirement even in areas determined to be class 1. This means that pipes will be designed and built with a thicker wall than code requires in class 1 areas.

Other examples of safety measures that are built into the pipeline during design include the cathodic protection system, valve spacing and testing the qualifications of employees and contractors.

Cathodic protection systems prevent pipeline corrosion and are designed to the specific site conditions to which the pipe will be subjected. Part of the process of creating an appropriate

cathodic protection system is to understand the environment in which the pipe will rest. Prior to being placed into service, Energy Services also conducts visual inspections during construction and X-rays 100 percent of the welds before being tested and placed into service. Each weld is then coated with a fusion bonded epoxy similar to the rest of the pipe to protect the weld from corrosion. I would add that the regulations only require that 10% of the welds are X-rayed.

Energy Services' pipelines typically have a minimum of three feet of depth of cover, which meets the US DOT requirements. However, in areas of high activity or heavy loading such as agricultural areas, UGIES has elected to maintain a minimum of four feet of cover over the top of the pipeline which exceeds DOT requirements.

Valve stations play a critical role in the design of a pipeline as they are the "shut-offs" between pipeline segments. Should a leak or other issue be detected, UGIES implements remotely activated valves which allow for the isolation of individual sections of the pipeline from a safe location and would allow much quicker response times should that be required. Valve station placement is determined during the design phase.

As important as it is to design the pipeline to ensure safety and integrity of the pipe, it is equally important to have qualified employees and contractors build the pipeline. UGI Energy Services only employs qualified individuals to ensure compliance with federal and state standards and regulations. We also have independent third party inspectors monitor all phases of construction as well as collect all of the as-built and compliance data. In addition, federal and state regulators conduct inspections throughout construction and installation. In fact, I am proud to share with you that FERC inspectors have recognized our Sunbury Pipeline project which runs from Lycoming County to Snyder County and is currently in construction as a well-executed project and is conducting a tour for EPA this week. This 36 mile pipeline runs under the Susquehanna River, under highways, crosses agricultural areas and traverses some pretty steep slopes. It will terminate at the Panda Power electric generating station in Shamokin Dam.

In addition to all of the built-in safety measures, UGI Energy Services and the industry, develop emergency response plans that are unique to that pipeline. These plans include pipeline specific information such as pipeline location, the product that it is carrying, pipe diameter, location of valves boxes and vaults, the time it would take to isolate different sections of the pipeline and response protocols for different incidents and scenarios. These plans are shared with the first responders along a pipeline route. Energy Services also routinely conducts training and educational opportunities to the first responders in the vicinity of the pipeline.

To ensure that first responders are familiar with how to respond to a pipeline incident, UGIES provides and participates in a variety of different training opportunities for those companies in locations where our assets are located. For example, we annually hold dinners for first responders in the areas covered by our pipeline assets. During the dinners, attendees receive basic pipeline safety information from independent third party consultants. In 2016, over 390 first responders attended our annual dinners. We also offer more in-depth training. For example, we partnered with the Pennsylvania State Fire Academy and trained approximately 100 first responders this year alone. Looking at 2017, UGI Energy Services is partnering with Williams Co. to bring the Pipeline Security in Rural Areas program to Pennsylvania. This training, which is conducted by the US Department of Homeland Security, will be a first for Pennsylvania.

In closing, natural gas use is a vital component of efforts to meet environmental goals, it keeps our homes warm, it is increasingly used to generate electricity, and it fuels our economy to run industrial and manufacturing facilities. Pipeline operators understand the need to design, construct and operate a safe natural gas highway system that will allow our economy to grow while ensuring the preparedness of our first responders for those rare instances when they are called upon to assist.

I would be happy to answer any questions that you may have.