

**WRITTEN TESTIMONY OF
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On Behalf of the American Gas Association

**Before the Energy and Air Quality Subcommittee
Committee on Energy and Commerce**

Oversight Hearing on Pipeline Safety

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Good morning, Mr. Chairman and members of the Committee. I am pleased to appear before you today and wish to thank the Committee for calling this hearing. Pipeline safety is a critically important issue, and I commend you for not only holding this hearing, but for all the work that you and your colleagues have done over the years to ensure that America has the safest, most reliable pipeline system in the world. My name is Paul Preketes. I am the senior vice president of energy delivery of Consumers Energy, based in Michigan. Consumers Energy provides natural gas service for heating and other uses to nearly 1.7 million customers in 54 of the 68 counties in Michigan's Lower Peninsula. It serves an area that spans 13,000 square miles and includes 215 cities and villages. Among the largest areas served are Bay City, Flint, Jackson, Kalamazoo, Lansing, Macomb, Midland, Royal Oak, Saginaw and Livonia. More than one-half of the utility's gas customers are in metro Detroit.

I am here testifying today on behalf of the American Gas Association (AGA) and the American Public Gas Association (APGA). AGA, founded in 1918, represents 200 local distribution companies that deliver natural gas to more than 64 million homes, businesses and industries throughout the United States. A total of 69 million residential, commercial, and industrial customers receive natural gas in the U.S., and AGA's members deliver 92 percent of all the

natural gas provided by the nation's natural gas utilities. AGA is an advocate for local natural gas utility companies and provides a broad range of programs and services for member natural gas pipelines, marketers, gatherers, international gas companies and industry associates.

APGA is the national association of publicly-owned natural gas distribution systems. There are currently approximately 950 public gas systems in the United States. Publicly-owned gas systems are not-for-profit, retail distribution entities that are owned by, and accountable to, the citizens they serve. They include municipal gas distribution systems, public utility districts, county districts, and other public agencies that have natural gas distribution facilities.

The gas utility's distribution pipes are the last critical link in the natural gas delivery chain. Local distribution companies, or LDC's, are the "face of the industry." Our customers see our name on their bills, our trucks in the streets, and our company sponsorship of many civic initiatives. We live in the communities we serve and interact daily with our customers and with the state regulators who oversee pipeline safety. Consequently, we take very seriously the responsibility of continuing to deliver natural gas to our communities safely, reliably, and affordably.

Indeed, SAFETY is our business. It has to be, because the environment in which we work has several factors over which we have no direct control --such as the public, excavators, weather, floods, and earth movement. However, LDC's contend with these every day. Therefore as an industry, we make safety our number one priority -- subscribing to the philosophy that safety is our number one priority, for our employees, our customer and the public. It all begins with the Tone at the Top and building a strong culture around safety. Natural gas utilities spend an

estimated \$6.4 billion each year in safety-related activities. Approximately half of this money is spent in compliance with federal and state regulations. The other half is spent as part of our companies' programs and activities that go beyond mere compliance, to ensure that our systems are safe and that the communities we serve are protected.

Excavation Damage Prevention

The Pipeline Inspection, Protection, Enforcement and Safety Act of 2006 (PIPES Act) contained several substantive provisions that focused on LDC related issues. The most important of these is the section on Excavation Damage Prevention. Excavation damage is the leading cause of natural gas distribution pipeline incidents. The latest statistics from DOT show that in 2007, over forty percent of incidents on distribution pipelines were from third party excavation or outside forces like automobiles hitting gas meters. If you exclude incidents classified as "Miscellaneous" or "Other", this statistic increases to almost eighty percent.

In writing the law, this committee created an incentive for states to adopt stronger damage prevention programs. This was a major step towards expanding the safety culture beyond just our industry – and creating a situation where all the stakeholders can come together to focus on this issue. For over three years, a group of excavation damage prevention stakeholders (composed of excavators, underground facility owners, natural gas facility operators, safety advocates, state regulators, and the public) worked together to craft the nine "Elements" that were eventually contained in the PIPES Act of 2006. We commend the Energy and Commerce Committee for the attention that was given to improving state excavation damage prevention, and for having made the nine elements a centerpiece of the bill. We are now focused on building upon that earlier

national stakeholder collaboration. I am happy to report that, in 2007, key national stakeholders formed the Excavation Damage Prevention Initiative (EDPI) to build upon the good work done by this committee. The EDPI produced a document entitled “A Guide to the 9 Elements” to provide guidance to states working to incorporate the “9 Elements” into their existing pipeline safety programs.

Last month AGA partnered with the National Association of Regulatory Utility Commissioners (NARUC), during its February 2008 Winter Meetings in Washington, D.C., to continue work on this issue. With AGA’s support, NARUC passed a resolution urging state commissions to review their current excavation damage prevention programs and to consider the EDPI’s “Guide to the 9 Elements” document in making revisions and improvements in order to incorporate fully the nine Elements of the PIPES Act. There is still much work to be done. Each state is unique and the local stakeholders have to decide how best to implement the nine elements. Sometimes enforcement resides with the state attorney general, while in other states the utility commission can enforce damage prevention rules. With the EDPI guidance document, the support of PHMSA, and the national trade associations, we believe local stakeholders can make the legislative and regulatory changes needed to enhance damage prevention programs in their particular states.

Another example of progress with damage prevention was the Common Ground Alliance’s successful roll-out of 811, the national “Call Before You Dig” number that was kicked off in May 2007. The Common Ground Alliance (CGA) is an association dedicated to ensuring public safety, environmental protection, and the integrity of underground services by promoting

effective damage prevention practices. Its members focus on reducing damages to all underground facilities in North America through shared responsibility among *all* stakeholders. Members include pipeline operators, excavators, locators, road builders, public works, state One Call organizations, federal and state regulators, and many others. The CGA has grown to over 1,300 individual members, 165 member organizations, and 40 sponsors. The initial 811 roll-out effort included 179 broadcasts in 73 media markets. The coverage reached 75 million Americans. Stakeholders are now incorporating the “Call 811” message in their advertising material. I have had the privilege of representing the natural gas industry and serving as the CGA board chair.

Distribution Integrity Management

The other significant section of the bill that related to natural gas utilities was the section on Distribution Integrity Management Programs (DIMP). For two years, PHMSA has been diligently working with key stakeholders to develop a DIMP regulation. We are very supportive of this effort, and are strong advocates of integrity management. We fully support taking a responsible course of action in seeking to enhance distribution pipeline integrity, and we are confident that PHMSA’s work to date will result in a DIMP rule that enhances safety while providing flexibility. The collaboration between PHMSA, state regulators, utility system operators, fire marshals, and the public has been exceptional. PHMSA should be commended for leading such an effort. It should be noted that distribution integrity management impacts a large portion of America’s energy infrastructure. The diversity among gas distribution pipelines makes it impractical to establish prescriptive requirements that would be suitable for all circumstances.

In order to achieve maximum distribution safety enhancements, a high-level rule that contains an appropriate level of flexibility including a strong risk assessment component, and which takes into account all the various stakeholder concerns, is essential. This will allow each natural gas facility operator to manage their system and ensure a goal of actually improving system safety based on individual company systems performance characteristics, and not simply following prescriptive rules that, in many cases, do not enhance the safety of particular systems. It would be most appropriate to require that all distribution pipeline operators, regardless of size, implement a risk based integrity management program that would contain seven key elements:

1. Develop and implement a written integrity management plan.
2. Know the infrastructure performance.
3. Identify threats, both existing and of potential future importance.
4. Assess and prioritize risks.
5. Identify and implement appropriate measures to mitigate risks.
6. Measure performance, monitor results, and evaluate the effectiveness of its programs, making changes where needed.
7. Periodically report performance measures to its regulator.

These seven elements will be clarified by way of guidance being developed by a nationally recognized standards body to provide a basis for operator compliance and for regulator enforcement.

Though PHMSA did not meet the December 2007 deadline for promulgating a final rule, we believe the progress that has been made thus far is significant. Furthermore, given the magnitude of the distribution system (2 million miles), the number of parties involved (including federal

regulators, 50 state agencies and over 1200 operators), the time taken to ensure a workable regulation that can be implemented and enforced has been time well spent.

Excess Flow Valves

The PIPES Act also contained a provision requiring the installation of excess flow valves (EFVs) on new or fully replaced service lines on single family residential dwellings. In situations where there is a rapid release of gas, EFVs can effectively stop the flow of gas. It should be noted that excess flow valves are not effective in stopping the release of gas in small leaks. Therefore, while EFVs are a helpful safety device, they are only one component of pipeline safety.

The industry has made progress in installing these devices. In 2006, AGA completed a survey of its members when pipeline safety legislation was being reauthorized. At that time, about 66 percent of the new services installed by its members included excess flow valves. In 2007 AGA sponsored a workshop to explain the benefits and limitations of excess flow valves. In addition, the implementation of EFVs has been discussed within AGA's technical committees. Gas utilities that have voluntarily installed EFVs explained the technical challenges involved with installing EFVs in various situations.

Since the passage of the PIPES Act and the AGA workshop, more operators have voluntarily begun to install EFVs on new service lines where installation is feasible. The rate will be close to 100 percent once the regulatory requirements are finalized. I say close to 100 percent because there are certain facilities with low pressures or significant particles or liquids in the natural gas, excess flow valves should not be installed.

Control Room Management

AGA and APGA believe that the vast majority of operators have already implemented effective procedures for control room operations. This is in part confirmed by the fact that there are no reportable natural gas incidents from the past ten years in which the primary cause was the action of a **gas** controller. In fact, our associations are not aware of any natural gas distribution incidents attributable to a natural gas controller's actions. Even with no incidents attributable to the actions of a gas distribution controller, gas utilities support legislative requirements to enhance control room operations.

AGA has a gas control committee that meets regularly to discuss technical issues, develop guidelines, and share best practices. PHMSA's staff has attended the gas control fall and spring meetings of the last few years. This has helped both parties understand the safety and operational issues necessary for new regulations.

There is a vast diversity in the control rooms of gas distribution, gas transmission and hazardous liquid operations. Natural gas has the properties of a compressible fluid that can expand and contract. Gas transmission operations operate at high pressures and have compressor stations about every 150 miles. Distribution pipelines operate at much lower pressures and rarely ever have compressors. Furthermore, the "control rooms" of many small utilities may do little more than indicate the pressure and flowrate, at one or more gate stations, where the utility receives natural gas from its transmission supplier. Hazardous liquid pipelines primarily move incompressible fluids, like crude oil across the country, but are vastly different from gas transmission pipelines.

PHMSA held a workshop on May 23, 2007 in Washington DC to address the control room management issue of all three pipeline sectors. Pipeline controllers from all three pipeline sectors provided technical presentations, along with PHMSA staff. All parties agree that there is vast diversity in the pipeline operations of gas distribution, gas transmission, hazardous liquids, and large and small operators. Because of this diversity, safety processes appropriate for one operator are often not practical for another operator. Furthermore, such diversity makes a uniform national regulation difficult to develop and implement. AGA believes that it is in all stakeholders' best interests for the final regulation to be written at a high level, reasonably providing operators the flexibility to adopt practices and procedures which are appropriate to their own system.

PHMSA has made much progress in developing a proposed rule. PHMSA has presented nine elements to enhance pipeline control room management. We support these enhancements.

- 1. Clearly define the roles and responsibilities of controllers to ensure their prompt and appropriate response to abnormal operating conditions.*
- 2. Formalize procedures for recording critical information and for exchanging information during shift turnover.*
- 3. Establish shift lengths and schedule rotations to protect against the onset of fatigue; and educate controllers and their supervisors in fatigue mitigation strategies and how non-work activities contribute to fatigue.*
- 4. Periodically review SCADA displays to insure controllers are getting clear and reliable information from field stations and devices.*

5. *Periodically audit alarm configurations and handling procedures to provide confidence in alarm signals and to ensure controller effectiveness.*
6. *Involve controllers when planning and implementing changes in operations, and maintain strong communications between controllers and field personnel.*
7. *Determine how to establish, maintain, and review controller qualifications, abilities and performance metrics, with particular attention to response to abnormal operating conditions.*
8. *Analyze operating experience including accidents and incidents for possible involvement of the SCADA system, controller performance, and fatigue.*
9. *Validate the adequacy of controller-related procedures, training and the qualifications of controllers, possibly annually through involvement by senior level executives of pipeline companies.*

Let me summarize my comments on pipeline controllers by saying that all pipeline controllers fall under the provisions of the operator qualification (OQ) regulations. Therefore, these individuals are already trained and qualified in accordance with these regulations and company OQ programs. Controllers must be proficient in communication protocols, in recognizing abnormal operating conditions, and in emergency response protocols. Training is extensive and pipeline companies have elements in their training plans, such as training on the fundamental characteristics of natural gas, understanding of the individual pipeline system, supervised operation of the pipeline system, and written exams. All of these steps must be completed and proficiency demonstrated before an individual receives management approval to operate the system without direct oversight of a more experienced and qualified controller.

Transmission Integrity Management

The regulation for transmission integrity management was finalized in December 2003. The Associations believe the program has been very successful in enhancing safety. Operators are ahead of schedule in accessing transmission pipelines. More than 50 percent of the total pipeline miles in high consequence areas have been inspected under the integrity management regulation, well before the December 2007 deadline. Industry, regulators, and technical consultants have worked to develop and implement new technologies that can assess transmission pipelines in situations where internal inspection devices or pressure testing are not feasible. These indirect assessment methods, like External Corrosion Direct Assessment, have been very beneficial to gas utilities that operate transmission pipelines.

Operators have learned much during the implementation of the regulation and AGA believes there can be some improvements in the current regulation. AGA supports the testimony of the Interstate Natural Gas Association of America and the effort to establish technically based re-assessment intervals similar to the ASME B31.8s consensus standard in lieu of the existing seven-year intervals.

Summary

The natural gas utility industry is proud of its safety record. We are committed to continuing our efforts to operate safe and reliable systems and to strengthen excavation damage prevention laws in every state.

Representatives from the public, state and federal government, industry, and other stakeholders have reached consensus on a framework for Distribution Integrity Management. The seven basic elements necessary for an effective program can be incorporated into a risk-based, performance-oriented federal regulation. The installation of excess flow valves will be part of DIMP. Even before the mandated effective date, there has been an increase in the number of new or replaced service lines being installed with this safety device.