

BEFORE THE
UNITED STATES DEPARTMENT OF TRANSPORTATION
Pipeline and Hazardous Materials Safety Administration

WASHINGTON, D.C.

Pipeline Safety: Safety of Gas Transmission)
Pipelines) Docket ID No. PHMSA-2011-0023
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Comments of the American Public Gas Association

The American Public Gas Association (“APGA”) is the national, non-profit association of publicly-owned natural gas distribution systems. APGA was formed in 1961 as a non-profit, non-partisan organization, and currently has approximately 700 members in 36 states. Overall, there are nearly 1,000 municipally-owned systems in the U.S. serving more than five million customers. 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. Virtually all of APGA’s member utilities purchase gas and pay transportation charges to transmission pipelines to deliver gas from the producer to the utility for re-delivery to the customer-owners of the municipal gas system.

General Comments

Most municipal gas systems have no transmission pipe, however according to the transmission annual report database on the Pipeline and Hazardous Materials Safety Administration’s (PHMSA) website there are 67 municipal gas systems that together operate about 2,800 miles of pipe classified as transmission. Transmission pipe owned by municipal gas utilities is very different from interstate transmission pipe – it is typically smaller diameter and lower pressure. The PHMSA data shows that approximately half the municipally-owned transmission piping is between 4 and 10 inches diameter and another 500 miles is 4 inches or less in diameter. 40 miles of municipal transmission pipe is plastic.

Those APGA members with transmission pipe would be directly affected by any regulations resulting from this rulemaking and virtually all of our members would be indirectly affected when the costs of any additional regulations resulting from this rulemaking are passed on to the utilities by their transmission pipeline suppliers. Some of the concepts discussed in this advance notice of proposed rulemaking are potentially quite expensive. We encourage PHMSA

to carefully consider the costs and benefits of any regulations that result from this rulemaking. Just because costs can be passed through to pipeline customers does not mean that those costs are justified.

For example, the National Transportation Safety board (NTSB) has called for rules retrofitting automatic or remotely-activated shut off valves on transmission pipelines in Class 3, Class 4 and High Consequence Areas (HCAs). In this ANPRM PHMSA asked if it should consider a requirement for all sectionalizing block valves to be capable of being controlled remotely. APGA defers to the interstate pipeline operators for the cost of retrofitting mainline interstate transmission valves, but understands that costs could exceed \$100,000 per valve. With approximately 40,000 valves on the interstate transmission system, potential costs could easily exceed \$1 billion. The benefits of such retrofits are dubious. It would not prevent a single pipeline failure – rapid shut down only comes into play after the pipeline has ruptured. Because natural gas is compressible, gas will continue to flow from the rupture for quite some time, even if the upstream and downstream valves close the instant the line ruptures. Gas will continue to vent until the entire pipeline segment, as much as ten miles of large diameter, high pressure line, has been reduced to atmospheric pressure. It is unlikely, therefore, that remote or automatically activated valves would save lives or reduce personal injuries from gas transmission accidents. These typically occur in the first few minutes after a rupture when gas would be flowing regardless of whether the pipeline valves were open or closed. It might reduce, but not eliminate, property damage, but property damage alone cannot justify a billion dollar expenditure.

For the sake of the over 5 million customer-owners of public gas systems we urge PHMSA to carefully consider the cost to pipeline transportation of natural gas unless it can be shown to be justified by commensurate safety benefits.

In addition APGA points out that the definition of “transmission line” is not risk-based. It includes functional definitions as well as one based on operating stress level. According to federal pipeline safety regulations at 49 CFR 192.3, “Transmission Line” means a pipeline, other than a gathering line, that:

(a) Transports gas from a gathering line or storage facility to a distribution center, storage facility, or large volume customer that is not downstream from a distribution center; or storage facility;

(b) Operates at a hoop stress of 20 percent or more of SMYS; or

(c) Transports gas within a storage field.

It is important to note that (a) and (c) of this definition are functional rather than safety related. As noted above, much of the transmission piping operated by municipal gas utilities is relatively low pressure and small diameter compared to interstate transmission pipelines. Some public gas system transmission lines are plastic. If PHMSA elects to proceed to rulemaking with any of the topics discussed in this ANPRM PHMSA should limit applicability to only pipelines classified as transmission due to stress level, and further limit requirements to pipelines operating over 30 % of SMYS.

In addition, transmission lines operated by distribution utilities are typically operated as part of the distribution system. Many are sole source feeds to distribution systems. Few, if any, are

“looped.” e.g. have parallel pipelines that might allow one line to be shut down for testing without totally cutting off gas flow. Some of the inspection methods discussed in this ANPRM are impractical for these pipelines.

Pipeline safety regulations have changed significantly since 1970. The definitions of “transmission and “distribution” have not kept pace. APGA encourages PHMSA to consider revising the definitions toward a risk-based definition, or creating a new category of pipe for smaller diameter, lower stress lines operated as part of distribution systems. During the Phase 1 discussions of Distribution Integrity Management Programs (DIMP) rules, the working group recommended that PHMSA consider requiring distribution operators to include their “transmission pipelines in DIMP rather than the Transmission Integrity Management rules. This would be an opportune time to make that change.

Specific Comments

PHMSA has asked a large number of questions on a wide range of issues. Because APGA’s members do not operate the type of transmission pipelines that many of these questions appear to address, APGA’ can only answer some of the questions. We anticipate that other operators and trade associations representing the long line pipelines will provide answers to those questions APGA cannot address. APGA’s comments, for the most part, will focus on the differences between transmission lines operated by APGA members and the large, high pressure lines one typically thinks of when discussing transmission pipelines.

A. Modifying the Definition of HCA

A.1.

1. Should PHMSA revise the existing criteria for identifying HCAs to expand the miles of pipeline included in HCAs? If so, what amendments to the criteria should PHMSA consider (e.g., increasing the number of buildings intended for human occupancy in Method 2?)

No. The purpose of integrity management is to focus resources where they will have the most benefit. Expanding the miles of pipeline subject to additional inspection is contrary to that principle.

2. Have improvements in assessment technology during the past few years led to changes in the cost of assessing pipelines?

Since most transmission mileage operated by APGA members cannot accommodate in line inspection tools this in not applicable to APGA members.

3. Given that most non-HCA mileage is already subjected to in-line inspection (ILI) does the contemplated expansion of HCAs represent any additional cost for conducting integrity assessments? If so, what are those costs?

As stated above, very little transmission owned by APGA members can be inspected with ILI so the cost of expanding inspections to all transmission would be very great. Those systems that

currently have no transmission pipe in HCA's would incur the entire cost of gearing up an integrity management program.

4. How would amendments to the current criteria impact state and local governments and other entities?

Most APGA members are local government entities. The 67 public gas systems with transmission would be affected.

A.2.

1. Should the HCA definition be revised so that all Class 3 and 4 locations are subject to the IM requirements?

Since much of APGA members' transmission line is small diameter and low pressure, the potential impact radius (PIR) is small. For example, a 2 inch pipeline with an MAOP of 225 psig would have an impact radius of 21 feet.

A.4.

2. Should PHMSA amend the existing criteria in any way which could better focus the identification of an HCA based on risk while minimizing costs? If so, how?

PHMSA should remove transmission lines operated as part of a distribution system from the TIMP rule and require that these lines be covered under Distribution Integrity Management Programs (DIMP).

3. Would it be more beneficial to include more miles of pipeline under existing HCA IM procedures, or, to focus more intense safety measures on the highest risk, highest consequence areas or something else? If so, why?

As stated above, the purpose of the TIMP rule is to focus on high consequence areas. Expanding integrity management to lower consequence areas would defeat the purpose of the TIMP rule.

G. Strengthening Requirements on the Selection and Use of Assessment Methods

G.9. Should a one-time pressure test be required to address manufacturing and construction defects?

No, this is not practical for most transmission pipeline operated by municipal distribution systems. PHMSA should follow the requirements for MAOP verification found in the recent reauthorization of the Pipeline Safety Act.

H. Valve Spacing and the Need for Remotely or Automatically Controlled Valves

Remotely operated valves are not feasible because very few of the systems that have transmission piping have someone assigned to remotely monitor and control the pipe. The risk of false closure of automatically-controlled valves on a transmission line operated by a distribution system would make installation of these valves problematic.

J. Pipe Manufactured Using Longitudinal Weld Seams

J.1.

1. Should all pipelines that have not been pressure tested at or above 1.1 times MAOP or class location test criteria (§§ 192.505, 192.619 and 192.620), be required to be pressure tested in accordance with the present regulations?

PHMSA should follow the requirements from the recent reauthorization of the Pipeline Safety Act.

O. Modifying the Regulation of Gas Gathering Lines

O.6.

1. Should PHMSA consider adopting specific requirements for pipelines associated with landfill gas systems? If so, what regulations should be adopted and why?

Yes; landfill gas is different from natural gas. The application of current requirements to this product has resulted in unintended consequences and potentially unattainable requirements, such as odorant sampling of gas containing hydrogen sulfide. It is also unclear whether landfill gas systems are production, gathering or transmission pipelines. Applying existing Part 192 regulations for any of these categories to landfill gas piping systems often results in absurd outcomes (e.g. a pipeline operating at negative gauge pressure having a negative potential impact radius).

2. Should PHMSA consider adding regulations to address the risks associated with landfill gas that contains higher concentrations of hydrogen sulfide and/or carbon dioxide?

Yes; and, in the process, allow landfill gas containing lower concentrations of hydrogen sulfide to be governed by existing regulations.

APGA appreciates the opportunity to provide input to PHMSA on this issue. APGA welcomes any questions regarding these comments.



Bert Kalisch, President & CEO