



January 12, 2023

Patrick Leeman, Division Counsel
Massachusetts Department of Public Utilities
One South Station, 5th Floor
Boston, MA 02110

RE: Initial comments regarding D.P.U. 22-100

Dear Mr. Leeman:

On December 5, 2022, the Department of Public Utilities (the “Department”) commenced this proceeding to amend 220 CMR 100.00 and 220 CMR 101. The Department requested initial comments on its Proposed Regulations no later than January 12, 2023, followed by a public hearing on Wednesday, February 1, 2023, with subsequent written reply comments filed with the Department no later than February 15, 2023. Northeast Gas Association (NGA)¹ membership including the Commonwealth of Massachusetts gas Operators and contractors appreciate the opportunity to offer comments regarding the rulemaking. We are committed to working with the Department to align Massachusetts regulations with state law and federal safety standards with the ultimate goal of enhancing pipeline safety and gas system reliability.

NGA believes that engaging in a collaborative process that affords stakeholders and subject matter experts the opportunity to provide additional information and perspectives will ultimately maximize public safety value while meeting the intent of proposed changes.

¹ NGA is a regional trade association that focuses on education and training, technology research and development, operations, planning, and increasing public awareness of natural gas in the Northeast U.S. NGA represents natural gas distribution companies, transmission companies, liquefied natural gas suppliers and associate member companies. Its operating member companies provide natural gas service to over 13 million customers in 9 states (CT, ME, MA, NH, NJ, NY, PA, RI, VT). Massachusetts Distribution Company members include Berkshire Gas Company; Eversource Energy; Holyoke Gas and Electric Department; Liberty Utilities; Middleborough Gas and Electric Department; National Grid; Unitil; Wakefield Municipal Gas and Light Department; and Westfield Gas and Electric Light Department.

In this regard, NGA respectfully requests the Department to consider technical sessions to facilitate these discussions with the ultimate goal of balancing proposed requirements with practical aspects of implementation.

Initial Comments on Proposed Regulations – NGA Distribution Company Members

NGA is pleased to submit the following comments on behalf of its Massachusetts Distribution Company Members. Additionally, NGA supports comments submitted by individual Distribution Company Members (“Members”), as well as Joint Comments of the Distribution Companies provided under separate cover.

101.06(2) Overpressure Protection

NGA supports the intent of adopting a layers-of-protection approach to prevent overpressure events. In the proposal, Operators will be required to take steps to implement additional safeguards to protect their distribution systems from overpressure events, including installation of a “slam shut” device in the station including in applications where there is only worker-monitor pressure control, or a third regulator; or a full-capacity relief valve immediately downstream of the station only where a “slam shut” or third regulator are not practicable. Such proposed enhancements, while value added in most situations, will require detailed engineering assessments on a case-by-case basis including engineering design reviews, procurement of equipment and materials, some of which currently have extended lead times, potentially the construction and installation of a buried vault, and specialty skilled and qualified installation technicians. For example, in many cases, the location of regulator stations in urban neighborhoods may preclude the use of full relief; furthermore, the use of a slam-shut valve may not be suitable for locations that are at or near load capacity, and retrofitting existing

stations to include an additional overpressure protection device is not always feasible in streets with an already congested infrastructure. Furthermore, requiring this additional layer of protection for all existing distribution stations will be challenging for Operators and is likely to impact their ability to comply with proposed regulation 101.06 (a) 12, which includes additional requirements regarding verification that no section of the distribution system is operating above 90% of its maximum capacity. As a result of these complexities and issues, completing these retrofits within a two-year timeframe will be extremely challenging if not impossible, considering these variables and the significant number of regulator stations that need to be addressed.

As an alternative, NGA proposes an approach that includes an engineering asset assessment risk ranking of facilities requiring retrofits, and an assessment of existing Gas System Enhancement Program (GSEP) plans. This assessment will include a risk evaluation that considers the safety value and benefits of requiring tertiary overpressure protection for elevated pressure systems, which already incorporate the use of downstream service regulators, in lieu of the current Proposed Regulation that requires tertiary overpressure protection for all applications. NGA notes that PHMSA issued Advisory Bulletin ADB-2020-02, dated Sept 29, 2020 “to remind owners of *low-pressure* (emphasis added) natural gas distribution systems of the possibility of a failure of overpressure protection devices” and requiring operators to account for the possibility of overpressure events in the design and operation of their systems under a Distribution Integrity Management Plan ("DIMP").

Under this proposal, Operators would be required to complete the risk ranking evaluations and develop a retrofit plan within two years of rule change adoption and complete facility retrofits in accordance with approved company-specific risk-based plans following completion of the proposed engineering assessment risk ranking.

Further, if the facility is scheduled for retirement/replacement as part of an existing capital improvement program, such as GSEP, it is recommended that retirements/retrofits associated with these facilities would proceed in accordance with prior scheduled plans and will be identified within the overall risk-based project plan. This approach affords each Operator the appropriate timeframe to perform assessments, develop approved facility specific designs, acquire necessary materials, secure construction permits and acquire trained and qualified resources to ensure successful retrofit installations while meeting the safety intent of the proposed rule.

The Department also proposes several additional changes to Pressure Limiting and Regulating Stations such as requiring signal failures immediately to Operators at control centers, making changes to control lines to ensure that all underground control lines not contained within the safety of a Pressure Regulating Station vault or pit are plated to protect from possible damage, setting overpressure protection below MAOP, etc. While on the surface these additional requirements will add safety value, NGA recommends additional technical discussions regarding the practical implications of certain elements of the proposal such as relative pit proximity and plate placement, technical evaluation, and system reliability implications of setting overpressure protection devices below MAOP, unintentionally precluding application of the relief capacity allowance in §192.201. NGA recommends consideration for adopting required retrofits as facilities are upgraded as part of a phase-in approach to compliance.

101.06(7) Meters and Regulators

NGA appreciates that proposed rules regarding meter, service regulator and service regulator vent proximity are intended to provide additional clarity and specificity to ensure safety. The industry generally has recognized the need to assess variables associated with meter set placement and vent proximity, and as a result, has supported independent research through the Gas Technology Institute

(GTI), now GTI Energy, to assess safety risks associated with meter set placement and clearances.²

In summary, the study confirmed the efficacy of existing requirements of precluding installation within three feet of an ignition source. Further, other regional pipeline safety regulators currently reviewing their regulations have recognized the safety value in this analysis and have proposed the following:

Service Regulator vent *terminations* shall be located at least:

- (1) 12 inches to the side or 18 inches above and below any building opening.
- (2) three feet in any direction from any exterior defined source of ignition; and
- (3) five feet in any direction from any forced air intake.

NGA requests the Department consider adopting similar requirements. For existing installations upon completion of a scheduled mandated inspection, and discovery that an installation does not meet these requirements, NGA recommends that an Operator be required to complete corrective action by the next scheduled mandated inspection cycle or in accordance with an Operator defined remediation plan, which may be warranted for some Operators based on legacy practices. In addition, NGA recommends consideration of additional risk mitigation measures in the event an installation cannot meet the three- or five-foot distance such as installation of an Over Pressure Shut Off device (OPSO), or vent-less or vent limiter gas service regulators similar to requirements of other regional pipeline safety jurisdictions.

Proposed regulations for Meters and Regulators also include additional requirements for service regulator maintenance and replacement cycles. NGA is not aware of any scientific basis or manufacturer's requirement supporting proposed timeframes for this recommendation and as such recommends that a risk-based engineering study be conducted to assess service regulator replacement frequency in accordance with a (DIMP).

² Evaluation of Meter Set Placement and Clearances, Final Report GTI Project Number 21860, October 2017

Results of the study could be incorporated into an Operator's DIMP to ensure operational safety of these devices meeting the intent of the proposed regulation. This risk-based assessment approach to establishing a *frequency of replacement and maintenance* is similar in principle to §192.1013 in establishing an alternate *frequency of inspection* under Part 192 Subpart P.

101.06(19) Operator Qualifications

Ensuring competency of our workforce is paramount and underpins our parallel goals of enhancing pipeline safety culture. NGA generally supports proposed rule changes associated with Operator Qualification (OQ) requirements, however, as currently written, the Proposed Regulations may have the unintended consequence of limiting development of skills and experience needed to ensure overall competency of the workforce. On-the-job training (OJT), conducted under direct supervision of an operator qualified individual, is an essential component of developing knowledge, skill, and ability to work independently as a fully qualified individual in the covered task being performed. Because OJT takes place in the work environment, it also includes aspects of the company's cultural, climate, and normative behavior. These are organizational aspects that other methods of training are unable to replicate. The proposed rule would preclude an Operator's ability to integrate OJT as a component of competency development prior to demonstrating Qualification through the testing process. NGA recommends incorporating additional clarifying language in 101.06(19)(c) to enable OJT to continue and allow for an individual to perform covered task functions if directed and observed by a fully qualified individual consistent with 49 CFR §192.805(c) provided work is performed under direct observation.

In addition, NGA understands that while the proposed intent of 101.06(19)(d), is to ensure competency of those inspecting or supervising work, the inspector or supervisory role does not require the skill or physical ability to execute tasks and thus does not require full OQ credentials to ensure proper performance while monitoring completion of covered tasks in the field.

The inspector or supervisor function must demonstrate competency in the *knowledge* of the task, the task execution process, and company-specific procedures including proper equipment calibration, operation, and materials selection. As an example, in some cases such as third-party welding inspections, the inspector holds credentials (knowledge and skill/experience) from a recognized accrediting organization to perform the inspection but may not be OQ certified to physically perform the weld. Another example would be an inspector or supervisor who may have the experience and knowledge necessary to ensure work is executed in accordance with covered task requirements, however, may not be physically able to perform the work and therefore would not be operator qualified in the task being observed.

The proposed rule should allow for an Operator to define, within their OQ Written Plan, competency requirements for those individuals inspecting or supervising OQ covered tasks identified within the plan.

101.06(22) MAOP

NGA agrees that appropriate knowledge of MAOP is essential to ensure facilities are not inadvertently over-pressurized during routine operations. However, posting of MAOP information for general public access may result in increased security risk of those facilities. As an alternative, MAOP information could be made available in a secure location or access format with O&M procedures and associated training programs updated to ensure technicians have knowledge of accessibility if needed. Additionally, it is unclear if posting MAOP data on individual service regulators would result in public safety value especially given the volume of service regulators that are in service. Typically, a manufacturer's information nameplate or tag identifying operating and safety information is adequate to ensure safe and continued operation.

101.07 Oversight of Contractors

NGA believes that the Contractor Workforce performing work on pipeline facilities is a natural extension of an Operator's Workforce and, as such, is contractually obligated to provide Operators with documentation and assurance that they are fully trained and qualified to perform specified work including meeting applicable regulatory requirements of Subpart N, Subpart H, 49 CFR Parts 199 and 40. NGA understands the Department's desire to have additional knowledge of Contractors performing work on behalf of an Operator.

NGA recommends clarifying the intent and applicability of the proposed Contractor registration requirement to specifically identify those contractors performing covered tasks on a pipeline facility. This would avoid unnecessary registration and reporting of other supporting contractors who do not perform work on pipeline facilities such as building maintenance, landscaping, fencing etc.

Typically, Contractors are contractually responsible for maintaining appropriate records to demonstrate conformance with company-specific training and qualification requirements. As a result, the proposal requiring Operators to maintain Contractor records is duplicative and offers little safety value. An alternate approach to further ensure compliance would be to require Operators to ensure Contractors maintain training and qualification records by implementing an audit or inspection process of contractor records.

As previously discussed regarding 101.06(19), NGA believes the proposed regulation requiring all personnel to be operator qualified in covered tasks being performed will unintentionally preclude the ability of technicians to perform work while under the direct supervision of a qualified individual in conformance with 49 CFR §192.805(c). Alternate language allowing work to be performed under the direct supervision and observation of a qualified individual should be considered.

Additionally, NGA recommends that the span-of-control crew/inspector ratio be reconsidered and provide additional clarity for the type of work being performed, similar to the risk-based approach to span-of-control advocated in ASME B31Q³ for tasks performed under direct observation.

101.08 Distribution Maps and Records

NGA believes further clarification is required for proposals regarding Distribution Maps and Records including the scope of required training, defining “completion of construction”, the scope of annual inspections and consideration of extending the update timeframe from 30 to 120 days.

Timeframe and Cost for Implementation and Compliance

The scope of work required to meet the desired outcome of the proposed regulations is significant. NGA members will need to evaluate the final requirements before a reasonable estimate can be made regarding an overall implementation timeline and cost to achieve compliance. In some cases, existing labor union agreements and contractor agreements may need to be renegotiated to implement change in associated operating, maintenance and construction procedures resulting from proposed regulatory changes. These recoverable costs will include both capital investments as well as assessment of incremental operation, maintenance and associated contractor costs to continue ongoing operations in compliance with revised regulations. In all likelihood, there will be common initiatives that could be undertaken in a collaborative format (recommended risk-based studies and assessments to optimize safety value) and there will also be numerous initiatives that are company-specific. Timelines to implement company-specific components will vary depending on the scale of the company and their current status/progress towards achieving the desired end state.

³ ASME B31Q-2021, Pipeline Personnel Qualification, ASME Code for Pressure Piping, B31

Additional Comments - NGA Contractor Members

NGA Associate Members include pipeline Contractors that provide substantial support of Distribution Company Member operations, maintenance, and construction activities. Indeed, pipeline contractors of the Commonwealth are considered a natural extension of the Distribution Company workforce and, as such, are directly and indirectly impacted by proposed rule changes. NGA Associate Members that represent the pipeline contractor community of the Commonwealth support the abovementioned Distribution Company comments. NGA reemphasizes the request for Technical Sessions to discuss proposed regulations associated with Contractors Working on Gas. More specifically, proposals requiring contractor registration, requiring all personnel to be operator qualified to perform covered tasks, essentially eliminating industry-wide practice of working under direct observation and the unintended consequences of eliminating essential OTJ training as expressed in the Distribution Operator comments above and apparent duplication of training and qualification recordkeeping by both the Operator and Contractor require further discussion to ensure the intended goals of pipeline safety are realized.

Conclusion

NGA appreciates the opportunity to provide initial comments on behalf of its Distribution Company and Pipeline Contractor Members and looks forward to participating further in Technical Sessions.

Jose Costa

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