

December 17, 2021

Honorable Michelle L. Phillips Secretary New York State Public Service Commission Three Empire State Plaza Albany, New York 12223-1350

Re: CASE 19-G-0736 – In the Matter of the Rules and Regulations of the Public Service Commission, Contained in 16 NYCRR – Proposed Amendments to Chapter III, Gas Utilities, Subchapter C, Safety, to Improve Operator Qualification Programs.

Via Email

Dear Secretary Phillips:

The Northeast Gas Association¹ ("NGA") respectfully submits the following comments on behalf of our New York State natural gas local distribution company members ("NY LDCs") in response to the above referenced Notice.

For the purposes of this filing, the LDCs are:

- Central Hudson Gas and Electric Corp.
- Consolidated Edison Company of New York, Inc.
- Corning Natural Gas Corp.
- Hamilton Municipal Utilities Commission
- Liberty Utilities
- National Fuel Gas Distribution Corp.
- National Grid²
- New York State Electric and Gas Corp.
- Orange and Rockland Utilities, Inc.
- Rochester Gas and Electric Corp.
- Valley Energy Inc.

¹ The Northeast Gas Association 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. The Northeast Gas Association (NGA) represents natural gas distribution companies, transmission companies, liquefied and compressed natural gas suppliers and associate member companies. Its member companies provide natural gas service to 14 million customers in 9 states (CT, MA, ME, NH, NJ, NY, PA, RI, VT).

² National Grid collectively refers to The Brooklyn Union Gas Company d/b/a National Grid NY ("KEDNY"), KeySpan Gas East Corporation d/b/a National Grid ("KEDLI"), and Niagara Mohawk Power Corporation d/b/a National Grid ("Niagara Mohawk"),

The NY LDCs appreciate the effort of the New York State Department of Public Service (DPS) Staff through this initiative to develop and propose changes to Operator Qualification (OQ) requirements. This effort will enhance employee and public safety while helping to facilitate overall competency of the workforce. NY LDCs fully support the intent of proposed regulations which underpin our parallel goals of maximizing competency of our workforce while minimizing the unintended negative consequences human factors play in day-to-day operations. NY LDCs also appreciate the opportunities to engage with DPS Staff (Staff) through virtual meetings on May 7th, May 25th, and November 15th, 2021. These discussions provided operators with clarity regarding the intent of specific proposed code sections and provided a collaborative forum to discuss alternative approaches which would achieve the intended goal while addressing practical concerns associated with implementation of the proposed rule changes. In this spirit, NY LDCs previously submitted formal comments³ as part of Case 19-G-0736. The comments submitted herein build upon these prior comments, focusing on code sections that require further clarity for adoption and/or revisions to achieve intended goals.

General Comments:

1. NY LDCs are Committed to Continuous Improvement of OQ Programs

NY LDCs support Staff's interest in improving Operator Qualification in New York. To that end, NY LDCs have made and continue to make significant program enhancements to their OQ Programs, many of which address issues highlighted in the NYS DPS OQ White Paper and this rulemaking. These concerted efforts commenced in 2017 and have continued in earnest since that time, addressing many of the issues discussed during the NYS DPS OQ technical conference in October 2017. NY LDCs individually and collectively, through the NGA, have made significant investments in these training and qualification program enhancements, which we believe illustrates the NY LDCs' alignment with the intent of the proposed rule as well as the rigorous and ongoing efforts by the NY LDCs to improve OQ Programs and overall workforce competency. NY LDCs reiterate our commitment to working cooperatively with Staff to incorporate these enhancements into forthcoming OQ requirements. A summary of these ongoing OQ Program enhancements was included in the June 21, 2021, comments.

2. Implementation Timeline Must Account for Project Interdependencies

As noted above, NY LDCs fully support the intent of the proposed regulations and have been working in earnest since 2017 to effect certain program changes. That said, the level of effort required to achieve and sustain what is presented as some of the most stringent OQ and training standards within the U.S. is significant and cannot be understated. We expand on this point later in this document with respect to proposed language for 255.604(c), but NY LDCs emphasize that an appropriate glidepath to achieve sustainable change must be considered. We also note that many interdependencies exist in the requisite adoption and implementation

³ NY LDCs submitted formal comments regarding CASE 19-G-0736 on June 21, 2021, via letter from Thomas M. Kiley of the Northeast Gas Association to Honorable Michelle Phillips, Secretary, New York Public Service Commission.

projects which in some cases limit the extent to which activities can be performed in parallel. Appendix A – New York Operator Qualification (OQ) Proposed Rule Change Implementation Activity Plan provides a summary of discrete implementation projects that must be undertaken to achieve the intent of proposed regulations. Additionally, issues such as resource constraints and enhancements to information systems will drive implementation timelines. Furthermore, small and municipal operators will be especially challenged as they have limited staff and financial resources that may impact their ability to implement some of the proposed requirements.

3. Notice of Proposed Rulemaking (NOPR) Code Section Comments:

The NY LDCs offer the following comments and recommendations relative to proposed code section changes within the NOPR. The comments provided below present the language proposed by Staff in the NOPR followed by discussion and then recommendations by the LDCs. The LDCs' proposed deletions are in red strikethrough text and the LDCs proposed additions are in red underlined text. In some cases where clarification on the intent of a code section is warranted, the LDCs suggest clarifying language for consideration within the Notice of Adoption.

Definition of a Covered Task:

255.3 Definitions

- (a) As used in the Part:
- (10) Covered tasks are all activities, identified by the operator, that:
- (i) are performed on a pipeline [facility]; and
- (ii) [are operations and maintenance tasks;
- (iii) are performed as a requirement of this Part; and
- (iv)] affect the *safety [operation]* or integrity of the pipeline.

Discussion: NY LDCs are aligned with the intent of expanding the scope of operator qualification programs and note that NY LDCs currently exceed federal and state requirements in that construction activities are already considered covered tasks. NY LDCs agree with DPS Staff's proposed redline revisions which utilize the term *pipeline*⁴ vs. *pipeline facility*⁵ and the term *safety* vs. *operation*. These revisions provide clarity of intent with regard to the definition of a covered task.

⁴ 16 NYCRR 255.3(a)(37) *Pipeline* means all parts of those physical facilities through which gas is transported, including pipe, valves, and other appurtenances attached to pipe, compressor units, metering stations, regulator stations, delivery stations, holders, and fabricated assemblies.

⁵ 16 NYCRR 255.3(a)(39) *Pipeline Facility* means new and existing pipeline, rights-of-way, and any equipment, facility, or building used in the transportation of gas or in the treatment of gas during the course of transportation.

NY LDCs note that the two-part definition of a covered task, as proposed in this section, is significantly broader in scope than the federal definition of a *covered task*, which utilizes a four-part test, in that covered tasks will no longer be limited to those tasks that are performed as a requirement of 16 NYCRR Part 255 or be limited to operations and maintenance activities. The proposed changes to the definition of a covered task in Part 255.3, when viewed holistically, may unintentionally broaden the interpretation of the scope of the operator qualification regulation.

Use of the term *pipeline facility*, in conjunction with the elimination of *(iii) performed as a requirement of this Part;* could unintentionally expand the scope of OQ to include functions such as: equipment/vehicle operation and maintenance; construction/maintenance of pipeline facility structures such as construction and maintenance of buildings, concrete slabs, electrical/plumbing work associated with buildings, etc.; security measures associated with pipeline facilities, such as installation, inspection and maintenance of fences, posts, rails, cameras, communication systems, etc.; installation, inspection and maintenance of fire suppression systems associated with pipeline facilities; right-of-way maintenance such as vegetation control, etc.; personal safety procedures such as confined space entry, fire extinguisher training/maintenance, etc.

Use of the term *pipeline* is consistent with the intent of this change as it appropriately limits the scope of a covered task to activities performed directly on a *pipeline*. This is reinforced by the ANSI Gas Piping Technology Committee Z380.1 (GPTC Guidance) as follows:

GPTC Guidance: Performed on a Pipeline Facility means that the task is performed on part of a facility that is connected to the pipeline system.

The use of the term *pipeline* is also consistent with the intent to include pipeline construction and fabrication of pipeline assemblies intended for installation by operator or contractor personnel but would exclude commercial shop fabrication of pipeline assemblies by manufacturers for installation by others, as these are not connected to the pipeline system by the fabrication contractor. Note that NY LDCs already exceed existing code requirements and include new construction as a component of OQ.

The following is offered as clarifying language for consideration in the Notice of Adoption that would help reinforce the intent of proposed changes:

The intent of proposed revisions to the definition of a Covered Task is to include construction related tasks, in addition to operations and maintenance related tasks, or functions performed on a pipeline facility connected to a pipeline system. Construction, operations and maintenance, and security activities performed on associated facility assets, not connected to the pipeline, such as ancillary equipment, building and/or support structures and systems, right-of-way maintenance, are not intended to be included in 255.3.

Definition of Evaluation:

255.3 Definitions:

- (16) Evaluation means a process, established and documented by the operator, to determine an individual's ability to correctly perform a covered task by the following:
- (i) written or oral examination; and
- (ii) observation during performance on the job or during simulations.

Discussion: In some cases, NY LDCs utilize or plan to utilize a single combined oral and performance-based evaluation which includes oral questions and demonstration of the task. During stakeholder discussions, Staff clarified, and NY LDCs affirmed, that such a combined knowledge and performance evaluation would be acceptable provided the evaluation included pertinent questions. Similarly, NY LDCs seek to clarify that the use of photographs on a written exam would be considered a simulation for certain covered tasks where the visual identification of a condition is required for that task.

The following is offered as clarifying language for consideration in the Notice of Adoption that would help reinforce the intent of proposed changes:

The intent of an evaluation is to ensure competency of the individual in performing the covered task which must be accomplished through knowledge and performance evaluations, or a combination thereof. Simulations may include but not be limited to replication of a process within a training/operating center, computer simulation including photographs or virtual reality, or other simulated setting as defined by the operator.

Definition of Qualified – Abnormal Operating Conditions:

255.3 Definitions:

(45) Qualified means that an individual has completed an evaluation and can correctly:

(ii) recognize and react to abnormal operating conditions <u>specific to any covered task</u> that may be encountered while performing said covered task;

Discussion: NY LDCs acknowledge the importance of recognizing and reacting to abnormal operating conditions⁶ (AOCs). NY LDCs, however, are concerned that the language *specific to any covered task* may unintentionally expand the scope of OQ to require individuals to be qualified in reacting to AOCs for tasks they have yet to be trained and qualified for. For example, a laborer may unintentionally be required to recognize and react to AOCs for complex tasks that may be conducted at a job site that they are working at, unassociated with their training or qualifications, such as tapping/stopping, squeeze-off, fusion, pressure testing, purging, etc. During discussions at the stakeholder workshop on November 15th, DPS Staff indicated that it was not the intent to include the AOCs of all covered tasks, but rather those associated with the work the individual is or may be performing. Staff also encouraged operators to define task specific AOCs, to the extent practical, versus the use of generic AOCs.

⁶ 16 NYCRR 255.3(a)(2) Abnormal operating condition means a condition identified by the operator that may indicate a malfunction of a component or deviation from normal operations that may indicate a condition exceeding design limits or result in a hazard(s) to persons, property, or the environment.

Recommendation: Revise 255.3 as follows:

- (45) Qualified means that an individual has completed an evaluation and can correctly:
- (ii) recognize and react to abnormal operating conditions specific to any covered task that may be encountered while performing said covered task;

Definition of Qualified – Knowledge and Skills:

255.3 Definitions:

- (45) Qualified means that an individual has completed an evaluation and can correctly:
- (iii) demonstrate <u>technical knowledge</u> required to perform the covered task, such as: equipment selection, maintenance of equipment, calibration requirements and proper operation of equipment, including variations that may be encountered in the performance of the covered task due to equipment and environmental differences;
- (iv) demonstrate the technical skills required to perform the covered task including:

Discussion: NY LDCs recognize the importance of individuals possessing the necessary knowledge and skills required to perform a covered task such as using an instrument properly to obtain proper readings, how to properly operate pipeline equipment, etc. NY LDCs, however, are concerned that the introduction of the term *technical* may unintentionally expand the scope of OQ to include the theoretical basis underpinning operating practices and procedures. For example, operators do not require field technicians to understand cathodic protection theory to take pipe-to-soil readings in the field. NY LDCs and Staff were aligned on this point during the stakeholder workshop on November 15th. NY LDCs recommend the term *technical* be replaced with *requisite* to reflect the intent of the code section.

Recommendation: Revise 255.3 as follows:

- (45) Qualified means that an individual has completed an evaluation and can correctly:
- (iii) demonstrate technical requisite knowledge required to perform the covered task, such as: equipment selection, maintenance of equipment, calibration requirements and proper operation of equipment, including variations that may be encountered in the performance of the covered task due to equipment and environmental differences;
- (iv) demonstrate the technical requisite skills required to perform the covered task including:

Definition of Qualified – Variations in Performance of a Covered Task:

255.3 Definitions:

- (45) Qualified means that an individual has completed an evaluation and can correctly:
- (iv) demonstrate the technical skills required to perform the covered task including:
- (A) variations required in the performance of the covered task due to equipment or new operation differences or changes or both; and
- (B) <u>variations required in performance of the covered task due to conditions or context</u> differences:

Discussion: During the stakeholder workshop on November 15th, NY LDCs sought clarity regarding the intent of the proposed underlined code section. DPS Staff indicated that the intent was to address issues such as field environmental conditions which would impact the performance of a covered task. Examples included fusion during adverse weather and conducting leak surveys within a geographic area with a high groundwater table. DPS Staff also indicated that the intent was not to demonstrate performance of the task during qualification in different environments, but rather to understand how environmental variables may impact the performance of the task and what actions would be required. As such, NY LDCs suggest moving this requirement from 255.3(45)(iv), which requires demonstration of the task, to 255.3(45)(iii), which focuses on knowledge required to perform the task.

Recommendation: Revise 255.3 as follows:

- Add applicable language from section (45)(iv)(B) to section (45)(iii) as follows:
 (45)(iii) demonstrate technical requisite knowledge required to perform the covered task, such as: equipment selection, maintenance of equipment, calibration requirements and proper operation of equipment, including variations that may be encountered in the performance of the covered task due to equipment, and environmental differences conditions, or context differences;
- Delete section (45)(iv)(B) as follows:
 (45)(iv)(B) variations required in performance of the covered task due to conditions or context differences;

Evaluation Requirements:

255.604(a)(3) Ensure through <u>performance</u> evaluation that each individual performing a covered task has gained the knowledge and skills needed to perform the covered task according to the operator's procedures and on the type of equipment used by the operator for the task for which the individual is deemed qualified provided that:

Discussion: NY LDCs recognize that the intent of adding the word *performance* into the above code section is to emphasize the relative importance of physically demonstrating competency in the task. NY LDCs are actively working to incorporate additional performance evaluations into qualification programs to comply with the spirit of this rule. However, adding the word *performance* into section 255.604(a)(3) conflicts with the definition of *evaluation* in 255.3(16):

- (i) written or oral examination; and
- (ii) observation during performance on the job or during simulations.

Within 255.3(16), the term *performance* is only used with regard to one of the two options for compliance within 255.3(16)(ii). The addition of the term *performance* in 255.604(a)(3) could therefore be misconstrued that qualification for each covered task must include observation during performance on the job and disallow simulations. 255.604(a)(3) as written prior to the redline revision, without the addition of the term *performance*, provided better clarity and achieves the intended end result.

Recommendations:

Delete the term performance in 255.604(a)(3) as follows:

255.604(a)(3) Ensure through *performance* evaluation that each individual performing a covered task has gained the knowledge and skills needed to perform the covered task according to the operator's procedures and on the type of equipment used by the operator for the task for which the individual is deemed qualified provided that:

Performance Evaluations:

255.604(a)(3)(ii) Evaluations shall not be conducted within 48 hours of training;

Discussion: Delaying a written examination based on a pre-determined timeframe after training may help to establish that an individual has adequately retained knowledge from the training versus knowledge retention in short-term memory. Performance evaluations, however, predominantly validate that an individual has the requisite skills and abilities to perform the task. Skills are developed over time with practice and abilities are inherent to each individual. Additionally, operating procedures, equipment manuals, and component installation instructions are available to the student during performance evaluations as they would be when performing the task in the field. The availability of these materials during the performance evaluation makes short-term memorization a non-issue during performance evaluations and therefore eliminates any perceived value of a wait period between training and the performance evaluation.

In terms of practical implementation challenges associated with a wait period and performance evaluations, a 48-hour wait period will extend the retraining and requalification cycle per individual by several days and introduce extreme complexity into the scheduling process. Logistical issues become even more challenging for operators in remote areas as the training center may be located several hours away from the individual's normal reporting location. In these cases, incremental costs will also be incurred with two additional overnight stays for each individual being qualified.

In summary, NY LDCs recognize the value in a wait period between written evaluations and training, but do not believe the marginal pipeline safety value derived from instituting a wait period between training and performance evaluations outweighs the coordination challenges, scheduling delays, and incremental costs.

Recommendation: Revise 255.604(a)(3)(ii) as follows: 255.604(a)(3)(ii) Written evaluations shall not be conducted within 48 hours of training;

Abnormal Operating Conditions Questions:

255.604(a)(3)(iv) A passing grade on a written test shall not be awarded if the individual answered any question about abnormal operating conditions incorrectly.

Discussion: NY LDCs agree with the intent of this section to ensure competency of individuals in recognizing and reacting to AOCs. Historically, NY LDCs, out of an abundance of caution, have been more conservative and considered certain substandard conditions as AOCs, even though these substandard conditions may exceed the Part 255 definition of an AOC. Staff acknowledged the merits of this approach but advised that the more stringent Part 255 definition of an AOC be followed and that operators consider a second category of conditions or concerns that could be included in an operator's OQ program, and such conditions would not be subject to the proposed AOC testing requirements proposed herein. NY LDCs summarize these key discussion points below and recommend clarifying language within the Notice of Adoption such that all stakeholders have a common understanding.

NY LDCs note the context references found in the New York State Register notice with respect to AOCs:

- AOC is a pipeline condition that could cause an incident
- One incorrectly repaired AOC can cause <u>catastrophic problems</u>, such as that which occurred in the Merrimack Valley, MA
- AOCs, conditions that often warrant an <u>emergency response</u>

NY LDCs also note PHMSA's Small Operators OQ Guidance document:

PHMSA Small Operators OQ Guidance: Some typical AOCs as identified in American Society of Mechanical Engineers (ASME) B31Q Pipeline Personnel Qualification include:

- Unplanned escape of gas from a pipeline,
- Fire or explosion,
- Unplanned pressure deviation,
- Unplanned flow-rate deviation,
- Pipeline damage,
- Activation of a safety device other than during planned testing,
- Unplanned status change.
- Interruption or failure of communications, control system or power,
- Inadequate odorization or reports of gas odor

NY LDCs note that the context of the term AOC, both in the NY State Register and PHMSA's Guidance, relates to conditions that represent an *imminent* safety and/or system reliability threat.

To provide further clarity on the definition of an AOC, NY LDCs note GPTC guidance, §192.803, Section 1.1, which reads as follows:

1.1 Incorporation of conditions in task competency requirements.

Conditions that are included in the basic competency requirements for a particular task need not be considered abnormal operating conditions for that task. This is illustrated by the following examples.

- (a) If an operator identifies leak surveys as a covered task, the discovery of a leak need not be considered an abnormal operating condition for the individual performing this task. Finding leaks is an objective of the given task and the individual performing the task is expected to understand how to identify and respond to leaks.
- (b) If monitoring cathodic protection systems using electrical surveys is a covered task, finding a low pipe-to-soil reading need not be considered an abnormal operating condition. To find such readings is an objective of the task, and the individual performing the task is expected to understand how to identify and respond to such conditions.

Given this background relative to the definition of an AOC, NY LDCs note that there are many "inspection" tasks where the task is, by its very nature, looking for a substandard condition (e.g., corrosion inspections, pipe joint inspections, leakage surveys, etc.). In these cases, identification of the substandard condition is included and evaluated as part of the basic competency of the task and, therefore, such tasks may not have any associated AOCs.

As a result of discussions at stakeholder meetings and the clarifications noted above, NY LDCs recommend the following language be included in the Notice of Adoption to address the intent of assessing task specific AOCs for purposes of operator qualification.

The following is offered as clarifying language for consideration in the Notice of Adoption that would help reinforce the intent of proposed changes:

The intent of this proposed change is to ensure competency in recognizing and reacting to conditions that represent an imminent safety and/or system reliability threat. Consistent with federal guidance, these industry acknowledged AOCs and potential imminent threats include, but are not limited to, unplanned escape of gas from a pipeline, fire or explosion, unplanned pressure deviation, unplanned flow-rate deviation, pipeline damage, activation of a safety device other than during planned testing, unplanned status change (i.e., discovery of a defect or unsafe condition that requires a pipeline to be taken out of service), interruption or failure of communications, control system or power, inadequate odorization or reports of gas odor. There are many "Inspection Type" tasks where the task is, by its very nature, looking for substandard conditions. In these cases, identifying certain sub-standard conditions is included within the basic competency of the task and is included as a competency domain of the task and evaluated as such. Conditions that are included in the basic competency requirements for a particular task need not be considered AOCs for that task.

Evaluation Methods:

255.604(a)(3)(v) Observation of on-the-job performance is not used as a sole method of evaluation. However, when on-the-job performance is used as an evaluation method for a covered task, the operator qualification procedure must define the measures used to determine

successful completion of the on-the-job performance evaluation <u>and shall be evaluated by individuals qualified to perform that task on the operator's system;</u>

Discussion: NY LDCs agree that evaluation measures need to be defined if utilizing on-the-job performance as an evaluation method. However, there are a number of scenarios where an evaluator may possess the requisite knowledge and experience and be sufficiently knowledgeable of the operator's procedure, but may not be formally qualified to perform that task on the operator's system. Examples include:

- Individuals who are no longer physically able to perform a covered task;
- Third-party subject-matter-experts (e.g., NACE certified SMEs, manufacturer representatives for specialty coatings, equipment, etc.)
- Professional third-party evaluators

In these cases, the company would take appropriate steps to ensure the evaluator understands company-specific requirements, and would *authorize* each evaluator as required under 255.604(c)(8) and comply with 255.604(a)(4).

Additionally, for evaluations conducted by observation of on-the-job performance, when an evaluator is not operator qualified, the operator will have an operator qualified individual present, to maintain compliance with span-of-control requirements as per 255.604(a)(5). This approach is commonly utilized by some NY LDCs for specialty tasks where there are limited inhouse subject-matter-experts and/or to avoid potential conflicts of interest (e.g., supervisor evaluating subordinate). Flexibility to utilize third-party expertise as evaluators will become increasingly important as NY LDCs expand the use of performance evaluations.

In summary, NY LDCs believe that the requirements as proposed in 255.604(a)(4), 255.604(a)(5) and 255.604(c)(8) suffice to address the evaluator requirements proposed within 255.604(a)(3)(v), thereby allowing the last section of 255.604(a)(3)(v), as shown below, to be deleted. This approach meets the intent of the code and provides necessary flexibility to operators in terms of evaluator resource options.

Recommendation: Revise 255.604(a)(3)(v) as follows:

255.604(a)(3)(v) Observation of on-the-job performance is not used as a sole method of evaluation. However, when on-the-job performance is used as an evaluation method for a covered task, the operator qualification procedure must define the measures used to determine successful completion of the on-the-job performance evaluation and shall be evaluated by individuals qualified to perform that task on the operator's system;

Performance Deficiencies and Re-evaluation Process:

255.604(a)(6) Evaluates an individual if the operator has reason to believe that the individual did not correctly perform a covered task, or if the individual's performance of a covered task contributed to an incident requiring the submission of a report pursuant to 255.801(d), or is otherwise significant in the judgment of the operator.

255.604(a)(7) Evaluates an individual if the operator has any reason to believe the individual is no longer qualified to perform a covered task.

255.604(e)(4) Detail a process to address performance deficiencies and actions from such observations. Action may include retraining, coaching, reevaluation, suspension, or disqualification, in accordance with the operator's program.

Discussion: NY LDCs agree with the intent that an individual's qualifications should be suspended or disqualified if there are indications that the individual did not perform a task correctly, which contributed to an incident or other significant event, or if there are indications that an individual is no longer qualified to perform the associated covered task. There is, however, the need to further clarify the intent of this code section. 255.604(a)(6) could unintentionally be construed to imply that an individual must be disqualified and "evaluated", if there is confirmed or even unconfirmed reason to believe that the task was not performed correctly. NY LDCs believe there is a need, in many cases, to suspend qualifications while the issue is further analyzed and then determine the next course of action, depending on the outcome of that analysis. The outcome may result in a disqualification, which would require subsequent re-evaluation of the individual's qualifications; however, the outcome may also identify a flaw or omission in a procedure, process, training, etc. as the root cause, in which case an individual's disqualification would not be appropriate. This approach aligns with 255.604(e)(4) which requires operators to detail a process to address performance deficiencies and actions from such observations. Action may include retraining, coaching, reevaluation, suspension, or disqualification, in accordance with the operator's program. NY LDCs suggest replacing the phrase has reason to believe with the term determines. Use of the term determines more aptly implies that the outcome of the analysis of the facts will drive the decision to disgualify and re-evaluate. NY LDCs also recommend that the term evaluates be replaced with the term assess as evaluates, as defined in 255.3(16), has an implied meaning, which may not meet the intention of this proposed code language. The same changes are recommended for section 255.604(a)(7).

NY LDCs also agree with the intent of 255.604(e)(4) that operators should establish a process to address performance deficiencies. The inclusion of this section within 255.604(e) is of concern, however, as section (e) addresses program effectiveness, which is a periodic (biannual) review to identify areas for process improvement. 255.604(e)(2)(ii) already requires operators to establish a process to implement necessary changes as an outcome of the program effectiveness review. Given the real-time nature of identifying and remediating performance deficiencies for individuals as detailed in 255.604(e)(4) (versus systemic program effectiveness enhancements), NY LDCs recommend relocating 255.604(e)(4) to fall within section 255.604(a) and, more specifically, to precede 255.604(a)(6) as this topic directly relates to sections 255.604(a)(6) and (7).

Recommendations: Relocate 255.604(e)(4) to fall under 255.604(a) and, more specifically, to precede 255.604(a)(6). Include 255.604(a)(6) and 255.604(a)(7) as subsections under the new 255.604(a)(6) as shown below.

<u>255.604(a)(6)</u>: Detail a process to address performance deficiencies and actions from such observations. Action may include improvements to procedures/programs, retraining, coaching,

reevaluation, suspension, or disqualification, in accordance with the operator's program. The following, at a minimum, should be included in this process:

(i): Evaluates Assess an individual's qualifications, if the operator determines has reason to believe that the individual did not correctly perform a covered task, or if the individual's performance of a covered task contributed to an incident requiring the submission of a report pursuant to 255.801(d), or is otherwise significant in the judgment of the operator.

(ii) Evaluates Assess an individual's qualifications, if the operator determines has reason to believe the individual is no longer qualified to perform a covered task.

Additionally, delete section 255.604(e)(4) as follows:

255.604(e)(4) Detail a process to address performance deficiencies and actions from such observations. Action may include retraining, coaching, reevaluation, suspension, or disqualification, in accordance with the operator's program.

Management of Change:

255.604(a)(11) Provides supplemental training for individuals when significant changes are made to procedures and specifications for the covered task;

Discussion: 255.604(a)(11) requires the operator's OQ Program to include provisions to provide supplemental training as part of the management of change process. NY LDCs recommend moving this code section to immediately follow 255.604(a)(8), which stipulates additional management of change requirements. This recommendation is simply made to aid in the organization and flow of related code sections.

Recommendation: Relocate 255.604(a)(11) to immediately follow 255.604(a)(8).

Mutual Aid:

255.604(a)(13) Includes a Mutual Aid training and evaluation plan. Operator contingencies must be in place for the use of outside operator qualified resources when the operator is responding to events that exceed in-house capabilities. During Mutual Aid situations, the Commission may waive any of the requirements specified in this Section;

Discussion: NY LDCs support the intent of this proposed code section and agree that mutual aid personnel need to be qualified in the tasks they perform, and competent to perform the tasks in accordance with the operator's requirements. During response to events requiring mutual assistance, operators should evaluate and, if appropriate, accept "task equivalent" OQ credentials of the operators providing mutual assistance contingent upon the operator providing "site arrival training" for mutual aid personnel. The acceptance of task equivalency aligns with OQ program acceptance, as described in PHMSA OQ FAQs 1.3, 1.4, 1.6, and 1.8. The arrival training would address the operator's company-specific procedures, materials, and equipment, as applicable, for the work that is to be performed by mutual aid responders. Operators who adopt this approach should include these provisions within their OQ Written Plan and Emergency Response Plan. This approach allows operators the flexibility to enlist support

services quickly and efficiently during emergency events, while ensuring the competency of the individuals providing mutual aid assistance and ensuring the Company's operating procedures are effectively communicated and followed.

Additionally, NY LDCs agree that emergency response planning should include the identification of covered tasks commonly required during mutual aid events along with the development of a process to validate the equivalency of qualifications from mutual aid responders and the development of associated site arrival training.

The following is offered as clarifying language for consideration in the Notice of Adoption that would help reinforce the intent of proposed changes:

The intent of this language is for operators to proactively establish a process which allows for the use of outside operator qualified resources including the verification of qualifications and training on company-specific requirements.

Training Records:

255.604(b)(1)(vii) Training that took place to support the individual's qualification or requalification for each covered task.

Excerpt from the State Register Notice: Proposed language intent was for the requirement to be implemented on a going forward basis and the specific types of records, such as affidavits or attestations, provided the individual has demonstrated the knowledge, skill, and ability that would result from completion of such training as defined by an operator's procedure.

Discussion: NY LDCs agree with the intent of this proposed code section and recognize the importance of training in developing the competency of personnel. Appropriate training is required to establish that individuals performing covered tasks have the knowledge and skills needed to perform the tasks. Such training should be incorporated in practices leading to the development, career progression, competency, and qualification of new employees, as well as practices that refresh the knowledge and skills of individuals with considerable experience. It is an Operator's responsibility to provide training to develop the competency necessary to perform covered tasks on the operator's unique pipeline system.

However, the retention of training records to support qualifications is a significant challenge. Methodologies and systems will need to be developed to link specific OQ covered tasks to existing company specific training documentation processes and systems. Additionally, many individuals change employers throughout their careers; this is especially true for contractors. These individuals have the requisite experience and competency to perform the covered task but may not have access to their initial training records. This new requirement to retain and link training records to qualifications throughout an individual's career sets new expectations regarding portability of training records for operators and contractors. Discussions with Staff during previous stakeholder meetings indicated that the intent of this provision is for operators to verify, on a going forward basis, that training requirements have been completed and that the

training verification record could be as simple as an affidavit that operator required training requirements have been met. NY LDCs agree with this intent and recognize that language in the State Register Notice supports this approach. NY LDCs recommend that the language from the November 3 State Register Notice be incorporated into the Notice of Adoption.

The following is offered as clarifying language for consideration in the Notice of Adoption that would help reinforce the intent of proposed changes:

The intent of this language was for the requirement to be implemented on a going forward basis and the specific types of records, such as affidavits or attestations, provided the individual has demonstrated the knowledge, skill, and ability that would result from completion of such training as defined by an operator's procedure.

Span of Control Records:

255.604(b)(2)(i) Records shall be kept and made available for audit for work completed by a non-qualified individual while being directed and observed by a qualified individual.

Excerpt from the State Register Notice: Operators are responsible for the qualification records of an individual performing a covered task. Thus, proposed language revised by deleting specific documentation used to verify on-the-job training.

Discussion: NY LDCs are very concerned that the record keeping requirement with regard to instances where non-qualified individuals perform work on the pipeline while being directed and observed by a qualified individual may require significant time and investment in information systems to develop or enhance work management systems and develop linkages to operator qualifications systems. Accountability for adherence to span-of-control requirements and overall quality of the work performed resides with the crew chief (or equivalent position/title). The challenge presented here is not compliance itself but rather documentation and information systems to support compliance, for the purposes of an audit.

LDC work management systems capture the work function performed, assets installed/retired, work crew, date of work performed, and many other parameters based on the work performed. That said, work management systems are not designed or configured to track work performed at the discrete covered task level. Note that a simple work function such as installation of a service may require fifteen or more covered tasks to complete that one job. To produce reports for audit purposes, each covered task would need to be tracked as an independent sub-function within each and every work order. The functionality to accurately track this data simply does not exist and would require major information system enhancements of each operator's work management system, or the development of a new, likely disparate stand-alone system simply to track work performed under span-of-control. This potentially complex record keeping requirement will be extremely expensive and adds little value in terms of pipeline safety. To illustrate the potential expense associated with this requirement, one NY operator spent approximately \$5 million in the development and implementation of a similar system to track the specific requirements for plastic joining and inspection alone, which represents only two of 80+covered tasks. The time and costs to develop and implement information systems to capture

and report this information is significant to all operators. If ultimately required by this code section, NY LDCs request a separate, extended timeline for implementation and will look to ensure cost recovery prior to initiating work to upgrade these systems. Above and beyond information system considerations, additional time demands and administrative burdens would be required of the individuals performing the work, who would now be required to be well versed in OQ Program structure so that they could accurately record each covered task performance, adding additional time and costs to all work functions.

Discussions with DPS Staff during stakeholder meetings focused on a few key points. DPS Staff indicated that the focus of this requirement was to document the use of span-of-control, but to do so in a manner that would not require significant system enhancements. DPS Staff indicated their focus was on those records currently being produced during audits, and that there was not an interest in the creation of additional work function records. DPS Staff also indicated that simply adding a comment field to existing forms would suffice to document use of span-of-control and record both the qualified person and the person who performed the work under direct observation. DPS Staff indicated that summary reporting on the use of span-of-control would not be required, thereby eliminating the need to record this information in a searchable database. DPS Staff indicated the operator's OQ Plan would need to reflect how this information would be captured.

Given these clarifications, NY LDCs will need time to review system requirements and assess impacts. NY LDCs recommend that clarification be provided within the Notice of Adoption and that separate implementation timelines associated with this requirement be established based on the impacts to each operator. In the spirit of this discussion, NY LDCs will pursue simpler approaches to documenting span-of-control which would help to mitigate major information system upgrades, but note that, in most cases, some degree of information system enhancements will be required.

The following is offered as clarifying language for consideration in the Notice of Adoption that would help reinforce the intent of proposed changes:

The intent of this language is for the requirement to be implemented on only existing records in which DPS Staff audits. This code section is to be implemented on a going forward basis as defined by an operator's procedure including the specific types of records, such as affidavits or comments on existing work order forms, provided the work completed by a non-qualified individual while being directed and observed by a qualified individual is recorded.

Engineering Functions:

255.604 [Operator] Qualification[s] of Pipeline Personnel

(f) <u>Engineering tasks</u>. The operator shall determine <u>engineering tasks</u> specific to the design, construction, operation, and integrity of pipelines that contain elevated risk. The operator shall have and follow a written program that includes a training, mentoring, and evaluation process to be used for <u>certifying</u> personnel performing these higher risk <u>engineering tasks</u>.

Discussion: NY LDCs are aligned with the intent of this proposed code section and recognize the important role that competent engineers play in ensuring pipeline safety and system reliability. To this point, NGA and utility engineering subject-matter-experts have developed fit-for-purpose guidelines for Gas System Engineering Design Review. The guidelines provide a framework for operators to define the education and experience requirements for engineering personnel, outline the design review and approval process for both standard and non-standard designs, and define a management of change process. This guideline is intended to provide a flexible and scalable review framework, with essential principles applicable to all pipeline operators, from large to small. Further, the guideline is intended to provide a general framework from which operators can adopt essential elements and adapt them, accordingly, based on their specific assets and unique operating environments.

NY LDCs also note that there isn't a "one-size-fits-all" solution to establishing competency of individuals performing high-risk engineering functions and design review as competency is generally defined as an appropriate combination of fit-for-purpose education and experience related to gas system design, construction, and operations. NY LDCs will need to review these guidelines in the context of the proposed 255.604(f) code requirements and develop (or refine) formal, company-specific engineering design and review processes and associated personnel competency requirements. While the guideline provides foundational practices from which operators can build upon, formal adoption, integration, training, and implementation may involve significant changes in current practices ranging from initial design through design execution and commissioning of facilities.

NY LDCs recognize and appreciate that the code section title of 255.604 was changed to eliminate the reference to Operator Qualification. NY LDCs support this change as OQ to validate competency of field personnel is vastly different than establishing competency of engineers. OQ is task and procedure oriented, and performance based. Conversely, engineering involves the application of a variety of design concepts and the strategic integration of these concepts and theory as related to constructability and operability of the design. As a result, competency development and demonstration of engineering design review principles requires broad knowledge and skills as well as system specific knowledge, which often requires the technical review and input of multiple SMEs. Given the intent of this code section and to further clarify that engineering competency is not intended to be fit into an OQ framework, NY LDCs recommend the revision of the term *Engineering Tasks* to *Engineering Functions* and propose alternate language to the term *certifying* to better reflect the concept of engineering competency development and validation.

Recommendation: Revise 255.604(f) as follows:

255.604(f) Engineering tasks Engineering functions. The operator shall determine engineering tasks engineering functions specific to the design, construction, operation, and integrity of pipelines that contain elevated risk. The operator shall have and follow a written program that includes a training, mentoring, and evaluation process to be used for certifying establishing competency of personnel performing these higher risk engineering tasks engineering functions.

Compliance Schedule:

255.604(c) Operators shall have a written qualification program consistent with the requirements herein and in effect by April 1, 2023.

Excerpt from the State Register Notice: Compliance Schedule: The proposed revisions would be effective upon publication of a Notice of Adoption filed in the New York State Register. Operators would be allowed six months to incorporate changes into their existing written OP Qual plans, nine months to implement those plans and 12 months to train and qualify workers under the new plans.

Discussion: NY LDCs fully support the intent of proposed regulations with the goal of maximizing competency of our workforce and minimizing unintended negative consequences human factors play in day-to-day operations. NY LDCs emphasize the tremendous work effort that has been ongoing since 2017 to achieve these desired goals. That said, the scope of work required to transform NY Operator Qualification programs to meet proposed additional requirements will be significant for all NY LDCs, some more so than others. Furthermore, there are many interdependencies in the requisite project tasks. These interdependencies, along with the need to engage key SMEs as part of multiple initiatives, limits the extent to which activities can be performed in parallel. NY LDCs propose the compliance schedule outlined below:

- Written Plan: Operators would be allowed 9 months from the Notice of Adoption to incorporate changes into each operator's OQ written plan;
- Implement the OQ Written Plan: Operators would be allowed 12 months from the date the written plan revisions are complete to implement those plans;
- Initial Qualifications: Following implementation of the revised plan, operators would be allowed 12 months to commence training and qualify workers being <u>initially qualified</u> on a covered task;
- Requalification of individuals previously qualified: Following implementation of the
 revised plan, workers who are already qualified on a covered task will remain qualified
 until those qualifications expire, at which point requalification will follow the revised plan.
- The proposed implementation timeline would be effective upon publication of the Notice of Adoption.

NY LDCs note that there are numerous aspects of the proposed rule that have already been implemented or could be implemented in concurrence with the release of a revised written plan (e.g., application of span-of-control, written evaluations not conducted within 48-hours of training, written evaluations delivered in a secure environment, establishing requirements for evaluators, etc.) Other items, especially those that require the development of new training, evaluations, processes and especially those changes requiring updates to learning management systems and databases or work management and record keeping systems, will take longer to develop and implement. This is especially true for the span-of-control records requirements. As noted previously under the span-of-control records section, NY LDCs request a separate, extended timeline to implement required system changes and will look to verify cost recovery of associated costs prior to initiating work to upgrade these systems.

Additionally, NY LDCs request clarification regarding the timeline for implementation of Engineering Function requirements under 255.604(f). NY LDCs recommend that these requirements be structured to align with the OQ written plan changes as follows:

- Engineering Written Program: Operators would be allowed 9 months from the Notice of Adoption to develop a written program for company defined elevated risk engineering functions;
- Implement the Engineering Written Program: Operators would be allowed 12 months from the date the development of the Engineering Written Program is complete to phase-in and implement those plans.

Recommendation: Revise 255.604(c) as follows:

255.604(c) Operators will be allowed 9-months to incorporate changes to their operator shall have a written qualification written plan program consistent with the requirements herein.—and in effect by April 1, 2023. Operators will be allowed 12-months from the date the written plan revisions are complete to implement those plans. Operators will be allowed 12-months from completion of plan implementation to commence training and qualify workers being initially qualified on a covered task. Unless otherwise stipulated by the Operator, individuals who are already qualified on a covered task will remain qualified on that task until that qualification expires, or the individual is disqualified. The implementation timeline is effective upon publication of the Notice of Adoption.

Additionally, the following is offered as clarifying language for consideration in the Notice of Adoption that would help reinforce the intent of proposed changes:

The intent for implementation of the revised plan is to allow operators 9-months to incorporate operator qualification requirements into their written plans; 12-months from the date written plans are complete to implement those plans; and 12-months from completion of the implementation to commence training and qualify workers being initially qualified. The intent is for individuals who are already qualified on a covered task to remain qualified until those qualifications expire, unless otherwise stipulated by the operator, at which point requalification will follow the revised plan.

4. Implementation Resource Recovery Considerations

Implementation of proposed enhancements to existing rules and regulations will, in most cases, require incremental capital investments and operations and maintenance expenses to be incurred by Operators. These substantial efforts may not be proportional to the size of the LDC or municipal operator and can be particularly burdensome to smaller operators. As identified throughout this document, anticipated incremental investments necessary to conform with proposed rule changes are driven by several factors, such as: requirements to strengthen training programs, reformat testing programs, in particular the shift to a significantly greater number of performance exams, documentation practices, learning-management-system revisions and enhancements, span of control tracking, and other member-specific program changes. NY LDCs propose tracking all associated rule change implementation incremental

costs including but not limited to labor, materials, consulting fees, and IT system enhancements relative to existing program expenses. So as not to delay implementation, Operators recommend that deferral authority for all incremental costs associated with implementation of these code changes be noted in a Commission Order adopting the changes so that they do not need to await a petitioning process and Commission ruling to proceed with implementation.

The following is offered as clarifying language for consideration in the Notice of Adoption to help reinforce the intent of proposed changes and expedite the implementation process: The intent of this regulation is for operators to implement the required changes in an expeditious manner. Operators shall track incremental costs associated with this rule change for inclusion and recovery in future rate proceeding(s).

Conclusion

NGA and the New York State LDCs appreciate the opportunity to present these comments. Our goal in offering these comments is to provide practical alternatives to certain recommendations which will enhance the competency of the workforce while maximizing public safety value. We hope that our efforts will help the Department of Public Service in achieving concrete improvements in the State's gas safety objectives. Please contact us if you have any questions.

Respectfully submitted,

Paul C. Armstrong By:

Vice President, Training & Qualification Services

Northeast Gas Association 75 Second Avenue. Suite 510

Bul Chanting

Needham, MA 02494

For further information please contact:

Lauren Toczylowski Chair, NGA Operator Qualification Committee Project Manager, Gas Regulatory Programs Con Edison Company of New York, Inc. 1560 Bruckner Blvd., Building 3 Bronx, NY 10473 (917) 560-3934 toczylowskil@coned.com

or

Paul Armstrong
Northeast Gas Association
(781) 455-6800 ext. 1130
parmstrong@northeastgas.org

Appendix A - New York Operator Qualification (OQ) Proposed Rule Change Activity Plan

Activity

Phase: Update Written Plan

Performed covered task analysis, identify new covered tasks.

Review evaluation method(s) for each covered task, adding performance evaluations where warranted.

Review covered task domains and elements, adding knowledge and skill aspects where warranted.

Review and update span of control for each covered task.

Re-evaluate AOCs and evaluation method for AOCs for each covered task.

Develop and document an approach to specify minimum training requirements for each covered task.

Review business rules for evaluation wait periods.

Review and document exam security provisions.

Develop, document, and specify requirements for Evaluators.

Review and update policy for suspension and disqualification of qualifications.

Review and update policy for management of change

Review and update policy for OQ compliance during mutual aid events.

Develop, document, and specify an approach to program effectiveness.

Review, develop, and document an approach to document training to support OQ.

Review, develop, and document an approach to document use of span of control.

Incorporate the above into the OQ Written Plan.

Review revisions to written plan with DPS Staff to ensure alignment with approach.

Develop and document an approach to developing and verifying competency of engineering personnel.

Phase: Implement OQ Written Plan

Develop domains, elements, AOCs, training, and evaluations for new new covered tasks.

Update evaluation method(s) for each covered task, creating/revising performance evaluations, revising written evaluations.

Implement (where necessary) updated span of control for each covered task.

Update evaluation methods to address AOCs for each covered task, revising written evaluations and performance evaluations.

Specify minimum training requirements for each covered task.

Implement updated business rules for evaluation wait periods.

Implement exam security provisions.

Implement requirements for Evaluators.

Implement policy for suspension and disqualification of qualifications.

Implement policy for management of change

Implement policy for OQ compliance during mutual aid events.

Implement program effectiveness.

Implement approach to document training to support OQ.

Implement approach to document use of span of control.

Implement an approach to developing and verifying competency of engineering personnel.

Phase: Training & Qualification of Personnel

Commence training and qualification of new personnel or first time qualification on a covered task in accordance with written plan including required documentation.

Regualification of personnel in accordance with the written plan will take place over 3 years as existing qualifications expire.

Regulatory Change Driver

Comply with expanded definition of a covered task.

Comply with definition of evaluation.

Comply with definition of qualified.

Comply with definition of span of control.

Comply with requirements for AOCs.

Comply with requirements for training.

Comply with requirements for wait period between training and evaluation.

Comply with requirements for secure delivery of written evaluations.

Comply with requirements for Evaluators.

Comply with requirements for addressing performance deficiencies.

Comply with management of change requirements.

Comply with mutual aid requirements.

Comply with program effectiveness requirements.

Comply with training requirements.

Comply with span of control requirements.

Comply with OQ rule requirements.

Comply with OQ rule requirements.

Comply with engineering requirements.

Comply with expanded definition of a covered task.

Comply with definition of evaluation.

Comply with definition of span of control.

Comply with requirements for AOCs.

Comply with requirements for enhanced training.

Comply with requirements for wait period between training and evaluation.

Comply with requirements for secure delivery of written evaluations.

Comply with requirements for Evaluators.

 $Comply \ with \ requirements \ for \ addressing \ performance \ deficiencies.$

Comply with management of change requirements.

Comply with mutual aid requirements.

Comply with program effectiveness requirements.

Comply with training requirements.

Comply with span of control requirements.

Comply with engineering requirements.

Comply with OQ rule change requirements.

Comply with OQ rule change requirements.