

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

At a session of the Public Service
Commission held in the City of
Albany on March 16, 2022

COMMISSIONERS PRESENT:

Rory M. Christian, Chair
Diane X. Burman
James S. Alesi
Tracey A. Edwards
John B. Howard
David J. Valesky
John B. Maggiore

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, Part 255,
Transmission and Distribution of Gas, to
Improve Operator Qualification Programs.

MEMORANDUM AND RESOLUTION
ADOPTING AMENDMENTS TO 16 NYCRR PART 255

(Issued and Effective March 18, 2022)

BY THE COMMISSION:

BACKGROUND

By Notice of Proposed Rulemaking, published in the New
York State Register on April 7, 2021, in accordance with the
State Administrative Procedure Act (SAPA) §201(1), the Public
Service Commission (Commission) issued for comment proposed
revisions to its pipeline safety regulations (SAPA 19-G-
0736SP1). The proposed rulemaking concerned safety regulations
pertaining to pipeline facilities which are addressed in Title
16 of the New York Codes Rules and Regulations (NYCRR), Chapter
III, Gas Utilities, Subchapter C, Safety, Part 255, Transmission

and Distribution of Gas, to improve operator qualification (OQ) programs, as well as to make technical clarifications. The comment period for the proposed rulemaking ended June 7, 2021.

Fourteen entities submitted comments: Northeast Gas Association (NGA) on behalf of thirteen member operators; NGA on behalf of twelve member contractors and the International Union of Operating Engineers (IUOE) Local Union 15; Consolidated Edison Company of New York, Inc. (Con Edison); Central Hudson Gas & Electric Corporation (Central Hudson); KeySpan Gas East Corporation d/b/a National Grid, The Brooklyn Union Gas Company d/b/a National Grid NY, and Niagara Mohawk Power Corporation d/b/a National Grid (collectively National Grid); Orange and Rockland Utilities, Inc. (ORU); National Fuel Gas Distribution Corporation (NFG); the Master Plumbers Council of the City of New York, Inc. (Master Plumbers of NYC); ENERGY worldnet, Inc. (ENERGY worldnet); American Petroleum Institute (API); and the Plumbing Foundation City of New York, Inc. (Plumbing Foundation of NYC).

A revised proposed rulemaking was issued for comment which was published in the New York State Register on November 3, 2021, in accordance with the SAPA §201(1) (SAPA 19-G-0736SP2). The revised proposed rulemaking addressed the comments made through November 3, 2021, and made additional clarifications. The comment period for the revised proposed rulemaking ended January 3, 2022.

Seven entities submitted comments: NGA on behalf of thirteen member operators; Central Hudson; Con Edison; all three National Grid entities; and ORU.

SUMMARY OF COMMENTS FOR SAPA 19-G-0736SP1

NGA on behalf of member operators submitted comments on the proposed provisions, including those: defining a "covered

task;" identifying covered tasks and abnormal operating conditions (AOCs); detailing the training requirements for covered tasks; evaluating individuals performing a covered task; performing evaluations within 48 hours of training; answering questions incorrectly related to AOCs; evaluation methods for individuals; re-evaluating individuals who performed a covered task incorrectly; establishing and maintaining a management of change (MOC) process; ensuring an individual has the necessary knowledge, skills, and abilities to perform a covered task; evaluating individuals who perform engineering-related tasks; addressing an individual's training on a moving-forward basis; maintaining records for non-qualified individuals being directed and observed by a qualified individual; developing a written OQ program and its effective date; performing effectiveness reviews of individuals; training and qualifying evaluators; and relabeling and reorganizing specific regulations for consistency with NYCRR numbering and cross-reference styles.

Central Hudson submitted comments on the provisions detailing the training requirements for covered tasks; ensuring an individual has the necessary knowledge, skills, and abilities to perform a covered task; answering questions incorrectly related to AOCs; maintaining records for non-qualified individuals being directed and observed by a qualified individual; and developing a written OQ program and its effective date.

Con Edison submitted comments on the provisions requiring that evaluations be performed within 48 hours of training; answering questions incorrectly related to AOCs; re-evaluating individuals who performed a covered task incorrectly; addressing an individual's training on a moving-forward basis; maintaining records for non-qualified individuals being directed

and observed by a qualified individual; and performing effectiveness reviews of individuals.

NFG submitted comments on the provisions defining a "covered task;" re-evaluating individuals who performed a covered task incorrectly; evaluating individuals who perform engineering-related tasks; and maintaining records for non-qualified individuals being directed and observed by a qualified individual.

NGA on behalf of member contractors submitted comments on the provisions defining a "covered task"; identifying covered tasks and AOCs; answering questions incorrectly related to AOCs; utilizing on-the-job performance as an evaluation method; re-evaluating individuals who performed a covered task incorrectly; establishing and maintaining a management of change (MOC) process; addressing an individual's training on a moving-forward basis; and performing effectiveness reviews of individuals.

IUOE Local Union 15 submitted comments on the importance of OQ regulations; the anticipated increase in associated OQ costs; on the provision regarding answering questions incorrectly related to AOCs; and on the provision regarding beta-testing of newer modules and simulators which can aid the OQ training process.

ENERGY worldnet submitted comments on the provisions defining a "covered task;" evaluating individuals performing a covered task; performing evaluations within 48 hours of training; answering questions incorrectly related to AOCs; and performing effectiveness reviews of individuals.

API submitted comments on the provisions defining a "covered task;" identifying covered tasks and AOCs; detailing the training requirements for covered tasks; evaluating individuals performing a covered task; performing evaluations within 48 hours of training; providing written tests in a secure

location under secure procedures; evaluating individuals using the span-of-control method; re-evaluating individuals who performed a covered task incorrectly; re-evaluating individuals who the operator believes is no longer qualified to perform a covered task; establishing and maintaining a management of change (MOC) process; determining what constitutes a significant change; ensuring an individual has the necessary knowledge, skills, and abilities to perform a covered task; providing supplemental training when procedures and specifications are changed for a covered task; evaluating and training resources for mutual aid events; performing effectiveness reviews of individuals; evaluating individuals who perform engineering-related tasks; maintaining records for non-qualified individuals being directed and observed by a qualified individual; and developing a written OQ program and its effective date.

National Grid, ORU, Master Plumbers of NYC, and Plumbing Foundation of NYC supported the comments made by NGA.

SUMMARY OF COMMENTS FOR SAPA 19-G-0736SP2

NGA on behalf of member operators submitted comments on the provisions defining a "covered task," "evaluation," and "qualified;" determining what constitutes a significant change; evaluating and training resources for mutual aid events; ensuring an individual has the necessary knowledge, skills, and abilities to perform a covered task; re-evaluating individuals who performed a covered task incorrectly; re-evaluating individuals who the operator believes is no longer qualified to perform a covered task; maintaining records for non-qualified individuals being directed and observed by a qualified individual; developing a written OQ program and its effective date; evaluating individuals who perform engineering-related tasks; and the anticipated increase in associated OQ costs.

Central Hudson submitted comments on developing a written OQ program and its effective date; and the anticipated increase in associated OQ costs.

Con Edison submitted comments on the provisions regarding performing evaluations within 48 hours of training; answering questions incorrectly related to AOCs; evaluation methods for individuals; re-evaluating individuals who performed a covered task incorrectly; re-evaluating individuals who the operator believes is no longer qualified to perform a covered task; maintaining records for non-qualified individuals being directed and observed by a qualified individual; and performing effectiveness reviews of individuals.

National Grid submitted comments on the provisions regarding answering questions incorrectly related to AOCs; evaluation methods for individuals; maintaining records for non-qualified individuals being directed and observed by a qualified individual; and the anticipated increase in associated OQ costs.

ORU submitted comments on the provisions regarding performing evaluations within 48 hours of training; answering questions incorrectly related to AOCs; evaluation methods for individuals; re-evaluating individuals who performed a covered task incorrectly; re-evaluating individuals who the operator believes is no longer qualified to perform a covered task; maintaining records for non-qualified individuals being directed and observed by a qualified individual; performing effectiveness reviews of individuals; and the anticipated increase in associated OQ costs.

STATE ENVIRONMENTAL QUALITY REVIEW

The Commission determines, pursuant to the State Environmental Quality Review Act (SEQRA) and its implementing regulations, that the proposed amendment of the pipeline safety

regulations are Type II actions (those previously determined not to have a significant adverse impact on the environment) within the meaning of 16 NYCRR §7.2(b). Pursuant to 6 NYCRR §617.3(f), no SEQRA determination, Environmental Impact Statement (EIS), or findings statement are required.

DISCUSSION

Ineffective OQ programs at regulated operators first came to the Commission's attention in 2014 as a result of the Department of Public Service Staff's (Staff) investigation of the East Harlem explosion.¹ Staff found that: (1) the worker who performed the fuse had expired credentials on the date the fuse was completed; and (2) regulated operators were not including the required destructive test of plastic fusions as part of their OQ programs.

In 2016, an allegation was raised, and Staff confirmed, that answer sheets to written OQ tests were made widely available to industry workers. Further investigations identified 2,260 alleged regulatory violations at Con Edison and National Grid, on construction jobs completed during the period the answers sheets were widely available.

In 2017, Staff conducted an OQ technical conference where it reported findings of OQ audits and presented proposed best practices for operators. Industry representatives also explained what steps they were taking to improve OQ training and evaluations for individuals.

¹ See Case 14-G-0201, Consolidated Edison Company of New York, Inc. - Investigation (commenced March 12, 2014).

On February 12, 2019, Staff issued an OQ White Paper,² the purpose of which was to provide a guide for operators to reassume control over their OQ programs. Another motive for updating current OQ regulations was a 2015 federal notice of proposed rulemaking issued by the Pipeline and Hazardous Materials Safety Administration (PHMSA),³ which sought to revise OQ requirements to improve compliance by increasing skills training and improving evaluations and recordkeeping.

Staff's proposed model plan would require that every task performed on a pipeline facility that affects its integrity, from design through construction and maintenance, shall be done by an individual with OQ credentials. OQ requirements must be individualized to ensure individuals have knowledge of operator-specific procedures and equipment, confirmed with oral and/or written examinations, and include robust training (hands-on learning simulations, etc.). Evaluations of individuals' skills and abilities must be documented by operators, and re-qualification intervals must be established for each covered task. Additionally, Staff's proposal would require that operators establish a MOC program to ensure that changes in procedure and/or equipment are conveyed to employees. Finally, Staff proposed requiring the operator to retain records of each employee's qualifications and covered tasks.

Under Staff's proposal, OQ standards for operator and contractor employees would be the same. In addition, personnel deployed during mutual aid events must be OQ qualified and their participation tracked and recorded by the operator. The OQ

² Case 14-G-0212, Gas Safety - Plastic Fusions, Operator Qualification White Paper (filed February 12, 2019) (OQ White Paper).

³ 80 Federal Register 39916.

White Paper also provides Staff's proposed best practices, which incorporated Staff's OQ proposals.

On May 7, May 25, and November 15, 2021, technical discussions were conducted with Staff, NGA, and several member operators. The discussions provided clarity regarding the intent of proposed revisions, a forum to discuss alternate approaches to achieve the desired outcomes, and addressed practical concerns related to this rulemaking.

16 NYCRR §255.3(a)(10) - Definition of "Covered Task"

NGA provided clarifying language for the definition of "covered task" and supported the removal of the word "facility" in "pipeline facility." Several other commenters agreed with the removal of the word "facility." NGA considers the words "pipeline facility" overly broad in its interpretation when compared with that of "pipeline" which limits the scope of a covered task to activities performed on a pipeline.

The federal equivalent language, contained in Title 49 of the Code of Federal Regulations (49 CFR) §192.801(b)(1), includes the word "facility" in the definition of covered task. The Commission's goal is to address the nuances with specific types of activities while at the same time not being less stringent than the equivalent federal language. Thus, the Commission is maintaining the existing language of "pipeline facility" and provides the following clarification.

The intent of the language contained in the definition of "covered task" is to include construction tasks, in addition to operations, maintenance, and pre-fabrication tasks, or functions performed on a pipeline facility connected to a pipeline system. Construction, operations, maintenance, and security activities performed on associated facility assets, not connected to the pipeline, including but not limited to,

ancillary equipment not relied upon to assure or maintain pipeline integrity, building and/or support structures and systems, and right-of-way (ROW) maintenance, are not included within the scope of this definition.

16 NYCRR §255.3(a)(16) - Definition of "Evaluation"

NGA provided clarifying language for the definition of "evaluation" and commented on the use of a single combined oral- and performance-based evaluation which includes answering questions about, and demonstration of, the task.

The Commission agrees, conceptually, with the comments and provides the following clarification. 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-based evaluations. Simulations may include, but are not limited to, replication of a process within a training and/or operating center, computer simulation including photographs or virtual reality, or other simulated settings as defined by the operator.

16 NYCRR §255.3(a)(45) - Definition of "Qualified"

NGA was concerned that the language may unintentionally expand the scope of OQ in requiring individuals to be qualified in reacting to AOCs for tasks that they have yet to be trained and qualified for; the introduction of the word "technical" may unintentionally expand the scope of OQ to include the theoretical basis for operating practices and procedures; and the intent was to include field environmental conditions and not to demonstrate performance of the task in different environmental conditions.

The Commission agrees, conceptually, with the comments and has made the appropriate revisions. Also, the Commission

provides the following clarification. It is not the intent to include AOCs for all covered tasks, but rather for those associated with the work the individual is, or may be, performing. Qualified individuals should know enough about the equipment to understand its maintenance requirements, whether it is functioning properly, and what should be done as a corrective action. Additionally, qualified individuals should understand the calibration of the equipment selected, including the required timeframes for recalibration.

16 NYCRR §255.604(a)(3)

NGA stated that it understands the importance of adding the word "performance" in "performance evaluation," however, believes this addition is in conflict with the definition of "evaluation." This word could be misconstrued in that qualification for each covered task must include observation during performance on the job and would therefore disallow the option for simulations. NGA also expressed concern with delaying performance examinations 48 hours. Additionally, NGA seeks to include basic competency requirements for a particular covered task as an AOC for that task. Finally, NGA argued that an individual can possess the requisite knowledge and experience to be considered an "evaluator" but not able to formally be qualified to perform the task on the operator's system. Examples of a competent or qualified "evaluator" would include those individuals who are no longer physically capable of performing a covered task, third-party subject matter experts, and professional third-party evaluators.

Both Con Edison and ORU expressed similar concerns with delaying performance examinations 48 hours, and with not providing a passing grade on an evaluation to those individuals who incorrectly answered questions related to AOCs.

Based on the comments provided, the Commission agrees with removing the word "performance" and removing the phrase "and shall be evaluated by individuals qualified to perform that task on the operator's system". The Commission notes, however, that it is the operator's responsibility to ensure that an evaluator is competent, and the operator must document the process used to ensure competency.

With regard to delaying performance examinations 48 hours, the Commission is concerned that an individual's ability to replicate a task shortly after the task has been demonstrated to the individual does not demonstrate knowledge and skill retention. Similar to the Commission's concerns that written examinations test knowledge retention, not just short-term memory, the competency of an individual needs to be evaluated regardless of whether the evaluation is written, oral, or practical. Thus, the Commission is maintaining the proposed language. This language does not preclude individuals from practicing skills learned during formal training at any time between the training and the examination.

The Commission reiterates that operators shall adhere to the definition of an AOC when identifying AOCs and shall continue to monitor for other substandard conditions. The importance and associated risk with failure to identify and react to AOCs are critical to ensuring the safety of pipeline facilities.

16 NYCRR §255.604(a) (6) and §255.604(a) (7)

NGA agrees with the intent of these provisions, that an individual's qualifications be suspended or disqualified if there are indications that the individual failed to perform a covered task correctly, which contributed to an incident or other significant event, or if that individual is no longer

qualified to perform the covered task. However, NGA does not agree that the individual should be immediately disqualified, and then evaluated. NGA posits that an example where disqualification would not be the appropriate first course of action is a flaw or omission with a procedure, process, or training. Thus, NGA recommends replacing the phrase "has reason to believe" with the word "determines" in both 16 NYCRR §255.604(a)(6) and §255.604(a)(7). National Grid, Con Edison, and ORU voiced similar concerns to that of NGA.

The federally equivalent language contained in 49 CFR §192.805(d) and §192.805(e) includes the phrase "has reason to believe". The intent of this language is for an operator to have a written OQ program that includes a mechanism for evaluating an individual. Any disqualification, or further evaluation prior to disqualification, would be solely based on the operator's OQ program. This includes, but is not limited to, suspension of an individual's qualifications until such time that an operator had determined said individual is either still qualified or no longer qualified to perform a covered task. Thus, the Commission is maintaining the existing phrase of "has reason to believe" in these paragraphs.

16 NYCRR §255.604(a)(11)

NGA requested that paragraph 16 NYCRR §255.604(a)(11) be relocated to follow paragraph 16 NYCRR §255.604(a)(8). NGA explained that this would aid in the organization of this subdivision and the logical progression with the MOC process. The Commission agrees with relocating paragraph 16 NYCRR §255.604(a)(11) to follow paragraph 16 NYCRR §255.604(a)(8) and has made the appropriate revisions.

16 NYCRR §255.604(a) (13)

NGA supported the intent of this paragraph in that mutual aid personnel should be qualified in the tasks they perform and competent to perform the tasks in accordance with the operator's OQ program. NGA further provided clarifying language for the paragraph.

NGA's proposed language may imply that the Commission will act on its own volition to suspend any of the requirements specified in the section. The Commission has made the appropriate revisions to provide for operators petitioning the Commission, rather than the Commission acting on its own volition, to suspend any of the requirements and is providing the following clarification. The intent of the language is for operators to proactively establish a process that allows for the use of outside OQ resources including the verification of qualifications and training on operator-specific tasks.

16 NYCRR §255.604(b) (1) (vii)

NGA, Con Edison, and ORU agree with the intent of this subparagraph in that the requirements be implemented on a going forward basis and that the specific types of records, such as affidavits or attestations, be sufficient provided the individual has demonstrated the knowledge, skills, and ability, that would result from completion of such training as defined by and operator's OQ program.

The Commission agrees with the clarification provided by NGA, Con Edison, and ORU. In addition, the operator is responsible for maintaining training and OQ records regardless of their specific locations, provided they are readily available upon request.

16 NYCRR §255.604(b)(2)(i)

NGA, Con Edison, ORU, and National Grid agree with the intent of this subparagraph in that the requirements be implemented on a going forward basis as defined by an operators OQ program including, but not limited to, 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 are documented and recorded. The Commission agrees with the clarification provided by NGA, Con Edison, ORU, and National Grid.

16 NYCRR §255.604(c)

NGA supports the intent of the proposed regulations with the goal of maximizing competency of the workforce while minimizing unintended negative consequences introduced by human factors in day-to-day operations. NGA further discussed the scope of work and approximate time required to bring OQ programs into compliance with the revised regulations. Central Hudson voiced similar concerns in that several software programs would need to be updated or further integration developed to meet the tracking requirements prescribed.

On April 1, 2023, operators shall have a written OQ program consistent with the revised regulations. This provides operators with approximately 12 months to incorporate the revised regulations into their written OQ programs. For the implementation and training of personnel, the Commission agrees, conceptually, that additional time may be required. However, each operator shall clearly define the time required for each phase of implementation or training of personnel within their specific OQ program. Also, the intent is for individuals who are already qualified for a covered task to remain qualified

until such time those qualifications expire or unless otherwise stipulated by the operator, at which point re-qualification will follow the revised OQ program.

16 NYCRR §255.604(e) (3) (i)

Con Edison and ORU expressed concern that clauses 16 NYCRR §255.604(e) (3) (i) (a) through §255.604(e) (3) (i) (m) may imply that a real-time analysis be conducted whenever one of the deficiencies occurred. Con Edison and ORU referenced paragraph 16 NYCRR §255.604(e) (1), which requires operators to conduct program effectiveness reviews once every two years, and further sought clarity regarding the analysis timeframes.

The Commission provides the following clarification. Subparagraph 16 NYCRR §255.604(e) (3) (i) does not imply that a real-time analysis be performed when one of the deficiencies occur. The effectiveness measures shall be developed by the operator and be in compliance with paragraph 16 NYCRR §255.604(e) (1); meaning reviewed once every two calendar years not to exceed 27 months.

16 NYCRR §255.604(e) (4)

NGA, Con Edison, and ORU, stated their concern that, by including performance deficiencies with subdivision 16 NYCRR §255.604(e), it would conflict with the periodic effectiveness reviews of an operator's OQ program. Based on this concern, NGA, Con Edison, and ORU requested that paragraph 16 NYCRR §255.604(e) (4) be relocated to §255.604(a) (6).

The Commission disagrees with the commenters' position. Indeed, performance deficiencies should be included as an element of periodic reviews for effectiveness of an OQ program. Thus, the Commission is maintaining the existing language.

16 NYCRR §255.604(f)

NGA requested that the words "task" and "certifying" be replaced with "functions" and "establishing competency," respectively. NGA explained that engineering involves the application of a variety of design concepts and the strategic integration of these concepts and theory as they relate 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 subject matter experts. NGA proposed these revisions to better reflect the concept of engineering competency development and validation. The Commission agrees with the clarification and has made the appropriate revisions.

Other Comments

Several, if not most, of the commenters sought clarity regarding cost recovery mechanisms and deferral treatment for incremental investments related to implementation of the revised OQ program regulations.

Pursuant to 16 NYCRR §255.604(c), on April 1, 2023, operators shall have a written OQ program consistent with the revised regulations. Thus, it is imperative for operators to implement the required changes, as discussed above, in an expeditious manner to ensure that the implementation and training of personnel, as defined by the operators OQ programs, is not delayed. Any incremental costs may be deferred pursuant to the terms of the individual utility's rate plan.

CONCLUSION

The views of all stakeholders have been taken into consideration in developing the attached regulations. Overall, our concern has been the continued safety of New Yorkers. The accompanying resolution and the resulting regulations, as set forth in the accompanying resolution, are adopted.

By the Commission,

(SIGNED)

MICHELLE L. PHILLIPS
Secretary

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

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Commission held in the City of
Albany on March 16, 2022

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the Public Service Commission, contained in 16
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Utilities, Subchapter C, Safety, Part 255,
Transmission and Distribution of Gas, to
Improve Operator Qualification Programs.

RESOLUTION BY THE COMMISSION

(Issued and Effective March 18, 2022)

Statutory Authority Public Service Law Section 66

BY THE COMMISSION:

RESOLVED:

1. That the provisions of Section 202(1) of the State
Administrative Procedure Act and Section 101-a (2) of
the Executive Law having been complied with, Title 16
of the Official Compilation of Codes, Rules and
Regulations of the State of New York is amended,
effective upon publication of a Notice of Adoption in
the State Register, by revising Chapter III, Gas
Utilities, Subchapter C, Safety, Part 255,

Transmission and Distribution of Gas, by amending Section 255.604, by amending Subdivisions 255.13(c), 255.481(a), 255.604(a), 255.604(b), 255.604(c), 255.604(d), 255.604(e), and 255.604(f), by deleting Subdivision 255.604(g), by amending existing definitions in Paragraphs 255.3(a)(10), 255.3(a)(16), and 255.3(a)(45), and by adding new definitions in Paragraphs 255.3(a)(17), and 255.3(a)(51), to read as follows (underscoring indicates new material, bracketing indicates deletions):

CHAPTER III GAS UTILITIES

SUBCHAPTER C, SAFETY

PART 255

TRANSMISSION AND DISTRIBUTION OF GAS

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.

...

(16) Evaluation means a process, established and documented by the operator, to determine an individual's ability to correctly perform a covered task by [any of]the following:[written examination; oral examination; work performance history review; observation during:]

(i) written or oral examination[performance on the job]; and

(ii) observation during performance on the job or during simulations[on the job training;]_.

[(iii) simulations or other forms of assessment.]

(17) Evaluator means the person who performs an evaluation.

(18[17]) ...

(19[18]) ...

(20[19]) ...

(21[20]) ...

(22[21]) ...

(23[22]) ...

(24[23]) ...

(25[24]) ...

(26[25]) ...

(27[26]) ...

(28[27]) ...

(29[28]) ...

(30[29]) ...

(31[30]) ...

(32[31]) ...

(33[32]) ...

(34[33]) ...

(35[34]) ...

(36[35]) ...

(37[36]) ...

(38[37]) ...

(39[38]) ...

(40[39]) ...

(41[40]) ...

(42[41]) ...

(43[42]) ...

(44[43]) ...

(45[44]) Qualified means that an individual has completed
an[been] evaluation[ed] and can correctly:

(i) perform the[assigned] covered task[s];[and]

(ii) recognize and react to abnormal operating
conditions specific to any covered task that may be
encountered while performing the covered task;[.]

(iii) demonstrate the knowledge required to perform
the covered task, such as: selection, maintenance
requirements, calibration requirements and proper
operation of equipment, including variations that may
be encountered in the performance of the covered task
due to equipment, environmental conditions, and
context differences;

(iv) demonstrate the skills required to perform the
covered task including variations required in the
performance of the covered task due to equipment or
new operation differences or changes or both; and

(v) demonstrate the physical abilities required to
perform the specific covered task.

(46[45]) ...

(47[46]) ...

(48[47]) ...

(49[48]) ...

(50[49]) ...

(51) Span of Control means the ratio of nonqualified to qualified individuals whereby the nonqualified individual(s) may be directed and observed by a qualified individual when performing a single covered task without impeding the ability of the qualified individual to effectively respond to errors or abnormal operating conditions that may occur during the performance of the task by the non-qualified individuals.

(52[50]) ...

(53[51]) ...

(54[52]) ...

(55[53]) ...

(56[54]) ...

(57[55]) ...

(58[56]) ...

(59[57]) ...

(60[58]) ...

255.13 - General

(c) [Waiver]Special Permit. If a special permit[waiver of] or deviation from the specific application of any rules prescribed in this Part is warranted[indicated] because of special facts, application may be made to the Public Service Commission for [waiver of]a special permit for deviation from the rules and regulations as written in this Part. Each request shall include a full and comprehensive justification for such requested [waiver]special permit[or deviation], together with a proposed alternate rule to be considered for application to the conditions requiring the special permit[waiver or deviation].

§255.481 Atmospheric corrosion control: monitoring.

(a) Each operator must inspect each pipeline or portion of pipeline that is exposed to the atmosphere for evidence of atmospheric corrosion, as follows:

If the pipeline is located:	Then the frequency of inspection is:
<u>Onshore Other than a Service Line</u>	At least once every 3 calendar years, but with intervals not exceeding 39 months.
<u>Onshore Service Line</u>	<u>At least once every 5 calendar years, but within intervals not exceeding 63 months</u>
Offshore	At least once each calendar year, but with intervals not exceeding 15 months

255.604 - [Operator]Qualification[s] of Pipeline Personnel

This section prescribes the minimum requirements for operator qualification and requalification of operator employees and

contractor workers who[individuals] perform[ing] covered tasks on a pipeline facility.

(a) Each operator shall have and follow a written qualification program. The program shall include provisions [to]that:

(1) Identify covered tasks and abnormal operating conditions on the operator's system with sufficient specificity to that system;

(2) Detail the training requirements, including the minimum training needed per covered task, to ensure that each individual performing a covered task is provided the knowledge and skills to be qualified and requalified, when necessary, prior to the individual performing the covered task. Training shall include hands-on learning or simulations unless an effective alternative has been documented and justified;

[(2)](3) Ensure through evaluation that each individual[s] performing a covered task has gained the knowledge and skills needed [are qualified] to perform the covered task in accordance with 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:

(i) Review of work performance history is not used as a sole evaluation method;

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

(iii) Written tests to confirm knowledge of elements of covered tasks and abnormal operating conditions are given in a secure location under secure procedures;

(iv) A passing grade on an evaluation shall not be awarded if the individual incorrectly answered any question about an abnormal operating condition; and

(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;

(4) Includes operator evaluations or third-party evaluations. Operators retain full responsibility for testing or evaluation performed by a third-party. Any such third-party evaluation process offered to qualify individuals for any operator shall comply with this subpart;

[(3)](5) Allows individuals [that]who are not qualified pursuant to this section to perform a covered task if directed and observed by a[n] qualified individual within the limitations of the span of control for the particular task[that is qualified], as long as the individual observing completion of the task is qualified for that task according to the operator's procedures and on the type of equipment used by the operator for the task;

[(4)](6) Evaluates an individual's qualifications, 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;

[(5)](7) Evaluates an individual's qualifications, if the operator has reason to believe that the individual is no longer qualified to perform a covered task;

[(6)](8) Establishes and maintains a Management of Change program that will address and [C]communicate significant changes in procedures, specifications, tools, materials of construction, and technology, that affect covered tasks to individuals performing or within the span of control for those covered tasks;

(i) The operator shall determine what constitutes a significant change;

(ii) The operator shall determine whether, and which, changes require suspension of operator qualification and requalification due to the change;

(iii) The operator shall determine what supplemental training is required for individuals when such significant changes affect the covered task;

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

[(7)](10) Identifies[y] all[those] covered tasks and the intervals at which reevaluation of each[the] individual's qualifications are[is] needed for each covered task;

[(8)](11) [after December 16, 2004, p]Provide training[, as appropriate] to ensure that any individual[s] performing covered tasks has[ve] the necessary knowledge, [and] skills, and abilities to perform the tasks in a manner that ensures the safe operation of pipeline facilities; [and]

(12) Establishes the requirements to be an Evaluator, including the necessary training;

(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, operators may petition the Commission to suspend any of the requirements specified in this Section;

(14) Measures the program's effectiveness consistent with §255.604(c)(4);

(15) Identifies a process for determining when a unique evaluation is required based on the characteristics of the equipment or process being performed; and

[(9) After December 16, 2004,] (16) P[p]rovides notification to the Department if the operator significantly modifies the program after the Department has verified that it complies with this section. Such notification shall be made to U.S. Department of Transportation in accordance with 49 CFR § 192.805(i).

(b) Each operator shall maintain records that demonstrate compliance with this section.

(1) Individual Qualification records shall include, at a minimum:

(i) Identification of each qualified individual[s];

(ii) Identification of the covered tasks the individual is qualified to perform;

(iii) Date(s) of current qualifications; [and]

(iv) Qualification method(s);

(v) Evaluation of ability to recognize and react to abnormal operating conditions, whether task-specific or non-task-specific, that could occur anywhere on an operator's system;

(vi) Name of the evaluator and date of evaluation; and

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

(2) Program [R]records detailing[supporting an] each individual's current qualification shall be maintained while the individual is performing a[the] covered task for the operator.

(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.

(ii) Records of prior qualification and records of individuals no longer performing covered tasks shall be retained for a period of five years.

(c) Operators shall have a written qualification program consistent with the requirements herein and in effect by [April 27, 2001]April 1, 2023. Program records must include:

[(d) Operators must complete the qualification of individuals performing covered tasks by October 28, 2002.

(e) Work performance history may be used as a sole evaluation method for individuals who were performing a covered task prior to August 27, 1999.

(f) After October 28, 2002, work performance history may not be used as a sole evaluation method.

(g) After December 16, 2004, observation of on-the-job performance may not be used as the sole method of evaluation.]

(1) Program effectiveness assessments;

(2) Program changes;

(3) List of abnormal operating conditions;

(4) Program management notice of change notifications;

(5) Covered task list, including all task-specific and non-task-specific abnormal operating conditions;

(6) Span of control ratios for all covered tasks;

(7) Re-evaluation intervals for all covered tasks; and

(8) Criteria used for selecting, training, and authorizing evaluators.

(d) Retention Periods.

(1) Operator shall maintain qualification records of individuals who have performed covered tasks. Records supporting an individual's current qualification must be retained while the individual is performing the covered task. Records of prior qualification and records of individuals no longer performing covered tasks must be retained for five years.

(2) Program records. An operator must maintain records required by paragraph (c) of subsection (2) for five years.

(e) Program Effectiveness. Operator Qualification programs shall include a written process to measure the program's effectiveness. An effective program minimizes human error caused by an individual's lack of knowledge, skills, and abilities (KSAs) to perform covered tasks.

(1) An operator must conduct the program effectiveness review within 36 months of the effective date of this rule and at least every 24 months, not to exceed 27 months thereafter.

(2) Process. The process to measure program effectiveness must:

(i) Assess if the qualification program is being implemented and executed as written; and

(ii) Establish an efficient process to amend the program to include any changes necessary to address the findings of the program effectiveness review.

(3) Measures. The operator shall develop program measures to determine the effectiveness of the qualification program. The operator must, at a minimum, consider the following measures to evaluate the effectiveness of the program.

(1) Number of occurrences caused by each individual whose performance of a covered task(s) adversely affected the safety or integrity of the pipeline due to any of the following deficiencies:

(a) Evaluation was not conducted properly;

(b) KSAs used to assign qualification for the specific covered task(s) were not adequate;

(c) Training was not adequate for the specific covered task(s);

(d) Change made to a covered task or the KSAs was not adequately evaluated;

(e) Change to a covered task(s) or the KSAs was not adequately communicated;

(f) Individual failed to recognize an abnormal operating condition, whether it is task-specific or non-task specific, which occurred anywhere on the system;

(g) Individual failed to take the appropriate action following the recognition of an abnormal operating condition (task-specific or non-task specific) that occurred anywhere on the system;

(h) Individual who failed to perform a covered task properly was not operator qualified;

(i) Nonqualified individual was not being directed and observed by a qualified individual;

(j) Individual did not follow approved procedures and/or use approved equipment;

(k) Span of control was not followed;

(l) Evaluator or training did not follow program or meet program requirements; or

(m) A qualified individual was directing and observing more unqualified individuals than circumstances showed was safe for the given covered task (that is, specified span of control turned out to be too large).

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

(f) Engineering Functions. The operator shall determine 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 establishing competency of personnel performing these
higher risk engineering functions.