

May 21, 2021

Robert Burrough
Director, Eastern Region
Pipeline and Hazardous Materials Safety Administration
840 Bear Tavern Road, Suite 300
West Trenton, NJ 08628

RE: CPF 1-2021-019-NOA

Dear Mr. Burrough:

This letter is a formal response by Eastern Gas Transmission and Storage, Inc. (EGTS) to the following alleged inadequacies found within EGTS' plans or procedures that were identified in Notice of Amendment CPF 1-2021-019-NOA, dated April 23, 2021. In response to Notice of Amendment CPF 1-2021-019-NOA, EGTS revised its Operator Qualification Plan and Short Pipe Direct Examination Procedures for Internal Corrosion to address the alleged inadequacies.

1. § 192.805 Qualification program.

Each operator shall have and follow a written qualification program. The program shall include provisions to:

(a) Identify covered tasks; ...

EGTSI's written qualification program was inadequate because it did not identify a specific covered task. Specifically, EGTSI's *D.O.T. Operator Qualification Compliance Plan, Revision*

*Date: 12/11/18*¹ (OQ Compliance Plan) did not contain a covered task that involved an individual using digital radiography to detect internal corrosion as an integral part of its short pipe assessment outlined in its integrity management program.

During the inspection, a PHMSA inspector reviewed EGTSI's written process for direct assessment that involved using digital radiography, a method of nondestructive testing, to detect internal corrosion on a covered segment which was titled, *Short Pipe Direct Examination for Internal Corrosion, Revision Date: 02/07/2012* (Short Pipe). Pursuant to Short Pipe Subsection 5.8 Radiographic Methods, digital radiography may be used to detect internal corrosion on the pipe segment. EGTSI (at the time Dominion) later

¹ The document provided to PHMSA contained a revision date of 12/11/18, but EGTSI clarified during and after the inspection that the actual revision date of the version reviewed was 12/31/19.

explained via e-mail that digital radiography can be used as a screening mechanism to inspect for internal corrosion during short pipe assessments, and if the digital radiography detects internal corrosion then ultrasonic thickness testing must be used to measure the depth of internal corrosion.

At prior inspections, EGTSI identified short pipe segments that were in high consequence areas and which had internal corrosion as a threat to its pipeline integrity. Hence, EGTSI included these short pipe segments in its integrity management program. EGTSI explained that it had an individual use digital radiography to inspect its pipe for internal corrosion during a short pipe direct assessment. The following records revealed an individual had performed a nondestructive test using digital radiography inspection:

1. Direct Examination Data Collection Form, LN-30, Dated 6/26/14
Section B. Integrity Dig Site Inspection Report
(4) NDT and Inspection Results
Method of inspection: Computerized Radiography
• Non-Destructive Examination Report dated 07/01/2014
2. Direct Examination Data Collection Form, TL 469 BR2, Dated 4/13/15
Section B. Integrity Dig Site Inspection Report
(4) NDT and Inspection Results
Method of inspection: Blank
• Non-Destructive Examination Report dated 04/14/2015

The PHMSA inspector requested EGTSI to provide Operator Qualification (OQ) records for those individuals who conducted or observed the digital radiography inspection. EGTSI stated that it did not consider digital radiography to be a covered task and had no OQ records that included digital radiography for those individuals. Consequently, EGTSI had not identified a covered task that included digital radiography.

The PHMSA inspector requested EGTSI to provide an analysis of the work activities which included using digital radiography to detect corrosion on its pipeline during a direct assessment

under integrity management. EGTSI responded that its corrosion team determined that using digital radiography did not meet the four-part test. Subsequently, the PHMSA inspector requested EGTSI to provide documentation to show its corrosion control team or other individual(s) decision to not include digital radiography as a covered task or part of a covered task in the OQ Compliance Plan. In response, EGTSI merely stated that it does not consider digital radiography to be a covered task. Nonetheless, EGTSI decided to utilize digital radiography as an integral part of its direct assessment for internal corrosion.

As defined in § 192.801(b), a covered task is an activity that:

- (1) is performed on a pipeline facility: based on the information provided by EGTSI, yes, an individual performed an activity of digital radiography on a pipeline facility;

(2) is an operations or maintenance task: based on the information provided by EGTSI, yes, an individual performed this activity during pipeline operation and maintenance task to detect internal corrosion under integrity management;

(3) is performed as a requirement of Part 192: based on the information provided by EGTSI, yes, this activity was conducted in accordance with requirements of Subpart O; and

(4) affects the operation or integrity of the pipeline: based on the information provided by EGTSI, if this activity was performed inadequately it would create incorrect results which would affect the operation or integrity of the pipeline. For instance, an inaccurate image or misinterpretation of an image of internal corrosion would prevent further assessment to be complete for it is used as a screening mechanism.

Thus EGTSI's use of digital radiography inspection is a covered task.

Therefore, EGTSI's written qualification program was inadequate because it did not identify a specific covered task in accordance with § 192.805(a). EGTSI must amend its OQ Compliance Program to include digital radiography inspection.

EGTS Response:

EGTS has revised the Operator Qualification Plan to accept ASNT certification for NDT: Digital Radiography for Corrosion Screening. The NDT: Digital Radiography for Corrosion Screening covered task has been added to Appendix 2. The task specific AOC's are delivered via ITS. The revised plan is being submitted with this response.

5.3.2 Identifying Covered Tasks

The Company has adopted the applicable tasks associated with the ITS Enhanced Series documented in Appendix 1. Welding tasks are specified in the API 1104 Welding of Pipelines and Related Facilities. Additionally, NDT: Digital Radiography for Corrosion Screening has been added as a task. Any new tasks added will be reviewed by SMEs to determine applicability as a covered based on the following criteria:

- Is performed on a pipeline facility
- Is an operations or maintenance task
- Is performed as a requirement of this part; and
- Affects the operation or integrity of the pipeline

If all questions are answered in the affirmative, the task is identified as a covered task. If the SMEs do not believe it is a covered task, the task and the rationale for not including it in the covered task list will be documented.

2. § 192.805 Qualification program.

Each operator shall have and follow a written qualification program. The program shall include provisions to:

(a) Identify covered tasks; ...

EGTSI's written qualification program was inadequate. Specifically, EGTSI's OQ Compliance Plan failed to include certain procedures and documents that EGTSI actively uses as part of their OQ program.

During the inspection, EGTSI presented a form to PHMSA entitled "Operator Qualification Task: New/Revise/Retire", revision date January 8, 2020 (Form). EGTSI indicated that this 6-page form is used to document new, revised, or retired covered tasks. Neither the Form nor any guidance for its use were included in EGTSI's OQ Compliance Plan.

Therefore, EGTSI's OQ Compliance Plan was inadequate. EGTSI must revise its OQ Compliance Plan to include its Form and details on the process followed for its use.

EGTS Response:

The form titled "Operator Qualification Task: New/Revise/Retire" was eliminated following the inspection and therefore was not included in the Operator Qualification Plan. The Operator Qualification Plan was revised following the inspection to better describe the process for identifying covered tasks. This revision was included in the Operator Qualification Plan that is currently on file with PHMSA and will also be in the updated plan being submitted to PHMSA on 5/21/2021. The following are pertinent excerpts:

4.2 Identification of Covered Tasks

The Company has contracted with Industrial Training Services (ITS) to manage employee and contractor qualifications in the ITS Onboard system. In addition to the task list specified in ASME B31Q – 2018, ITS has identified additional covered tasks. This task list is known as the ITS Enhanced Series. The Company utilized subject matter experts (SMEs) to review the task list to determine which tasks were applicable to the work being performed. The results of the SME review are documented in Appendixes 1, 2, and 3.

5.2 Process for Determining Covered Tasks

Company developed the covered task list through a combination of:

- SME covered task identification.
- ASME B31.Q - 2018 Nonmandatory Appendix A task list.

5.3.2 Identifying Covered Tasks

The Company has adopted the applicable tasks associated with the ITS Enhanced Series documented in Appendix 1. Welding tasks are specified in the API 1104 Welding of Pipelines and Related Facilities. Additionally, NDT: Digital Radiography for Corrosion Screening has been added as a task. Any new tasks added will be reviewed by SMEs to determine applicability as a covered based on the following criteria:

- Is performed on a pipeline facility
- Is an operations or maintenance task
- Is performed as a requirement of this part; and
- Affects the operation or integrity of the pipeline

If all questions are answered in the affirmative, the task is identified as a covered task. If the SMEs do not believe it is a covered task, the task and the rationale for not including it in the covered task list will be documented.

3. § 192.805 Qualification program.

Each operator shall have and follow a written qualification program. The program shall include provisions to:

- (a) ...
- (b) **Ensure through evaluation that individuals performing covered tasks are qualified; ...**

EGTSI's written qualification program was inadequate. Specifically, EGTSI's OQ Compliance Plan did not contain evaluation methods for a covered task. In addition, EGTSI's OQ Compliance Plan did not contain a detailed, written evaluation method process for qualifying an individual to perform a covered task.

The following deficiencies were noted during the inspection:

1. On February 27, 2020, EGTSI presented a document titled *DTI Qualification and Requalification Methods as of 11/14/2019* (OQ Methods) which listed its evaluation method(s) for qualifying an individual to perform a covered task. This document was not referenced in its OQ Compliance Plan. EGTSI had no other document to demonstrate it determined the evaluation method(s) for each covered task. Consequently, EGTSI's OQ Compliance Plan did not include evaluation method(s) for each covered task for initial qualification and subsequent qualification.
2. EGTSI's OQ Compliance Plan, Section 4, *Evaluation of Qualifications* indicated that an individual may be evaluated by observation during on the job performance only. However, this is not consistent with § 192.809(e) which states that an observation of on-the-job performance may not be used as the sole method of evaluation after December 16, 2004. EGTSI did not

produce a written process that prohibited the use of observation of on-the-job performance as a sole evaluation method.

3. EGTSI's OQ Compliance Plan did not have an evaluation criteria to ensure an individual is qualified to perform a covered task. Pursuant to § 192.803, "qualified" means individuals can (a) perform the assigned covered tasks; and (b) recognize and react to abnormal operating conditions (AOCs). Therefore, an evaluation must ensure that an individual possesses knowledge, skills, and abilities to perform the assigned covered task and to recognize and react to AOCs.

For example, both EGTSI's *SOP 390/01 Valve Inspection and Maintenance / Transmission, Storage, and Jurisdictional Gathering Pipelines*, Revision Date: 08/01/2019 and *OQ-071-GL Inspecting Maintaining & Lubricating*, Revision Date: 08/29/2014 (OQ-071-GL) stated that an individual must operate a valve. However, EGTSI's OQ Compliance Plan did not contain the evaluation method(s) used to assess an individual's abilities to properly perform the covered task. Based on EGTSI's OQ Methods for covered task OQ-071-GL, initial qualification methods would be either a class or hands-on OQ or a learning management system (LMS)², and the requalification method was only LMS. Thus, EGTSI's OQ Compliance Plan and OQ Methods allows an individual to take an initial on-line test in LMS and a subsequent on-line test only. The LMS and on-line test would not be able to ascertain an individual's ability to operate a manual valve. Consequently, as written, an individual would not be assessed for their physical ability to perform that covered task.

In addition, EGTSI's on-line test for covered task OQ-071-GL did not contain an evaluation to determine whether an individual can recognize and react to specific AOCs that may occur when performing that covered task. EGTSI's on-line test did not cover AOCs for inspecting, maintaining, and lubricating valve. Consequently, an individual will not be evaluated for task specific AOCs if an on-line test is taken.

4. EGTSI stated that an individual can take the online test anywhere and anytime on their company's laptop. However, EGTSI did not have a written process to ensure no one other than the individual to be qualified is taking the test or no other individual provides the answers to the individual to be qualified while taking the test.

Therefore, EGTSI's OQ Compliance Plan failed to include provisions that ensure through evaluation that individuals performing covered tasks are qualified as prescribed in § 192.805(b). As such, EGTSI must amend its OQ Compliance Plan to include evaluation method(s) for each covered task for initial qualification and subsequent qualification. Also, EGTSI's OQ Compliance Plan must ensure no individual can be evaluated solely by "observation during performance on the job." In addition, EGTSI's OQ Compliance Plan must have an evaluation criteria to ensure an individual performing a covered task is qualified. Furthermore, EGTSI's OQ Compliance Plan must ensure each covered task evaluation method includes an evaluation on task specific AOCs, and have a process to ensure individuals will be the only one taking the on-line test.

² LMS is a computer-based operating system used for training functions.

EGTS Response:

1. The Operator Qualification Plan was revised following the inspection and but prior to receiving the NOA, to document the initial and requalification methods for each covered task in Appendix 1 (ASME B31Q Tasks) and Appendix 2 (Additional Tasks). This revision was included in the Operator Qualification Plan currently on file with PHMSA and will be in the updated plan that is being submitted to PHMSA on 5/21/2021. The following are pertinent excerpts:

8.1.2 Initial Qualification and Methods of Evaluation

Individuals must be evaluated and determined to be qualified prior to performing a covered task unless directed and observed by a qualified individual if allowed by span-of-control.

The approved method of evaluation for a covered task is specified in ASME B31Q under that covered task's section. Approved methods include:

- Written evaluations
- Oral evaluations
- Performance evaluations

8.2.3 Evaluation Method Selection

Evaluation methods are documented in Appendixes 1 and 2.

9.2.1 Initial Evaluation for Qualification

Evaluations for initial qualification must include a performance evaluation, unless a covered task has been determined to only require an individual's knowledge to correctly perform the task. Initial evaluation methods are documented in Appendixes 1 and 2.

9.2.2 Subsequent Evaluation for Qualification

The subsequent qualification must be completed within the specified qualification interval.

When the subsequent qualification requires evaluation for knowledge, skills, and abilities the individual is considered requalified upon completion of all the required evaluations.

Subsequent evaluation methods are documented in Appendixes 1 and 2.

13.3 Documenting Covered Tasks

Covered tasks are documented in Appendixes 1 and 2 which include:

- The list of covered tasks.
- The evaluation criteria for each covered task.
- The appropriate evaluation methods for each covered task.
- The subsequent qualification interval for each covered task.
- The span-of-control for each covered task.

2. The Operator Qualification Plan was revised following the inspection, but prior to receiving the NOA, to remove the statement that an individual may be evaluated solely by observation of on-the-job performance. This revision was included in the Operator Qualification Plan that is being submitted to PHMSA on 5/21/2021.

3. The Operator Qualification Plan was revised following the inspection, but prior to receiving the NOA, to specify that individuals are qualified for covered tasks based on evaluations of their knowledge, skills and physical abilities to perform the covered tasks and their ability to recognize and react to both general and covered task specific abnormal operating conditions. This revision was included in the Operator Qualification Plan that is being submitted to PHMSA on 5/21/2021. The following are pertinent excerpts:

8.1 Evaluation Process

This section establishes the requirements to evaluate individuals for the knowledge, skills, and abilities required to perform a covered task.

8.2.2 Evaluation Criteria

For each covered task, the evaluation criteria are documented in the ITS Onboard system. Evaluation criteria represent the knowledge, skills, and distinctive physical abilities an individual must possess and demonstrate to be considered qualified to perform the covered task.

9.2.1 Initial Evaluation for Qualification

Evaluations for initial qualification must include a performance evaluation unless a covered task has been determined to only require an individual's knowledge to correctly perform the task. An Individual may not be evaluated solely by observation of on the job performance. Initial evaluation methods are documented in Appendixes 1 and 2.

9.2.2 Subsequent Evaluation for Qualification

The subsequent qualification must be completed within the specified qualification interval.

When the subsequent qualification requires evaluation for knowledge, skills, and abilities the individual is considered requalified upon completion of all the required evaluations.

Subsequent evaluation methods are documented in Appendixes 1 and 2.

6 – ABNORMAL OPERATING CONDITIONS

The Company utilizes both general and task specific abnormal operating conditions (AOCs) as defined in ASME B31Q. Qualified Individuals performing a covered task shall maintain a current qualification in the general AOCs and shall be able to recognize and properly react to task specific AOCs that they might encounter during the performance of the covered task.

AOCs are included in training and testing materials to verify that individuals can recognize and react appropriately. Each AOC and associated reaction is reviewed and approved by SMEs familiar with that task.

4. The Operator Qualification Plan was revised following the inspection and but prior to receiving the NOA, to specify the following:

- Written evaluations are proctored by authorized proctors who are trained to protect the integrity of the written evaluation process.
- Prior to proctoring an exam associated with a written evaluation, the proctor must verify the identity of the individual taking the written examination.
- Performance evaluations are conducted by authorized evaluators who are trained in the subject matter being evaluated.
- Prior to conducting a performance evaluation, the evaluator must verify the identity of the individual performing the work.

This revision was included in the Operator Qualification Plan currently on file with PHMSA and will be in the updated plan that is being submitted to PHMSA on 5/21/2021. The following are pertinent excerpts:

8.1.1 Policies and Procedures

The Company has contracted with ITS to deliver online training, administer written evaluations and document performance evaluations for covered tasks for employees and contractors. Written evaluations are proctored by individuals trained to protect the integrity of the testing process. The associated exams are automatically scored by the ITS Onboard system and require an 80% passing score for successful completion. Trained and authorized evaluators conduct performance evaluations for tasks in their area of expertise. Performance evaluations require a 100% passing score for successful completion.

Oral evaluations are only used after a performance evaluation to test the individual's knowledge of the AOCs and proper reactions. ***Exception – There is a process in place so that a contractor evaluator can deliver a knowledge test verbally to a contractor employee if there is a language barrier that prevents the use of the ITS online test. These exceptions are documented with the specifics of each situation.*

Each employee and contractor has a unique ITS Onboard system credential. Prior to proctoring an exam associated with a written evaluation, the proctor must verify the identity of the individual taking the exam. Prior to conducting a performance evaluation, the evaluator must verify the identity of the individual performing the work.

The ITS Onboard system is designed to reduce the possibility of cheating through the use of trained proctors, requiring proctors to enter credentials to access written exams, and the use of qualified evaluators. Any report of cheating will be investigated. If confirmed that a written exam has been compromised, the Technical Training Department will notify ITS and the written will be removed from use and replaced by an alternate written exam.

If it is discovered that a proctor or evaluator is not filling their role as defined or is not acting with integrity, the individual's qualifications as a proctor and/or evaluator will be removed from the ITS Onboard system.

4. § 192.805 Qualification program.

Each operator shall have and follow a written qualification program. The program shall include provisions to:

- (a) ...**
- (b) Ensure through evaluation that individuals performing covered tasks are qualified; ...**

EGTSI's written qualification program was inadequate. Specifically, EGTSI's OQ Compliance Plan failed to include certain procedures and documents that EGTSI actively uses as part of their OQ program.

During the inspection, PHMSA reviewed and noted several individual's OQ qualification records indicating "equivalent" under the recorded "Qualification Method". EGTSI's OQ Compliance Plan did not include a process for using "equivalent" courses for granting OQ credit. EGTSI provided a spreadsheet reflecting which OQ courses are granted as equivalent credit for other OQ courses, but it is unclear how this is used as it is not included in their OQ Compliance Plan.

Therefore, EGTSI's OQ Compliance Plan were inadequate. EGTSI must revise its OQ Compliance Plan to include the list of "equivalent courses" and details of its process of granting qualifications using equivalent OQ credit.

EGTS Response:

The Operator Qualification Plan was revised following the inspection and but prior to receiving the NOA, to eliminate the use of equivalency credit for granting qualification for covered tasks. This revision was included in the Operator Qualification Plan currently on file with PHMSA and will be in the updated plan that is being submitted to PHMSA on 5/21/2021.

5. § 192.805 Qualification program.

Each operator shall have and follow a written qualification program. The program shall include provisions to:

- (a) ...**
- (c) Allow individuals that are not qualified pursuant to this subpart to perform a covered task if directed and observed by an individual that is qualified; ...**

EGTSI's written qualification program was inadequate because it failed to include provisions to allow individuals that are not qualified pursuant to this subpart to perform a covered task if directed and observed by an individual that is qualified. Specifically, EGTSI's OQ Compliance Plan did not define under what condition(s) a qualified person would direct and observe one or more unqualified persons.

EGTSI's OQ Compliance Plan, Section 5. Non-Qualified Individuals Performing Covered Tasks, referenced a document titled *OQ and IMP Tasks by Category*. The *OQ and IMP Tasks by Category as of 1/8/2020* listed a span of control ratio for each covered task. The PHMSA inspector requested EGTSI to produce its criteria in determining the number of qualified individual(s) to non-qualified individual(s) who can safely perform a covered task under their direction and observation (known as span of control). EGTSI stated that it did not establish criteria to determine the span of control. Thus, the written process for allowing unqualified individuals to perform covered tasks while being directed and observed by a qualified individual was inadequate.

Therefore, EGTSI's OQ Compliance Plan was inadequate for it failed to include adequate provisions for allowing individuals that are not qualified pursuant to this subpart to perform a covered task if directed and observed by an individual that is qualified in accordance with §

192.805(c). EGTSI must amend its OQ Compliance Plan to include more details on determining span of control.

EGTS Response:

The Operator Qualification Plan was revised following the inspection and but prior to receiving the NOA, to specify how the span-of-control ratios for covered tasks are determined. This revision was included in the Operator Qualification Plan currently on file with PHMSA and will be in the updated plan that is being submitted to PHMSA on 5/21/2021. The following are pertinent excerpts:

9.5.1 Span-of-Control Ratios for Direction and Observation

A span-of-control ratio indicates the number of nonqualified individuals who can perform a covered task under the direction and observation of a qualified individual. The Company's span-of-control ratios are documented in Appendixes 1 and 2.

9.5.2 Establishing Span-of-Control Ratios

The Company's span-of-control ratios are equal to or more restrictive than those included in ASME B31Q-2018. For tasks that are not included in ASME B31Q-2018, the span-of-control ratio is established by SME consensus with consideration to the following:

- Difficulty and importance of the tasks associated with the qualification.
- Difficulty associated with directing and observing the task performance.
- Task and jobsite factors that affect the ability of a qualified individual to direct or observe.

An assessment is not required if the ASME B31Q-2018 span-of-control ratio is adopted or is more restrictive; however, an assessment is required to establish a rational basis to increase the ASME B31Q-2018 span-of-control ratio.

6. § 192.805 Qualification program.

Each operator shall have and follow a written qualification program. The program shall include provisions to:

(a) ...

(g) Identify those covered tasks and the intervals at which evaluation of the individual's qualifications is needed; ...

EGTSI's written qualification program was inadequate because it failed to include a provision to identify those covered tasks and the intervals at which evaluation of an individual's qualifications is needed.

EGTSI's OQ Compliance Plan, Section 9, *Qualification Evaluation and Intervals* did not describe the number of times an individual can be re-evaluated before their qualification is revoked or a minimum timeframe for re-evaluation once an individual did not pass or complete an evaluation for a covered task. In addition, EGTSI's OQ Compliance Plan, Section 9 *Qualification Evaluation and Intervals* did not define when a qualification has expired. It mentioned that each of its covered tasks has a requalification interval and a grace period of three months, but it is unclear when the qualification has become invalid and re-evaluation of the individual's qualification is needed.

Therefore, EGTSI's OQ Compliance Plan was inadequate because it failed to include a provision to identify those covered tasks and its intervals at which evaluation of the individual's qualifications are needed in accordance with § 192.805(g). EGTSI must amend its OQ Compliance Plan to include more details on the its qualification process.

EGTS Response:

The Operator Qualification Plan was revised following the inspection and but prior to receiving the NOA, to specify the requirements of the remediation process if an individual fails a written, oral, or performance evaluation. This revision was included in the Operator Qualification Plan currently on file with PHMSA and will be in the updated plan that is being submitted to PHMSA on 5/21/2021. The following is a pertinent excerpt:

8.1.4 Remediation

In the event that an individual fails a written, oral, or performance evaluation, a remediation process must be followed.

- The individual must wait until at least until the next workday before being allowed to retake a written or oral exam.
- The individual is allowed two failures. Workflow attempts are shared between the written exam and the performance evaluation.
- In the event of a second failure, the individual is referred to the Technical Training Department and the individual's Supervisor to determine the appropriate course of action.

The Operator Qualification Plan has been revised to provide clarification in Section 9.6.2 that individuals will remain qualified for a covered task throughout the three-month grace period.

9.6.2 Development and Implementation

Subsequent qualification intervals have been established with a three-month grace period. An individual remains qualified throughout the grace period.

- One-year subsequent qualification intervals may be stated as one year not to exceed 15 months.
- Three years subsequent qualification interval may be stated as three years not to exceed 39 months.
- Five-year subsequent qualification intervals may be stated as five years not to exceed 63 months.

For tasks not included in ASME B21.Q-2018, the subsequent qualification intervals are established by SME consensus.

In the event a qualification lapses, the individual may not perform the covered task until re-qualified or permitted to do so under the direction and observation of a qualified individual if allowed by span-of-control.

7. § 192.805 Qualification program.

Each operator shall have and follow a written qualification program. The program shall include provisions to:

- (a) ...
- (h) **After December 16, 2004, provide training, as appropriate, to ensure that individuals performing covered tasks have the necessary knowledge and skills to perform the tasks in a manner that ensures the safe operation of pipeline facilities; and ...**

EGTSI's written qualification program was inadequate because it failed to fully address training requirements, as appropriate, to ensure that individual performing covered tasks have the necessary knowledge and skills to perform the tasks in a manner that ensures the safe operation of pipeline facilities.

EGTSI's OQ Compliance Plan vaguely mentioned training for individuals whose performance of a covered task was determined to have contributed to an incident or accident. The OQ Compliance Plan, Section 6, *Performance of a Covered Task Contributing to an Incident or Accident*, indicated that an evaluation would be done to determine whether an individual should receive training, but there was no additional information on method, content, or time frame. Thus, the written process to determine when training is "appropriate" was inadequate.

During this inspection, EGTSI stated that there were PowerPoint slides before the on-line test for covered tasks which provided training to individuals. This information was not included in EGTSI's OQ Compliance Plan. *DETI Qual and Requalification Methods, as of 11/14/2019* described that an individual can be evaluated using other methods beside on-line evaluation, in which case an individual would not be trained if he or she did not take an on-line evaluation. In

addition, EGTSI's OQ Compliance Program had no instructions on minimum passing grade or completion for training. Furthermore, EGTSI's OQ Compliance Plan did not define the requirements for initial training and new hires. Thus, the written process for providing training per § 192.805(h) lacked sufficient detail.

Therefore, EGTSI's OQ Program was inadequate for it failed to ensure that individual performing covered tasks have the necessary knowledge and skills to perform the tasks in a manner that ensures the safe operation of pipeline facilities in accordance with § 192.805(h). EGTSI must amend its OQ Compliance Plan to include more details on training requirements.

EGTS Response:

The Operator Qualification Plan was revised following the inspection and but prior to receiving the NOA, to specify the requirements for training. This revision was included in the Operator Qualification Plan currently on file with PHMSA and will be in the updated plan that is being submitted to PHMSA on 5/21/2021. The following are pertinent excerpts:

7.2.1 Determining Training Needs

In order to ensure consistency of training, the Company has determined that all employees and contractors will complete ITS Enhanced Training prior to qualification in the ITS Onboard system.

7.2.2 Situations for Considering Training

The need to train an individual should be considered for, but not limited to, situations where the individual:

- Requires qualification for a covered task not previously performed.
- Requires qualification for a covered task outside their knowledge and skills.
- Has had a qualification suspended, revoked or expired.
- Fails an evaluation for qualification.
- Requires new or different knowledge or skills to perform a covered task.
- Will utilize new equipment, tools, or procedures to perform a covered task.

The Operator Qualification Plan was revised following the inspection to specify the requirements for passing scores for exams associated with written evaluations and the requirements for passing scores for performance evaluations. This revision was included in the Operator Qualification Plan that is being submitted to PHMSA on 5/21/2021. The following is a pertinent excerpt:

8.1.1 Policies and Procedures

The Company has contracted with ITS to deliver online training, administer written evaluations and document performance evaluations for covered tasks for employees and contractors. Written evaluations are proctored by individuals trained to protect the integrity of the testing process. The associated exams are automatically scored by the ITS Onboard system and require an 80% passing score for successful completion. Trained and authorized evaluators conduct performance evaluations for tasks in their area of expertise. Performance evaluations require a 100% passing score for successful completion.

8. § 192.911 What are the elements of an integrity management program?

An operator's initial integrity management program begins with a framework (see § 192.907) and evolves into a more detailed and comprehensive integrity management program, as information is gained and incorporated into the program. An operator must make continual improvements to its program. The initial program framework and subsequent program must, at minimum, contain the following elements. (When indicated, refer to ASME/ANSI B31.8S (incorporated by reference, see § 192.7) for more detailed information on the listed element.)

(a) ...

(d) A direct assessment plan, if applicable, meeting the requirements of § 192.923, and depending on the threat assessed, of §§ 192.925, 192.927, or 192.929.

EGTSI's integrity management program was inadequate because it did not contain a detailed direct assessment plan in accordance with § 192.927. Specifically, EGTSI's *Integrity Management Program Gas Transmission Pipeline, Revision Date: 09/01/2014* (IMP) did not contain a detailed direct assessment plan addressing how digital radiography is employed when used to detect internal corrosion.

During the inspection, a PHMSA inspector reviewed EGTSI's written process for direct assessment that involved using digital radiography to detect internal corrosion, which was titled *Short Pipe Direct Examination for Internal Corrosion, Revision Date: 02/07/2012* (Short Pipe). Pursuant to Short Pipe Subsection 5.8 Radiographic Methods, digital radiography detects corrosion, but may not be used without other techniques. EGTSI later explained via e-mail that digital radiography can be used as a screening mechanism to inspect for internal corrosion during short pipe assessments, and if the digital radiography detects internal corrosion then ultrasonic thickness testing must be used to measure the depth of internal corrosion. However, there was no reference to ultrasonic thickness testing as a required next action when corrosion was detected by digital radiography inspection in the written process. Subsection 5.8, *Radiographic Methods*, also did not delineate the methodology to conduct a digital radiography inspection. For example, there was neither information on an industry standard to apply and interpret digital radiography images nor was there criteria to determine when to use an ultrasonic thickness testing.

Therefore, EGTSI's IMP did not contain a detailed direct assessment plan in accordance with § 192.927. EGTSI's must amend its IMP to reflect and include more details on the actual direct assessment process of applying digital radiography during its short pipe direct examination for internal corrosion.

EGTS Response:

Short Pipe Direct Examination Procedures for Internal Corrosion (Revision Date: 7/22/2020), which is referenced in the Integrity Management Program, was revised following the inspection and prior to receiving the NOA, to include the following content concerning digital radiography in Section 5.8.1:

If the digital radiography identifies the presence of internal corrosion, then follow-up ultrasonic thickness testing needs to be performed to determine the remaining wall thickness of the pipe. If the digital radiography does not identify the presence of internal corrosion, then no further inspection methods need to be performed.

Short Pipe Direct Examination Procedures for Internal Corrosion (Revision Date: 7/22/2020), which is referenced in the Integrity Management Program, was further revised to include the following content concerning digital radiography in Section 5.8.1:

Digital radiography shall be completed in accordance with the requirements specified in ASNT SNT-TC-1A at a minimum. Digital radiography is used to identify areas of potential internal corrosion. If the digital radiography identifies the possible presence of internal corrosion, then follow-up ultrasonic thickness testing needs to be performed to determine the remaining wall thickness of the pipe. If the digital radiography does not identify the possible presence of internal corrosion, then no further inspection methods need to be performed.

If you have any questions, concerns, or should require additional information, please do not hesitate to contact Dan Stahl at 681-842-3365 (Office) or 304-266-6062 (Mobile).

Respectfully,



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