



U.S. Department
of Transportation

**Pipeline and
Hazardous Materials
Safety Administration**

840 Bear Tavern Road, Suite 300
West Trenton, NJ 08628
609.771.7800

NOTICE OF AMENDMENT

OVERNIGHT EXPRESS DELIVERY

April 23, 2021

Mr. Matt Lamb
Vice President, Eastern Pipeline Operations
Eastern Gas Transmission and Storage, Inc.
925 White Oaks Boulevard
Bridgeport, WV 26330

CPF 1-2021-019-NOA

Dear Mr. Lamb:

From February 24 - 28, 2020, representatives of the Pipeline and Hazardous Materials Safety Administration (PHMSA) pursuant to Chapter 601 of 49 United States Code (U.S.C.) inspected Dominion Energy Transmission, Inc.'s procedures for Operator Qualification (OQ) at your office located in Bridgeport, West Virginia.

Subsequently, on November 1, 2020, Dominion Energy Transmission, Inc., OPID 2714, was acquired by Berkshire Hathaway Energy, a subsidiary of Berkshire Hathaway, Inc. Additionally, the name of OPID 2714 was changed to Eastern Gas Transmission and Storage, Inc., referred to hereinafter as EGTSI. EGTSI is utilizing the existing OQ procedures of Dominion Energy Transmission, Inc.

On the basis of the inspection, PHMSA has identified the apparent inadequacies found within EGTSI's plans or procedures, as described below:

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: 12/11/18¹ (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 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

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.

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.

2. § 192.805 Qualification program.

Each operator shall have and follow a written qualification program. The program will 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.

3. **§ 192.805 Qualification program.**

Each operator shall have and follow a written qualification program. The program will 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 Qual 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

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

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.

4. § 192.805 Qualification program.

Each operator shall have and follow a written qualification program. The program will 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.

5. § 192.805 Qualification program.

Each operator shall have and follow a written qualification program. The program will 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.

6. § 192.805 Qualification program.

Each operator shall have and follow a written qualification program. The program will 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 is needed in accordance with § 192.805(g). EGTSI must amend its OQ Compliance Plan to include more details on the its qualification process.

7. § 192.805 Qualification program.

Each operator shall have and follow a written qualification program. The program will 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.

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.

Response to this Notice

This Notice is provided pursuant to 49 U.S.C. § 60108(a) and 49 C.F.R. § 190.206. Enclosed as part of this Notice is a document entitled *Response Options for Pipeline Operators in Enforcement Proceedings*. Please refer to this document and note the response options. Be advised that all material you submit in response to this enforcement action is subject to being made publicly

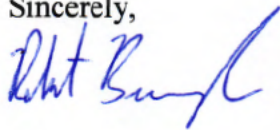
available. If you believe that any portion of your responsive material qualifies for confidential treatment under 5 U.S.C. 552(b), along with the complete original document you must provide a second copy of the document with the portions you believe qualify for confidential treatment redacted and an explanation of why you believe the redacted information qualifies for confidential treatment under 5 U.S.C. 552(b).

Following the receipt of this Notice, you have 30 days to submit written comments, revised procedures, or a request for a hearing under §190.211. If you do not respond within 30 days of receipt of this Notice, this constitutes a waiver of your right to contest the allegations in this Notice and authorizes the Associate Administrator for Pipeline Safety to find facts as alleged in this Notice without further notice to you and to issue an Order Directing Amendment. If your plans or procedures are found inadequate as alleged in this Notice, you may be ordered to amend your plans or procedures to correct the inadequacies (49 C.F.R. § 190.206). If you are not contesting this Notice, we propose that you submit your amended procedures to my office within 30 days of receipt of this Notice. This period may be extended by written request for good cause. Once the inadequacies identified herein have been addressed in your amended procedures, this enforcement action will be closed.

It is requested (not mandated) that Eastern Gas Transmission and Storage, Inc maintain documentation of the safety improvement costs associated with fulfilling this Notice of Amendment (preparation/revision of plans, procedures) and submit the total to Robert Burrough, Director, PHMSA Eastern Region, 840 Bear Tavern Road, Suite 300, West Trenton, NJ 08628. Please refer to **CPF 1-2021-019-NOA** on each document you submit, and whenever possible provide a signed PDF copy in electronic format. Smaller files may be emailed to robert.burrough@dot.gov. Larger files should be sent on USB flash drive accompanied by the original paper copy to the Eastern Region Office.

Additionally, if you choose to respond to this (or any other case), please ensure that any response letter pertains solely to one CPF case number.

Sincerely,



Robert Burrough
Director, Eastern Region
Pipeline and Hazardous Materials Safety Administration

Enclosure: *Response Options for Pipeline Operators in Enforcement Proceedings*