NOTICE OF AMENDMENT

VIA ELECTRONIC MAIL TO: mark.hewett@nngco.com; thomas.correll@nngco.com; david.geck@nngco.com; john.gormley@nngco.com; Laura.Demman@nngco.com; Brian.Mundt@nngco.com

February 6, 2024

Mr. Mark Hewett
President & CEO
Northern Natural Gas Company
1111 S. 103rd Street
Omaha, NE 68124

CPF 3-2024-010-NOA

Dear Mr. Hewett:

From April 10 through May 4, 2023, representatives of the Pipeline and Hazardous Materials Safety Administration (PHMSA), along with representatives from the Michigan Public Service Commission, Minnesota Office of Pipeline Safety, and the Iowa Utility Board acting as Interstate Agents, pursuant to Chapter 601 of 49 United States Code (U.S.C.), inspected Northern Natural Gas Company's (NNG) procedures for the new gas integrity rule[1] in Omaha, Nebraska.

As a result of the inspection, PHMSA has identified the apparent inadequacies found within NNG's plans or procedures. The items inspected and the inadequacies are described below:

[1] Docket No. PHMSA–2011–0023; Amdt. Nos. 191–26; 192–125 Pipeline Safety: Safety of Gas Transmission Pipelines: MAOP Reconfirmation, Expansion of Assessment Requirements, and Other Related Amendments

1. **§ 192.607 Verification of Pipeline Material Properties and Attributes: Onshore steel transmission pipelines.**

(a) . . . .
(d) ***Special requirements for nondestructive Methods.*** **Procedures developed in accordance with paragraph (c) of this section for verification of material properties and attributes using nondestructive methods must:**
(1) Use methods, tools, procedures, and techniques that have been validated by a subject matter expert based on comparison with destructive test results on material of comparable grade and vintage.

NNG's procedures did not provide adequate guidance for nondestructive testing in accordance with the requirements of § 192.607(d)(1). Specifically, NNG's procedure 80.803 section 3.7 simply repeated the code requirements; it did not include any specificity or guidance with respect to the types of in-situ tools that would be used and the proper calibration of such tools.

2. **§ 192.607 Verification of Pipeline Material Properties and Attributes: Onshore steel transmission pipelines.**

(a) . . . .
(f) ***Components.*** **For mainline pipeline components other than line pipe, an operator must develop and implement procedures in accordance with paragraph (c) of this section for establishing and documenting the ANSI rating or pressure rating (in accordance with ASME/ANSI B16.5 (incorporated by reference, see § 192.7)) . . . .**

NNG's procedure 80.803 section 5.3 did not adequately provide guidance for traceable, verifiable, and complete (TVC) records of components required under § 192.607(f). While the procedure restated the requirements of the regulation, the procedure did not specify details such as whether personnel can get TVC information strictly from records, or whether personnel have to visually inspect the component itself to get the information. Additionally, for above-ground facilities, such as meter stations and compressor stations, NNG's procedures did not define what would be considered a "mainline pipeline component other than line pipe" for the purpose of compliance with § 192.607(f).

NNG must amend its written procedures to comply with the requirements of § 192.607(f).

3. **§ 192.624 Maximum allowable operating pressure reconfirmation: Onshore steel transmission pipelines.**

(a) . . . .
(c) ***Maximum allowable operating pressure determination.*** **Operators of a pipeline segment meeting a condition in paragraph (a) of this section must reconfirm its MAOP using one of the following methods:**
(1) Method 1: Pressure test. Perform a pressure test and verify material

properties records in accordance with § 192.607 and the following requirements:
(i) . . . .
(ii) ***Material properties records.*** **Determine if the following material properties records are documented in traceable, verifiable, and complete records: Diameter, wall thickness, seam type, and grade (minimum yield strength, ultimate tensile strength).**

NNG's procedure 80.801 section 5.3 did not adequately include all of the required attributes for obtaining TVC information as it pertains to Method 1 under MAOP reconfirmation as required by § 192.624(c)(1)(ii). Specifically, procedure 80.801 section 5.3.1 indicated that the attributes to be TVC'd include diameter, wall thickness, seam type, and grade (yield strength). The procedure must also include getting the TVC records for ultimate tensile strength.

NNG must amend its written procedures to comply with the requirements of § 192.624(c)(1)(ii) in accordance with § 192.605(a).

4. § 192.624 Maximum allowable operating pressure reconfirmation: Onshore steel transmission pipelines.

(a) . . . .
(c) ***Maximum allowable operating pressure determination.*** **Operators of a pipeline segment meeting a condition in paragraph (a) of this section must reconfirm its MAOP using one of the following methods:**
(1) Method 1: Pressure test. Perform a pressure test and verify material properties records in accordance with § 192.607 and the following requirements:
(i) . . . . .
(iii) ***Material properties verification.*** **If any of the records required by paragraph (c)(1)(ii) of this section are not documented in traceable, verifiable, and complete records, the operator must obtain the missing records in accordance with § 192.607. An operator must test the pipe materials cut out from the test manifold sites at the time the pressure test is conducted. If there is a failure during the pressure test, the operator must test any removed pipe from the pressure test failure in accordance with § 192.607.**

NNG's procedure 80.801 section 5.3 did not adequately require obtaining TVC information on a pressure test header for reconfirmation per § 192.624(c)(1)(iii). Specifically, procedure 80.801 section 5.3.1 indicated that NNG personnel must test pipe cut out from the pressure test manifold sites in accordance to NNG's procedure 80.803. However, procedure 80.803 section 3.1 specified that this only applies to pressure test headers that are within one mile of the pipe to be tested. There is no geographic requirement for testing the pressure test manifold as required in § 192.624(c)(1)(iii) and therefore, NNG's one mile limitation should be removed from its procedures.

NNG must amend its written procedures to comply with the requirements of § 192.624(c)(1)(iii) in accordance with § 192.605(a).

5. **§ 192.710 Transmission lines: Assessments outside of high consequence areas.**

(a) . . . .
(d) *Data analysis.* An operator must analyze and account for the data obtained from an assessment performed under paragraph (c) of this section to determine if a condition could adversely affect the safe operation of the pipeline using personnel qualified by knowledge, training, and experience. In addition, when analyzing inline inspection data, an operator must account for uncertainties in reported results (*e.g.,* tool tolerance, detection threshold, probability of detection, probability of identification, sizing accuracy, conservative anomaly interaction criteria, location accuracy, anomaly findings, and unity chart plots or equivalent for determining uncertainties and verifying actual tool performance) in identifying and characterizing anomalies.

NNG's procedures for data analysis did not provide adequate guidance on how NNG integrates the information from the assessments performed in locations outside of a high consequence area (HCA) as required by § 192.710(d). Specifically, NNG's procedure 140.201 section 5.2 only provided a basic overview of NNG's process for data integration. NNG did not provide specifics for how to perform data integration and the procedure did not include a process for graphically integrating all data. During PHMSA's inspection, NNG's personnel verbally explained to PHMSA representatives NNG's actual detailed data integration process, but none of what was verbally described was included in the written procedure.

NNG must amend its written procedures to comply with the requirements of § 192.710(d) in accordance with § 192.605(a).

6. **§ 192.917 How does an operator identify potential threats to pipeline integrity and use the threat identification in its integrity program?**

(a) . . . .
(c) *Risk assessment.* An operator must conduct a risk assessment that follows ASME/ANSI B31.8S, section 5, and considers the identified threats for each covered segment. An operator must use the risk assessment to prioritize the covered segments for the baseline and continual reassessments (§§ 192.919, 192.921, 192.937), and to determine what additional preventive and mitigative measures are needed (§ 192.935) for the covered segment….

NNG's risk model prioritizing moderate consequence areas (MCAs) and HCAs did not adequately consider the identified threats for each covered segment, per § 192.917(c). Specifically, the weighting factors used to determine risk for two threats (internal corrosion and stress corrosion cracking) were assigned abnormally low weights in the model which were not technically justified. This is an issue because if a failure occurred due to either of those risks, the risk model ranking would not be affected.

NNG must amend its written risk assessment procedures and re-run the risk model to also amend the written baseline assessment schedule for MCAs to comply with the requirements of § 192.917(c) in accordance § 192.907(a), which requires implementation of Subpart O, and §192.911, which provides the elements of an integrity management program.

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 90 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 NNG maintain documentation of the safety improvement costs associated with fulfilling this Notice of Amendment (preparation/revision of plans, procedures) and submit the total to Gregory A Ochs, Director, Central Region, Pipeline and Hazardous Materials Safety Administration. In correspondence concerning this matter, please refer to **CPF 3-2024-010-NOA** and, for each document you submit, please provide a copy in electronic format whenever possible.

Sincerely,

Gregory A. Ochs
Director, Central Region
Pipeline and Hazardous Materials Safety Administration

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

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