



U.S. Department
of Transportation
**Pipeline and Hazardous
Materials Safety**

901 Locust Street, Suite 480
Kansas City, MO 64106

NOTICE OF AMENDMENT

VIA ELECTRONIC MAIL TO: scott.smith@spireenergy.com;
randy.wilson@spireenergy.com; nicole.christianer@spireenergy.com

December 20, 2024

Scott Smith
President
Spire STL Pipeline, LLC
3773 Richmond Ave
Houston, TX 77046

CPF 3-2024-075-NOA

Dear Mr. Smith:

From February 2, 2023, to February 14, 2024, a representative of the Pipeline and Hazardous Materials Safety Administration (PHMSA), pursuant to Chapter 601 of 49 United States Code (U.S.C.), inspected on-site Spire STL Pipeline, LLC's (Spire) operations and maintenance procedures for the Spire STL Pipeline, LLC in St. Louis, Missouri.

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

- 1. § 192.605 Procedural manual for operations, maintenance, and emergencies.**

(a) General. Each operator shall prepare and follow for each pipeline, a manual of written procedures for conducting operations and maintenance activities and for emergency response. For transmission lines, the manual must also include procedures for handling abnormal operations. This manual must be reviewed and updated by the operator at intervals not exceeding 15 months, but at least once each calendar year. This manual must be prepared before operations of a pipeline system commence. Appropriate parts of the manual must be kept at locations where operations and maintenance activities are conducted.

Spire's "Spire STL Pipeline Operations & Maintenance Manual" (O&M Manual) failed to have adequate procedures for determining whether its cathodic protection (CP) meets the requirements

of CFR § 192.463(a).¹ Specifically, Spire’s corrosion control procedures failed to adequately address how to measure CP protective voltage in accordance with “Appendix D to Part 192: Criteria for Cathodic Protection and Determination of Measurements,” in areas where alternating current (AC) mitigation devices influence voltage measurement.

During the inspection, PHMSA found that Spire used the negative 0.85 volt criteria, as detailed in Appendix D, section I, and that Spire’s system contained AC mitigation devices (decouplers) that discharged current during annual surveys, which affected the voltage shift (IR drop) and the accuracy of the results of annual survey measurements. PHMSA determined that Spire did not have a process or procedure for considering the IR drop at locations of AC mitigation devices when interpreting survey results, as required by Section II of Appendix D.

From a review of Spire’s records, PHMSA found that in 2020, Spire received a recommendation from a contracted third party specialist, Lake Superior Consulting, LLC, that during electrical surveys, due to device capacitance, Spire should extend the interruption cycle of impressed protective current from their rectifiers to 9 seconds “on” and 3 seconds “off,” to account for the gradual discharge of current from the decouplers. This recommendation was in-line with the device manufacturer’s recommendations. Spire did not revise its procedures in accordance with these recommendations. To determine whether the cathodic protection meets the requirements of § 192.463, Spire must amend its procedures to have a process to appropriately consider the IR drop caused by the decouplers.

2. § 192.605 Procedural manual for operations, maintenance, and emergencies.

(a) General. Each operator shall prepare and follow for each pipeline, a manual of written procedures for conducting operations and maintenance activities and for emergency response. For transmission lines, the manual must also include procedures for handling abnormal operations. This manual must be reviewed and updated by the operator at intervals not exceeding 15 months, but at least once each calendar year. This manual must be prepared before operations of a pipeline system commence. Appropriate parts of the manual must be kept at locations where operations and maintenance activities are conducted.

Spire failed to have adequate procedures to inspect and evaluate each pipeline or portion of the pipeline that is exposed to the atmosphere for evidence of atmospheric corrosion, per the requirements of § 192.481. Specifically, Spire’s procedures failed to address how to evaluate and categorize atmospheric corrosion found during inspections. The evaluation and categorization of the corrosion affects how remediation is to be done, per § 192.481(c).²

¹ 49 CFR 192.463(a) states: “Each cathodic protection system required by this subpart must provide a level of cathodic protection that complies with one or more of the applicable criteria contained in appendix D of this part. If none of these criteria is applicable, the cathodic protection system must provide a level of cathodic protection at least equal to that provided by compliance with one or more of these criteria.”

² 49 CFR 192.481(c) states: “If atmospheric corrosion is found during an inspection, the operator must provide protection against the corrosion as required by § 192.479.”

Spire's O&M manual, section 7.4.8.3, specified that atmospheric corrosion conditions are to be evaluated based on rust grade levels provided in ASTM D610-01. However, after interviewing Spire's qualified individuals for atmospheric corrosion, PHMSA found that the O&M Manual was out of date, and that Spire used Standard Operating Practice (SOP) 190.E.3 for evaluating atmospheric corrosion conditions, rather than ASTM D610-01.

SOP 190 E.3, section 2.1, stated, "Atmospheric corrosion is defined as corrosion which causes deterioration or pitting of the pipe surface resulting from a reaction with the atmospheric environment. Smooth surface rust shall not be considered atmospheric corrosion." PHMSA found that Spire's Asset Workforce Management System, MAXIMO, provided, four options for documenting the atmospheric corrosion condition: clean, localized, pitting, or scaling.

However, neither SOP 190.E.3 nor the MAXIMO system defined or provided clear guidance for determining how to identify and select between the four options. Specifically, SOP 190.E.3 failed adequately define the conditions that are considered detrimental to safe operation and require repair to protect against the corrosion, per § 192.481(c).

Spire must amend its procedures to clearly state how it will evaluate, categorize, and address an atmospheric corrosion condition in accordance with the requirements of § 192.481 (c).

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 that Spire STL Pipeline, LLC 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 3-2024-075-NOA** and, for each document you submit, please provide a copy in electronic format whenever possible.

Sincerely,

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

cc: Randy Wilson, Director, Pipeline & System Integrity, Spire STL Pipeline, LLC,
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Enclosure: *Response Options for Pipeline Operators in Enforcement Proceedings*