



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

901 Locust Street, Suite 480
Kansas City, MO 64106

**NOTICE OF PROBABLE VIOLATION
and
PROPOSED COMPLIANCE ORDER**

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

January 16, 2024

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

CPF 3-2025-003-NOPV

Dear Mr. Smith:

From August 1, 2023 to November 29, 2024, a representative of the Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS), pursuant to Chapter 601 of 49 United States Code (U.S.C.), inspected Spire STL Pipeline, LLC's (Spire) natural gas transmission pipeline from St. Louis, Missouri, to Alsey, Illinois.

As a result of the inspection, it is alleged that Spire has committed probable violations of the Pipeline Safety Regulations, Title 49, Code of Federal Regulations (CFR). The items inspected and the probable violations are:

- 1. § 192.473 External corrosion control: Interference currents.
(a) Each operator whose pipeline system is subjected to stray currents shall have in effect a continuing program to minimize the detrimental effects of such currents.**

Spire failed to have a continuing program to minimize the detrimental effects of stray currents, per the requirements of § 192.473(a). The "Spire STL Pipeline Operations & Maintenance Manual," (Spire's O&M Manual) section 7.2.1 merely stated, "[i]f subject to stray currents carry out continuing program. Corrosion tech performs stray current testing. Refer to [Spire's O&M Manual] Sections 6.5.1 CP Design and 7.4.11.1 External Corrosion Control." From PHMSA's review of Spire's procedures and records, PHMSA found that Spire's procedures did not further

define how to carry out a continuing program to address stray current (e.g. how to detect, monitor, analyze, and minimize such currents). In response to PHMSA's exit briefing report, Spire stated:

Spire monitors the CP readings near foreign lines for indications, such as a very high on or off readings, that may indicate there is an adverse effect on the pipeline from a foreign line crossing. The Manager, Corrosion Control would direct CIS readings to be taken in the area of the foreign line crossing to determine if stray current was interfering with the cathodic protection system. If such a condition was found, Spire would begin monitoring the stray current and/or install a bond. However, to date Spire has not observed readings that would indicate stray current interference.

In order to measure the protective electrical gradient at any specific location, monitoring should be conducted directly at the location otherwise excessive resistance (IR) and inaccuracy is introduced into the recorded readings. Spire's own description of its process demonstrates that it is necessary to take readings "in the area of the foreign line crossing" in order "to determine if stray current was interfering with the cathodic protection system." By failing to have a program in place aligning with this description, Spire's program for addressing stray current failed to comply with § 192.473(a).¹

PHMSA found from a review of Spire's cathodic protection records that the following foreign pipeline crossing sites were located a significant distance away from the test station: (1) the Buckeye Partners, LP, and St. Louis Pipeline Operating, LLC, crossing is approximately 1,950 feet from the nearest test station (TS-112); (2) the Marathon Pipeline, LLC, crossing is approximately 541 feet from the nearest test station (TS-99); (3) Express Holdings (USA), LLC and TC Oil Pipeline Operations, Inc.'s two line crossings are approximately 1005 feet from the nearest test station (TS-88). Consequently, Spire was not continually monitoring these line crossings, which posed a risk of stray current or interference, in such a way as to minimize the detrimental effects of such currents. Therefore, Spire failed to follow the requirements of § 192.473(a).

Additionally, when asked by PHMSA during the inspection for records of inspection and monitoring of alternating current (AC) mitigation devices installed to mitigate AC interference, Spire did not provide any records in response. Spire's corrosion personnel stated it did not have a process requiring the technician to get AC readings during annual surveys, unless directed by the manager. Furthermore, Spire's system of recording² cathodic protection surveys did not have a location to capture and record an AC reading. Absent this information, the effectiveness of Spire's AC interference monitoring program cannot be gauged. By failing to monitor its foreign pipeline crossings for stray currents and by failing to monitor the effectiveness of AC interference mitigation devices, Spire failed to have a continuing program to minimize the detrimental effects of interference current, per the requirements of § 192.473(a).

¹ While not incorporated by reference under 49 C.F.R. § 192.7, NACE TM0497, *Measurement Techniques Related to Criteria for Cathodic Protection on Underground or Submerged Metallic Piping Systems* (2022) demonstrates that corrosion control experts recommend monitoring directly at the location. See sections 5.7, 6.1.2, and 9.6.3. Spire's program does not align with this industry recommend methodology.

² Spire's work order system of record, MAXIMO.

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 conduct an adequate review and update of its manual of written procedures for conducting operations and maintenance activities and for emergency response, in accordance with § 192.605(a). Specifically, Spire's O&M Manual did not include or reference many of the Standard Operating Procedures (SOPs) that Spire's personnel used for conducting operations and maintenance activities and for emergency response. Spire provided 15 SOPs on January 12, 2023, that were used by personnel but were not included or referenced within Spire's O&M Manual. Spire's O&M revision log showed that Spire updated its O&M Manual once each calendar year yet, failed to identify and address these omissions. Thus, Spire failed to comply with the requirement of § 192.605(a) to conduct an adequate and thorough review and update of its manual of written procedures for conducting operations and maintenance activities and for emergency response.

3. **§ 192.615 Emergency plans.**
(a)
(b) Each operator shall:
(1)
(2) Train the appropriate operating personnel to assure that they are knowledgeable of the emergency procedures and verify that the training is effective.

Spire failed to train the appropriate operating personnel to assure that they were knowledgeable of the emergency procedures and verify that the training was effective, per the requirements of § 192.615(b)(2). Specifically, Spire did not conduct annual refresher training for its emergency response personnel, from calendar year 2019 through 2022, as required by Spire's "Spire STL Pipeline Emergency Plan and Procedures" (Spire's Emergency Response Procedures), section 17.3. During this time frame only 3 out of 18 qualified individuals received any refresher training. Spire's Emergency Response Procedures, section 17.3 stated:

All employees who will be involved in emergency response will receive prior training to the degree necessary to perform their duties...Employees who are trained in accordance with this section shall receive annual refresher training of sufficient content to maintain their competencies, or shall demonstrate competency in those areas at least annually, at intervals not to exceed 15 months.

When initial or refresher training is provided, the documentation shall be maintained in the Spire STL Pipeline Energy WorldNet system. At a minimum, the training record shall contain the following information:

- The location and date of the training session.
- A description of the subject matter.
- A list of all persons attending the training.
- The name of the instructor(s).

By failing to conduct refresher training for all appropriate personnel, Spire did not assure that its personnel were knowledgeable, nor verify that the training was effective, per the requirements of § 192.615(b)(2).

4. § 192.706 Transmission lines: Leakage Surveys.

Leakage surveys of a transmission line must be conducted at intervals not exceeding 15 months, but at least once each calendar year. However, in the case of a transmission line which transports gas in conformity with § 192.625 without an odor or odorant, leakage surveys using leak detector equipment must be conducted—
(a) In Class 3 locations, at intervals not exceeding 7½ months, but at least twice each calendar year;

Spire failed to conduct leakage surveys of a transmission line at intervals not exceeding 15 months, but at least once each calendar year, per the requirements of § 192.706(a). Specifically, Spire failed to perform leakage surveys by a method appropriate for identifying leaks at three locations.

PHMSA inspected Spire's records of monthly aerial patrols, which were performed to look for indications of leaks affecting surface vegetation on Spire's right-of-way (ROW). PHMSA found that tree canopy over the ROW had prohibited observation of the surface conditions from the air. Based on a review of historical Google Earth imagery, PHMSA found that the ROW was obstructed by tree canopy overgrowth beginning in 2020. Due to the dense tree canopy Spire could not observe indications of leaks affecting surface vegetation over-the-line in its growth cycle during the aerial patrols. Spire did not conduct another means of patrol such as by ground patrol. In the field, PHMSA confirmed the ROW conditions with those viewed in the records.

In response to PHMSA's findings, during the inspection, Spire stated, "Leak surveys for the years 2020-2023 were not conducted in wooded areas between HDD entry and exit points due to FERC's requirement to not clear ROW areas within HDD segments." This includes the following locations:

<u>Location</u>	<u>Starting Point</u>	<u>Ending Point</u>	<u>Distance</u>	<u>Class</u>	<u>Odorant</u>
Mississippi River HDD	38.948453°, - 90.378981°	38.942572°, - 90.382897°	1915 ft	1	No
Highway 367 HDD	38.819331°, - 90.233597°	38.815431°, - 90.224403°	1545 ft	3	Yes
Spanish Lake HDD	38.801217°, - 90.197081°	38.800567°, - 90.1955°	465 ft	3	Yes

Thus, at these locations, Spire failed to perform leakage patrols at the appropriate intervals for one Class 1 and two Class 3 areas, per the requirements of § 192.706(a).

5. § 192.907 What must an operator do to implement this subpart?

(a) General. No later than December 17, 2004, an operator of a covered pipeline segment must develop and follow a written integrity management program that contains all the elements described in § 192.911 and that addresses the risks on each covered transmission pipeline segment. The initial integrity management program must consist, at a minimum, of a framework that describes the process for implementing each program element, how relevant decisions will be made and by whom, a time line for completing the work to implement the program element, and how information gained from experience will be continuously incorporated into the program. The framework will evolve into a more detailed and comprehensive program. An operator must make continual improvements to the program.

Spire failed to follow its written integrity management program, per the requirements of § 192.907(a). Specifically, Spire failed to follow its procedures for selecting and performing preventive and mitigative measures (PMM) per section 12 of its Integrity Management Plan. Section 12.4.2 of the Integrity Management Plan stated, “If any recommendations are rejected during Management Review, the justification for the rejection should be documented. All approved recommendations should be added to a master P&M recommendation list.” During a review of records, PHMSA found that Spire had not formally documented its evaluation process, selection, or implementation of PMM. Thus, the operator had no record of selecting and performing preventive and mitigative measures required per § 192.935, from 2019-2022, and therefore failed to follow its integrity management program as required by § 192.907(a).

6. § 192.947 What records must an operator keep?

An operator must maintain, for the useful life of the pipeline, records that demonstrate compliance with the requirements of this subpart. At minimum, an operator must maintain the following records for review during an inspection.

(a)

(b) Documents supporting the threat identification and risk assessment in accordance with § 192.917;

Spire failed to maintain documents that support its identification and risk assessment of the threat of equipment failure, as required by § 192.947(b). Spire’s Integrity Management Plan, section 4.9.4, “Equipment Threats,” refers to Appendix D Table 4-3 for documentation of the threat assessment. Subsequent to PHMSA’s request during the inspection, on August 15, 2023, Spire provided a completed Table 4-3, dated August 23, 2023. Spire personnel stated this was completed after PHMSA requested one be provided, as Spire could not locate a previous version. Spire also stated that its risk model did not have equipment listed as a threat in any other section. Therefore, Spire failed to keep records supporting the threat identification of equipment failure, per the requirements of § 192.947(b).

Proposed Civil Penalty

Under 49 U.S.C. § 60122 and 49 CFR § 190.223, you are subject to a civil penalty not to exceed \$266,015 per violation per day the violation persists, up to a maximum of \$2,660,135 for a related series of violations. For violation occurring on or after January 6, 2023 and before December 28, 2023, the maximum penalty may not exceed \$257,664 per violation per day the violation persists, up to a maximum of \$2,576,627 for a related series of violations. For violation occurring on or after March 21, 2022 and before January 6, 2023, the maximum penalty may not exceed \$239,142 per violation per day the violation persists, up to a maximum of \$2,391,412 for a related series of violations. For violation occurring on or after May 3, 2021 and before March 21, 2022, the maximum penalty may not exceed \$225,134 per violation per day the violation persists, up to a maximum of \$2,251,334 for a related series of violations. For violation occurring on or after January 11, 2021 and before May 3, 2021, the maximum penalty may not exceed \$222,504 per violation per day the violation persists, up to a maximum of \$2,225,034 for a related series of violations. For violation occurring on or after July 31, 2019 and before January 11, 2021, the maximum penalty may not exceed \$218,647 per violation per day the violation persists, up to a maximum of \$2,186,465 for a related series of violations. For violation occurring on or after November 27, 2018 and before July 31, 2019, the maximum penalty may not exceed \$213,268 per violation per day, with a maximum penalty not to exceed \$2,132,679.

We have reviewed the circumstances and supporting documentation involved for the above probable violations and recommend that you be preliminarily assessed a civil penalty of \$50,200 as follows:

<u>Item number</u>	<u>PENALTY</u>
3	\$50,200

Proposed Compliance Order

With respect to Items 1, 4, and 5 pursuant to 49 U.S.C. § 60118, the Pipeline and Hazardous Materials Safety Administration proposes to issue a Compliance Order to Spire. Please refer to the *Proposed Compliance Order*, which is enclosed and made a part of this Notice.

Warning Item

With respect to Items 2 and 6, we have reviewed the circumstances and supporting documents involved in this case and have decided not to conduct additional enforcement action or penalty assessment proceedings at this time. We advise you to promptly correct these items. Failure to do so may result in additional enforcement action.

Response to this Notice

This Notice is issued in accordance with 49 C.F.R. § 190.207(c). Any response you may have submitted to the original Notice is no longer applicable. You must respond as set forth below.

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. All material you submit in response to this enforcement action may be 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 your receipt of this Notice, you have 30 days to respond as described in the enclosed *Response Options*. 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 a Final Order. If you are responding to this Notice, we propose that you submit your correspondence to my office within 30 days from receipt of this Notice. The Region Director may extend the period for responding upon a written request timely submitted demonstrating good cause for an extension.

In your correspondence on this matter, please refer to **CPF 3-2025-003-NOPV** and, for each document you submit, please provide a copy in electronic format whenever possible.

Sincerely,

GREGORY ALAN OCHS



Digitally signed by GREGORY ALAN OCHS
Date: 2025.01.16 11:16:32 -06'00'

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,
randy.wilson@spireenergy.com
Nicole Christianer, Manager, Transmission Integrity, Spire STL Pipeline, LLC,
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Enclosures: *Proposed Compliance Order*
Response Options for Pipeline Operators in Enforcement Proceedings

PROPOSED COMPLIANCE ORDER

Pursuant to 49 United States Code § 60118, the Pipeline and Hazardous Materials Safety Administration (PHMSA) proposes to issue to Spire a Compliance Order incorporating the following remedial requirements to ensure the compliance of with the pipeline safety regulations:

- A. In regard to Item 1 of the Notice, pertaining to Spire's failure to have a continuing program to minimize the detrimental effects of stray currents, Spire must:
 - a. Develop and provide a detailed continuing program per § 192.473 to the Central Region Director for review and approval within **30** days of receipt of the Final Order.
 - b. Implement the continuing program and provide initial survey results from monitoring, including any recommendations from findings, to the Central Region Director within **180** days of receipt of the Final Order.
 - 1. The implementation shall include (1) performing training; (2) identifying all foreign line crossings and sources of stray AC current; (3) monitoring each location at the location of the pipeline crossing; and (4) reporting findings and any remedial actions.
- B. In regard to Item 4 of the Notice, pertaining to the failure to patrol its right-of-way (ROW) using an appropriate means Spire must:
 - a. Provide to the Central Region Director record of leakage surveys conducted at the referenced locations using an appropriate method for the conditions (e.g., time of year, weather conditions, ground visibility, soil conditions, location of the pipeline, etc.) within **60** days of receipt of the Final Order.
- C. In regard to Item 5 of the Notice, pertaining to the failure to follow procedures for selecting and performing preventive and mitigative measures, Spire must:
 - a. Provide records supporting the evaluation and selection of preventive and mitigative measures to the Central Region Director within **30** days of receipt of the Final Order for review and approval.
 - b. Provide records supporting the implementation and periodic evaluation of the preventive and mitigative measures to the Central Region Director within **365** days of receipt of the Final Order.
- D. It is requested (not mandated) that Spire STL Pipeline, LLC maintain documentation of the safety improvement costs associated with fulfilling this Compliance Order and submit the total to Gregory A. Ochs, Director, Central Region, Pipeline and Hazardous Materials Safety Administration. It is requested that these costs be reported in two categories: (1) total cost associated with preparation/revision of plans, procedures, studies and analyses, and (2) total cost associated with replacements, additions and other changes to pipeline infrastructure.