June 6, 2022

VIA ELECTRONIC MAIL TO: scott.carter@spireenergy.com

Mr. Scott B. Carter
President
Spire Missouri East
700 Market Street
St. Louis, Missouri 63101

Re: CPF No. 3-2022-033-NOPV

Dear Mr. Carter:

Enclosed please find the Final Order issued in the above-referenced case. It makes findings of violation, finds that the civil penalty amount of $31,100 has been paid in full, and specifies actions that need to be taken to comply with the pipeline safety regulations. When the terms of the compliance order are completed, as determined by the Director, Central Region, this enforcement action will be closed. Service of the Final Order by e-mail is effective upon the date of transmission and acknowledgement of receipt as provided under 49 C.F.R. § 190.5.

Thank you for your cooperation in this matter.

Sincerely,

Alan K. Mayberry
Associate Administrator
for Pipeline Safety

Enclosures (Final Order and NOPV)

cc: Mr. Gregory Ochs, Director, Central Region, Office of Pipeline Safety, PHMSA
Mr. Craig Hoeferlin, Vice President, Operations Services & SMS, Spire Missouri East, craig.hoeferlin@spireenergy.com
Mr. Robert Gardner, Director, Compliance & Pipeline Integrity, Spire Missouri East, bob.gardner@spireenergy.com
In the Matter of

Spire Missouri Inc.,
d/b/a Spire Missouri East,

Respondent.

CPF No. 3-2022-033-NOPV

FINAL ORDER

On March 17, 2022, pursuant to 49 C.F.R. § 190.207, the Director, Central Region, Office of Pipeline Safety (OPS), issued a Notice of Probable Violation (Notice) to Spire Missouri Inc. d/b/a Spire Missouri East (Respondent). The Notice proposed finding that Respondent had violated the pipeline safety regulations in 49 C.F.R. Part 195. The Notice also proposed certain measures to correct the violations. Respondent did not contest the allegations of violation or corrective measures and paid the proposed civil penalty on April 19, 2022.

Based upon a review of all of the evidence, pursuant to § 190.213, I find Respondent violated the pipeline safety regulations listed below, as more fully described in the enclosed Notice, which is incorporated by reference:

49 C.F.R. § 195.446(c)(1) (Item 1) — Respondent failed to implement API RP 1165 (incorporated by reference, see §195.3) whenever a SCADA system is added, expanded or replaced, unless the operator demonstrates that certain provisions of API RP 1165 are not practical for the SCADA system used.

49 C.F.R. § 195.446(e)(1) (Item 4) — Respondent failed to review SCADA safety-related alarm operations using a process that ensures alarms are accurate and support safe pipeline operations.

49 C.F.R. § 195.446(e)(3) (Item 5) — Respondent failed to verify the correct safety-related alarm set-point values and alarm descriptions when associated field instruments are calibrated or changed and at least once each calendar year, but at intervals not to exceed 15 months.

These findings of violation will be considered prior offenses in any subsequent enforcement action taken against Respondent. In accordance with 49 C.F.R. § 190.223, Respondent is assessed the proposed civil penalty amount of $31,100, which Respondent has already paid in full.

**Compliance Actions**

Pursuant to 49 U.S.C. § 60118(b) and 49 C.F.R. § 190.217, Respondent is ordered to take the actions proposed in the enclosed Notice to correct the violations. The Director may grant an extension of time to comply with any of the required items upon a written request timely submitted by the Respondent and demonstrating good cause for an extension. Upon completion of the ordered actions, Respondent may request that the Director close the case. Failure to comply with this Order may result in the assessment of civil penalties under 49 C.F.R. § 190.223 or in referral to the Attorney General for appropriate relief in a district court of the United States.

**Warning Items**

With respect to Items 2 and 3, the Notice alleged probable violations of 49 C.F.R. §§ 195.446(c)(2) and 195.446(c)(3), respectively, but did not propose a civil penalty or compliance order for these items. Therefore, these are considered to be warning items. If OPS finds a violation of any of these items in a subsequent inspection, Respondent may be subject to future enforcement action.

The terms and conditions of this order are effective upon service in accordance with 49 C.F.R. § 190.5.

**ALAN KRAMER MAYBERRY**

Date: 2022.05.31
08:52:28 -04'00'

Alan K. Mayberry
Associate Administrator for Pipeline Safety
NOTICE OF PROBABLE VIOLATION
PROPOSED CIVIL PENALTY
and
PROPOSED COMPLIANCE ORDER

VIA ELECTRONIC MAIL TO: craig.hoeferlin@spireenergy.com and Bob.Gardner@spireenergy.com

March 17, 2022

Mr. Craig Hoeferlin
Vice President, Operations Services and SMS
Spire Missouri Inc. East
700 Market Street
St. Louis, Missouri 63101

CPF 3-2022-033-NOPV

Dear Mr. Hoeferlin:


This Notice is in response to PHMSA’s Control Room Management (CRM) Initiative, which is a national level program that includes inspectors from every region. As a result, you may have received this Notice from a different Regional Director than typical because the CRM Initiative inspections are currently separate from the standard inspection program. Notices and correspondence from other types of inspections will remain unchanged.

As a result of the inspection, it is alleged that you have committed probable violations of the Pipeline Safety Regulations, Title 49, Code of Federal Regulations (CFR). The items inspected and the probable violations are:
1. 195.446 Control Room Management.

(a)....

(c) *Provide adequate information.* Each operator must provide its controllers with the information, tools, processes and procedures necessary for the controllers to carry out the roles and responsibilities the operator has defined by performing each of the following:

(1) Implement API RP 1165 (incorporated by reference, see §195.3) whenever a SCADA system is added, expanded or replaced, unless the operator demonstrates that certain provisions of API RP 1165 are not practical for the SCADA system used;

Spire failed to verify, through records, it implemented API RP 1165 when the Spire NGL system was added to the existing console that monitored, operated and controlled the Spire Gas Transmission system. The operator did not demonstrate that certain provisions of API RP 1165 are not practical for the SCADA system used.

2. 195.446 Control room management.

(a)....

(c) *Provide adequate information.* Each operator must provide its controllers with the information, tools, processes and procedures necessary for the controllers to carry out the roles and responsibilities the operator has defined by performing each of the following:

(1)....

(2) Conduct a point-to-point verification between SCADA displays and related field equipment when field equipment is added or moved and when other changes that affect pipeline safety are made to field equipment or SCADA displays;

Spire failed to complete an adequate point-to-point verification (PPV) between SCADA displays and related field equipment when field equipment was added or moved and when other changes that affect pipeline safety were made to field equipment or SCADA displays. The point-to-point documentation only captured date, time, tag, description, field tech, controller, field value, HMI value (auto populate) and notes. The operator failed to include in the documentation alarm set point verification, alarm description verification, alarm priority verification, alarm presentation verification, screen(s) verification (presents properly on all screens). It was explained that this was due to the auto populate for the electronic form not including these. Additionally, analog values and status points did not match. Spire failed to provide follow-up and documentation of an adequate verification following failed PPV.
3. 195.446 Control room management.
   (a)….
   (c) *Provide adequate information.* Each operator must provide its controllers with the information, tools, processes and procedures necessary for the controllers to carry out the roles and responsibilities the operator has defined by performing each of the following:
   (1)….
   (2)….
   (3) Test and verify an internal communication plan to provide adequate means for manual operation of the pipeline safely, at least once each calendar year not to exceed 15 months;

   Spire failed to complete a test of their internal communication plan in 2020. The first test should have been completed in November 2020, one year after anniversary of the pipeline and control room start up.

4. 195.446 Control room management.
   (a)….
   (e) *Alarm management.* Each operator using a SCADA system must have a written alarm management plan to provide for effective controller response to alarms. An operator’s plan must include provisions to:
   (1) Review SCADA safety-related alarm operations using a process that ensures alarms are accurate and support safe pipeline operations;

   Spire failed to adequately implement safety related points in their SCADA system. The Spire CRM Plan Section 7.2 identified all pressure points and odorizers as safety related points. The conditions of pressure HH, H, L and LL were identified as safety related alarms. It also identified pressure Rate of Change (ROC) and odorizer pump failure as safety related alarms.

   A review of the master database identified valves were not properly implemented as well as gas detect alarms. Some pressure points were identified as “False” for safety related point/alarm even though the procedure stated all pressure points were safety related.

5. 195.446 Control room management.
   (a)….
   (e) *Alarm management.* Each operator using a SCADA system must have a written alarm management plan to provide for effective controller response to alarms. An operator’s plan must include provisions to:
   (1)….
   (2)….
(3) Verify the correct safety-related alarm set-point values and alarm descriptions when associated field instruments are calibrated or changed and at least once each calendar year, but at intervals not to exceed 15 months.

Spire failed to verify between the field and control room correct safety-related alarm set-point values and alarm descriptions in SCADA when calibrations were performed in the field. Also, they failed to include in their CRM Plan a procedure to coordinate with the field to meet all the requirements of this section. Spire did not have a process implemented to complete the required verifications once they incorporated the hazardous liquid pipeline in the control room. The operator was performing calibrations in the field, but these were not in coordination with documentation in the control room.

Proposed Civil Penalty

Under 49 U.S.C. § 60122 and 49 CFR § 190.223, you are subject to a civil penalty not to 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. For violation occurring on or after November 2, 2015 and before November 27, 2018, the maximum penalty may not exceed $209,002 per violation per day, with a maximum penalty not to exceed $2,090,022.

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 $31,100 as follows:

<table>
<thead>
<tr>
<th>Item number</th>
<th>PENALTY</th>
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<td>5</td>
<td>$31,100</td>
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Warning Items

With respect to items 2 and 3 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.
Proposed Compliance Order

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

Response to this Notice

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 the receipt of this Notice, you have 30 days to submit written comments, or request a hearing under 49 CFR § 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 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. This period may be extended by written request for good cause.

In your correspondence on this matter, please refer to CPF 3-2022-033-NOPV 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: Bob Gardner, Director Compliance and Pipeline Integrity  Bob.Gardner@spireenergy.com

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 NGL a Compliance Order incorporating the following remedial requirements to ensure the compliance of Spire NGL with the pipeline safety regulations:

A. In regard to Item 1 of the Notice, pertaining to verifying Spire implemented API RP 1165 when the Spire NGL system was added to the existing gas transmission console, Spire must complete an audit of their SCADA system against the API RP 1165 as incorporated by reference. Any findings from the audit, must be corrected in the SCADA system to be compliant with §195.446 (c)(2) unless the operator demonstrates that certain provisions of the API RP 1165 are not practical for the SCADA system used. This must be completed within 30 days of receipt of the Final Order.

B. In regard to Item 4 of the Notice, pertaining to Spire’s failure to adequately implement safety related points in their SCADA system, Spire must define safety related points and alarms, review the master SCADA database and correctly identify those points to designate Safety Related. Additionally, the designation of safety related must be readily available to the controllers for review and alarm handling practices within 90 days of receipt of the Final Order.

C. It is requested (not mandated) that Spire 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.