



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

12300 W. Dakota Ave., Suite 110
Lakewood, CO 80228

WARNING LETTER

VIA E-MAIL TO MR. BRIAN WEISKER

June 11, 2021

Mr. Brian Weisker
Senior Vice President & COO Natural Gas
Duke Energy
4720 Piedmont Row
Charlotte, NC 28210

CPF 5-2021-026-WL

Dear Mr. Weisker:

During the week of October 19 through 23, 2020, representatives of the Pipeline and Hazardous Materials Safety Administration (PHMSA), pursuant to Chapter 601 of 49 United States Code (U.S.C.), performed a virtual inspection of Duke Energy's (Duke) KO Transmission Control Room located in Charlotte, North Carolina. This inspection included a review of company procedures and records, and virtual observations associated with the Control Room Management Program.

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. § 192.631 - 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 sections 1, 4, 8, 9, 11.1, and 11.3 of API RP 1165 (incorporated by reference, see § 192.7) whenever a SCADA system is added, expanded or replaced, unless the operator demonstrates that certain provisions of sections 1, 4, 8, 9, 11.1, and 11.3 of API RP 1165 are not practical for the SCADA system used;

Duke Energy failed to implement API RP 1165 Sections 1, 4, 8, 9, 11.1 and 11.3 whenever a SCADA system is added, expanded, or replaced, nor did the company demonstrate that certain provisions of these sections are not practical for the SCADA system used in violation of § 192.631(c)(1). During the PHMSA inspection, Duke could not produce any records, such as validation studies or audits, to demonstrate that their SCADA system was in compliance with the applicable API RP 1165 sections.¹

2. § 192.631 - 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) Identify at least once each calendar month points affecting safety that have been taken off scan in the SCADA host, have had alarms inhibited, generated false alarms, or that have had forced or manual values for periods of time exceeding that required for associated maintenance or operating activities;

Duke failed to identify at least once each calendar month points affecting safety that have been taken off scan in the SCADA host, have had alarms inhibited, generated false alarms, or had forced or manual valves for periods of time exceeding that required for associated maintenance or operating activity in violation of § 192.631(e)(2). Specifically, during the PHMSA inspection, the company could not produce records demonstrating that it had identified false alarms for May 2017, September 2018, and February 2019.² Additionally, the records for 2017 and 2018 indicate a review of "VIS GC Alarms, Chat 3 in 5 mins" which was not included in the 2019 record.

3. § 192.631 - 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) ...

¹ See 49 C.F.R. § 192.631(j)(1) requiring operators to maintain for review during inspection records that demonstrate compliance with the requirements of this section.

² *Id.*

(3) Verify the correct safety-related alarm set-point values and alarm descriptions at least once each calendar year, but at intervals not to exceed 15 months;

Duke failed to verify the correct safety-related alarm set-point values and alarm descriptions at least once each calendar month, but at intervals not exceeding 15 months, in violation of § 192.631(e)(3).³ Although Duke provided its 2017 Alarm Set Point Review during the inspection, it did not include a full date so compliance could not be determined. Additional rationalization records for the Charlotte and Anderson areas were reviewed, but the dates of the reviews were not documented and the records failed to have any signatures. Finally, Duke failed to provide records for 2018 and 2019.

4. § 192.631 - 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) ...

(4) Review the alarm management plan required by this paragraph at least once each calendar year, but at intervals not exceeding 15 months, to determine the effectiveness of the plan;

Duke failed to review its alarm management plan at the requisite intervals in violation of § 192.631(e)(4). During the review of the records of the Alarm Management Plan (Plan), Duke personnel stated to PHMSA that there is not a separate document that records the review of the Alarm Management Plan, but rather the review is recorded on page 2 of the Plan. Page 2 of the Plan, however, is just a revision page and fails to clearly demonstrate that a review of the entire Plan has occurred.

Page 2 identifies February 16, 2017,⁴ May 1, 2018, and May 1, 2019 as review dates. (Duke failed to provide a record for the annual review for 2016.) The records for these years failed to include documentation of who reviewed the plan, signatures of who approved the plan review, or the approval date of the completed review pursuant to Duke's Alarm Management Plan CRM 1090 procedure (effective date September 2, 2020), at Section 8 and Table 4. It also lacked documentation that these revisions were implemented. For example, the revision page notes that "[c]hanges on hold for pending integration" for both revisions 1.15 and 1.16.

³ According to Duke's control room staff, the company has approximately 5,000 points to review, which takes an estimated month to complete.

⁴ Additionally, the document provided and titled "Alarm Management Plan 2017" has a revision number 1.13, with a revision date of 2/16/2017, which fails to match the revision date for revision 1.13, found on Page 2 of the Plan.

5. § 192.631 - Control room management.

(a) ...

(f) *Change management.* Each operator must assure that changes that could affect control room operations are coordinated with the control room personnel by performing each of the following:

(1) Establish communications between control room representatives, operator's management, and associated field personnel when planning and implementing physical changes to pipeline equipment or configuration;

Duke failed to assure that changes that could affect control room operations are coordinated with control room personnel by establishing communications between control room representatives, operator's management, and associated field personnel when planning and implementing physical changes to pipeline equipment or configuration in violation of § 192.631(f)(1). During the inspection, Duke provided an electronic calendar invite as a record to demonstrate that communications with control room personnel were established to meet this requirement. However, a calendar invite fails to demonstrate that appropriate control room representatives, operator management, and associated field personnel attended, only that they were invited. Duke Energy could not provide records to demonstrate compliance with this regulation.⁵

6. § 192.631 - Control room management.

(a) ...

(h) *Training.* Each operator must establish a controller training program and review the training program content to identify potential improvements at least once each calendar year, but at intervals not to exceed 15 months...

Duke failed to review its training program content to identify potential improvements at least once each calendar year, but at intervals not exceeding 15 months, in violation of § 192.631(h). During the PHMSA inspection, Duke was unable to provide any records for 2017, 2018, and 2019 to demonstrate that the company reviewed the contents of its training program to identify potential improvements.⁶

7. § 192.631 - Control room management.

(a) ...

(h) *Training.* Each operator must establish a controller training program and review the training program content to identify potential improvements at least once each calendar year, but at intervals not to exceed 15 months. An operator's program must provide for training each controller to carry out the roles and responsibilities

⁵ See 49 C.F.R. § 192.631(j)(1) requiring operators to maintain for review during inspection records that demonstrate compliance with the requirements of this section.

⁶ *Id.*

defined by the operator. In addition, the training program must include the following elements:

(1) Responding to abnormal operating conditions likely to occur simultaneously or in sequence;

Duke failed to establish a controller training program that included responding to abnormal operating conditions likely to occur simultaneously or in sequence at the requisite intervals. Specifically, during the PHMSA inspection, Duke failed to provide any records or other documentation to indicate that controllers are trained pursuant to this regulation.⁷

8. § 192.631 - Control room management.

(a) ...

(j) *Compliance and deviations.* An operator must maintain for review during inspection:

(1) Records that demonstrate compliance with the requirements of this section; and

Duke failed to maintain for review during inspection, records that demonstrated compliance with the requirements of § 192.631. In general, Duke's record-keeping was found to be chaotic without any real organization. While PHMSA understands the difficulty of mergers, record keeping is a core responsibility for compliance. To that end, records must be sufficiently detailed to demonstrate compliance.

During the inspection, Duke personnel verbally stated that records are on company laptop hard drives. Compliance records should never be stored on a laptop hard drive unless hard drives are routinely required to be back-upped to company servers. The operator failed to ensure that electronic records were properly stored and safeguarded.

Under 49 U.S.C. § 60122 and 49 CFR § 190.223, you are subject to a civil penalty not to 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 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 correct the items identified in this letter. Failure to do so will result in Duke Energy being subject to additional enforcement action.

⁷ *Id.*

No reply to this letter is required. If you choose to reply, in your correspondence please refer to **CPF 5-2021-026-WL**. 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).

Sincerely,

Dustin Hubbard
Director, Western Region, Office of Pipeline Safety
Pipeline and Hazardous Materials Safety Administration

cc: PHP-60 Compliance Registry
PHP-500 D. Fehling (#20-177378)