STATE OF WASHINGTON
UTILITIES AND TRANSPORTATION COMMISSION
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Sent Via Email

April 26, 2021

Pat Darras
VP, Engineering & Ops Services
Cascade Natural Gas Corporation
400 North 4th Street
Bismarck, ND 58501

RE: 2020 Natural Gas CRM Inspection – Cascade Natural Gas – Headquarters – (Insp. No. 8149)

Dear Mr. Darras:

Staff from the Washington Utilities and Transportation Commission (staff) conducted a Control Room Management (CRM) inspection of Cascade Natural Gas Corporation from November 16 to 17, 2020. This inspection included a records review and inspection of company procedures.

Our inspection indicates 9 area(s) of concern as noted in the enclosed report, which unless corrected, could potentially lead to future violation of state and/or federal pipeline safety rules.

Your response needed
Please review the attached report and respond in writing by May 28, 2021. The response should include how and when you plan to bring the area of concern into full compliance.

What happens after you respond to this letter?
The attached report presents staff's decision on the area of concern and does not constitute a finding of probable violation by the staff at this time if the issue is resolved within 90 days of discovery.

If this issue is not resolved within 90 days, this matter may result in the issuance of a notice of probable violation.

Cascade Natural Gas Company
2020 [Control Room Management Inspection], [Headquarters]
April 26, 2021

If you have any questions or if we may be of any assistance, please contact Lex Vinsel at (360) 789-6024. Please refer to the subject matter described above in any future correspondence pertaining to this inspection.

Sincerely,

Sean Mayo Digitally signed by Sean Mayo Date: 2021.04.26 16:29:31 -07'00'

Sean C. Mayo
Pipeline Safety Director

Enclosure

cc: Josh Sanders, Dir, Ops Policy & Procedures, CNGC
Mike Schoepp, Dir, Operations Services, CNGC
Ryan Privratsky, Dir, System Integrity, Integrity Management, CNGC

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION
2020 Natural Gas Control Room Management Inspection
Cascade Natural Gas Corp. - Headquarters

The following areas of concern of Title 49 CFR Part 192.631 for Control Room Management were noted as a result of the 2020 inspection of the Cascade Natural Gas – Headquarters. The inspection included a records review and inspection of company procedures.

AREA OF CONCERN

1. **49 CFR §192.631 Control room management.**

Question Title, ID - Control Room Management Criteria, CR.CRMGEN.CRMCRITERIA.P

Question 1. Do procedures adequately address the process and criteria that determine which facilities are determined to be control rooms?

References 192.631(a)(2)
Result Concern

Description for Area of Concern:
(a) General
(2) The procedures required by this section must be integrated, as appropriate, with operating and emergency procedures required by § § 192.605 and 192.615. An operator must develop the procedures no later than August 1, 2011, and must implement the procedures according to the following schedule. The procedures required by paragraphs (b), (c)(5), (d)(2) and (d)(3), (f) and (g) of this section must be implemented no later than October 1, 2011. The procedures required by paragraphs (c)(1) through (4), (d)(1), (d)(4), and (e) must be implemented no later than August 1, 2012. The training procedures required by paragraph (h) must be implemented no later than August 1, 2012, except that any training required by another paragraph of this section must be implemented no later than the deadline for that paragraph.

Summary of Findings:
The Control Room Management (CRM) plan in place was developed and implemented on April 01, 2014 based on the Change/Review log located on page 18 of CRM CP#930. Staff requested clarity on this implementation date and were informed this was related to the establishment of Control Room systems taking place in 2014. Procedures implemented beyond the required schedule should be supported by factual timeline statements to support an implementation date outside of the schedule.

2. **49 CFR §192.631 Control room management.**

Question Title, ID - Control Room Management, CR.CRMGEN.CRMIMPLEMENT.R

Cascade Natural Gas Company
2020 [Control Room Management Inspection], [Headquarters]
April 26, 2021

Question 3. Were procedures approved, in place, and implemented on or before the regulatory deadline?

References 192.631(a)(2)
Result Concern

Description for Area of Concern:
(a) General
(2) The procedures required by this section must be integrated, as appropriate, with operating and emergency procedures required by § § 192.605 and 192.615. An operator must develop the procedures no later than August 1, 2011, and must implement the procedures according to the following schedule. The procedures required by paragraphs (b), (c)(5), (d)(2) and (d)(3), (f) and (g) of this section must be implemented no later than October 1, 2011. The procedures required by paragraphs (c)(1) through (4), (d)(1), (d)(4), and (e) must be implemented no later than August 1, 2012. The training procedures required by paragraph (h) must be implemented no later than August 1, 2012, except that any training required by another paragraph of this section must be implemented no later than the deadline for that paragraph.

Summary of Findings:
The Control Room Management (CRM) plan in place was developed and implemented on April 01, 2014 based on the Change/Review log located on page 18 of CRM CP#930. Staff requested clarity on this implementation date and were informed this was related to the establishment of Control Room systems taking place in 2014. Procedures implemented beyond the required schedule should be supported by factual timeline statements to support an implementation date outside of the schedule.

3. **49 CFR §192.631 Control room management.**

Question Title, ID - Control Center Evacuation, CR.CRMRR.EVACUATION.P

Question 13. Do processes specifically address the controller's responsibilities in the event the control room must be evacuated?

References 192.631(b)(3)
Result Concern

Description for Area of Concern:
(b) Roles and responsibilities. Each operator must define the roles and responsibilities of a controller during normal, abnormal, and emergency operating conditions. To provide for a controller's prompt and appropriate response to operating conditions, an operator must define each of the following:
(3) A controller's role during an emergency, even if the controller is not the first to detect the emergency, including the controller's responsibility to take specific actions and to communicate with others;

Summary of Findings:
Within the CRM Plan provided, CNG outlines actions to be taken in the event of an evacuation. No outline or clear plan is in place to maintain coverage during transition to the backup control room in the event of an evacuation. Due to distance between the primary and backup control rooms, staff is concerned of the potential down/blind time associated with the transfer of system control.

4. **49 CFR §192.631 Control room management.**

Question Title, ID – Backup SCADA Transfer, CR.SCADA.BACKUPSCADATRANSFER.P

Question 57. Do processes adequately address and test the logistics of transferring control to a backup control room?

References 192.631(c)(4)
Result Concern

Description for Area of Concern:
(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:
(4) Test any backup SCADA systems at least once each calendar year, but at intervals not to exceed 15 months; and...

Summary of Findings:
CNG states the backup control room transfer will be done over the telephone when applicable, but no specific logistical plan appears to be readily available within the CP. Time duration to get qualified controllers to, and activate, the back-up control room should be identified and downtime/blind time accounted for. Due to distance between the primary and backup control rooms, staff is concerned of the potential down/blind time associated with the transfer of system control.

5. **49 CFR §192.631 Control room management.**

Question Title, ID – Backup SCADA Return to Primary, CR.SCADA.BACKUPSCADARETURN.P

Question 58. Do procedures adequately address and test the logistics of returning operations back to the primary control room?

References 192.631(c)(4)
Result Concern

Description for Area of Concern:
(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:
(4) Test any backup SCADA systems at least once each calendar year, but at intervals not to exceed 15 months; and

Summary of Findings:
Time duration to get qualified controllers to, and activate, the main control room when returning to normal operations should be identified and downtime/blind time accounted for. Due to distance between the primary and backup control rooms, staff is concerned of the potential down/blind time associated with the transfer of system control.

6. **49 CFR §192.631 Control room management.**

Question Title, ID – Fatigue Mitigation Manager CR.CRMFM.FATIGUEMANAGER.P

Question	63. Is there a designated fatigue risk manager who is responsible and accountable for managing fatigue risk and fatigue countermeasures, and someone (perhaps the same person) that is authorized to review and approve HOS emergency deviations?
References	192.631(d)
Result	Concern

Description for Area of Concern:
(d) Fatigue mitigation. Each operator must implement the following methods to reduce the risk associated with controller fatigue that could inhibit a controller's ability to carry out the roles and responsibilities the operator has defined:

Summary of Findings:
CP 930 Section 5.2.3 addresses deviation and approvals mentioning the requirement of pre-approval of CNGC Gas Control Management. The bottom of page 2 and top of page 3 provide specific job descriptions associated with the management team. CRM Plans should clearly reference titles, or where to find them, when outlining processes. Staff also noted no specific reference to the management team being responsible for the fatigue plan as mentioned in the description for area of concern.

7. **49 CFR §192.631 Control room management.**

Question Title, ID – Control Room Team Training – Personnel
CR.CRMTRAIN.TEAMTRAINPERSONNEL.P

Question 130. Do processes establish who, regardless of location, operationally collaborates with control room personnel?

References 192.631(h)(6)
Result Concern

Description for Area of Concern:
(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 defined by the operator. In addition, the training program must include the following elements:*
(6) Control room team training and exercises that include both controllers and other individuals, defined by the operator, who would reasonably be expected to operationally collaborate with controllers (control room personnel) during normal, abnormal or emergency situations. Operators must comply with the team training requirements under this paragraph by no later than January 23, 2018.

Summary of Findings:
CNG CP 930 Section 9.8 calls out “other individuals” for team training, but does not define position titles. Records supporting this training are associated with action in Section 4 during failure drills. Staff was able to review these documents indicating “other individuals” are participating in drills as a method of team training. Procedures associated with team training should clearly demonstrate that the operator has defined positions/personnel outside of the control room to participate in these activities and the methodology behind frequency of this training.

8. **49 CFR §192.631 Control room management.**

Question Title, ID – Control Room Team Training – Frequency
CR.CRMTRAIN.TEAMTRAINFREQ.P

Question 131. Do processes define the frequency of new and recurring team training?

References 192.631(h)(6)
Result Concern

Description for Area of Concern:
(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 defined by the operator. In addition, the training program must include the following elements:
(6) Control room team training and exercises that include both controllers and other individuals, defined by the operator, who would reasonably be expected to operationally collaborate with controllers (control room personnel) during normal, abnormal or emergency situations. Operators must comply with the team training requirements under this paragraph by no later than January 23, 2018.

Summary of Findings:
CNG CP 930 Section 9.8 calls out "other individuals" for team training, but does not define position titles. Records supporting this training are associated with action in Section 4 during failure drills. Staff was able to review these documents indicating "other individuals" are participating in drills as a method of team training. Procedures associated with team training should clearly demonstrate that the operator has defined positions/personnel outside of the control room to participate in these activities and the methodology behind frequency of this training.

9. **49 CFR §192.631 Control room management.**

Question Title, ID – Deviation Records CR.CRMCOMP.DEVIATION.R

Question 144. Were all deviations documented in a way that demonstrates they were necessary for safe operation?

References 192.631(j)(2)
Result Concern

Description for Area of Concern:
(j) Compliance and deviations. An operator must maintain for review during inspection:
(2)Documentation to demonstrate that any deviation from the procedures required by this section was necessary for the safe operation of a pipeline facility.

Summary of Findings:
CNG had no deviations, but were unable to demonstrate adequate documentation. An email supporting statements made by CNG personnel was provided as supporting documentation. Staff is concerned that CNG records do not adequately support deviations that occurred for the safe operation of the pipeline facility or lack thereof.