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April 29, 2021

Sean Mayo – Pipeline Safety Director
Washington Utilities and Transportation Commission
PO Box 47250
Olympia, WA 98504-7250

Subject: CNGC response to Areas of Concern RE: Control Room Management inspection on November 17, 2020 (Insp. No. 8149)

Dear Mr. Mayo,

This letter is intended to address seven areas of concern stemming from a Control Room Management inspection of Cascade Natural Gas Corporation (CNGC) performed by the Washington Utilities and Transportation Commission (WUTC) on November 17, 2020 (Insp. No. 8149). Specifically, we are addressing how we have brought the areas of concern into full compliance.

AREAS OF CONCERN

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

(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 Finding(s):

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 was 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.

Cascade Response

CNGC's natural gas pipeline system was monitored by the WBI Energy Gas Control Center in Bismarck, ND from April 1, 2010 to April 1, 2014. The CRM plan in place was developed and implemented on April 1, 2014 which coincides with the establishment of CNGC's current Gas Control Room and aligns with the requirements of 49 CFR § 192.605 and 192.615.

2. 49 CFR§192.631 Control room management.

(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 Finding(s):

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.

Cascade Response

CNGC acknowledges the findings brought forth by the WUTC. As such, CNGC performed a thorough review of logistics and potential down time associated with a transfer from the Main Control Room to the Back Up Control Room and vice versa via the MDU Utilities Group (MDUG) Management of Change (MOC) process. It should be noted that CNGC CP 930 was superseded by MDUG OPS 631 – Control Room Management on December 14, 2020. The conversion of CP 930 to OPS 631 included general editing to reflect MDUG as opposed to CNGC. Transferring from the Main Control Room to the Back Up Control Room and vice versa, as well as other procedure changes stemming from the seven-state control room audit were addressed in the latest revision of OPS 631, provided to the WUTC on March 16, 2021.

3. 49 CFR§192.631 Control room management.

(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 Finding(s):

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.

Cascade Response

Please see the Cascade response to area of concern 2 above.

4. 49 CFR§192.631 Control room management.

(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 Finding(s):

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.

Cascade Response

Please see the Cascade response to area of concern 2 above.

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

(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 Finding(s):

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.

Cascade Response

CNGC acknowledges the findings brought forth by the WUTC stated above. While the scope of Company Procedure 930 – Control Room Management states the CNGC Gas Control Management Team is comprised of three positions: Director, Gas Supply/Gas Control, Manager, Gas Supply/Gas Control and Supervisor, Gas Control, MDUG has added the title, Supervisor, Gas Control, in the Fatigue Mitigation section of OPS 631 as it relates to responsibility and approval authority. This revision of OPS 631 was provided to the WUTC on March 16, 2021.

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

(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 Finding(s):

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.

Cascade Response

CNGC acknowledges the findings brought forth by the WUTC stated above. As such, the Training section of OPS 631 was revised to add the following position titles that will be included, along with Gas Controllers, in specific training exercises: These additions are reflected in the latest revision of OPS 631, provided to the WUTC on March 16, 2021.

Network Architect(s)
SCADA System Analysts
First Responders (e.g. Service Mechanics, Service Technicians) who respond to communication outages

To provide a robust training curriculum to the personnel outlined above, the frequency of every 24 months, not to exceed 30 months was established. This frequency provides adequate time to develop impactful training exercises and ensure attendance with such a large group without compromising the sustainability of the information provided.

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

(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 Finding(s):

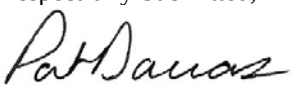
CNG had no deviations, but were unable to demonstrate adequate documentation. An email supporting statements made by CNG personnel was provided as supporting documentation. Staff is concerned that CNG records do not adequately support deviations that occurred for the safe operation of the pipeline facility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

Cascade Response

CNGC acknowledges the findings brought forth by the WUTC stated above. As such, MDUG has created a Monthly Deviation Report. The Supervisor, Gas Control or designee will be responsible for the completion of the report, and the report will document if no deviation occurred. The new report was implemented with the MOC referenced in the Cascade response to area of concern 2. The latest revision of OPS 631 was provided to the WUTC on March 16, 2021.

Please contact Josh Sanders at (701) 222-7773 with questions or comments.

Respectfully Submitted,



Pat Darras
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