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U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Ref 10 CFR 50.36

12/19/2017

SUBJECT: COMANCHE PEAK NUCLEAR POWER PLANT – UNIT 1
DOCKET NO. 50-445
INOPERABLE POST ACCIDENT MONITORING INSTRUMENTATION REPORT
SPECIAL REPORT 1-SR-17-001-00

Dear Sir or Madam:

Enclosed is a 14 day Special Report titled "COMANCHE PEAK NUCLEAR POWER PLANT – UNIT 1, SPECIAL REPORT 1-SR-17-001-00, INOPERABLE POST ACCIDENT MONITORING INSTRUMENTATION" submitted in accordance with CPNPP Technical Specification 5.6.8, PAM Report.

This letter contains no new regulatory commitments.

If you have any questions regarding this submittal, please contact Garry Struble at (254) 897-6628 or garry.struble@luminant.com.

Sincerely,

Steven K. Sewell

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NRR

Enclosure COMANCHE PEAK NUCLEAR POWER PLANT – UNIT 1, SPECIAL REPORT 1-SR-17-001-00, INOPERABLE POST ACCIDENT MONITORING INSTRUMENTATION

c –

Kriss Kennedy, Region IV
Margaret M. O'Banion, NRR
Resident Inspectors, Comanche Peak

VISTRA OPERATIONS COMPANY LLC
COMANCHE PEAK NUCLEAR POWER PLANT – UNIT 1
SPECIAL REPORT 1-SR-17-001-00
INOPERABLE POST ACCIDENT MONITORING INSTRUMENTATION

1.0 Report Requirements

This special report is submitted in accordance with Section 5.6.8, PAM Report of the CPNPP Technical Specifications (TS). Specifically, TS Section 3.3.3, Post Accident Monitoring (PAM) Instrumentation requires the PAM Instrumentation to be OPERABLE in MODES 1, 2, and 3 for each function in Table 3.3.3-1. With one or more functions with one required channel inoperable, Condition A.1 requires the inoperable channel be restored to OPERABLE status within 30 days. If the Required Action and associated Completion Time of Condition A is not met then, Required Action B.1 requires initiating actions immediately in accordance with Specification 5.6.8.

When a report is required by the required actions of LCO 3.3.3, "Post Accident Monitoring (PAM) Instrumentation," a report shall be submitted within the following 14 days. The report shall outline the preplanned alternate method of monitoring, the cause of the inoperability, and the plans and schedule for restoring the instrumentation channels of the Function to OPERABLE status.

2.0 Event Description

The principle function of the Containment Area High Range Radiation Monitor (HRRM) at CPNPP is to provide indication of radiation levels in Containment during and after postulated accidents. The Containment Area HRRM consists of two ion chamber detectors located on the 905 foot elevation of the Containment approximately 90 degrees apart. The range of each detector is 1 to 10,000,000 R/hr. The output of each detector is fed to a radiation monitoring processor located outside Containment. The radiation monitoring processor provides monitoring, alarming, and recording functions for the associated channel. There are no control functions associated with the Containment Area HRRM. Instrument output can be read on multiple display units in the radiation monitoring system and the plant computer.

On December 13, 2017, during evaluation of past operability of Unit 1 radiation monitor 1-RE-6290B UNIT 1 CONTAINMENT EL 905 E. WALL HIGH RANGE RADIATION DETECTOR it was determined that a 2 inch opening in a vendor supplied junction was not sealed. Due to the 2 inch opening not being sealed the radiation monitor was not sealed against the environment making the channel inoperable. This condition was identified during the Unit 1 refueling outage in

November 2017 (1RF19). The proper seal plug was obtained and the opening sealed during 1RF19 prior to MODE 3 entry. CPNPP assumes that the opening was present for greater than the 30 days allowed by Condition A of TS 3.3.3, requiring submittal of this PAM Report.

Also during 1RF19 maintenance was performed on the other Containment Area HRRM, 1-RE-6290A UNIT 1 CONTAINMENT EL 905 HIGH RANGE RADIATION DETECTOR. No impacts on operability were identified on 1-RE-6290A UNIT 1 CONTAINMENT EL 905 HIGH RANGE RADIATION DETECTOR.

3.0 Required Information

3.1 Preplanned Alternate Methods of Monitoring

As described above, the inoperability was not known until maintenance was being performed during 1RF19. At that time the monitor was not required for operability as PAM instrumentation is required in MODES 1, 2, and 3. Therefore, a preplanned alternate method of monitoring is not required for this report.

However, this monitor is listed as Equipment Important to Emergency Response (EITER), Category B. As such, plant procedure STI-433.01, Maintaining Equipment Important to Emergency Preparedness, originally issued on August 26, 2013, has the following alternate indications for the loss of 1-RE-6290B UNIT 1 CONTAINMENT EL 905 E. WALL HIGH RANGE RADIATION DETECTOR;

- 1-RE-6290A UNIT 1 CONTAINMENT EL 905 HIGH RANGE RADIATION DETECTOR
- Containment air lock door dose rate per RP survey
- Containment air sampling and analysis

3.2 Cause of the Inoperability

As described above the lack of the plug for the 2 inch opening in the junction box caused the channel to be inoperable in a harsh environment. Once the plug was installed the channel was OPERABLE.

3.3 Plans and Schedule for Restoring the Instrumentation Channels of the Function to OPERABLE Status

As stated, once the 2 inch opening was properly plugged the environmental inoperability was no longer applicable on 1-RE-6290B UNIT 1 CONTAINMENT EL 905 E. WALL HIGH RANGE RADIATION DETECTOR.

Both PAM channels; 1-RE-6290A UNIT 1 CONTAINMENT EL 905 HIGH RANGE RADIATION DETECTOR and 1-RE-6290B UNIT 1 CONTAINMENT EL 905 E. WALL HIGH RANGE RADIATION DETECTOR are OPERABLE.