Steven K. Sewell
Senior Director, Engineering & Regulatory Affairs
Luminant
P.O. Box 1002
6322 North FM 56
Glen Rose, TX 76043
o 254.897.6113

CP-201800312
TXX-18036

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

7/19/2018

SUBJECT: COMANCHE PEAK NUCLEAR POWER PLANT (CPNPP)
DOCKET NOS. 50-445 AND 50-446
SCHEDULE REVISIONS RELATED TO OPEN PHASE CONDITION MONITORING

REFERENCES:
1. Luminant Power Letter logged TXX-12122, from CPNPP 90-day Response to NRC Bulletin 2012-01, "DESIGN VULNERABILITY IN ELECTRIC POWER SYSTEM"
2. Letter from Anthony R. Pietrangelo, NEI, to William M. Dean, USNRC, March 16, 2015, "Industry Initiative on Open Phase Condition, Revision 1"

Dear Sir or Madam:

The purpose of this letter is to provide a revised schedule for full implementation of the Open Phase Detection/Protection system at CPNPP. The revision is a change to the schedule dates for transitioning the CPNPP Open Phase Detection / Protection system from monitoring-only to trip-enabled mode. The transition date is changed from December 31, 2018, to December 31, 2019.

Vistra Operating Company LLC (Vistra OpCo) selected the Open Phase Detection / Protection system that was developed by the Electric Power Research Institute (EPRI) and Power System Sentinel Technologies, LLC (PSStech). This system will be installed for each Unit in 2018 and will be operated in the monitoring mode through 2019 to ensure sufficient data is captured and analyzed prior to placement of the system into the 'trip' mode. Vistra OpCo considers the need to monitor grid conditions during varying seasonal conditions necessary to reasonably reduce the potential for unnecessary shedding of a viable preferred offsite power feed from its respective safeguards buss.

As a member of the PSStech Users Group, Vistra OpCo. has become aware of several issues during operation of the PSStech Open Phase Protection (OPP) system currently installed at other facilities. For example, the digital injection source has been found to be very sensitive to grid disturbances such as capacitor banks coming on line, plant trips, grid anomalies from large customer or equipment changes or failures. Changes in 5th harmonic and

A001
NRR

current levels on the neutral have also created some alarms. Adjustments to settings have been made to address many of the alarms. Some of the conditions creating the alarms are seasonal (environmental) and some are based on the local grid configuration. Since early 2016, the PSStech user group has monitored and collected data on the types of issues and adjustments made to the equipment including equipment upgrades. The local grid at CPNPP is unique to our location and a 12-month monitoring period is considered prudent and appropriate so as to reduce the potential for false trips from the OPP equipment and ensure proper evaluation of our unique area and environmental conditions. During the monitoring period, alarms will be enabled which would initiate operator action to discover the cause of the alarm and possible Open Phase Conditions (OPCs).

Hence, CPNPP is extending the Open Phase Detection / Protection system monitoring period to gather more operating experience (OE) with this new hardware configuration before enabling the Open Phase Detection system trip functions. Additional time will also provide more OE from across the industry relative to the types and characteristics of grid disturbances that could cause spurious Open Phase Detection / Protection system actuations.

The information obtained during the additional monitoring period will better inform the determination of the actuation setpoints and time delays for the system. This will serve to minimize the potential for inadvertent system actuations once the trip functions have been enabled. Inadvertent system actuations during normal power operations would unnecessarily (1) reduce the availability of offsite power, (2) cause the emergency diesel generators (EDGs) on the affected Unit to start and run unloaded, and (3) require Limiting Condition for Operation (LCO) entry due to loss of the applicable offsite source.

The extended monitoring period will not adversely impact the safe operation of CPNPP Units 1 and 2. CPNPP has taken interim corrective actions in response to this industry issue, as documented in Reference 1. In addition to those interim actions, the Open Phase Detection system alarm feature itself helps operators diagnose any potential OPC related to the offsite power source.

In summary, CPNPP selected the Open Phase Detection / Protection system that was developed by the Electric Power Research Institute (EPRI) and Power System Sentinel Technologies, LLC (PSStech). This system will be installed for each Unit in 2018 as previously stated. The system for each Unit will be operated in the 'monitoring' mode throughout 2019 and, barring unforeseen circumstances, be operated in the 'trip' mode on or before December 31, 2019.

This communication contains a new commitment for CPNPP Unit1 and Unit 2 as described in Attachment 1.

Should you have any question, please contact Ken Vehstedt at (254) 897-6296.

Sincerely,

Steven K. Sewell

Attachment 1 Regulatory Commitment

c - Kriss Kennedy, Region IV
Margaret Watford O'Banion, NRR
Resident Inspectors, Comanche Peak

Regulatory Commitment

Corrective Action Program Action Task:

AI-TR-2016-005840-40

Commitment Description:

The Open Phase Condition (OPC) system shall be placed into the 'trip' mode for both Comanche Peak Nuclear Power Plant (CPNPP) Units 1 and 2.

Schedule Completion Date:

December 31, 2019