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Log # TXX-13154

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December 9, 2013

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

**SUBJECT:** COMANCHE PEAK NUCLEAR POWER PLANT (CPNPP)  
UNITS 1 AND 2, DOCKET NUMBERS 50-445 AND 50-446  
REQUEST FOR ENFORCEMENT DISCRETION REGARDING COMPLIANCE WITH  
TECHNICAL SPECIFICATIONS 3.8.1, "AC SOURCES - OPERATING"

- REFERENCES:**
1. Luminant Power letter, Logged TXX-12198, from Rafael Flores to the NRC dated December 19, 2012, "Comanche Peak Nuclear Power Plant (CPNPP) Docket Nos. 50-445 and 50-446, License Amendment Request (LAR) 12-007, Revision to Technical Specifications 3.8.1, 'AC Sources - Operating,' for Two, 14-Day Completion Times for Offsite Circuits."
  2. Luminant Power letter, Logged TXX-13082, from Rafael Flores to the NRC dated May 16, 2013, "Response to Request for Additional Information for License Amendment Request (LAR) 12-007, Revision to Technical Specifications 3.8.1, 'AC Sources - Operating,' for Two, 14-Day Completion Times for Offsite Circuits." (TAC Nos. MF0405 and MF0406).
  3. Letter to Rafael Flores (CPNPP) from Balwant K. Singal (USNRC) dated September 18, 2013, "Comanche Peak Nuclear Power Plant, Units 1 and 2 - Issuance of Amendments Revising Technical Specification 3.8.1, 'AC Sources - Operating' for Two, 14-Day Completion Times for Offsite Circuits." (TAC Nos. MF0405 and MF0406).
  4. NRC Regulatory Issue Summary 2005-01, Revision 1, "Changes to Notice of Enforcement Discretion Process and Staff Guidance," dated March 13, 2013.
  5. NRC Inspection Manual Chapter 0410, "Notices of Enforcement Discretion," dated March 13, 2013.

Dear Sir or Madam:

This letter documents the background and technical information supporting the Comanche Peak Nuclear Power Plant (CPNPP) Units 1 and 2 notice of enforcement discretion (NOED) request discussed with the Nuclear Regulatory Commission (NRC) during a telephone conference call held on December 5, 2013 at 1000 Central Standard Time (CST). On December 5, 2013 at 1300 CST, Luminant Generation Company LLC (Luminant Power) received verbal approval from the NRC staff for the NOED. This submittal fulfills the requirement that a written NOED request be submitted to the NRC within two working days following NRC verbal approval of the NOED.

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On the subject telephone conference call the NRC also agreed that no permanent change to the Operating License or Technical Specifications appeared necessary.

Reference 1 was CPNPP's License Amendment Request (LAR) 12-007 for two, one-time, 14-day Technical Specification (TS) Completion Times (CTs) to complete a plant modification by March 31, 2014. This change was needed to allow sufficient time to (1) modify the XST1 138kV tower to add disconnects for new alternate XST1A and replace existing disconnects for XST1 and (2) to make final terminations to facilitate connection of XST1 or alternate XST1A to the 1E buses. After completion of this modification, if XST1 should require maintenance or repair or if failure occurs, then the alternate XST1A can be aligned to the 1E buses well within the current Completion Time (CT) of 72 hours. Reference 2 was the Luminant Power response to a request from the NRC for additional information needed to review LAR 12-007. Reference 3 was the NRC's approval of LAR 12-007 and provided the Safety Evaluation for Amendment 160 to the Units 1 and 2 Facility Operating License Nos. NPF-87 and NPF-89, respectively. CPNPP implemented Amendment 160 on October 10, 2013 at 1300 CST and completed the first 14-day CT on October 22, 2013 at 0412 CST.

The events leading to CPNPP's request began at 0100 CST on December 4, 2013 when CPNPP entered the second 14-day CT for XST1 and started cutting 6.9kV cables to make the final terminations. At 1341 CST the same day, CPNPP experienced a loss of safeguards electrical power when 345kV startup transformer XST2 was de-energized. Non-safeguards electrical power remained energized. Both Units remained at-power in MODE 1. Both Units emergency diesel generators (EDGs) automatically started and all safeguards buses were re-energized from the EDGs. All engineered safety feature actuation systems functioned as expected. Initial review indicates that during the modification work for XST1, an incorrect cable was cut associated with the 6.9 kV Phase B cable from XST2 and electrical protection circuits actuated to isolate transformer XST2. At 1341 CST on December 4, 2013, both CPNPP Units entered Condition C, Required Action C.2, "Restore one required offsite circuit to OPERABLE status" of TS 3.8.1 "AC Sources - Operating" to restore one required offsite circuit to OPERABLE status within 24 hours. If the CT of 24 hours for Condition C is not met, then both CPNPP Units will be required to enter Condition G and be in MODE 3 in 6 hours and in MODE 5 in 36 hours.

Enforcement discretion was requested to provide an additional 14 hours to comply with Limiting Condition for Operation (LCO) LCO 3.8.1 Condition C beginning at 1341 CST on December 5, 2013 in order to permit additional time to make repairs and restore XST1 or XST2 to OPERABLE status before entry into MODE 3 within 6 hours was required. The additional 14 hours was requested to restore XST1 or XST2 to OPERABLE status such that the action to place the plant in MODE 3 within 6 hours would begin at 0341 CST on December 6, 2013.

Repair to the cut cable and restoration of XST2 were performed in parallel with the effort to restore XST1 to OPERABLE status but repair and restoration of XST1 was projected to take longer.

CPNPP will work around the clock to complete repairs and restoration of XST1 and XST2. CPNPP is not requesting the enforcement discretion for troubleshooting but is using the time for corrective maintenance and if, at any time during the effort, it becomes apparent that the allowed time will not be met, the enforcement discretion will no longer apply. Further, the applicable compensatory and mitigating measures committed to during the one-time, 14-day CT for XST1 will continue to be in place to assure safe shutdown and offsite power capability and availability for the duration of the period of enforcement discretion.

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The event has been entered into the CPNPP corrective action program and will be the subject of a root cause evaluation.

Attachments 1 and 2 provide the information documenting CPNPP's verbal request for enforcement discretion on December 5, 2013 at 1000 CST and were prepared using the guidance in References 4 and 5. It should be noted that XST2 was declared OPERABLE on December 5, 2013 at 1717 CST and the NOED was terminated. The total time CPNPP Units 1 and 2 remained in the NOED was 3 hours and 36 minutes. Transformer XST1 was declared OPERABLE on December 6, 2013, at 0019 CST. If you have any questions regarding this request, please contact Jack Hicks at 254-897-6725 or jack.hicks@luminant.com.

This letter contains no new regulatory commitments.

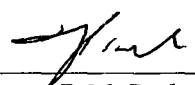
I state under penalty of perjury that the foregoing is true and correct.

Executed on December 9, 2013.

Sincerely,

Luminant Generation Company LLC

Rafael Flores

By:   
Thomas P. McCool  
Vice President, Station Support

Attachment 1: Request for Enforcement Discretion Regarding Compliance with Technical Specifications 3.8.1, "AC SOURCES - OPERATING"

Attachment 2: CPNPP Commitments for the Second One-Time, 14-Day CT for XST1

c - Marc L. Dapas, Region IV  
Kriss M. Kennedy, Region IV  
Balwant K. Singal, NRR  
Matthew A. Bartlett, NRR  
Resident Inspectors, Comanche Peak

ATTACHMENT 1 to TXX-13154

REQUEST FOR ENFORCEMENT DISCRETION REGARDING COMPLIANCE WITH TECHNICAL  
SPECIFICATION 3.8.1, "AC SOURCES - OPERATING"

The following provides the information, described in NRC Inspection Manual Chapter (IMC) 0410, required to be included in requests for enforcement discretion.

1. Type of NOED being requested, which of the NOED criteria is satisfied, and how it satisfied those criteria. (IMC 0410, Attachment 1, 07a)

A regular notice of enforcement discretion (NOED) is being requested in order to avoid an unnecessary transient by cycling both reactors from power operations to full shutdown (Section 06.02a.1(a) of IMC 0410) as a result of compliance with Technical Specifications (TS) since compliance with TS 3.8.1 "AC Sources -Operating" Condition C, Required Action C.2, "Restore one required offsite circuit to OPERABLE status" and G.1 would involve an unnecessary shutdown of both Units without a corresponding health and safety benefit. The proposed enforcement discretion request meets NOED criteria in Section 03.03a and 03.03b of IMC 0410 by avoiding an unnecessary transient and thus minimizes potential safety consequences and operational risks as a result of compliance with TS 3.8.1 Required Actions G.1 and G.2.

2. TS or license condition that will be violated. (IMC 0410, Attachment 1, 07b)

TS 3.8.1 "AC Sources - Operating" Condition C, Required Action C.2 Completion Time (CT) of 24 hours to restore one required offsite circuit to OPERABLE status was entered at 1341 Central Standard Time (CST) on December 4, 2013 and will expire at 1341 hours on December 5, 2013. The violation of TS 3.8.1, Condition C, Required Action C.2 will occur when the CT of 24 hours expires. The requested period for the Notice of Enforcement Discretion is discussed in Section 9 below.

3. Description of the circumstances, including: likely causes; the need for prompt action; the action taken to avoid the need for a NOED; and any relevant historical events. (IMC 0410, Attachment 1, 07c)

The events leading to Comanche Peak Nuclear Power Plant's (CPNPP's) request began at 0100 CST on December 4, 2013 when CPNPP entered the second 14-day CT for XST1 and started cutting 6.9 kV cables to make the final terminations. At 1341 CST the same day, CPNPP experienced a loss of safeguards electrical power when 345 kV startup transformer XST2 was de-energized when the transformer protective circuitry sensed a fault condition and opened the high voltage air switches.

Initial review indicates that during the modification work for XST1, an incorrect cable, associated with the 6.9 kV Phase B cable from XST2, was cut causing electrical protection circuits to actuate to isolate transformer XST2 from the fault.

Prompt action is needed otherwise at 1341 CST on December 5, 2013, CPNPP Units 1 and 2 will be forced to enter in MODE 3 within 6 hours and MODE 5 within 36 hours in accordance with TS 3.8.1 Condition G Required Actions G.1 and G.2. Remaining at power to allow for restoration of one offsite circuit represents a lower level of risk by maintaining additional redundant/diverse core cooling equipment and removing the transition to MODE 3 (see Section 13 for additional information).

The cause of this event was a unique and isolated incident which was not expected to occur; therefore, no actions were taken to avoid the need for a NOED. There was a recent similar event of a cut cable during the one time effort to modify the XST1 138kV tower to add disconnects for new alternate XST1A and replace existing disconnects for XST1. This event was different in that

it did not result in the loss of off-site power (both 345 kV and 138 kV switchyards). Both events have been entered into CPNPP's corrective action program.

There are no relevant historical events for CPNPP Units 1 and 2 (loss of off-site power – both 345 kV and 138 kV).

4. Cause of the situation that has led to the NOED request. (IMC 0410, Attachment 1, 07d)

The events leading to CPNPP's request began at 0100 CST on December 4, 2013 when CPNPP entered the second 14-day CT for XST1 and started cutting 6.9kV cables to make the final terminations. At 1341 CST the same day, CPNPP experienced a loss of safeguards electrical power when 345kV startup transformer XST2 was de-energized when the transformer protective circuitry sensed a fault condition and opened the high voltage air switches. Initial review indicates that during the modification work for XST1, an incorrect cable, associated 6.9 kV Phase B cable from XST2, was cut and electrical protection circuits actuated to isolate transformer XST2 from the fault.

The cause of the event appears to be an error in the design modification process. This event has been entered into CPNPP corrective action program and will be the subject of a root cause evaluation. The repairs will restore XST2 to OPERABLE. A mechanical device was being used to cut the cable. As soon as an arc was noticed, the cutting process was terminated and the workers immediately exited the area. Subsequent inspections indicated no damage to other cables in the area. There was no significant melting of the conductor or insulation of the cut cable. There were no associated personnel injuries.

5. Course of action to resolve the situation until the situation no longer warrants a NOED. (IMC 0410, Attachment 1, 07e)

Restoration of XST2 is the primary path for restoring offsite power to the safeguards buses. The plan includes repairing the XST2 cable that was cut by installing a bolted connection. This work was started on December 4, 2013 at 1800 CST and is anticipated to complete by approximately 1700 CST on December 5, 2013.

In parallel, CPNPP is working to restore XST1 which had been removed from service for the completion of modification work. The plan includes installing the intended connection to provide power from XST1. The XST1A modification will be terminated after XST1 is restored to OPERABLE status. This work was started on December 4, 2013 at 1900 CST and is anticipated to complete by approximately 0300 CST on December 6, 2013.

The work is being performed around the clock and controlled through the outage control center which is staffed around the clock. This will ensure that the appropriate focus is placed on scheduling, prioritization, contingencies, and relief turnover. Senior and Site Management personnel will continue to closely monitor the work activities to assure prompt, and safe completion.

6. Demonstrate that the resolution itself does not result in a different, unnecessary transient. (IMC 0410, Attachment 1, 07f)

The planned resolution is to restore XST1 or XST2 to OPERABLE status. The compensatory measures listed in Attachment 2, for the 14-day CT for the 6.9 kV work, will continue during the requested period of enforcement discretion. The emergency diesel generators (EDGs) were

originally intended to be in standby, so while in the running condition additional compensatory actions are being put in place to monitor them and their fuel oil storage levels. The initiating events identified that all balance of plant (BOP) equipment that can result in a plant transient should also be protected and these compensatory actions have been put in place. Upon restoration of either XST2 or XST1 to OPERABLE status, both Units safeguards electrical buses will be realigned to the OPERABLE transformer and all unit EDGs will be restored to a normal standby condition. None of these activities are expected to result in a different, unnecessary transient during the requested period of enforcement discretion.

CPNPP has confidence that transformer XST2 will perform its design function after the electrical transient experienced on December 4, 2013 due the following:

- XST2 is rated for 35000/46667/58333 OA/FOA/FOA (Oil immersed natural convection/forced -air-forced-oil-cooled/forced -air-forced oil-cooled), therefore, its Full Load Amps (FLA) is 169 amps.
- The ground fault relay (51G/ST2-X-1) sensed the fault and transformer XST2 was isolated in 4 cycles.
- The current magnitude sensed in the 345 kV switchyard for the line that feeds XST2 was roughly 20 amps prior to the cable being cut. The magnitude of the fault current was approximately 35 amps. The fault duration was only 4 cycles. The fault current experienced was well below the design rating of the transformer.
- The damage to the cable that was mistakenly cut was not catastrophic; therefore the ground fault relay minimized the duration and magnitude of the fault current and thus any potential damaging current.

7. Demonstration that there was insufficient time to process an emergency TS or license amendment or that a license amendment is not needed. (IMC 0410, Attachment 1, 07g)

The event resulting in entry into TS 3.8.1, Condition C, Required Action C.2 occurred at 1341 CST on December 4, 2013. The 24 hours CT provided to restore one required offsite circuit to OPERABLE status does not provide adequate time to prepare and submit an emergency license amendment request. In addition, the cause of this event was a unique and isolated incident which is not expected to recur; therefore, no permanent change to the Operating License or the TS is required.

8. Condition and operational status of the plant, including safety-related equipment out-of-service or otherwise inoperable and non-safety-related equipment that is degraded or out-of-service that may have risk significance and that may increase the probability of a plant transient or may complicate the recovery from a transient or may be used to mitigate the condition. (IMC 0410, Attachment 1, 07h)

The current (i.e., December 5, 2013, 1000 CST) operating conditions of both Units at CPNPP are:

- In MODE 1 at normal operating temperatures and pressures
- Safety related 6.9kV buses are being powered by their respective emergency diesel generators (EDGs)
- both offsite power supply transformers that provide power to the safety related buses are unavailable (XST1 and XST2)
- Non-safety 6.9kV power is being provided by the unit auxiliary transformers
- 345kV switchyard is available and stable
- Uninterruptible Power Supply (UPS) chiller unit X-01, Instrument Air Compressor 1-01, a single steam dump valve associated with Unit 2, seismic monitors, and control room intake radiation monitor XRE-5896B are currently out-of-service, Unit 2 power operated relief valve (PORV) Block Valve 2-8000A is closed. However, a review of the current

- Probabilistic Risk Analysis (PRA) model component importance measures has determined that the affect of this out-of-service equipment on plant risk is insignificant. No other safety related equipment is currently out-of-service or otherwise inoperable that would have additional risk significant impact or increase the probability of a plant transient or complicate the recovery of a transient based on the current configuration
- With the exception of the XST1 and XST2 transformers, no non-safety related equipment is degraded or out-of-service that would have additional risk significant impact or increase the probability of a plant transient or complicate the recovery of a transient based on the current configuration

9. Period for the NOED, including a justification for the duration of the noncompliance. (IMC 0410, Attachment 1, 07i)

The request is for 14 hours (best estimation as of December 5, 2013 at 1000 CST), in addition to the 24 hours allowed by TS 3.8.1 Condition C Required Action C.2, in order to complete work to restore transformer XST1 or XST2 to OPERABLE status. Otherwise the action to place the Units in MODE 3 within 6 hours and MODE 5 within 36 hours in accordance with TS 3.8.1 Condition G Required Actions G.1 and G.2 would begin at 1341 CST on December 5, 2013.

There is no significant difference in nuclear safety risk by extending the CT to accomplish repairs, and testing. The change in risk for the requested period of enforcement discretion is consistent with the risk incurred during normal work control practices. Requiring XST1 or XST2 repairs while shutting down both Units would result in additional plant equipment and personnel challenges without any significant benefit to the safety of the plant or health and safety of the public. Therefore, there is an inherent safety benefit of restoring XST1 or XST2 without shutting down either Unit.

[Note that XST2 was declared OPERABLE on December 5, 2013 at 1717 CST and the NOED was terminated. The total time CPNPP Units 1 and 2 remained in the NOED was 3 hours and 36 minutes. Transformer XST1 was declared OPERABLE on December 6, 2013 at 0019 CST.]

10. Compensatory measures the plant has both taken and will take to reduce the risk associated with the specified configuration. (IMC 0410, Attachment 1, 07j)

Applicable compensatory measures for the 14-day CT will remain in effect (See Attachment 2). The EDGs were originally intended to be in standby, so while in the running condition additional compensatory actions are being put in place to monitor them and their fuel oil storage levels. The initiating events identified that all balance of plant (BOP) equipment that can result in a plant transient should also be protected and these compensatory actions have been put in place.

Additional compensatory measures are the following:

- As possible, restrict ALL activities on the Balance of Plant equipment necessary to provide core cooling to ensure its availability.
- Fuel trucks have been scheduled to bring diesel fuel oil as required to maintain EDG fuel oil inventory as required by TS 3.8.3 "Diesel Fuel Oil, Lube Oil, and Starting Air."
- Access to safety related equipment continues to require a review by Operations to minimize risk. This Defense in Depth program was implemented at the onset of the 14 day LCO mentioned above.



11. Status and potential challenges to offsite and onsite power sources, including any current or planned maintenance in the distribution system and any current or planned maintenance to the emergency diesel generators. (IMC 0410, Attachment 1, 07k)

Currently [at the time of the teleconference call with the NRC at 1000 CST on December 5, 2013], both offsite power sources to both Units' safeguards buses are unavailable and all safeguards buses are being supplied from the respective EDGs. Fuel trucks have been scheduled to bring diesel fuel oil as required to maintain EDG fuel oil inventory as required by TS 3.8.3 "Diesel Fuel Oil, Lube Oil, and Starting Air." All Alternate Power Diesel Generator (APDG) sets for each Unit are available with no planned maintenance or surveillances scheduled per Commitment 4457016 in Attachment 2.

Since the Electric Reliability Council of Texas (ERCOT) expects the area to experience a prolonged cold front up to and including Tuesday December 10, 2013, it is prudent to consider the possible scenario of CPNPP Units 1 and 2 being offline (see Section 14 for future weather forecast). The reason to consider this potential challenge is due to the unknown impacts on wind generation, and the possible de-rates of generation due to gas curtailments over the next few days. Adding a reduction of the 2400 mega-watts (MW) provided by CPNPP Units 1 and 2 will further impact the ERCOT Reserve Capacity, consequently reducing the "Capacity Available for Operating Reserves" bringing ERCOT closer (and possibly beyond) ERCOT's requirement to maintain an Operating Reserve of 2300 MW. If ERCOT's Operating Reserves reduce below 2300 MW, ERCOT will declare first level Energy Emergency Alert (EEA), which commences with the deployment of ERCOT's contracted load reduction service known as Emergency Response Service (ERS). There are three EEA levels, second level calling for more ERS and other Load Reduction Services, the third calling for system wide load reduction (rotating load reduction throughout the state of consumer loads).

12. Safety basis for the request and an evaluation of the safety significance and potential consequences of the proposed course of action. (IMC 0410, Attachment 1, 07l)

Each Unit is presently operating in MODE 1 with the non-safety buses being fed from each Units main generator with offsite sources available and the safeguards buses being supplied by the EDGs. It is desirable to maintain CPNPP Units 1 and 2 in such stable configuration until transformer XST1 or XST2 are returned to service. Present best estimates are for the first transformer (XST2) to be completed at 1700 CST on December 5, 2013 and the second transformer (XST1) to be completed at 0300 CST on December 6, 2013. The requested NOED would, if granted, expire at 0341 CST on December 6, 2013.

The relative risk increase associated with the requested NOED is counter-balanced by the following considerations:

Both safeguards buses in CPNPP Unit 1 and 2 are presently being powered by their respective emergency diesel generators. The plant safety analysis (Updated Final Safety Analysis Report (UFSAR) Chapter 15) do not take credit for the offsite power supplies for the mitigation of any design bases event. The types of event scenarios addressed in UFSAR Chapter 15 include:

1. Increase in heat removal by the secondary system
2. Decrease in heat removal by the secondary system
3. Decrease in reactor coolant system flow rate
4. Reactivity and power distribution anomalies

5. Increase in Reactor Coolant Inventory
6. Decrease in Reactor Coolant Inventory

The UFSAR analyses for the above event types will model the availability of offsite power sources only if said availability results in more limiting consequences.

In the absence of approval of the requested NOED, actions would have to be taken to take both Units to MODE 3 and subsequently to MODE 5.

13. Demonstration that the NOED condition, along with any compensatory measures, will not result in more than a minimal increase in radiological risk, either in a quantitative assessment that risk will be within the normal work control levels (ICCDP less than or equal to  $5E-7$  and/or ICLERP less than or equal to  $5E-8$ ) or defensible qualitative evaluation. (IMC 0410, Attachment 1, 07m)

From a risk perspective it is undesirable to place the Unit into a MODE 3 configuration based on the current plant status. Currently, both CPNPP Units 1 and 2 are operating in a stable configuration with offsite power available to support the non-safety buses for the balance of plant while safety related power is being provided by the respective EDGs to the 6.9 kV buses.

#### Quantitative Assessment:

The CPNPP Model of Record Revision 4B internal events no flood with zero test and maintenance (TM) model was used to establish the plant's baseline risk and the estimated risk increase associated with the extended CT duration. The current plant Model of record has been PEER reviewed and found to generally meet or exceed Category 2 requirements with minimal exceptions. Those attributes not meeting Category 2 are two internal flood items and one Level II item. These were reviewed and determined to have no impact on the conclusions of the assessment. Core Damage Frequency (CDF), Large Early Release Frequency (LERF), Incremental Conditional Core Damage Probability (ICCDP), and Incremental Conditional Large Early Release Probability (ICLERP) values are shown in the tables below.

Quantification of the plant risk for the initial (baseline) plant conditions reflects a no test and maintenance configuration. For the extended CT calculation the following equipment was removed from service or modified based on the current plant configuration in addition to the out-of-service (OOS) transformers: Unit 1 instrument air compressor (IAC) 1-01 and Unit 2 power operated relief valve (PORV) block valve 2-8000A being in the closed position. Additionally, the extended CT configuration was modified to account for the EDGs currently running by removing failure modes associated with starting the EDGs. ICCDP calculations were performed using the 14 hours from the requested extension.

CDF	Case	Frequency (Per Reactor Year)	Duration of Extended CT (hrs)	ICCDP
Unit 1	Baseline CDF - Zero TM	2.77E-06	14	3.49E-07
	Extended CT - Zero TM XST1 OOS, XST2 OOS, EDGs running, IAC 1-01 OOS	2.21E-04		
Unit 2	Baseline CDF - Zero TM	2.76E-06		3.49E-07
	Extended CT - Zero TM XST1 OOS, XST2 OOS, EDGs Running, 8000A Closed	2.21E-04		

LERF	Case	Frequency (Per Reactor Year)	Duration of Extended CT (hrs)	ICLERP
Unit 1	Baseline CDF - Zero TM	2.26E-07	14	1.97E-08
	Extended CT - Zero TM XST1 OOS, XST2 OOS, EDGs running, IAC 1-01 OOS	1.25E-05		
Unit 2	Baseline CDF - Zero TM	2.25E-07		1.97E-08
	Extended CT - Zero TM XST1 OOS, XST2 OOS, EDGs Running, 8000A Closed	1.25E-05		

The calculated value for ICCDP meets the Regulatory Issue Summary 2005-01, "Changes to Notice of Enforcement Discretion (NOED) Process and Staff Guidance," guidance threshold of less than or equal to 5.0E-07 ICCDP and 5E-08 ICLERP. The calculated ICCDP and ICLERP values reported above do not account for various conservatisms in place such as the various compensatory actions being taken by operations and maintenance that were already in place for the 14-day CT. It should be noted that preliminary assessments [discussed on the teleconference call with NRC at 1000 CST on December 5, 2013] using the online risk monitor did not account for EDGs running and were higher than those shown in the associated tables.

A review of the top 95% cutsets was performed to determine the dominant initiators and components contributing to risk while in the current configuration. The dominating initiating events are associated with the secondary side plant equipment; e.g. reactor/turbine trip, loss of main feedwater, loss of condenser vacuum, non-1E 6.9kV power, etc. For top components important to risk the following were identified; EDGs, Station Service Water pumps, alternate power diesel generators (APDGs), turbine driven auxiliary feedwater. At the risk significant component level all of the top equipment has been previously identified for protection and the compensatory measures associated with the 14-day CT are to remain in place. The exception to this is the EDGs were originally intended to be in standby, so while in the running condition additional compensatory actions are being put in place to monitor them and their fuel oil storage levels. The initiating events identified that all BOP equipment that can result in a plant transient should also be protected and these compensatory actions have been put in place.

While both Units show that the ICCDP and ICLERP values meet the threshold requirements, they do not account for other external events or transition risk. However, the following qualitative risk

discussion further supports that the extension request will have a minimal impact on risk. This is principally due to the risk that would be accrued as a result of the plant trip to enter MODE 3. The potential risk increase as a result of entry into MODE 3 further counterbalances the risk increases that are associated with the ICCDP value provided in the extension request.

#### Qualitative Risk Insights for Remaining in MODE 1:

In order to place the Unit in MODE 3 the Unit would have to transition from its current operating power down to 0% reactor power. While MODE 3 represents a plant condition where the reactor is not operating, placing the reactor in this configuration requires manipulating the Balance of Plant which could complicate plant conditions further (due to potential transients/equipment failure). Additionally, MODE 3 does not represent a significant change from MODE 1 operating conditions with respect to initiating events (exception of reactor trip). This is primarily due to the normal operating temperatures and pressures associated with MODE 3 operation; e.g. loss of coolant accident (LOCA) probabilities, loss of support system initiators, reactor coolant pump (RCP) seal LOCA, etc.

In MODE 3 the Unit would be reliant on auxiliary feedwater (motor driven AFW) to provide decay heat removal capabilities until condensate feedwater can be restored. In this configuration the cooling water source is the condensate storage tank (which will eventually require make up water for extended operation) with the EDGs providing power to the motor driven auxiliary feedwater pump (MDAFWP) or with the turbine driven AFWP in operation. In the event of a loss of AFW the remaining means of decay heat removal are the residual heat removal (RHR) system (in MODE 5) and if necessary the capability of providing feed and bleed to the reactor vessel.

By maintaining the plant in its current (MODE 1) operating configuration additional redundancy and diversity is provided for core cooling. In the current configuration, the BOP is the primary means of core cooling. This is the normal operating configuration for the BOP and provides a closed loop cooling system that can be maintained indefinitely. In the event that the BOP is lost, the MODE 3 capabilities of AFW, RHR (in MODE 5), and feed/bleed remain available. The additional redundancy and diversity of BOP cooling maintains the standby AFW systems in their normal design configuration. Placing the primary core cooling burden on the BOP systems allows the non-safety buses to provide power for cooling. The EDGs are therefore the backup source of power for core cooling with the benefit of reducing their loads (MDAFWPs in standby).

The static level of core damage risk between MODE 1 and MODE 3 is effectively the same. The transition from MODE 1 to MODE 3 presents a real, but unquantifiable, level of increased risk. Thus, there is a net increase in overall risk for the transition from MODE 1 to MODE 3. Therefore, this qualitative assessment demonstrates that remaining at power in this configuration represents a lower level of total risk by maintaining additional redundant/diverse core cooling equipment and removing the transition to MODE 3.

Given the above, the potential initiating events that would be eliminated once the plant was in MODE 3 would be anticipated transients without scram (ATWS) and Reactor/Turbine trips. The frequency of all other initiators does not change between MODE 1 and MODE 3. However, the transition to MODE 3 presents an increased level of risk for these initiators that will be incurred since the plant will be tripped to get to MODE 3.

For the short extended CT period, transition risk increases relative to remaining in MODE 1. Staying in MODE 1 for an additional 14 hours presents a small risk of these initiators, approximately  $1\text{E-}3$  for reactor trip. If the Unit is transitioned to MODE 3, the risk of reactor trip

increases to equal 1. Since the conditional risk of ATWS given reactor trip does not change between MODEs 1 and 3, the incremental risk due to an ATWS event increases by three orders of magnitude because of the actual reactor trip. It should also be noted that industry experience continues to show that some fraction of plant trips are complicated.

#### Other Events:

Previous site assessments were done related for the initial 14-day transformer CT. These assessments in addition to the Individual Plant Examination of External Events (IPEEE) were reviewed to form the basis of the following conclusions.

With regards to fire risk in the current configuration, the same safety related equipment would be relied upon regardless of MODE 1 or 3 operations. However, for MODE 1 a fire in a Safety related structure may not impact the BOP systems that would be providing core cooling. As such fire does not pose a risk significant increase due to remaining in MODE 1 during an extended CT due to the additional operating core cooling capability.

For seismic events, CPNPP is considered to be in an area of low seismicity. Per NUREG-1407, "Procedural and Submittal Guidance for the Individual Plant Examination of External Events (IPEEE) for Severe Accident Vulnerabilities," CPNPP was identified as being in a region of low seismicity and classified as a reduced scope plant. As a reduced scope plant, the IPEEE Seismic analysis used a margin approach that assumed a Loss of Offsite Power (LOOP) and Very Small Break LOCA in a seismic event. Since switchyards are not Category I seismic structures, they are assumed to be damaged (total failure) in the seismic event. If the Unit remains in MODE 1 a trip may occur with the potential loss of the BOP. However, the same seismically qualified equipment would be relied upon regardless of MODE 1 or 3 operations. Therefore seismic events would not pose a risk significant increase due to remaining in MODE 1 during an extended CT.

Review of the IPEEE for CPNPP external flooding determined that plant equipment is not under threat even at the worst conditions of probable maximum precipitation and potential dam failures. However, the same safety related equipment would be relied upon regardless of MODE 1 or 3 operations. Therefore external flooding events would not pose a risk significant increase due to remaining in MODE 1 during an extended CT.

Analysis of the IPEEE for high winds (tornado) determined that any event at or above an F1 (Fujita - Pearson scale) the switchyard would be lost. However, the same safety related equipment would be relied upon regardless of MODE 1 or 3 operations. Therefore high wind events would not pose a risk significant increase due to remaining in MODE 1 during an extended CT.

From the review of IPEEE and other assessment concluded that; the potential maximum oil leak affecting the safety related structures of the station is unlikely due to physical barriers. In case of a gas line break the concentration of gas at any plant air intake is not expected to impact plant operation, i.e. it is well below the lower flammability limit. The land routes around the station are far away from the plant proper, and are lightly traveled as not to pose any type of hazard for CPNPP.

The area surrounding CPNPP was reviewed for other plant-specific external events that may affect the safety of the plant. With the exception of natural gas exploration, no industrial growth has occurred in the site vicinity. The only hazardous materials (excluding local gas stations and materials not directly related to CPNPP) regularly manufactured, stored, used, or transported in the vicinity of CPNPP are crude oil and natural gas transported through the pipelines described

above. This review did not identify any other external events which might pose a significant threat to the plant.

Therefore, there is no significant increase in risk from external floods, external fires, transportation, or nearby facility accidents for the extended CT.

In conclusion the above qualitative assessment demonstrates that remaining at power in this configuration represents a lower level of risk by maintaining additional redundant/ diverse core cooling equipment and removing the transition to MODE 3.

**14. Forecasted weather and pandemic conditions for the NOED period and any plant vulnerabilities related to weather or pandemic conditions. (IMC 0410, Attachment 1, 07n)**

A time in which severe weather is not expected was selected for 6.9 kV work for the second XST1 CT, based on historical information, this time frame is September 1 through March 31. This planned timing will reduce high wind/tornados and weather challenges to the plant during the XST1 CT.

There is no severe weather (i.e, severe thunderstorms or tornados) in the current 7-day forecast for Glen Rose, TX (see National Weather Service (NWS) forecast below). The NWS defines a severe thunderstorm as having large hail, at least 1 inch in diameter, and/or damaging winds, at least 58 mph, or 50 knots.

There is a winter storm warning for the north Texas area (including Glen Rose, TX). Historically, CPNPP has not experienced challenges due to snow, sleet, or freezing rain typically associated with winter storms.

Based on the forecasted weather CPNPP does not expect any vulnerability related to the weather. There is no related pandemic to consider.

The National Weather Service forecast for the area is (Source =  
"http://forecast.weather.gov/MapClick.php?lat=32.297580627868925&lon=-97.78759002685547"  
as of December 5, 2013 at 0700 CST):

- Thursday - A 50 percent chance of rain. Cloudy, with a temperature falling to around 31 by 5pm. North wind 15 to 20 mph, with gusts as high as 25 mph.
- Thursday Night - Rain or freezing rain, becoming all freezing rain after midnight. Low around 25. North wind around 15 mph, with gusts as high as 25 mph. Chance of precipitation is 100%. New ice accumulation of around a 0.4 of an inch possible.
- Friday - A chance of freezing rain and sleet, mainly before noon. Cloudy and cold, with a high near 27. North wind around 15 mph, with gusts as high as 25 mph. Chance of precipitation is 40%. New sleet accumulation of less than a half inch possible.
- Friday Night - Mostly cloudy, with a low around 18. Wind chill values between 5 and 11. North northeast wind 10 to 15 mph, with gusts as high as 20 mph.
- Saturday - A slight chance of sleet before noon, then a chance of freezing rain and sleet. Cloudy and cold, with a high near 25. Northeast wind around 10 mph. Chance of precipitation is 40%.
- Saturday Night - A chance of freezing rain and sleet, mainly before midnight. Mostly cloudy, with a low around 23. Northeast wind 5 to 10 mph becoming south southeast after midnight. Chance of precipitation is 30%.

- Sunday - A chance of freezing rain and sleet before noon. Mostly sunny, with a high near 33. South wind around 5 mph becoming calm in the afternoon. Chance of precipitation is 30%.
- Sunday Night - Partly cloudy, with a low around 22. Light and variable wind becoming north northwest 5 to 10 mph in the evening.
- Monday - Mostly sunny, with a high near 35. North wind 10 to 15 mph, with gusts as high as 25 mph.
- Monday Night Mostly clear, with a low around 16.
- Tuesday - Mostly sunny, with a high near 39.
- Tuesday Night Partly cloudy, with a low around 24.
- Wednesday - Mostly sunny, with a high near 42.

**15.** Basis for the conclusion that the noncompliance will not create undue risk to public health and safety. (IMC 0410, Attachment 1, 07o)

Luminant Power has evaluated whether or not a significant hazards consideration is involved with the proposed amendment(s) by focusing on the three standards set forth in 10CFR50.92, "Issuance of amendment," as discussed below:

**15.1** Does the proposed change involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No

The proposed request does not adversely affect accident initiators or precursors nor alter the design assumptions or the manner in which the plant is normally operated and maintained. The proposed request does not affect the source term, containment isolation, or radiological release assumptions used in evaluating the radiological consequences of an accident previously evaluated. The proposed request is consistent with safety analysis assumptions, which apply when the plant is operating in compliance with LCO requirements.

Therefore, the proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

**15.2** Do the proposed changes create the possibility of a new or different kind of accident from any accident previously evaluated?

Response: No

The proposed request does not result in a change in the manner in which the electrical distribution subsystems provide plant protection. The proposed request will only affect the time allowed to restore the operability of the offsite power source through a startup transformer. The proposed request does not affect the configuration, or operation of the plant.

The proposed request does not affect the supporting systems operating characteristics or conditions. The proposed request does not change any existing accident scenarios, nor create any new or different accident scenarios. In addition, the proposed request does not impose any new or different

requirements or eliminate any existing requirements. The proposed request does not alter any of the assumptions made in the safety analysis.

Therefore, the proposed change does not create the possibility of a new or different kind of accident from any previously evaluated.

15.3 Do the proposed changes involve a significant reduction in a margin of safety?

Response: No

The proposed request does not affect the acceptance criteria for any analyzed event nor is there a change to any safety limit. The proposed request does not alter the manner in which safety limits, limiting safety system settings, or limiting conditions for operation are determined. Neither the safety analyses nor the safety analysis acceptance criteria are affected by this proposed request. The proposed request will not result in plant operation in a configuration outside the current design basis. The proposed request only increases the time period when the plant may operate with neither offsite power source available. The margin of safety is maintained by maintaining the ability to safely shut down the plant and remove residual heat.

Therefore, the proposed change does not involve a reduction in a margin of safety.

Based on the above evaluations, Luminant Power concludes that the proposed request for enforcement discretion presents no significant hazards under the standards set forth in 10CFR50.92(c) and, accordingly, a finding of "no significant hazards consideration" is justified.

16. Basis for the conclusion that the noncompliance will not involve adverse consequences to the environment. (IMC 0410, Attachment 1, 07p)

This request for enforcement discretion does not result in any significant changes in the types, or significant increase in the amounts, of any effluents that may be released offsite. In addition, no significant increase in individual or cumulative occupational radiation exposures is involved as a result of the request. Therefore, it can be concluded that the NRC's granting of this request for enforcement discretion does not involve any adverse consequences to the environment.

17. Approval by the facility organization that normally reviews safety issues. (IMC 0410, Attachment 1, 07q)

The requested NOED was reviewed by the CPNPP Station Operations Review Committee (SORC). SORC and the Plant Manager approved the NOED on December 5, 2013 at 0945 CST (SORC Meeting Number 2013-022).



18. Commitment to a written NOED request within two working days and a follow-up license amendment request following the staffs verbal granting of the NOED. (IMC 0410, Attachment 1, 07r)

This letter fulfills the requirement to submit a written NOED request within two working days. Further, a license amendment is not needed because the cause of this event was a unique and isolated incident which is not expected to recur, therefore no permanent change to the Operating License or the Technical Specifications is required.

ATTACHMENT 2 to TXX-13154

CPNPP COMMITMENTS FOR THE SECOND ONE-TIME, 14-DAY CT FOR XST1

The Following Commitments Are Associated With The 6.9kV Work For Startup Transformer XST1	
4457004	During a 14-day CT, the APDG provided for each Unit will be verified available to provide power to equipment for long term cooling once per shift.
4457005	During a 14-day CT, if an APDG becomes unavailable, the affected Unit shall enter Condition C of TS 3.8.1 and comply with the Required Actions. If the CT for the Condition C Required Actions is not met, then Condition G of TS 3.8.1 shall be entered. This allowance will only be exercised once within a 14-day CT for a given Unit. For any second, or subsequent, unavailability of an APDG for a given Unit, the affected Unit shall immediately enter TS 3.0.3. In all cases, the normal rules governing application of TSs in section 1.0 of the CPNPP TSs shall apply.
4457016	The EDGs, APDGs, TDAFWPs, XST2, CCWPs, and SSWPs will have ALL testing and maintenance activities suspended for the duration of a one-time, 14-day CT for XST1. Additionally, signs will be placed on the doorways to the equipment, or in the case of XST2 around the equipment, noting the restriction of testing and maintenance during this XST1 CT.
4457030	A roving hourly fire watch will be in effect during the 14-day XST1 CT along the path of the XST2 power and control cabling. This is an additional measure to monitor the area for fires that could damage and disable the XST2 transformer cabling.
4457033	Local weather conditions and forecasts will be monitored by Operations twice per shift to assess potential impacts on plant conditions.
4457041	A time in which severe weather is not expected will be selected for implementation of the XST1 CT. Based on historical information; this time frame is September 1 through March 31. This planned timing will reduce high wind/tornados and weather challenges to the plant during the XST1 CT.
4457119	Access to both switchyards and relay houses will be controlled and posted, and all maintenance will be suspended for the duration of the CT on XST1.
4457121	CPNPP's Operations Department will contact the Transmission Operator (Transmission Grid Controller) once per day during a 14-day Completion Time to ensure no problems exist in the transmission lines feeding CPNPP or their associated switchyards that would cause post trip switchyard voltages to exceed the voltage required by STA-629.
4457123	All hot work activities along the routing associated with power and control cabling for XST2, the in-service ST, will be suspended during the XST1 CT. This is to reduce the likelihood of fires that could damage and thus disable the XST2 transformer cabling.
4457125	Both Unit 1 and 2 Transient Combustible safe zones that are associated with the cable routing for the XST2 transformer will have additional restrictions relating to combustible storage during the extended CT durations. Implementing this mitigation measure will reduce the likelihood of fires related to the XST2 transformer.
	A Nuclear Equipment Operator will be assigned to ensure proper operation of the APDGs, during the proposed two 14-day CTs