



# Luminant

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Ref. # IMC-0410

July 14, 2015

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

**SUBJECT:** COMANCHE PEAK NUCLEAR POWER PLANT (CPNPP)  
UNIT 2, DOCKET NUMBER 50-446  
REQUEST FOR ENFORCEMENT DISCRETION REGARDING COMPLIANCE WITH  
TECHNICAL SPECIFICATION 3.5.2, "ECCS - Operating"

**REFERENCE:** 1. NUREG-1600, "General Statement of Policy and Procedures for NRC Enforcement Actions," dated May 1, 2000.  
2. NRC Regulatory Issue Summary 2005-01, Revision 1, "Changes to Notice of Enforcement Discretion Process and Staff Guidance," dated March 13, 2013.  
3. 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) Unit 2 request for Enforcement Discretion discussed with the Nuclear Regulatory Commission (NRC) during a telephone conference call held on July 10, 2015 at 0800 Central Time. On July 10, 2015 at 0920 Central Time, Luminant Power Generation Company LLC (Luminant Power) received verbal approval from the NRC staff for the Enforcement Discretion. This submittal fulfills the requirement that a written Enforcement Discretion Request be submitted to the NRC within two working days following NRC verbal approval of the Enforcement Discretion. On the verbal approval telephone conference call the NRC also agreed that a License Amendment Request appeared unnecessary.

Attachments 1 and 2 provide the information documenting CPNPP's verbal request for Enforcement Discretion on July 10, 2015 at 0800 Central Time and the information was prepared using the guidance in References 1, 2, and 3. It should be noted that Safety Injection Pump (SIP) 2-02 was declared OPERABLE on July 11, 2015 at 0000 Central Time and the Enforcement Discretion was terminated. The total time CPNPP Unit 2 remained in the Enforcement Discretion was 10 hours and 56 minutes.

A002  
NRR

This communication contains a new commitment number 5088813 as described in Attachment 3. This commitment was met during the period of the Enforcement Discretion and is now closed.

Should you have any questions, please contact Mr. J. D. Seawright at (254) 897-0140.


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

Executed on July 14, 2015.

Sincerely,

Luminant Generation Company LLC

Rafael Flores

By:   
Fred W. Madden  
Director External Affairs

- Attachment 1 Request for Enforcement Discretion Regarding Compliance With  
Technical Specification 3.5.2, "ECCS - Operating"
- Attachment 2 Drawing M2-0262
- Attachment 3 Commitment Number 5088813

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Request for Enforcement Discretion Regarding Compliance With Technical Specification 3.5.2, "ECCS - Operating," [The information below reflects the tense at 0800 Central Time on July 10, 2015]

- REFERENCE:
1. NUREG-1600, "General Statement of Policy and Procedures for NRC Enforcement Actions," dated May 1, 2000.
  2. NRC Regulatory Issue Summary 2005-01, Revision 1, "Changes to Notice of Enforcement Discretion Process and Staff Guidance," dated March 13, 2013.
  3. NRC Inspection Manual Chapter 0410, "Notices of Enforcement Discretion," dated March 13, 2013.

In accordance with the guidance provided by References 1, 2, and 3, Luminant Generation Company LLC (Luminant Power) requests that the Nuclear Regulatory Commission (NRC) exercise enforcement discretion to allow Comanche Peak Nuclear Power Plant (CPNPP) Unit 2 to remain in Mode 1, Power Operation, while completing necessary activities to return the affected SI pump to full OPERABILITY as defined in the plant Technical Specifications. Without the requested enforcement discretion, compliance with CPNPP Technical Specifications (TS) 3.5.2, Condition B, Required Action B.1, and Condition C, Required Actions C.1 and C.2 would require that Luminant Power shutdown CPNPP Unit 2 to Mode 3 within 6 hours and Mode 4 within 12 hours following expiration of the 72-hour COMPLETION TIME for TS 3.5.2, Condition B which was entered at 1304 Central Time on July 7, 2015.

The referenced section of the NRC Inspection Manual (Reference 3) provides guidance on the information to be included in a request for enforcement discretion. The sections below are arranged to correspond to that guidance.

- A. *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 enforcement discretion is being requested in order to avoid an unnecessary transient by cycling CPNPP Unit 2 from power operations to shutdown (Section 06.02a.1(a) of IMC-0410) as a result of compliance with Technical Specifications (TS) since compliance with TS 3.5.2 "ECCS - Operating" Condition B, Required Action B.1, "Restore train(s) to OPERABLE status" and C.1 and C.2 would involve an unnecessary shutdown of Unit 2 without a corresponding health and safety benefit. The proposed enforcement discretion request meets the first enforcement discretion 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 3.5.2 Required Actions B.1, C.1, and C.2.

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

TS 3.5.2 "ECCS - Operating" Condition B, Required Action B.1 Completion Time (CT) of 72 hours to restore the inoperable train to OPERABLE status was entered at 1304 Central Time on July 7, 2015 and will expire at 1304 hours on July 10, 2015. The enforcement discretion will result in a violation of the 72 hour CT of TS 3.5.2, Condition B, Required Action B.1. The requested period of enforcement discretion is discussed in Section I below.

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

At 1304 Central Time on July 7, 2015, a potential through wall leak from pipe segment SI-2-070 in Unit 2 Train B SI pump room was discovered. There was a 1 -2 cup boric acid accumulation on the floor underneath valve 2SI-0055. The insulation was removed to identify the source of the leak. The leak was determined to be coming from a flange on Safety Injection Pump (SIP) 2-02 suction spool piece (formerly a flush strainer) and an additional leak on the weld on 2SI-0055 (SIP 2-02 Suction Test Connection). The on duty Shift Manager declared Train B ECCS (SIP 2-02) inoperable at 1304 and entered TS 3.5.2, Condition B, Required Action B.1, a 72 hour Completion Time.

A small through-wall leak had been identified on the suction of the 2-02 Safety Injection (SI) pump. The leakage was from a socket weld connection between the six (6) inch suction piping and the ¾ inch vent piping to 2SI-0055. The affected piping is ASME Class II and the magnitude of the observed leakage approximately 6-12 drops per minute. The 2-02 SI pump has been declared inoperable pending repair/resolution of this issue.

The CPNPP initial assessment determined the likely cause of the leakage to be vibration-induced weld failure. An attempted repair utilizing ASME Code Case N-666 was made. However, in the course of the welding activity a small pinhole leak was created in the vent piping. Had the ASME Code Case repair activity been successful there might not have been a need for this enforcement discretion request.

The repair activities included development of detailed plans to implement a freeze seal on the affected piping, install a new vent line and valve (to facilitate post-repair filling and venting of the safety injection piping), to support repair of the affected weld and pinhole leak. This enforcement discretion is requesting additional time to complete remaining activities necessary to return the affected SI pump to full OPERABILITY as defined in the plant Technical Specifications.

In addition to the activities described above, an Extent of Condition (EOC) review is being performed. The immediate EOC is limited to other vent valves located near the SI pumps. The Condition Report (CR) database and Work Order (WO) history have been reviewed. The reviews verified no previous leaks and no WOs were completed to repair the piping and valves within the EOC. In addition, the performance of test procedure ETP-204A&B was reviewed to verify no similar leakage was identified while the system is in operation. A walkdown of the other SI pumps and piping revealed no additional leakage. Historical reviews confirmed no past weld failures have occurred and walkdowns verified no current leakage from similar piping configurations on the suction and discharge of the safety injection pumps.

- D. *Cause of the situation that has led to the NOED request. (IMC0410, Attachment1, 07d)*

Initial assessment determined the likely cause of the socket weld leakage to be vibration-induced weld failure. As detailed in "C" above, the repair activities performed under the umbrella of ASME Code Case N-666 resulted in the creation of pinhole leak in the vent pipe proper. Activities necessary to effect repair of the pipe leak were not and could not have been anticipated. This enforcement discretion is specifically the result of the inability to effect said repair activities with the 72 hour completion time allowed by TS 3.5.2, Condition B, Required Action B.1.

- E. *Course of action to resolve the situation until the situation no longer warrants an NOED. (IMC-0410, Attachment 1, 07e)*

Repair of a small through-wall leak that has been identified on the suction of the 2-02 Safety Injection (SI) pump is the course of action necessary to restore the pump to OPERABLE status and exit TS 3.5.2, Condition B, Required Action B.1. This work was started on July 7, 2015, at 1304 Central Time and is anticipated to complete by approximately 1404 Central Time on July 11, 2015. This results in an extension of 25 hours to the current TS 3.5.2, Condition B, Required Action B.1, Completion Time of 72 hours for a total completion time of 97 hours.

An attempt to repair the small through-wall leak at the socket weld within a shorter time interval was attempted. As detailed in "C" above, the repair activities performed under the umbrella of ASME Code Case N-666 resulted in the creation of pinhole leak in the vent pipe proper.

The work is being performed around the clock with plant staff. 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.

Remaining work activities to return SI Pump 2-02 to OPERABLE [based on anticipated status]:

- Vacuum fill of system
- Ultrasonic testing (UT) for voids
- Thaw freeze seal
- SI Pump run and collect vibration data
- Dye penetrant testing (PT) at location of freeze seal
- Install grating

A flow diagram of the safety injection system is attached (drawing M2-0262).

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

CPNPP Unit 2 is presently at 100% power and is expected to remain so throughout the duration of the repair activities. Granting of the requested enforcement discretion will eliminate the need to subject the Unit to a cooldown to Mode 4 as otherwise required by TS 3.5.2, Condition C. The planned repair activities themselves would not result in a plant transient of any kind.

- G. *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 failure resulting in entry into TS 3.5.2, Condition B, Required Action B.1 at 1304 Central Time on July 7, 2015 was discovered during a system walkdown. The 72 hour CT provided to restore the inoperable train to OPERABLE status does not provide adequate time to prepare and submit an emergency license amendment request. In addition, the enforcement discretion request is 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.

For additional information see Section C for extent of condition.

- H. *Condition and operational status of the plant, including safety-related equipment out of service or otherwise inoperable and nonsafety-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., July 10, 2015 at 0800 Central Time) operating conditions of Unit 2 at CPNPP are:

- MODE 1 at normal operating temperatures and pressures
- Safety Injection Pump 2-02 out of service
- 138 kV and 345 kV switchyards are available and stable

Unit 2 will be operating at 100% power throughout the repair window. The station risk condition remains GREEN with the 'B' Safety Injection Pump (SIP 2-02) out of service for leak repair. That is, given this information, a review of the current Probabilistic Risk Analysis (PRA) model component importance measures has determined that the effect of this out-of-service equipment on plant risk is low. No other safety related components are out of service and the 'A' Safety Injection Pump (SIP 2-01) is operable. The risk is mitigated through protection of the 'A' ECCS train and not performing any activities which could affect equipment that could degrade plant risk. A risk assessment has determined there is no net increase in radiological risk to the public. During the requested 25 hour extension, all safety related equipment will remain operable, and there is no non-safety related equipment out of service that may increase the probability of a plant transient, complicate the recovery from a plant transient, or be used to mitigate this condition.

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

The request is for 25 hours (best estimation as of July 10, 2015 at 0800 Central Time), in addition to the 72 hours allowed by TS 3.5.2, Condition B, Required Action B.1, in order to complete work to restore SIP 2-02 to OPERABLE status. Otherwise the action to place Unit 2 in MODE 3 within 6 hours and MODE 4 within 12 hours in accordance with TS 3.5.2, Condition C, Required Actions C.1 and C.2 would begin at 1304 Central Time on July 10, 2015.

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. Shutting down Unit 2 could 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 in restoring SIP 2-02 without shutting down Unit 2.

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

In order to minimize the risk associated with this enforcement discretion request, Luminant Power has reviewed the previously planned work activities to ensure activities with the potential to cause a plant transient are not performed during the time frame of this enforcement discretion. In addition, the guarded equipment process has been applied to reduce the potential for adverse effects on the redundant SI equipment.

The following will be implemented during the requested enforcement discretion extension.

- No work that jeopardizes plant operation, such as alignment changes (except in response to emergent plant equipment failures) or balance-of-plant function testing, or switchyard work will be allowed except as needed in response to emergent failures or conditions that develop.
- The Unit's Station Service Water pumps, Auxiliary Feedwater pumps, Component Cooling Water pumps, Safety Chilled Water pumps and chillers, Emergency Diesel Generators, and both Switchyards shall have access controlled per the station's component protection program (Protecting Plant Equipment and Sensitive Equipment Controls, procedure STA-600) except as needed in response to emergent failures or conditions that develop.
- No work will be planned except as needed in response to emergent failures or conditions that develop on the Unit's Centrifugal Charging pumps, Auxiliary Feedwater pumps, Station Service Water pumps, Safety Chilled Water pumps/chillers and Emergency Diesel Generators.
- No PRA related equipment maintenance will be planned during the extension period.
- No surveillances that would make equipment inoperable will be performed during the period of enforcement discretion.
- The grid condition will be periodically monitored during the period of enforcement discretion.
- Fire watches in the areas important to fire risk will be set and all hot work will be suspended. These areas are SD009 (Train A Electrical Equipment Room), SE018 (Train B Electrical Equipment Room), EC051 (Train B UPS & Distribution Room), SB008 (SFGD BLDG 810' Corridor), and EH053 (Train A UPS & Distribution Room). Fire detection and suppression systems in these areas are expected to remain operable during the enforcement discretion period.

- K. *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, the grid is stable as a result of continued operation of CPNPP Unit 2 to support the grid voltage. No challenges to grid stability are currently forecasted as a result of severe weather or other events. Refer to the weather forecast below in Section N. Additionally, no switchyard work will be allowed except as needed in response to emergent failures or conditions that develop. There are no Transmission activities planned that will affect offsite power to CPNPP.

All on-site Emergency Diesel Generators are operable with no planned maintenance.

- L. *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, 07I)*

(1) Quantitative Assessment:

For this evaluation the CPNPP PRA Model of Record Revision 4B internal events with flood zero-maintenance version was used to calculate the impact. No adjustment was made for alignment since the current configuration with Train A as the protected train matches the normal maintenance alignment reflected in the application specific model. Quantitative assessment established the plant's baseline risk and the estimated risk increase associated with the extended CT duration with only the SIP 2-02 removed from service. The current plant Model of Record has been peer reviewed and found to generally meet or exceed ASME PRA Standard Category II requirements with minimal exceptions. The result of the 25 hour extension was an incremental conditional core damage probability (ICCDP) of 8.56E-11 which is substantially less than the 5E-07 acceptance criteria established in USNRC Inspection Manual 0410. In addition the ICLERP result of 5.71E-12 is substantially less than the established acceptance criteria of 5.0E-08. Details are shown in the table below.

From a risk perspective it is undesirable to place the Unit into a MODE 3/4 configuration based on the current plant status.

Top Event	Case Frequency (Per Reactor Year)
Base Unit 2 No T&M CDFALL	2.64E-06
Base Unit 2 No T&M LERFALL	2.14E-07
Unit 2 No T&M w/SIP 2-02 OOS CDFALL	2.67E-06
Unit 2 No T&M w/SIP 2-02 OOS LERFALL	2.16 E-07

ICCDP was calculated using the formula: ICCDP = [(zero maintenance conditional core damage frequency (CDF), taking into account the equipment that is out of service for the enforcement discretion request) - (zero maintenance baseline CDF)] x (enforcement discretion CT under consideration).

$$\text{ICCDP} = [(2.67\text{E-}06 - 2.64\text{E-}06)] \times (25/8760)$$

$$\text{ICCDP} = 8.56\text{E-}11$$

ICLERP can be calculated using the formula: ICLERP = [(zero maintenance conditional large early release frequency (LERF), taking into account equipment that is out of service for the enforcement discretion request) - (zero maintenance baseline LERF)] x (enforcement discretion CT under consideration).

$$\text{ICLERP} = [(2.16\text{E-}07 - 2.14\text{E-}07)] \times (25/8760)$$

$$\text{ICLERP} = 5.71\text{E-}12$$

The calculated ICCDP and ICLERP values reported above do not account for conservatisms in place such as the compensatory measures being taken by operations and maintenance.



## (2) Dominant Cutsets

A review of the top cutsets was performed to determine the dominant initiators and components contributing to risk while in the extended configuration. The dominating initiating events are associated with Loss of Station Service Water, Loss of off-site Power and Loss of HVAC Systems. The dominant components were found to be associated with the AFW system pumps, Station Service Water system pumps, 6.9 kV power switchgear and DC power distribution components. In addition, the centrifugal charging pumps were seen to be contributors to overall risk.

This evaluation is based on the application specific zero-maintenance PRA model for CPNPP. The compensatory measures identified below limit the maintenance configuration to that of the requested enforcement discretion and highlight the importance of other systems/functions that are to remain available. At the risk significant component level all of the top equipment has been identified for protection in accordance with the station's protective control program and the compensatory measures associated with the enforcement discretion.

While 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 compensatory measures identified above and that risk that would be accrued as a result of the plant trip to enter MODE 3 is avoided with the requested extension (TS 3.5.2, Condition B, Required Action B.1 Completion Time).

### 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.

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 balance of plant (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. The transition from MODE 1 to MODE 3 presents a real, but unquantifiable, level of increased risk. 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.

### (3) Compensatory Measures

The compensatory measures identified below limit the maintenance configuration to that of the requested enforcement discretion and highlight the importance of other systems/functions that should remain available. Since the evaluation using the application specific zero-maintenance PRA model bounds this configuration, there was no special accounting for the implementation of the compensatory measures in the PRA model.

To reduce the likelihood of initiating events:

No other work that jeopardizes plant operation, such as alignment changes (except in response to emergent plant equipment failures) or balance-of-plant function testing, or switchyard work will be allowed except as needed in response to emergent failures or conditions that develop. Thus, the potential for a unit trip and the related electrical bus transfers will be reduced for items under plant control.

Unit 2 Station Service Water (SSW) pumps, Auxiliary Feedwater (AFW) pumps, Component Cooling Water (CCW) pumps, Safety Chilled Water (CHS) pumps and chillers, Emergency Diesel Generators, and both Switchyards shall have access controlled per the station's component protection program, except as needed in response to emergent failures or conditions that develop (i.e., no elective SSW, AFW, CCW, CHS, or switchyard work). Thus, the potential for a unit trip and the related electrical bus transfers will be reduced for items under plant control.

Compensatory measures taken to reduce the likelihood of unavailability of trains redundant to the equipment that is out-of-service are as follows:

No work will be planned on the unit's Centrifugal Charging pumps, Auxiliary Feedwater pumps, Station Service Water pumps, Safety Chilled Water pumps/chillers and Emergency Diesel Generators. In addition, these components will be protected in accordance with the plants Protecting Plant Equipment and Sensitive Equipment Controls procedure (STA-600). These actions will ensure the availability of these key mitigating components during the requested enforcement discretion.

No other PRA related equipment maintenance is planned. This action will ensure the availability of PRA related mitigating components during the requested enforcement discretion.

No maintenance will be performed on the operable SIP 2-01 and will be protected in accordance with the plants Protecting Plant Equipment and Sensitive Equipment Controls procedure (STA-600). This will ensure that the redundant SIP will be available.

The grid condition will be periodically monitored during the period of enforcement discretion.

No surveillances that would make equipment inoperable will be performed during the period of enforcement discretion.

#### (4) Failure Probabilities

There have been no other identified leaks in the ECCS that show an indication of increased risk in other trains. Therefore, there were no adjustments made to the base model to account for an increase in the common cause failure probability.

#### (5) External Events:

The results of the Fire IPEEE study show a relatively low core damage frequency and its uniform distribution among various contributors demonstrate that no plant-specific vulnerability to severe accidents exists at CPNPP from fires.

The dominant core damage frequency scenarios were due to fires in the control room and were found to be approximately 43% of the total fire CDF. The results of the control room analysis indicate two predominant contributors from which similar insight can be drawn, namely 1) scenarios whose only recoveries are from the Remote Shutdown Panel, or 2) scenarios involving a fire-induced loss of offsite power.

The risk of fires outside the control room is distributed among a number of fire areas, but generally within only a few fire compartments. This relatively narrow range results primarily because the compartments have essentially the same function, i.e., electric power and control. These compartments are SD009 (Train A Electrical Equipment Room), SE018 (Train B Electrical Equipment Room), EC051 (Train B UPS & Distribution Room), SB008 (SFGD BLDG 810' Corridor), and EH053 (Train A UPS & Distribution Room).

The contribution of safe shutdown and fire protection systems follow a relatively consistent pattern. For safe shutdown, generally two types of failures occur: 1) a loss of station power caused by fire-induced faults and random failures of the opposite electrical train resulting in a loss of coolant accident (LOCA) (most often a reactor coolant pump (RCP) seal LOCA) followed by operator or random failures to mitigate the consequences of the LOCA, or 2) loss of CCW caused by fire-induced faults and random failures of the undamaged CCW train or its support system (e.g., service water) resulting in an RCP seal LOCA followed again by operator or random failures to mitigate the consequences of the LOCA.

The dominant contributors to the Fire Individual Plant Examination for External Events (IPEEE) results were the 6.9kV electrical switchgears, the Emergency Diesel Generators and the DC inverters/chargers and batteries. This was followed by the Centrifugal Charging pumps (CCPs) and their supporting systems, Station Service Water pumps and Component Cooling Water pumps.

To reduce the impact of fires at CPNPP during the extended enforcement discretion time, fire watches in the areas important to fire risk will be set and all hot work will be suspended. Also, all fire detection and suppression systems in these areas are expected to remain operable during the enforcement discretion period. This is important since fire is a significant contributor to the CDF at CPNPP. These proposed compensatory measures will help reduce the likelihood of a fire event from happening and/or spreading during the requested extension period. In addition, preventing work on and protection of important mitigating system components will also further reduce the overall risk while in the extended condition. As such fire does not pose a risk significant increase due to remaining in MODE 1 during the requested enforcement discretion.

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. For CPNPP, the CCPs are the primary mitigating components utilized to mitigate the loss of inventory with AFW system providing a method to remove decay heat. The SIP's can only be used once the Reactor Coolant System (RCS) has been depressurized as the very small LOCA itself would not reduce RCS pressures below the point that the SIPs could inject. The previously identified compensatory measures to protect the charging and AFW systems as well as the Emergency Diesel Generators will minimize the impact of having the SIP 2-02 out of service. Therefore seismic events would not pose a risk significant increase due to remaining in MODE 1 during the requested enforcement discretion.

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 as external flooding events would not directly lead to a plant transient based on the IPEEE information, the impact of having SIP 2-02 out of service can be considered risk neutral as the safety injection system function is not challenged due to this external event along with the implementation of the aforementioned compensatory measures.

Analysis of the IPEEE for high winds (tornado) determined the dominant sequences do not involve tornado-induced failures of plant structures or equipment; rather they involve tornado-induced loss of offsite power. This is due to the fact that nearly all risk-significant equipment is protected within Seismic Category I structures which are designed to withstand tornadoes up to the design basis tornado.

These results are dominated by F1 and F2 class tornadoes. Station blackout (SBO) is the principal contributor to the overall core damage frequency due to tornadoes. The dominant contributor to the SBO sequences is the random failure of both diesel generators following the tornado strike. The influence of the tornado for these sequences is the reduced probability of restoring electric power. Because of this, the conditional probability of blackout given a tornado strike is relatively insensitive to the tornado intensity (at least up to F4 class tornadoes). Since the frequency of occurrence of F1 and F2 tornadoes is greater than more severe tornadoes, these two tornado classes tend to dominate the results.

A review of the high wind IPEEE cutsets identified the Emergency Diesel Generators as key contributing equipment to mitigate the high wind events. The AFW and Chemical Volume and Control System (CVCS) components utilized for decay heat and/or inventory make up were also seen as contributors to mitigating risk. Similar to the other external events, implementation of compensatory measures to protect and prevent work on those components reduces the risk of having the SIP 2-02 out of service during the requested enforcement discretion.

- M. *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)*

Based on the metrics contained in CPNPP procedure DI-016 "Risk Assessment for NOEDs, LARs, and Emergency Technical Specifications," and allowing for risk due to external events and fire, the ICCDP and ICLERP values for this 25 hour extension of the TS 3.5.2, Condition B, Required Action B.1, Completion Time are substantially below the thresholds established. In addition, this change falls within the normal work controls established in accordance with 10CFR50.65 (a) (4).

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

There is no severe weather (i.e, severe thunderstorms or tornados) in the current 3-day forecast for Granbury, TX near CPNPP (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.

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 Friday, Saturday, and Sunday forecast for the area is (Source = <http://forecast.weather.gov/MapClick.php?CityName=Granbury&state=TX&site=FWD&textField1=32.4402&textField2=-97.7877&e=0> as of July 10, 2015 at 0010 Central Time):

- Friday - Sunny, with a high near 93. South wind 5 to 10 mph.
- Friday Night - Mostly clear, with a low around 73. South southeast wind 5 to 10 mph.
- Saturday - Sunny, with a high near 97. South wind 5 to 10 mph.
- Saturday Night - Mostly clear, with a low around 75. South wind around 10 mph.
- Sunday - Sunny and hot, with a high near 99. South southwest wind 5 to 10 mph.
- Sunday Night - Mostly clear, with a low around 75. South wind around 10 mph.

- O. *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 noncompliance will create undue risk to public health and safety as discussed below:

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.

- (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 ECCS systems provide plant protection. The proposed request will only affect the time allowed to restore one inoperable ECCS train to OPERABLE status. 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.

- (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 provides additional time to complete repairs necessary to restore the 2-02 SIP to OPERABLE status. 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 a noncompliance will not create undue risk to public health and safety.

- P. *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.

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

This request for enforcement discretion was reviewed by the CPNPP Station Operations Review Committee (SORC). SORC and the CPNPP Plant Manager approved requesting enforcement discretion on July 9, 2015 at 2115 Central Time (SORC Meeting Number 15-016).

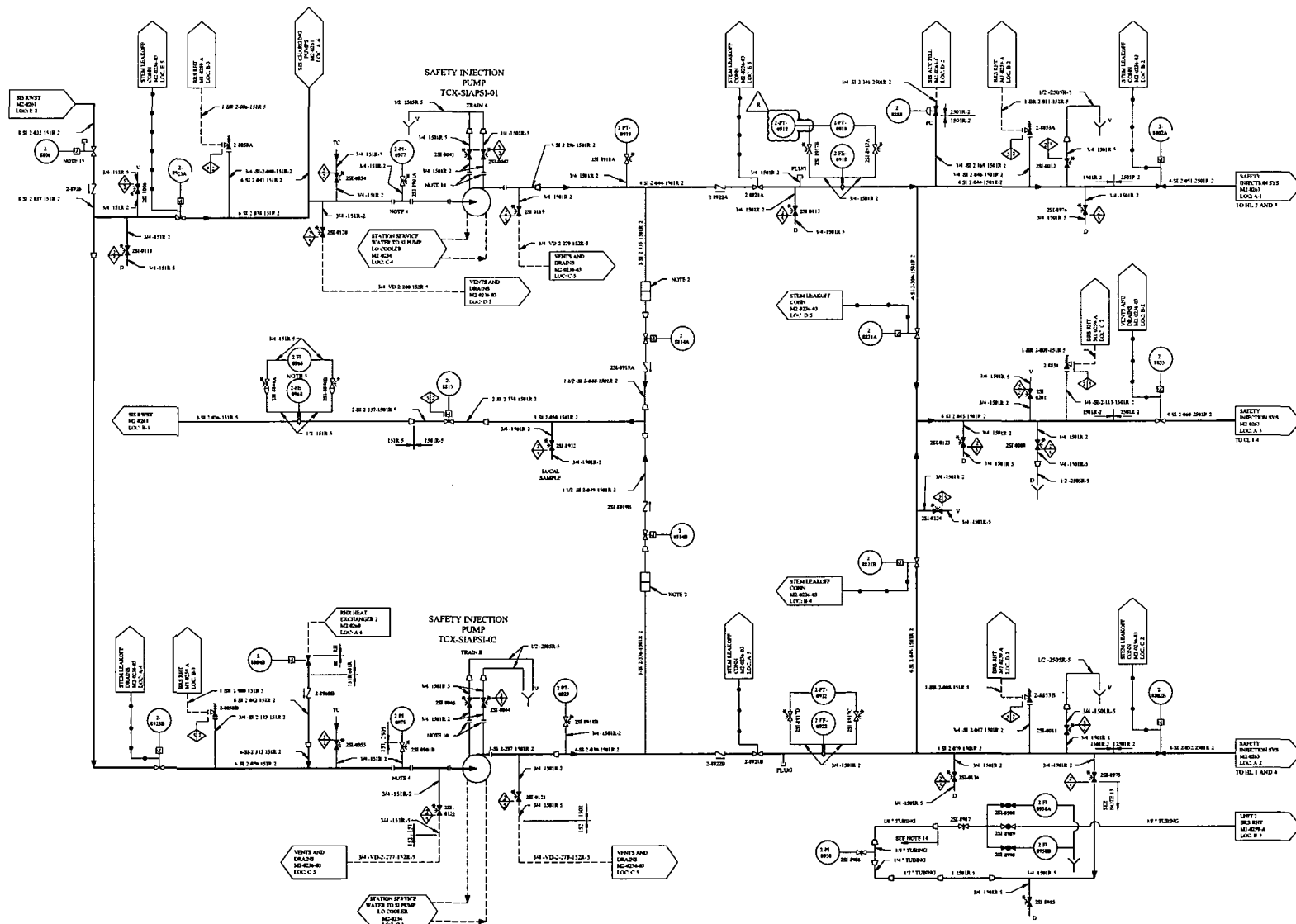
- R. *Commitment to a written NOED request within two working days and a follow-up license amendment request following the staffs verbal granting of the NOED. (IMC-0410, Attachment 1, 07r)*

This letter fulfills the requirement to submit a written enforcement discretion request within two working days. Further, a license amendment is not needed because the request for the enforcement discretion was a unique and isolated incident which is not expected to recur.

CONCLUSION:

Luminant Power requests the NRC grant the requested enforcement discretion to TS 3.5.2, Condition B, Required Action B.1, Completion Time. If there is a significant change in the circumstances associated with this exercising of enforcement discretion, Luminant Power will notify the NRC. A response is requested by 1200 Central Time on July 10, 2015.

# Attachment 2 to TXX-15107



- NOTES
1. DELETED
  2. SEE FOR 14-1518.1 FOR INSTRUMENTATION PART OF SAFETY INJECTION PUMP BY TXX-SIAPS-01
  3. DELETED
  4. TXX-SIAPS-01 AND TXX-SIAPS-02 ARE PLACED IN SH-4 POSITION WITH INITIAL FLOWING OPERATIONS STANDARDS SET FOR REHEATED HEAVY PLANT START UP CAPTED LINE IS CONNECTED TO PRESSURE GAUGE DURING INITIAL FLOWING
  5. FLOW INDICATOR LOCATED OUTSIDE OF SAFETY INJECTION PUMP BLADE
  6. DELETED
  7. DELETED
  8. DELETED
  9. DELETED
  10. SAFETY INJECTION PUMP CASING VENTS DESIGNED TO BE 14-1518.2
  11. UNLESS OTHERWISE NOTED DRAINS COLLECTED BY LOCAL DRAIN SYSTEM
  12. DELETED
  13. ALL TURNS IS BELIEVED PAID AND LEAK MEASUREMENT
  14. SPECIAL CASE REHEATED HEAVY PLANT START UP INITIAL FLOWING OPERATIONS STANDARDS SET FOR REHEATED HEAVY PLANT START UP CAPTED LINE IS CONNECTED TO PRESSURE GAUGE DURING INITIAL FLOWING
  15. VALVE IS Labeled WITH POWER REHEATED AND ARE ADMINISTRATIVELY CONTROLLED

REVISIONS NOTE:  
THIS FLOW DIAGRAM HAS BEEN REHEATED FROM WORKING DRAWING 14-1518.1  
REV 9 WITH EXCEPTIONS AS FOLLOWS:  
A. VALVES AND LINE CONNECTIONS HAVE BEEN ADDED  
B. CONTROL LOGIC HAVE BEEN DELETED EXCEPT FOR THE PRIMARY AND THE FINAL ELEMENTS THE DETAILS OF THE CONTROL LOGIC WILL BE SHOWN ON INSTRUMENTATION AND CONTROL DIAGRAM

## CLASS I

REACTOR SAFETY RELATED  
SAFETY CLASS 1  
SAFETY CLASS 1  
SAFETY CLASS 1

LUMINANT  
CPNP  
GLEN ROSE, TEXAS

FLOW DIAGRAM  
SAFETY INJECTION SYSTEM  
SHEET 2 OF 6

REV 10  
M2-0262

REV 10  
CP-20

< FINAL PRINT >



This communication contains the following new commitment which will be effective for the duration of the enforcement discretion is granted.

<u>Number</u>	<u>Commitment</u>
5088813	<p>Risk measures will be implemented (as described in Section J of Attachment 1 to TXX-15107) during the period of Enforcement Discretion for TS 3.5.2, Condition B, Required Action B.1, Completion Time.</p> <p>The following will be implemented during the requested enforcement discretion extension.</p> <ul style="list-style-type: none"><li>• No work that jeopardizes plant operation, such as alignment changes (except in response to emergent plant equipment failures) or balance-of-plant function testing, or switchyard work will be allowed except as needed in response to emergent failures or conditions that develop.</li><li>• The Unit's Station Service Water pumps, Auxiliary Feedwater pumps, Component Cooling Water pumps, Safety Chilled Water pumps and chillers, Emergency Diesel Generators, and both Switchyards shall have access controlled per the station's component protection program (Protecting Plant Equipment and Sensitive Equipment Controls, procedure STA-600) except as needed in response to emergent failures or conditions that develop.</li><li>• No work will be planned except as needed in response to emergent failures or conditions that develop on the Unit's Centrifugal Charging pumps, Auxiliary Feedwater pumps, Station Service Water pumps, Safety Chilled Water pumps/chillers and Emergency Diesel Generators.</li><li>• No PRA related equipment maintenance will be planned during the extension period.</li><li>• No surveillances that would make equipment inoperable will be performed during the period of enforcement discretion.</li><li>• The grid condition will be periodically monitored during the period of enforcement discretion.</li><li>• Fire watches in the areas important to fire risk will be set and all hot work will be suspended. These areas are SD009 (Train A Electrical Equipment Room), SE018 (Train B Electrical Equipment Room), EC051 (Train B UPS &amp; Distribution Room), SB008 (SFGD BLDG 810' Corridor), and EH053 (Train A UPS &amp; Distribution Room). Fire detection and suppression systems in these areas are expected to remain operable during the enforcement discretion period.</li></ul>