



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
REGION IV
1600 E. LAMAR BLVD.
ARLINGTON, TX 76011-4511

July 17, 2015

Rafael Flores, Senior Vice President
and Chief Nuclear Officer
Attention: Regulatory Affairs
Luminant Generation Company LLC
Comanche Peak Nuclear Power Plant
P.O. Box 1002
Glen Rose, TX 76043

**SUBJECT: NOTICE OF ENFORCEMENT DISCRETION FOR LUMINANT GENERATION
COMPANY (TAC NO. MF6457, NOED NO. 15-4-02)**

Dear Mr. Flores:

By letter dated July 14, 2015, (ADAMS Accession Number ML15197A132), the Luminant Generation Company, requested a Notice of Enforcement Discretion (NOED) from the U.S. Nuclear Regulatory Commission (NRC) to exercise discretion for compliance with the actions required in Comanche Peak Nuclear Power Plant (CPNPP), Units 1 and 2, Technical Specification (TS) 3.5.2, "ECCS – Operating," Condition B, Required Action B.1. This letter documents information previously discussed between Mr. Ken Peters and other members of your staff, and members of the NRC staff in a telephone conference at 8:00 a.m. on July 10, 2015, (all time references below will be in Central Daylight Time). The principal NRC staff members who participated in the telephone conference included Troy Pruett, Director, Division of Reactor Projects, Region IV (RIV); Jeff Clark, Deputy Director, Division of Reactor Safety, RIV; Travis Tate, Acting Deputy Director, Division of Operating Reactor Licensing, Office of Nuclear Reactor Regulation (NRR); Mirela Gavrilas, Deputy Director, Division of Policy and Rulemaking, NRR; Ryan Alexander, Acting Chief, Project Branch A, RIV; Rayomand Kumana, Comanche Peak Resident Inspector, RIV; Fred Lyons, Acting Chief, Plant Licensing Branch IV 1, NRR; Balwant Singal, Project Manager, Plant Licensing Branch IV-1, NRR; Brian Benney, NOED Process Coordinator, NRR; David Alley, Chief, Component Performance, NDE, and Testing Branch, NRR; Ravi Grover, Reactor Systems Engineer, Technical Specifications Branch, NRR; Rick Deese, Senior Reactor Analyst, RIV; and Antonios Zoulis, Reliability and Reactor Analyst, PRA Operations Support Branch, NRR.

On July 7, 2015, a potential through wall leak from pipe segment SI-2-070 in the Unit 2, train B Safety Injection (SI) pump room was discovered during routine system walkdowns by your staff. Approximately 1 - 2 cups of boric acid accumulation was identified on the floor underneath valve 2SI-0055 (SIP 2-02 Suction Test Connection). The pipe insulation was removed to identify the source of the leakage, which was determined to be from a socket weld connection between the six-inch suction piping for SI Pump 2-02 and the ¾ inch vent piping to 2SI-0055.

Your staff stated that at 1:04 p.m. on July 7, 2015, the Shift Manager declared Unit 2, train B, Emergency Core Cooling System (ECCS) inoperable and entered Technical Specification 3.5.2, Condition B, for "one or more [ECCS] trains inoperable for reasons other than one inoperable centrifugal charging pump, and at least 100 percent of the ECCS flow equivalent to a single operable ECCS train available." Required Action B.1 of TS 3.5.2 required restoration of the train(s) to an operable status within 72 hours. Further TS 3.5.2 required that if Required Action B.1 could not be met within 72 hours, Unit 2 would be required to enter TS 3.5.2 Condition C, Required Actions C.1 and C.2, and be in Mode 3 in 6 hours and Mode 4 in 12 hours.

Your staff's initial assessment determined the likely cause of the socket weld failure to be vibration induced fatigue failure. An attempted repair utilizing ASME Code Case N-666 was conducted on July 8, 2015. During the welding activity a small pinhole leak developed in the vent piping. Your staff then initiated alternate repair activities including a freeze seal on the affected piping, installation of a new vent line and valve (to facilitate post-repair filling and venting of the SI piping), and repair of the affected weld. The planning for this possible repair path was initiated by your staff in parallel with the attempted ASME Code Case repair, and work continued around the clock in an attempt to restore the ECCS train B to an operable status within the 72 hour completion time.

This letter documents the telephone conversation on July 10, 2015, between the CPNPP and NRC staff, during which the NRC verbally issued this NOED. Enforcement discretion was requested to allow 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. Specifically, your staff requested an additional 25 hours of completion time (97 hours total) based on station-specific operational experience to complete the remaining tasks required to return the 2-02 SI pump to operability. Those tasks included incremental vacuum filling of and ultrasonic evaluation for voids in the piping system, thawing of the freeze seal, completion of an operational run of the SI 2-02 pump and collection of vibration data, dye penetrant testing of the pipe at the freeze seal location, and other system restoration activities. The additional 25 hours requested to restore the system to an operable status was such that the completion time of Required Action B.1 would expire at 2:04 p.m. on July 11, 2015.

During the teleconference on July 10, as further elaborated in your July 14, 2015, letter, your staff indicated that from a risk perspective it was undesirable to place Unit 2 into a Mode 3 or Mode 4 configuration based on the current plant conditions. Using actual plant conditions on July 10, 2015, your staff estimated quantitatively that for the additional 25 hours requested in completion time, the Incremental Conditional Core Damage Probability (ICCDP) was approximately $8.56\text{E-}11$, and the Incremental Conditional Large Early Release Probability (ICLERP) was approximately $5.71\text{E-}12$. Additionally, it was noted that the estimated ICCDP and ICLERP values did not take into account various additional conservatisms associated with compensatory actions implemented to protect the unit's other critical safety systems while the repair activities were underway. The results of your quantification were below the guidance thresholds of $5.0\text{E-}07$ for ICCDP, and $5.0\text{E-}08$ for ICLERP set forth in Inspection Manual Chapter 0410, "Notices of Enforcement Discretion," (ADAMS Accession Number ML13071A487)

Your staff implemented compensatory risk management measures during the period of enforcement discretion, including (1) performing no work that jeopardizes plant operations, including balance-of-plant and switchyard work; (2) protection of the Unit 2 station service water

pumps, auxiliary feedwater pumps, component cooling water pumps, safety chilled water pumps/chillers, and emergency diesel generators, and controlling access to the switchyards; (3) performing no planned work on the unit's station centrifugal charging pumps, service water pumps, auxiliary feedwater pumps, safety chilled water pumps/chillers, and emergency diesel generators; (4) periodic monitoring of the grid condition during the period, and (5) suspension of hot work and implementation of fire watches in areas important to fire risk. CPNPP staff also stated that no severe weather was forecast which could challenge offsite power availability during the proposed period of enforcement discretion, and grid conditions were normal.

Your staff further stated that the noncompliance would not create undue risk to public health and safety, in that (1) it did not involve a significant increase in the probability or consequences of a previously evaluated accident scenario; (2) it did not create the possibility of a new or different kind of accident from those previously evaluated; (3) it did not involve a significant reduction in a margin of safety, and (4) it would not result in any significant changes in the types or quantities of effluents released from the facility. The Comanche Peak Station Operations Review Committee and Plant Manager approved the NOED request at 9:15 p.m. on July 9, 2015, prior to the verbal request for an NOED. Because the request was a one-time extension of the required completion times for repairs, the licensee stated that a follow-up license amendment request was not required.

In consultation with the NRC Resident Inspection staff at CPNPP, the NRC verified your staff's oral assertions, including the likely cause and compensatory measures. The NRC staff also independently verified your staff's estimates for ICCDP and ICLERP.

Based on the NRC staff evaluation of Luminant's request, the staff has concluded that granting this NOED is consistent with the NRC's Enforcement Policy and staff guidance, and would have no adverse impact on public health and safety. Therefore, as communicated to your staff at 9:20 a.m. on July 10, 2015, the NRC exercised discretion to not enforce compliance with Technical Specification 3.5.2, Condition B, Required Action B.1, for an additional period of 25 hours, which expired at 2:04 p.m. on July 11, 2015.

Your staff subsequently informed the NRC that CPNPP completed the required repairs to the socket weld connection to 2SI-0055 and installed the requisite vent line and valve (for system filling and venting) such that the condition causing the need for this NOED was corrected (i.e., the SI Pump and Unit 2 ECCS train B was returned to an operable status), allowing Unit 2 to exit TS 3.5.2, Required Action B.1 and this NOED, at 12:00 a.m. on July 11, 2015. Therefore CPNPP utilized 10 hours and 56 minutes of the 25 hours of enforcement discretion which was granted.

In addition, as discussed on July 10, 2015, the NRC staff agreed with your determination that a follow-up license amendment is not needed. The staff concluded that an amendment (either a temporary or permanent amendment) is not necessary because this NOED involves a nonrecurring compliance issue and involves only a single request for extending the period of time for Technical Specification 3.5.2, Condition B, Required Action B.1, to restore SI pump 2-02 and ECCS train B to an operable status.

R. Flores

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As stated in the Enforcement Policy, the NRC staff may take enforcement actions to the extent that any violations are identified for the root cause that led to the noncompliance for which this NOED was necessary.

Sincerely,

/RA/

Troy Pruett, Director
Division of Reactor Projects

Docket: 50-445; 50-446
License: NPF-87; NPF-89

Electronic Distribution for Comanche Peak
Nuclear Power Plant

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Distribution
See next page

ADAMS Accession Number: ML15198A401

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OFFICE	C(A):RIV/DRP/A	SRA:RIV/DRS	C:RIV/ACES	DD:RIV/DRS
NAME	RAlexander	RDeese	MHay	JClark
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DATE	7/15/15	7/15/15	7/16/15	7/15/15
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Letter to Rafael Flores from Troy Pruett, dated July 17, 2015

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