Luminant

**Rafael Flores**
Senior Vice President
& Chief Nuclear Officer
Rafael.Flores@Luminant.com

**Luminant Power**
P O Box 1002
6322 North FM 56
Glen Rose, TX 76043

**T** 254 897 5550
**C** 817 559 0403
**F** 254 897 6652

CP-201300258
Log # TXX-13046

Ref. # 10CFR50.55a(a)(3)(i)

March 21, 2013

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

SUBJECT: COMANCHE PEAK NUCLEAR POWER PLANT
DOCKET NOS. 50-445 AND 50-446
RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION FOR
RELIEF REQUEST NO. P-1 FOR UNIT 1 AND UNIT 2 INSERVICE TESTING PLAN FOR
PUMP AND VALVES (TAC NOS. ME9259 AND ME9260)

REFERENCES: 1. Letter logged TXX-12117 dated August 16, 2012 from Rafael Flores to the NRC submitting Relief Request No. P-1 for Unit 1 and Unit 2 Inservice Testing Plan for Pumps and Valves (ASME OM Code 2004 Edition, through 2006 Addenda, Third Interval Start Date: August 3, 2013).

2. Email dated February 19, 2013 from Balwant Singal of the NRC to Timothy Hope of Luminant Power requesting additional information regarding Relief Request No. P-1 (TAC ME9259 and ME9260).

Dear Sir or Madam:

Per reference 1, Luminant Generation Company LLC (Luminant Power) previously submitted a request for relief for testing of the Safeguards Building Sump Pumps at Comanche Peak Nuclear Power Plant (CPNPP). Per reference 2, the NRC provided a request for additional information regarding the subject relief request.

Attached is the Luminant Power response to the request for additional information.

This communication contains no new commitment regarding Comanche Peak Units 1 and 2.

Should you have any questions, please contact Mr. Jack Hicks at (254) 897-6725.



A047
NRR

Sincerely,

Luminant Generation Company LLC

Rafael Flores

By: Fred W. Madden
Fred W. Madden
Director, Oversight & Regulatory Affairs

Attachment : Response to Request for Additional Information for Relief Request P-1
Enclosure: Photo for Response to RAI Question 2

c - E. E. Collins, Region IV
B. K. Singal, NRR
Resident Inspectors, Comanche Peak
Jack Ballard, ANII, Comanche Peak

Luis Ponce
Texas Department of Licensing and Regulation
P. O. Box 12157
Austin, Texas 78711-2332

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATIONFOR RELIEF REQUEST NUMBER P-1
FOR THE UNITS 1 AND 2 INSERVICE TESTING PLAN FOR PUMPS AND VALVES
(THIRD INTERVAL: START DATE: AUGUST 3, 2013; END DATE: AUGUST 2, 2023)
(TAC NOS. ME9259 AND ME9260)

**NRC Question 1 from Reference 2**

In your letter dated August 16, 2012 (ADAMS Accession No. ML12240A052), it is stated that a RR P-2 similar to RR P-1 was authorized, by the U.S. Nuclear Regulatory Commission (NRC) staff pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR), paragraph 50.55a(a)(3)(ii) for the second 10-year Inservice Testing (IST) program interval (ADAMS Accession No. ML091620548). The current RR P-1 is similar but not exactly the same as the previous RR, P-2. In RR P-2, relief was only requested from the requirements of ISTB-5200(a)(1), "Duration of Tests," ISTB-5221, "Group A Test Procedures," and ISTB-5223, "Comprehensive Test Procedure." However, in the current RR P-1, additional relief is requested from the requirements of ISTB-3540(b), "Vibration."

Since relief from ISTB-3540(b) was not requested in RR P-2, pump testing for vertical line draft pumps, CP1-WPAPSS-01, CP1-WPAPSS-02, CP1-WPAPSS-03, CP1-WPAPSS-04, CP2-WPAPSS-01, CP2-WPAPSS-02, CP2-WPAPSS-03, and CP2-WPAPSS-04, should have been performed in accordance with the vibration requirements of ISTB-3540(b). Please describe how the requirements of ISTB-3540(b) were met during the second 10-year IST program interval.

**Luminant Power's Response to Question 1**

The Second Interval Relief Request (RR) P-2, Section Substitute Test states, "A baseline reference shall be established for flow and vibration (MIH)." Vibration measurements were taken at the motor-inboard-horizontal (MIH) direction as indicated by Second Interval RR P-2. The note to the Third Interval RR P-1 was added for completeness and to further clarify that relief was also requested from the requirements of ISTB-3540(b) since vibration can only be taken in one direction without excessive burden. The vibration measurement method was described in Section "Proposed Alternative and Basis for Use" of Second Interval RR P-2. Therefore, even though explicit reference to ISTB-3540(b) in the Second Interval RR P-2 was not stated, the proposed alternative method for measuring vibration was described (i.e., MIH).

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATIONFOR RELIEF REQUEST NUMBER P-1
FOR THE UNITS 1 AND 2 INSERVICE TESTING PLAN FOR PUMPS AND VALVES
(THIRD INTERVAL: START DATE: AUGUST 3, 2013; END DATE: AUGUST 2, 2023)
(TAC NOS. ME9259 AND ME9260)

**NRC Question 2 from Reference 2**

In Section 5 of the letter dated August 16, 2012, it is stated that vibration will be measured in a single direction due to the short pump run time and the ability to acquire a single vibration reading during this time period. ISTB-3540(b) requires that for vertical line shaft pumps, measurements shall be taken on the upper motor-bearing housing in three approximately orthogonal directions, one of which is the axial direction. Vibration measurements are normally taken simultaneously during the pump run. Therefore, please provide more details or justification why the vibration measurements cannot be taken during the pump run and justify that a single vibration reading is an acceptable alternative to the ISTB-3540(b) requirements.

**Luminant Power's Response to Question 2**

Vibration measurements are done in 1 direction for the following reasons:

1. **Duration:** Due to the limited volume of water, the sump is emptied in approximately 50 seconds. The pumps do not have time to stabilize and subsequently CPNPP cannot meet ASME OM Section ISTB-5200(a)(1).
2. **Location:** Since the pumps are under a 1" thick steel plate (see enclosed photo), only the motors are accessible by workers. These are small motors with only one location for MH, MV, and MA. MIH and MOH are the same point, MH. Hence only the MH measurement is taken (see approved Second Interval RR P-2). The 1" thick steel plate is stiff and will dampen any vibrations. The trending of 3 vibration readings at the same location would not provide any additional trending information beyond the current single MH measurement. During normal operations these pumps are not used continuously. Therefore the use of a single vibration reading is an acceptable alternative to the ISTB-3450(b) requirement to measure vibration in 3 directions.
3. **Setup:** Direct access to the Safeguards Building Sump Pumps would be a significant burden since they are inside the sump and the sump is covered by a 1" thick steel plate (see enclosed photo). To run the pumps for greater than 50 seconds would require opening the sump and running water from a demineralized water source with temporary hoses. Performing this test would incur significant effort. The man hours estimated to remove the plate, run demineralized water, and reestablish the design configuration is approximately 50 man hours for each pump train (versus approximately 9 man hours for each pump train in accordance with currently approved relief request P-2).
4. **Dose:** The Safeguards Building Sump Pumps are located in a radiological area of the plant at EL. 773, in both Units. The dose in the room will vary depending on what waste has been discharged into the sumps. If the waste is very radioactive then the dose rate for workers performing the test could be high. More importantly however, removing the steel access plate to access the sump will significantly increase the risk of worker contamination, since the sumps are highly contaminated.

Due to the reasons listed above, relief from the ASME OM Code for the vibration requirements of ISTB-3540(b) is requested for the Safeguards Building Sump Pumps CP1-WPAPSS-01, CP1-WPAPSS-02, CP1-WPAPSS-03, CP1-WPAPSS-04, CP2-WPAPSS-01, CP2-WPAPSS-02, CP2-WPAPSS-03, and CP2-WPAPSS-04

Enclosure to TXX-13046
(Photo for Response to RAI Question 2)