UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

August 11, 2009

Mr. Rafael Flores
Senior Vice President and
Chief Nuclear Officer
Luminant Generation Company LLC
P.O. Box 1002
Glen Rose, TX 76043

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION, UNITS 1 AND 2 – REQUEST FOR ADDITIONAL INFORMATION REGARDING THE PERMANENT ALTERNATE REPAIR CRITERIA LICENSE AMENDMENT REQUEST (TAC NOS. ME1446 AND ME1447)

Dear Mr. Flores:

By letter dated June 8, 2009, Luminant Generation Company LLC (the licensee) submitted a license amendment request to revise Comanche Peak Steam Electric Station, Units 1 and 2, Technical Specification (TS) 5.5.9, "Steam Generator (SG) Program," and TS 5.6.9, "Steam Generator (SG) Tube Inspection Report." The licensee proposed to change the inspection scope, repair, and reporting requirements. The proposed changes would establish permanent alternate repair criteria for portions of the SG tubes within the tubesheet.

On July 30, 2009, the U.S. Nuclear Regulatory Commission staff held a conference call with your staff to discuss these issues further. The enclosure provides a list of the topics discussed in that teleconference. We understand that you will include your response to these topics in your forthcoming response to our request for additional information letter dated July 23, 2009.

If you have any questions, please feel free to contact me at 301-415-3016.

Sincerely,

Balwant K Singal

Balwant K. Singal, Senior Project Manager
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-445 and 50-446

Enclosure:
As stated

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LIST OF TOPICS DISCUSSED DURING JUNE 30, 2009, TELECONFERENCE

REGARDING PERMANENT H* ALTERNATE REPAIR CRITERIA

FOR STEAM GENERATOR INSPECTIONS

COMANCHE PEAK STEAM ELECTRIC STATION, UNITS 1 AND 2

DOCKET NOS. 50-445 AND 50-446

By letter dated June 8, 2009 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML091670154), Luminant Generation Company LLC (the licensee), submitted a license amendment request (LAR) to revise the Technical Specifications (TS) of Comanche Peak Steam Electric Station (CPSES), Units 1 and 2. The LAR proposed changes to the inspection scope and repair requirements of TS 5.5.9, "Steam Generator (SG) Program," and reporting requirements of TS 5.6.9, "Steam Generator (SG) Tube Inspection Report." The proposed changes would establish permanent alternate repair criteria for portions of the SG tubes within the tubesheet. The TS changes only affect CPSES, Unit 2, but the TS are common to CPSES, Units 1 and 2.

The Westinghouse Electric Company LLC (Westinghouse) document, WCAP-17072-P, Revision 0, "H*: Alternate Repair Criteria for the Tubesheet Expansion Region in Steam Generators with Hydraulically Expanded Tubes (Model D5)" (Reference 1), was submitted with the June 8, 2009, letter, in support of the LAR.

The U.S. Nuclear Regulatory Commission (NRC) staff determined that additional information was needed in order to complete its review and requested additional information in its letter dated July 23, 2009 (ADAMS Accession No. ML092020579). On July 30, 2009, the NRC staff held a conference call with your staff to discuss these issues further. The following is a list of the topics discussed in the June 30, 2009, teleconference that we understand will be included in your response to our letter dated July 23, 2009:

1. Please address the following questions as part of your response to Request for Additional Information (RAI) 4:

    a. Clarify the nature of the finite element model ("slice" model versus axisymmetric SG assembly model) used to generate the specific information in Tables 6-1, 2, and 3 (and accompanying graph entitled "Elliptical Hole Factors") of Reference 6-15. What loads were applied? How was the eccentricity produced in the model? (By modeling the eccentricity as part of the geometry? By applying an axisymmetric pressure the inside of the bore?) Explain why this model is not scalable to lower temperatures.

    b. Provide a table showing the maximum eccentricities (maximum diameter minus minimum diameter) from the 3 dimensional (3-D) finite element analysis for normal operating and steam line break (SLB).

Enclosure

c. In Figure 2 of the White Paper, add plot for original relationship between reductions in contact pressure and eccentricity as given in Reference 6-15 in the graph accompanying Table 6-3. Explain why this original relationship remains conservative in light of the new relationship. Explain the reasons for the differences between the curves.

d. When establishing whether contact pressure increases when going from normal operating to SLB conditions, how can a valid and conservative comparison be made if the normal operating case is based on the original delta contact pressure versus eccentricity curve and the SLB case is based on the new curve?

2. The response to RAI 22 should include a discussion of a main steam line break and whether it continues to be less limiting, from maximum H* perspective, than three times normal operating pressure.

3. As part of the response to RAI 25, address the feed line break (FLB) heatup transient in the Final Safety Analysis Report (FSAR), as this design-basis accident is part of the licensing basis. Please provide a rationale to justify basing the leakage factor on SLB, or commit to a leakage factor based on the FLB heatup transient.

4. During review of the CPSES LAR, it was noticed that a regulatory commitment regarding use of the leakage factor (see below) had been stated in the body of the document (page 8 of Attachment 1) but had been left off the list of regulatory commitments on page 2 of the cover letter. Since the final leakage factor may change based on the FLB analysis (question 3 above), the proper factor will need to be used in the regulatory commitment.

    For the Condition Monitoring assessment, the component of leakage from the prior cycle from below the H distance will be multiplied by a factor of 2.03 and added to the total leakage from any other source and compared to the allowable accident induced leakage limit. For the Operational Assessment, the difference between the allowable accident induced leakage and the accident induced leakage from sources other than the tubesheet expansion region will be divided by 2.03 and compared to the observed operational leakage.*

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DATE	8/5/09	8/5/09	8/5/09	8/11/09	8/11/09