



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

July 10, 2015

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

SUBJECT: COMANCHE PEAK NUCLEAR POWER PLANT, UNIT 2 – REVIEW OF THE  
SPRING 2014 STEAM GENERATOR TUBE INSPECTIONS PERFORMED  
DURING REFUELING OUTAGE 14 (TAC NO. MF5052)

Dear Mr. Flores:

By letter dated October 21, 2014 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML14302A067), as supplemented by letters dated April 16 and June 1, 2015 (ADAMS Accession Nos. ML15114A198 and ML15161A315, respectively), Luminant Generation Company, LLC (the licensee), submitted information summarizing the results of the spring 2014 steam generator tube inspections performed at the Comanche Peak Nuclear Power Plant (CPNPP), Unit 2, during refueling outage 14.

The U.S. Nuclear Regulatory Commission (NRC) staff has completed its review of the submittal and concludes that the licensee provided the information required by the CPNPP, Unit 2, technical specifications. No additional follow-up is required at this time. The results of the NRC staff's review and observations are enclosed.

If you have any questions, please contact me at (301) 415-3016 or via e-mail at [balwant.singal@nrc.gov](mailto:balwant.singal@nrc.gov).

Sincerely,

A handwritten signature in black ink that reads "Balwant K. Singal".

Balwant K. Singal, Senior Project Manager  
Plant Licensing Branch IV-1  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket No. 50-446

Enclosure:  
As stated

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REVIEW OF THE SPRING 2014 STEAM GENERATOR INSPECTIONS

LUMINANT GENERATION COMPANY LLC

COMANCHE PEAK NUCLEAR POWER PLANT, UNIT 2

DOCKET NO. 50-446

By letter dated October 21, 2014 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML14302A067), as supplemented by letters dated April 16 and June 1, 2015 (ADAMS Accession Nos. ML15114A198 and ML15161A315, respectively), Luminant Generation Company LLC (the licensee), submitted information summarizing the results of the spring 2014 steam generator (SG) tube inspections performed at the Comanche Peak Nuclear Power Plant (CPNPP), Unit 2, during refueling outage 14 (2RF14).

CPNPP, Unit 2 has four Westinghouse Model D5 SGs. Each SG contains 4,570 thermally treated Alloy 600 tubes. Each tube has a nominal outside diameter of 0.750 inches and a nominal wall thickness of 0.043 inches. The tubes were hydraulically expanded at both ends for the full depth of the tubesheet and are supported by a number of Type 405 stainless steel supports with quatrefoil shaped holes.

The licensee provided the scope, extent, methods, and results of its SG tube inspections in the documents referenced above. In addition, the licensee described corrective actions (i.e., tube plugging) taken in response to the inspection findings.

After reviewing the information provided by the licensee, the U.S. Nuclear Regulatory Commission (NRC) staff has the following comments/observations:

- There are two low-row tubes that have an eddy current (EC) offset in the EC data, which is indicative of potentially elevated residual stress. The NRC staff notes that some licensees have preventively taken all low-row tubes with this EC offset out of service due to the potential for stress-corrosion cracking to occur in these tubes.
- Discoloration was observed in the channel head cladding on the cold leg side of SG 1. The licensee believes that the discoloration was caused by a flaw in the vicinity of the joint between the channel head shell and the tubesheet, and near the peripheral tube in row 36, column 100. The licensee estimated the flaw length to be approximately 0.625 inches. A historical review indicated that the discoloration was visible in 2003, which led the licensee to conclude that the corrosion has been slowly developing since the initial operation of the SGs. The licensee evaluated the flaw for continued operation and concluded it was acceptable to operate for several cycles. Inspection and recharacterization was recommended by the licensee during the next inspection of the SGs.

Based on a review of the information provided, the NRC staff concludes that the licensee provided the information required by CPNPP, Unit 2 technical specifications. In addition, the NRC staff concludes that there are no technical issues that warrant follow-up action at this time

Enclosure

since the inspections appear to be consistent with the objective of detecting potential tube degradation and the inspection results appear to be consistent with industry operating experience at similarly designed and operated units.

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*/RA/*

Balwant K. Singal, Senior Project Manager  
Plant Licensing Branch IV-1  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

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As stated

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ADAMS Accession No. ML15187A037

\*Memo dated June 24, 2015

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DATE	7/10/15	7/10/15	

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