



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

February 26, 2018

Mr. Ken J. Peters  
Senior Vice President and  
Chief Nuclear Officer  
Attention: Regulatory Affairs  
Vistra Operations Company LLC  
Comanche Peak Nuclear Power Plant  
6322 N FM 56  
P.O. Box 1002  
Glen Rose, TX 76043


SUBJECT: COMANCHE PEAK NUCLEAR POWER PLANT, UNIT NO. 2 – REVIEW OF  
THE SPRING 2017 STEAM GENERATOR TUBE INSPECTION REPORT  
(EPID L-2017-LRO-0053)

Dear Mr. Peters:

By letter dated October 30, 2017 (Agencywide Documents Access and Management System Accession No. ML17313A447), Vistra Operations Company LLC (the licensee) submitted information to the U.S. Nuclear Regulatory Commission (NRC) summarizing the results of the spring 2017 steam generator (SG) tube inspections performed at the Comanche Peak Nuclear Power Plant (CPNPP), Unit No. 2, during Unit 2 Refueling Outage 16. The SG tube inspection report was submitted in accordance with Technical Specification (TS) 5.6.9, "Unit 1 Model D76 and Unit 2 Model D5 Steam Generator Tube Inspection Report."

Based on its review, the NRC staff concludes that the licensee provided the information required by CPNPP TS 5.6.9, and that no followup is required at this time. A summary of the NRC staff's review is enclosed. If you have any questions, please call me at 301-415-1233 or via e-mail at [Margaret.O'Banion@nrc.gov](mailto:Margaret.O'Banion@nrc.gov).

Sincerely,

  
Margaret W. O'Banion, Project Manager  
Plant Licensing Branch IV  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket No. 50-446

Enclosure:  
Review of SG Tube Inspection Report

cc: Listserv

REVIEW OF THE SPRING 2017 REFUELING OUTAGE 16  
STEAM GENERATOR TUBE INSPECTION REPORT  
VISTRA OPERATIONS COMPANY LLC  
COMANCHE PEAK NUCLEAR POWER PLANT, UNIT NO. 2  
DOCKET NO. 50-446

By letter dated October 30, 2017 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML17313A447), Vistra Operations Company LLC (the licensee) submitted information summarizing the results of the spring 2017 steam generator (SG) inspections performed at the Comanche Peak Nuclear Power Plant (CPNPP), Unit No. 2, during Unit 2 Refueling Outage 16 (2RF16). The SG tube inspection report has been submitted in accordance with Technical Specification (TS) 5.6.9, "Unit 1 Model D76 and Unit 2 Model D5 Steam Generator Tube Inspection Report."

In a letter dated May 22, 2017 (ADAMS Accession No. ML17137A174), the U.S. Nuclear Regulatory Commission (NRC) staff summarized a conference call that was held with the licensee on April 20, 2017, regarding the SG inspections performed during 2RF16.

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 its letter dated October 30, 2017. In addition, the licensee described corrective actions, such as tube plugging, taken in response to the inspection findings.

Based on the NRC staff's review of the information provided by the licensee, the NRC staff has the following observations and comments:

- The licensee reported four circumferential primary water stress corrosion cracking indications in three tubes of SG 2-03. Three of the indications were within the depth of the tubesheet and the maximum depths of the indications ranged from 43 to 48 percent through wall, with circumferential extents of 31 to 35 degrees. The fourth indication was located at a top-of-tubesheet expansion transition. The maximum measured depth of this indication was 69 percent through wall and 60 degrees of circumferential extent. All three tubes were stabilized and plugged. No in situ pressure testing was required.
- During the licensee's inspection of the SG channel head bowl, discolorations were observed in the cladding of SG 2-01 and in SG 2-02. The discoloration in SG 2-01 was first noted in 2RF14 and determined to be a flaw. The evaluation of the flaw performed in 2RF14 determined there was no detrimental impact on meeting the SG performance criteria. The visual inspection in 2RF14 indicated no change to the flaw and the licensee concluded that the flaw was still bounded by the previous evaluation. The flaw in

SG 2-02 had similar characteristics to the existing flaw in SG 2-01, and therefore the licensee concluded that it was bounded by the evaluation performed in 2RF14.

Based on a review of the information provided, the NRC staff concludes that the licensee provided the information required by CPNPP TS 5.6.9. In addition, the staff concludes that there are no technical issues that warrant followup action at this time 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.

SUBJECT: COMANCHE PEAK NUCLEAR POWER PLANT, UNIT NO. 2 – REVIEW OF THE SPRING 2017 STEAM GENERATOR TUBE INSPECTION REPORT (EPID L-2017-LRO-0053) DATED FEBRUARY 26, 2018

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**ADAMS Accession No. ML18053A160**

**\*memo dated February 7, 2018**

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DATE	02/23/2018	02/23/2018	02/07/2018	02/23/2018	02/26/2018

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