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CP-202200357  
TXN-22079  
September 14, 2022

U. S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, DC 20555-0001

Ref 10 CFR 50.55a  
10 CFR 50.4

Subject: Comanche Peak Nuclear Power Plant (CPNPP) Unit 2  
Docket No. 50-446  
Response to Request for Additional Information, Fall 2021 (2RF19) Steam Generator Tube  
Inspection Report

References:

1. NRC email from Dennis Galvin to Jack Hicks, "Comanche Peak Unit 2 - Request for Additional Information - 2RF19 Inspection Summary Report for Steam Generator Tubing (EPID: L 2022-LRO-0065)," dated August 17, 2022
2. Letter TXN-22041 from Jack Hicks to the NRC, "Unit 2 Refueling Outage 19 (2RF19) Steam Generator 180 Day Report," dated May 5, 2022 [ML22125A267]


Dear Sir or Madam:

Vistra Operations Company LLC (Vistra OpCo) hereby submits a response to the NRC request for additional information (RAI) (Reference 1) regarding the Comanche Peak 2RF19 steam generator report submitted with Reference 2. The attachment to this letter provides Vistra OpCo's response to the NRC information request.

This communication contains no new commitments regarding CPNPP Unit 2.

Should you have any questions, please contact Jim Barnette at (254) 897-5866 or James.Barnette@luminant.com.

Sincerely,

  
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Jack C. Hicks

Attachment: Response to Request for Additional Information - 2RF19 Steam Generator 180 Day Report

c (email) - Scott Morris, Region IV [Scott.Morris@nrc.gov]  
Dennis Galvin, NRR [Dennis.Galvin@nrc.gov]  
John Ellegood, Senior Resident Inspector, CPNPP [John.Ellegood@nrc.gov]  
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Attachment to TXX-22079

Comanche Peak Nuclear Power Plant  
Response to NRC Request for Additional Information Regarding the  
CPNPP 2RF19 Steam Generator 180 Day Report [ML22125A267]  
(EPID: L 2022-LRO-0065)  
(4 pages including this cover page)

The NRC Staff's requests for additional information (RAI) are provided below in bold text and are followed by the Vistra OpCo responses.

**RAI 1:**

**The table in Section c.4 shows that the tubes at Row 40 Column 48 (33 percent through wall), and Row 40 Column 49 (18 percent through wall), in SG 3, were stabilized and plugged. The information in Sections c.2 and c.3 indicates both tubes had single volumetric indications caused by foreign object wear.**

With respect to foreign object wear projections, Section d, near the top of page 15 states, "A total of 16 objects remained in secondary side of the SGs following 2RF19. All of these objects were small parts and demonstrated by bounding calculations through tube wear projections to not adversely affect tube integrity until at least 2RF22." However, Section c.3, near the top of page 12, states, "no foreign objects remain within the vicinity of the affected tubes, so no OA [operational assessment] projection is provided."

**These two statements about foreign object wear projections appear to be inconsistent. Therefore, please clarify the basis for stabilizing and plugging these tubes, the location of foreign objects with respect to these tubes, and whether these objects were included in the operational assessment.**

Response:

The tubes at Row 40 Column 48 (33 percent through wall), and Row 40 Column 49 (18 percent through wall), in SG 3, were stabilized and plugged. Both tubes had single volumetric indications caused by foreign object wear. For SG3 R40C48/49, the foreign object causing the wear could not be removed as it was fixed in place. Therefore, the tubes were plugged and stabilized to protect against tube severing in the event of continued wear.

A total of 16 objects that were visually verified during foreign object search and retrieval (FOSAR) remained in the secondary side of the SGs following 2RF19. Fifteen (15) of these objects were small parts (mostly sludge and scale), whose dimensions were bound by tube wear projections to not adversely affect tube integrity until at least 2RF22. One (1) object at SG3 R40C48/49 was not considered for operational assessment (OA) because it was found to be fixed in place between two tubes with wear indications, and as such the tubes were plugged and stabilized. None of the remaining 15 objects are associated with any foreign object wear indications.

With respect to tubes with detected foreign object wear, it is true that no foreign objects remain within the vicinity of any of these tubes that were returned to service. This was confirmed through secondary side visual inspections and eddy current examinations. Therefore, there is no mechanism to produce further flaw progression during future operations. With no mechanism present for further flaw growth and all wear flaws satisfying condition monitoring limits, all SG performance criteria for structural and leakage integrity will be satisfied until the next SG inspection (no OA projection is necessary). For the foreign object wear indications in SG3 at R40C48/49, the loose part remains in place, but the tubes have been removed from service.

**RAI 2:**

With respect to the single volumetric indication in the tube at Row 6 Column 79 in SG 3:

- In Section c.4, the table of tubes plugged or repaired, please clarify the use of the word "Preventative" as the "Plugging Basis." According to Sections c.2 and c.3, the indication was 43 percent through wall, which would require plugging according to TS 5.5.9.c.
- Please clarify how this indication was assessed and determined to be foreign object wear (Section c.3) considering its location in the U-bend region (13.55 inches above tube support plate C11) and the absence of a corresponding foreign object in the summary table in Section f.

Response:

The 2RF19 Plugging and Stabilization List in Section c.4 is corrected and provided below. The term "Preventative" for SG3 R6C79 was referring to the fact that the loose part suspected of causing the single volumetric indication (SVI) could not be visually verified. However, as the depth of the flaw is > 40% TW, a corrected plugging basis is provided.

2RF19 Plugging and Stabilization List						
SG	Row	Col	Ind	Location	Plugging Basis	Stabilize
1	1	69	SAI	H3	Axial ODSCC	No
2	1	95	-	-	High Stress Tube	No
2	1	55	-	-	High Stress Tube	No
3	6	79	SVI	C11	Wear > 40% TW	No
3	40	48	SVI	C2	Preventative	Yes
3	40	49	SVI	C2	Preventative	Yes

The single volumetric indication at SG3 R6C79 was determined to be foreign object wear via eddy current inspections. The bobbin probe detected a Non-Quantifiable Indication (NQI) at H11 +13.60", which required a +Point probe diagnostic test to be performed. The +Point probe examination detected a possible loose part (PLP) and an SVI. The loose part (foreign object) was detectable in the +Point data but could not be visually verified because of location in the U-Bend which is between two Anti-Vibration Bars (AVB). No loose part was recorded in the summary table in Section f because the location is inaccessible from the secondary side, so no part could be visually confirmed.

**RAI 3:**

**Please explain the meaning of “Limiting/Total” wear indications, shown with a value of 279 in the table of “Wear Indication at Support Structures” in Section c.2**

Response:

The first table in Section c.2 has been corrected and provided below.

Wear Indications < 20% TW at Support Structures (AVB, TSP, and PBP)

<b>SG1</b>	<b>SG2</b>	<b>SG3</b>	<b>SG4</b>	<b>Total</b>
135	47	55	42	279