



Tennessee Valley Authority
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Vice President
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August 13, 2010

10 CFR 50.4

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

Sequoyah Nuclear Plant, Unit 2
Facility License No. DPR-79
NRC Docket No. 50-328

Subject: **Response to Request for Clarification of "Response to Request for Additional Information Regarding the 90-Day and 180-Day Steam Generator Tube Inspection Reports for Cycle 16 Refueling Outage (TAC Nos. ME3400 and ME3971)," dated July 16, 2010**

- References:
1. E-mail from NRC (Siva Lingam) to TVA (Rod Cook), "Sequoyah, Unit 2- Steam Generator Tube Inspection Report (TAC Nos. ME3400 and ME3971)," dated August 2, 2010
 2. Letter from TVA to NRC, "Response to Request for Additional Information Regarding the 90-Day and 180-Day Steam Generator Tube Inspection Reports for Cycle 16 Refueling Outage (TAC Nos. ME3400 and ME3971)," dated July 16, 2010

By e-mail dated August 2, 2010 (Reference 1), the NRC requested that the Tennessee Valley Authority provide clarification of several responses as contained in Reference 2. The Enclosure to this letter provides that clarification.

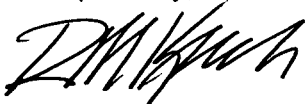
There are no regulatory commitments contained in this letter.

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If you have any questions concerning this matter, please contact Rod Cook at
(423) 751-2834.

Respectfully,

A handwritten signature in black ink, appearing to read 'R. M. Krich', written in a cursive style.

R. M. Krich

Enclosure:

Response to Request for Clarification of "Response to Request for Additional
Information Regarding the 90-Day and 180-Day Steam Generator Tube Inspection
Reports for Cycle 16 Refueling Outage (TAC Nos. ME3400 and ME3971)," dated
July 16, 2010

cc (Enclosure):

NRC Regional Administrator - Region II
NRC Senior Resident Inspector - Sequoyah Nuclear Plant

ENCLOSURE

**Tennessee Valley Authority
Sequoyah Nuclear Plant, Unit 2**

**Response to Request for Clarification of
“Response to Request for Additional Information Regarding the 90-Day and 180-Day
Steam Generator Tube Inspection Reports for Cycle 16 Refueling Outage (TAC Nos.
ME3400 and ME3971),” dated July 16, 2010**

NRC Requested Clarification Number 1:

In your response to RAI 1 you indicated there were no “unacceptable or abnormal” conditions discovered. From the rest of the response, we would assume you detected erosion of the feedwater inlet distribution tee. Did you detect any other degradation of the secondary side internals?

TVA Response:

The original response statement referred to, “. . . ultrasonic testing thickness measurements of the feedwater inlet distribution tee were obtained to assess erosion for information,” does not indicate erosion was found but rather information was gathered for erosion assessment. As stated in the second sentence of the response, “No unacceptable or abnormal conditions were discovered,” remains a valid statement for the inspections.

NRC Requested Clarification Number 2:

In your response to RAI 5, the last part of the response seems to have been truncated. What is the remainder of this response?

TVA Response:

The response was inadvertently truncated during editing. The entire response is provided below with the inadvertently truncated portion bolded:

[Response to RAI 5 from “Response to Request for Additional Information Regarding the 90-Day and 180-Day Steam Generator Tube Inspection Reports for Cycle 16 Refueling Outage (TAC Nos. ME3400 and ME3971),” dated July 16, 2010]

“The appropriate information from Tables 4-6 through 4-10 is summarized in Table 5.1.

Table 5.1: Ratios taken from Tables 4-6 through 4-10

	SG 1	SG 2	SG 3	SG 4	Total
Ratio of new indications in tubes tested with worn probe to number of tubes tested with a worn probe (HL only)	0.028	0.048	0.068	0.046	0.048
Ratio of new indications in tubes tested with good probe to number of tubes tested with a good probe (HL only)	0.042	0.028	0.046	0.060	0.044

The ratios of new indications previously tested with a worn probe are higher for SG [steam generator] Nos. 2 and 3, but lower for SG Nos. 1 and 4.

In addition to the information in Table 5.1, the percentage of new indications greater than 0.5 V will help assess if the population of new indications is significantly different.

Table 5.2: Percentages taken from Tables 4-6 through 4-10

	SG 1	SG 2	SG 3	SG 4	Total
Percentage of new indications equal to or greater than 0.5 V in tubes tested with worn probe	60.0	54.5	64.4	52.4	57.6
Percentage of new indications equal to or greater than 0.5 V in tubes tested with good probe	52.0	64.4	64.0	45.5	54.9

Table 5.1 shows a variation from SG to SG. In some cases the ratio of new indications in tubes previously tested with a worn probe is greater than the ratio of new indications in tubes previously tested with a good probe, and in some cases it is smaller. Since the SGs experience essentially the same conditions, there is no known cause for a greater ratio in one SG than another. The ratios for the SGs combined are almost the same. Therefore, the differences are suspected to be a result of random variations in the detectability of these indications.

Table 5.2 shows the variation of the percent of new indications equal to or greater than 0.5 V. These percentages also show some variation but do not show a trend that would indicate that there is a difference in the nature of the population of indications. It is reasonable to presume based on these ratios and percentages that the new indications detected that were previously **tested with a worn probe and the new indications detected that were previously tested with a good probe are members of the same population. Therefore, no corrective action is necessary.**