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

July 29, 2025

Mr. Delson C. Erb
Vice President, OPS Support
Tennessee Valley Authority
1101 Market Street, LP 4A-C
Chattanooga, TN 37402-2801

SUBJECT: SEQUOYAH NUCLEAR PLANT, UNIT 1 – REVIEW OF THE SPRING 2024 STEAM GENERATOR TUBE INSPECTION REPORT (EPID L-2025-LRO-0008)

Dear Mr. Erb:

By letter dated October 24, 2024, Tennessee Valley Authority (TVA) submitted information summarizing the results of the spring 2024 steam generator tube inspections performed at Sequoyah Nuclear Plant, Unit 1, during refueling outage 26.

The Nuclear Regulatory Commission staff has completed its review of the information provided and concludes that TVA provided the information required by the Sequoyah Nuclear Plant, Unit 1, technical specifications and that no follow-up is needed at this time. The staff's review is enclosed.

If you have any questions, please contact me at 301-415-1627 or via email at Kimberly.Green@nrc.gov.

Sincerely,

***/RA/***

Kimberly J. Green, Senior Project Manager
Plant Licensing Branch II-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-327

Enclosure:
As stated

cc: Listserv

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

REVIEW OF THE SPRING 2024 STEAM GENERATOR TUBE INSPECTION REPORT

TENNESSEE VALLEY AUTHORITY

SEQUOYAH NUCLEAR PLANT, UNIT 1

DOCKET NO. 50-327

By letter dated October 24, 2024 (Agencywide Documents Access and Management System Accession No. ML24298A117), as corrected by letter dated July 28, 2025 (ML25209A534), Tennessee Valley Authority (the licensee) submitted information summarizing the results of the spring 2024 steam generator (SG) tube inspections performed during refueling outage 26 (U1R26) at Sequoyah Nuclear Plant (Sequoyah), Unit 1. During the outage, the Nuclear Regulatory Commission (NRC) staff discussed the status of the ongoing SG tube inspections, and the call summary provides the details of the discussion (ML24102A121).

Sequoyah, Unit 1, installed four Westinghouse Model 57AG replacement SGs in 2003. Each SG contains 4,983 U-bend thermally treated Alloy 690 tubes. Each tube has a nominal outside diameter of 0.750 inches and a nominal wall thickness of 0.043 inches. During SG fabrication, the tubes were hydraulically expanded at both ends over the full depth of the tubesheet. The U-bends in rows 1 through 16 were stress relieved after bending. Seven stainless steel lattice type advance tube support grids (ATSG) support the vertical section of the tubes. Vertical and diagonal structures support the U-bend section of the tubes. At the time of U1R26, the replacement SGs had operated for approximately 18.8 effective full-power years.

The licensee provided the scope, extent, methods, and results of the SG tube inspections in the letter referenced above. In addition, the licensee described corrective actions (e.g., tube plugging), if any, that were taken in response to the inspection findings.

After reviewing the information provided by the licensee, the NRC staff noted the following:

- The base scope of the inspection was full-length bobbin probe inspection of all open tubes in all four SGs and combination array/bobbin probe inspection of the tube bundle periphery, in high fluid velocity or transition fluid velocity zones. The array probe periphery inspections were from the tubesheet up to the first horizontal support in all four SGs. The array probe was also used for resolving bobbin I codes, examining dents and dings, and performing special interest examinations.

- The only tube degradation detected was wear from structures at the ATSG supports and in the U-bend supports. There were only two tube wear indications that were measured to be greater than 20 percent through wall (TW). These two U-bend indications were in SG 1 and SG 4 at the VS3 location, and measured 22 percent and 21 percent TW,

respectively. There was a total of 392 tube wear indications less than 20 percent TW in all four SGs. All degradation was well within the condition monitoring limits. A total of 6 tubes with wear depths between 18 and 22 percent TW were preventatively plugged to support the projected operating time until the next SG tube inspection.

Based on a review of the information provided, the NRC staff concludes that the licensee provided the information required by their technical specifications. In addition, the staff concludes that there are no technical issues that warrant follow-up action currently, 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: SEQUOYAH NUCLEAR PLANT, UNIT 1 – REVIEW OF THE SPRING 2024 STEAM GENERATOR TUBE INSPECTION REPORT (EPID L-2025-LRO-0008) DATED JULY 29, 2025

**DISTRIBUTION**:

PUBLIC
RidsACRS_MailCTR Resource
RidsNrrDorlLpl2-2 Resource
RidsNrrPMSequoyah Resource
RidsNrrLAABaxter Resource
RidsRgn2MailCenter Resource
RidsNrrDnrlNcsg Resource
PKlein, NRR
AJohnson, NRR
GMakar, NRR
LTerry, NRR
SBloom, NRR

**ADAMS Accession No.: ML25198A294** **NRR-106**

| OFFICE | NRR/DORL/LPL2-2/PM | NRR/DORL/LPL2-2/LA | NRR/DNRL/NCSG/BC |
|---|---|---|---|
| NAME | KGreen | ABaxter | SBloom |
| DATE | 07/17/2025 | 07/18/2025 | 07/09/2025 |
| OFFICE | NRR/DORL/LPL2-2/BC | NRR/DORL/LPL2-2/PM | |
| NAME | DWrona | KGreen | |
| DATE | 07/23/2025 | 07/29/2025 | |

**OFFICIAL RECORD COPY**