

Tennessee Valley Authority. Post Office Box 2000. Soddy-Daisy. Tennessee: 37379

February 9, 1996

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

Gentlemen:

160018

602160090 960

05000327 PDR

In the Matter of Tennessee Valley Authority

)

Docket No. 50-327

SEQUOYAH NUCLEAR PLANT (SQN) - SPECIAL REPORT ON STEAM GENERATOR (SG) ACTIVITIES COMPLETED DURING THE UNIT 1 CYCLE 7 REFUELING OUTAGE

- References: 1. TVA letter to NRC dated September 7, 1995, "Sequoyah Nuclear Plant (SQN) - Technical Specification (TS) Change 95-15, Revision 1, 'Alternate Plugging Criteria for Steam Generator (S/G) Tubing -Unit 1'"
  - TVA letter to NRC dated October 26, 1995, "Sequoyah Nuclear Plant (SQN) - Special Report on Steam Generator (SG) Tube Inspections That Fall Into Category C-3 - Unit 1"
  - NRC letter to TVA dated January 16, 1996, "Summary of the December 11, 1995, Meeting on the Unit 1 Steam Generator Tube Inspection Results"

In accordance with the requirements of SQN Unit 1 TSs 4.4.5.5.b, 4.4.5.5.c, and a TVA commitment from the Reference 1 letter, enclosed is a report including the following: (1) results of the SG tube inservice inspection, (2) results of investigations conducted to determine the cause of SQN Unit 1 SG tube degradation and corrective measures taken to prevent recurrence, and (3) the Cycle 8 Alternate Plugging Criteria 90-Day Report.

An inservice inspection (bobbin coil) was performed on 100 percent of the hot-leg tubes in all four SGs. Rotating pancake coil was performed on 100 percent of SGs No. 2, 3, and 4, and approximately 61 percent on SG No.1. The inservice inspection results (defined in TS 4.4.5.2) were classified as Category C-2 for SG No. 1 and Category C-3 for SGs No. 2, 3, and 4. SGs No. 2, 3, and 4 were classified as Category C-3 because of the detection of primary water stress corrosion cracking at the top of the tubesheet expansion zone. Notification of the Category C-3 classification was provided in the Reference 2 letter.

U.S. Nuclear Regulatory Commission Page 2 February 9, 1996

SQN Unit 1 implemented alternate plugging criteria (APC) for tube support plates during the Unit 1 Cycle 7 refueling outage. A 90-day APC report was prepared by Westinghouse Electric Corporation. TVA has reviewed this report and concurs with the results.

Three tubes were pulled from SGs No. 1 and 2 to support application of APC and structural integrity assessment of the largest top of tubesheet circumferential crack. The results of the destructive examination are documented in this report as requested by NRC in the Reference 3 letter.

Please direct questions concerning this issue to D. V. Goodin at (423) 843-7734.

Sincerely,

R.H. Shell

R. H. Shell Manager SQN Site Licensing

Enclosure

cc: Mr. D. E. LaBarge, Project Manager (w/Enclosure) Nuclear Regulatory Commission One White Flint, North 11555 Rockville Pike Rockville, Maryland 20852-2739

NRC Resident Inspector Sequoyah Nuclear Plant 2600 Igou Ferry Road Soddy-Daisy, Tennessee 37379-3624

Regional Administrator U.S. Nuclear Regulatory Commission Region II 101 Marietta Street, NW, Suite 2900 Atlanta, Georgia 30323-2711