Tennessee Valley Authority, Post Office Box 2000, Soddy-Daisy, Tennessee 37384-2000

October 20, 2005

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

Gentlemen:

In the Matter of) Docket No. 50-327
Tennessee Valley Authority)

SEQUOYAH NUCLEAR PLANT (SQN) - UNIT 1 CYCLE 13 (U1C13) 12-MONTH STEAM GENERATOR INSPECTION REPORT

In accordance with the requirements of SQN Unit 1 Technical Specification 4.4.5.5.b, TVA is submitting the 12-month steam generator inspection report that includes the results of in-service inspections performed during the U1C13 refueling outage. Enclosed is the 12-month steam generator in-service inspection report.

If you have any questions, please call me at (423) 843-7170 or Jim Smith at (423) 843-6672.

Sincerely,

Paul L. Pace
Manager, Site Licensing and
Industry Affairs

Enclosures

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ENCLOSURE

TENNESSEE VALLEY AUTHORITY
SEQUOYAH NUCLEAR PLANT (SQN)

12-Month Steam Generator Inspection Report

(Unit 1 Cycle 13 Refueling Outage)

TENNESSEE VALLEY AUTHORITY
SEQUOYAH NUCLEAR PLANT (SQN)

Unit 1 Cycle 13 Refueling Outage
Steam Generator In-service Inspection Report

In accordance with Technical Specification 4.4.5.5.b, this report documents the complete results of the Unit 1 Cycle 13 steam generator (SG) tube in-service inspection. A 100% full length bobbin coil examination was performed in all four SGs. Plus Point examinations were performed on 100% of the dents and dings greater than or equal to 2 volts between the top of the hot leg tubesheet to the top of the cold leg tubesheet. Plus Point examinations were performed during the outage as needed to better characterize indications by bobbin coil. A total of 19,912 bobbin examinations were performed, and a total of 177 Plus Point examinations were performed.

This was the first in-service inspection for the SQN Unit 1 replacement SGs. During the Unit 1 Cycle 13 inspection, 11 tubes were identified with wear in the area of the 2nd and 4th vertical straps (VS2 and VS4).

SG	ROW	COL	VOLTAGE	MAX DEPTH	LOCATION	Resolution
1	71	65	0.53	17	VS2-.71	Plugged
1	77	81	0.27	8	VS2+.89	Plugged
1	80	68	0.44	14	VS2+1.17	Plugged
1	86	70	0.51	16	VS4-1.04	Plugged
1	93	75	0.41	14	VS4+.86	Plugged
1	95	69	0.34	12	VS4+.65	Plugged
1	96	68	0.25	9	VS4-1.05	Plugged
1	96	70	0.3	11	VS4-1.11	Plugged
1	97	65	0.47	15	VS4+.60	Plugged
1	99	65	0.38	13	VS4+.86	Plugged
3	87	69	0.33	10	VS2+1.00	Plugged

Since the largest indication was 17% maximum depth, all these indications could have remained in service with no challenge to structural or leakage integrity during the upcoming fuel cycle. However, all were preventively plugged.

Sludge lancing and foreign object search and retrieval were performed on all 4 SGs. All identified foreign material was removed. The annular and tube lane areas were inspected. The annulus regions in SGs 1, 3, and 4 contained some minute magnetic debris (scale, weld spatter, hair-like bristle). Nothing was identified in SG 2.

A potential loose part identified by bobbin coil on SG3 Column 62, Row 34 hot leg was investigated by the foreign object search and retrieval crew. No foreign material was identified. The potential loose part signal was attributed to hard sludge material which had begun to build up on the tubes in this region.