

Tennessee Valley Authority, Post Office Box 2000, Soddy-Daisy, Tennessee 37379

October 13, 1998

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

Gentlemen:

In the Matter Tennessee Valley Authority

Docket No. 50-327

SEQUOYAH NUCLEAR PLANT (SQN) - UNIT 1 STEAM GENERATOR (SG) TUBE PLUGGING REPORT AND NOTIFICATION OF UNIT 1 SG TUBE INSPECTIONS - UNIT 1 CYCLE 9 REFUELING OUTAGE

As required by SQN Technical Specification (TS) 4.4.5.5.a, this submittal provides a report of SG tube plugging during the Unit 1 Cycle 9 refueling outage. The in-service inspection (ISI) of the Unit 1 SG tubes was completed on September 30, 1998. In accordance with SQN TS 4.4.5.5.b, TVA will submit a special report of the results of this inspection on or before September 30, 1999.

Pursuant to the reporting requirements of TS 4.4.5.5.c, NRC was notified of the SG tube inspections that fell into Category C-3. Notification of these results was made during a telephone conference call on September 29, 1998. In accordance with SQN TS 3/4.4.5, SGs 3 and 4 U-Bend inspections were classified as Category C-3. The initial Row 1 and 2 U-Bend Plus-Point examination sameles were 146 tubes in SG 3 and 155 tubes in SG 4. There were two tubes in SG 3 and three tubes in SG 4 that were determined to have primary water stress corrosion cracking (PWSCC). These tubes are located in Row 1. Since 100 percent of the Row 1 and 2 tubes were examined, no expansion was necessary.

TS 4.4.5.5.c also requires a written follow-up report. TVA plans to provide this information in conjunction with SQN's 90-day alternate plugging report.

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In accordance with TS 4.4.5.5.d, notification was made to the staff during two conference calls on September 29 and October 2, 1998. The September conference call provided notification regarding four SG tubes having indications attributable to PWSCC. The October conference call provided notification of a tube having both a circumferencial and an axial indication in the same tube support plate. This indication was identified initially by bobbin examination as an indication that would require a retest using a rotating coil. The Plus-Point coil identified a circumferential and axial outside diameter stress corrosion cracking at the first hot support plate. This tube was removed from service by plugging.

Enclosed is a summary of the tubes plugged during the Unit 1 Cycle 9 refueling outage.

Please direct questions concerning this issue to me at (423) 843-7170 or J. D. Smith at (423) 843-6672.

Sincerely

Pedro Salas Site Licensing and Industry Affairs Manager

cc (Enclosure): Mr. R. W. Hernan, Project Manager 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 Atlanta Federal Center 61 Forsyth St., SW, Suite 23T85 Atlanta, Georgia 30303-3415

ENCLOSURE

SEQUOYAH NUCLEAR PLANT UNIT 1 CYCLE 9 REFUELING OUTAGE STEAM GENERATOR TUBE PLUGGING REPORT

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SG	ROW	COL	INDICATION	LOCATION	RESOLUTION	
1	1	39	SAI	H07+10.57	PLUG	
1	2	52	SAI	HTS29	PLUG	
1	3	59	SAI	H01+.51	PLUG	
1	4	54	SAI	HTS-2.01	PLUG	
1	7	47	SCI	H01+.00	PLUG	
1	9	2	SCI	H01+.01	PLUG/STABILIZE	
1	17	55	SAI	H01+.58	PLUG	
1	23	88	SAI	H01+.00	PLUG	
1	26	41	SCI	HTS04	PLUG	
1	35	77	SCI	HTS+.00	PLUG/STABILIZE	
				Total Number of Tubes Plugged This Generator=10		
2	2	92	PTE	HTS+.00	PLUG PREVENTIVELY	
2	4	15	PI	H0206	-ULL/PLUG	
2	4	36	SAI	HTS+.15	PLUG	
2	8	32	41	H0117	PLUG	
2	10	25	SCI	HTS19	PLUG	
2	10	34	36	H01+.06	PLUG	
2	11	25	SCI	HTS17	PLUG	
2	13	17	SCI	HTS12	PLUG	
2	13	18	SCI	HTS14	PLUG	
2	14	33	56	H0212	PLUG	
2	15	29	SCI	HTS10	PLUG	
2	16	33	MCI	H02+.12	PLUG/STABILIZE	
2	16	53	SCI	HTS07	PLUG	
2	16	78	SAI	HTS-2.74	PLUG	
2	17	30	SCI	HTS11	PLUG	
2	18	30	59	H0117	PLUG	
2	19	24	SCI	HTS08	PLUG	

Sequoyah Unit 1 Cycle 9

SAI = Single Axial Indication SCI = Single Circumferential Indication MCI = Multiple Circumferential Indication BLG = Bulge PTE = Partial Tubesheet Expansion

PI = Axial ODSCC where APC applies

Sequoyah Unit 1 Cycle 9

SG	ROW	COL	INDICATION	LOCATION	RESOLUTION
2	22	34	SCI	HTS+.04	PLUG/STABILIZE
2	23	33	SCI	HTS03	PLUG
2	25	65	SCI	HTS08	PLUG
2	26	27	SCI	HTS08	PLUG
2	26	50	SCI	HTS06	PLUG
2	29	56	SCI	HTS13	PLUG
				Total Nu	mber of Tubes
				Plugged	This Generator=23
3	1	89	SAI	H07+3.60	PLUG
3	1	90	SAI	H07+10.45	PLUG
3	3	53	42	H0112	PLUG
3 3 3	:	58	52	H0104	PLUG
	4	60	SCI	H01+.02	PLUG
3	5	62	30	H01+.00	PLUG
3	6	45	44	H0309	PLUG
3	6	54	SCI	H0421	PLUG
3	6	64	SAI	HTS29	PLUG
3	6	74	55	H0130	PLUG
3	7	36	46	H0508	PLUG
3	7	54	SCI	H01+.11	PLUG
3	7	76	40	H0224	PLUG
3	7	83	40	H01+.37	PLUG
3	8	3	49	H0305	PLUG
3	9	67	43	H02+.05	PLUG
3	9	83	18	H0107	PLUG
3	9	86	SAI	H01+.01	PLUG
3	10	36	46	H0106	PLUG

H01-.14

HTS+.06

H01-.20

PLUG

PLUG

PLUG

40

SCI

80

3

3

3

41

54

85

10

10

10

Sequoyah Unit 1 Cycle 9

SG	ROW	COL	INDICATION	LOCATION	RESOLUTION
3	11	19	SCI	HTS07	PLUG
3	11	74	46	H0151	PLUG
3	12	48	SAI	HTS19	PLUG
3	12	71	SAI	H0106	PLUG
3	12	81	SAI	H01+.67	PLUG
3	14	57	49	H0106	PLUG
3	14	84	41	H0127	PLUG
3	15	62	SCI	H01+.17	PLUG
3	16	43	SCI	HTS12	PLUG
3	16	69	39	H01+.46	PLUG
3	18	74	51	H01+.31	PLUG
3	19	68	SCI	H01+.03	PLUG
3	21	46	SC1	H01+.15	PLUG
3	21	74	SCI	401+.00	PLUG
3	23	76	57	HC218	PLUG
3	24	80	40	H0119	PLUG
3	24	81	SCI	H0212	PLUG/STABILIZE
3	24	85	54	H0103	PLUG
3	25	62	44	H01+.41	PLUG
3	25	76	SAI	H01+.06	PLUG
3	26	75	SCI	H0115	PLUG
3	28	80	SCI	H01+.01	PLUG/STABILIZE
3	29	80	44	H0125	PLUG
3	32	70	SCI	H01+.17	PLUG
3	33	79	40	H0101	PLUG
3	34	52	41	H01+.12	PLUG
3	34	72	SCI	H0210	PLUG/STABILIZE
3	34	76	BLG	HTS+.00	PLUG/STABILIZE
3	35	41	42	AV3+.03	PLUG
3	42	56	BLG	HTS+3.55	PLUG/STABILIZE
3	42	60	44	H0311	PLUG
3	43	38	45	H0118	PLUG
3	45	52	46	H0207	PLUG

Total Number of Tubes Plugged This Generator=55

Sequoyah Unit 1 Cycle 9

SG	ROW	COL	INDICATION	LOCATION	RESOLUTION
4	1	4	0.5.7	1100 5.6	
4	1		SAI	HTS56	PLUG
	1	27	SCI	H03+.30	PLUG
4	1	77	SCI	H07+3.68	PLUG
4	1	80	SAI	H07+2.93	PLUG
4	1	81	SAI	H07+4.07	PLUG
4	2	11	SCI	H0117	PLUG
4	2	56	43	H0125	PLUG
4	3	12	SCI	H01+.14	PLUG
4	3	16	SCI	H0115	PLUG
4	3	75	49	H0210	PLUG
4	4	50	SCI	H01+.30	PLUG
4	5	33	SCI	H0124	PLUG
4	6	15	SCI	H0307	PLUG
4	6	18	SCI	H0325	PLUG
4	7	10	SCI	H0119	PLUG
4	7	75	52	H01+.06	PLUG
4	8	46	SAI	HTS34	PLUG
4	9	38	SCI	H01+.21	PLUG
4	10	4	40	H01+.03	PLUG
4	11	35	45	H04+.22	PLUG
4	11	77	52	H0327	PLUG
4	12	29	SCI	HTS09	PLUG
4	13	15	SAI	HTS35	PLUG
4	13	37	SCI	HTS11	PLUG
4	13	46	SCI	HTS15	PLUG
4	13	61	97	H0340	PLUG
4	15	59	38	H0259	PLUG

SG	ROW	COL	INDICATION	LOCATION	RESOLUTION
4	17	11	38	H01+.39	PLUG
4	17	53	40	H0114	PLUG
4	18	33	SCI	HTS69	PLUG
4	20	44	SCI	H01+.00	PLUG
4	21	57	35	H01+.40	PLUG
4	23	43	43	H01+.39	PLUG
4	25	22	MCI	H0103	PLUG
4	26	12	SAI	H01+.00	PLUG
4	26	63	46	H0229	PLUG
4	28	24	SCI	H01+.00	PLUG
4	28	52	52	H0109	PLUG
4	31	18	57	H0133	PLUG
4	38	38	SCI	H0111	PLUG/STABILIZE
4	39	36	SCI	H0111	PLUG
4	41	27	SAI	HTS10	PLUG

Sequoyah Unit 1 Cycle 9

Total Number of Tubes Plugged This Generator=42