



Kewaunee Nuclear Power Plant  
N490, State Highway 42  
Kewaunee, WI 54216-9511  
920-388-2560

Operated by  
Nuclear Management Company, LLC



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Washington, D.C. 20555

Ladies/Gentlemen:

Docket 50-305  
Operating License DPR-43  
Kewaunee Nuclear Power Plant  
2000 Annual Operating Report

Enclosed is the 2000 Kewaunee Nuclear Power Plant (KNPP) Annual Operating Report. This report is being submitted in accordance with Section 6.9.a.2 of the KNPP Technical Specifications.

This submittal of the 2000 KNPP Annual Operating Report also satisfies the reporting requirements of 10 CFR 50.46(a)(3)(ii) (Emergency Core Cooling System evaluation model changes), and KNPP Technical Specification 4.2.b.7.b (steam generator inspection). Also, in accordance with the commitment made by WPSC upon NRC issuance of the turbine valve test frequency Technical Specification amendment, any turbine stop and control valve failures are described. Due to administrative error this report was submitted one (1) day late. We apologize for any inconvenience this may have caused you.

Sincerely,

Mark E. Reddemann  
Site Vice President

DAK

Enc.

cc - US NRC - Region III  
US NRC Senior Resident Inspector  
INPO Records Center  
REIRS Project Manager, US NRC

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## INTRODUCTION

This annual operating report is being submitted to fulfill several reporting requirements contained either in the Kewaunee Nuclear Power Plant (KNPP) Technical Specifications (TS) or in other commitments made by KNPP to the Nuclear Regulatory Commission (NRC).

In response to NUREG-0737, Item II.K.3.3, and in accordance with KNPP Technical Specification (TS) 6.9.a.2.C, Section 1.0 reports challenges to and failures of pressurizer safety and relief valves, if applicable.

Section 2.0 provides a summary of the steam generator eddy current examination in accordance with KNPP TS 4.2.b.7.b.

Personnel exposure and monitoring data is provided in Section 3.0 per Regulatory Guide 1.16, Section C.1.b.(3), and KNPP TS 6.9.a.2.B.

The provisions of 10 CFR 50.46 require the reporting of corrections or changes to the Emergency Core Cooling System (ECCS) evaluation models that are approved for use in performing the loss-of-coolant accident (LOCA) safety analysis. This information, if applicable, is provided in Section 4.0.

Section 5.0 reports failures of turbine stop and control valves, if applicable, in accordance with a commitment made to the NRC upon approval of KNPP TS Amendment 84.

Section 6.0, in accordance with KNPP TS 6.9.a.2.D, contains documentation of the results of specific analysis in which the reactor coolant exceeded the limits of KNPP TS 3.1.c.1.A, if applicable.

## **1.0 CHALLENGES TO AND FAILURES OF PRESSURIZER SAFETY AND RELIEF VALVES**

In response to NUREG-0737, item II.K.3.3, and in accordance with KNPP Technical Specification 6.9.a.2.C, WPSC is committed to reporting challenges to and failures of pressurizer safety and pressurizer power-operated relief valves. There were no challenges to or failures of pressurizer safety or pressurizer power-operated relief valves during 2000.

## **2.0 SUMMARY OF THE SPRING 2000 STEAM GENERATOR EDDY CURRENT EXAMINATIONS**

During the Kewaunee Nuclear Power Plant spring 2000 refueling outage, the following steam generator (SG) services were performed:

### **Eddy Current Examinations**

The spring 2000 SG tube eddy current examination program included:

- 1) A bobbin coil examination of 100% of the non-plugged, non-repaired tubes through their entire length.
- 2) A bobbin coil examination of 100% of the non-plugged, repaired tubes through their entire non-repaired length (Kewaunee has installed sleeves in a large portion of its hot leg tubesheet. The inspection consisted of an examination from the top of the sleeve to the end of the tube on the cold leg side).
- 3) A rotating plus point examination of 100% of the Westinghouse hybrid expansion joint (HEJ) mechanical sleeves, from the top of the sleeve to 6 inches below the top of the HEJ.
- 4) A rotating plus point examination of 20% of the Westinghouse HEJ mechanical sleeves, from the top of the sleeve to the bottom of the sleeve.
- 5) A rotating plus point examination of 20% of the ABB welded sleeves, from the top of the sleeve to the bottom of the sleeve.
- 6) A low frequency (400 kHz) rotating plus point examination of 100% open row 1 and row 2 U-bends, and 20% of open row 3 U-bends.
- 7) A low frequency (800 kHz) rotating plus point examination of 100% open row 1 and row 2 U-bends, and 20% of open row 3 U-bends.
- 8) A Motorized Rotating Pancake Coil (MRPC) examination of 100% of all non-sleeved hot leg tubes, from the tube end to 4 inches above the secondary face of the tubesheet.
- 9) A rotating plus point examination of 100% of the Westinghouse HEJ laser weld repaired sleeves, from the top of the sleeve to 6 inches below the top of the HEJ (Steam Generator B only).
- 10) A rotating plus point examination of 20% of the Westinghouse HEJ laser weld repaired sleeves, from the top of the sleeve to the bottom of the sleeve.
- 11) An ultrasonic examination of 20% of the Westinghouse HEJ laser weld repaired sleeves.

- 12) Augmented RPC testing at tube support plate (TSP) intersections, as required by Technical Specification 4.2.b.

As required by Technical Specification 4.2.b.7.b.1, Table 2.1 contains a summary of the 2000 SG eddy current examinations, including the number and extent of tubes tested.

As required by Technical Specification 4.2.b.7.b.2, Table 2.2 and Table 2.3 contains the location and percent of wall-thickness penetration for each indication of degradation. For tube support plate indications, Kewaunee has implemented the 2 volt alternate repair criteria in accordance with Technical Specification 4.2.b.5. As a result, the current Technical Specification definition of a degraded tube (a tube containing an imperfection  $\geq 20\%$  of the nominal wall thickness caused by degradation) is not applicable. Therefore, each tube support plate location left in service as a result of application of the 2 volt alternate repair limit, with the associated voltage, is reported as well.

### **Steam Generator Repairs**

The SG repairs were performed during the spring 2000 refueling outage included tube plugging and tubesheet sleeving.

As required by Technical Specification 4.2.b.7.b.3 and 4.2.b.7.b.4, Table 2.2 and Table 2.3 lists the tube locations which were plugged or repaired by tubesheet sleeving.

**TABLE 2.1**

**SUMMARY OF THE 2000 STEAM GENERATOR  
EDDY CURRENT EXAMINATIONS**

Item	Scope	Extent	Number of Tubes Tested	
			SGA	SG B
1	Bobbin Examination	TEH to TEC	833	949
2	Bobbin Examination	STH to TEC	1754	1723
3	HEJ Sleeve Upper Joints	STH to STH-6"	722	1090
4	HEJ Sleeve Full Length	STH to SEH	208	281
5	ABB Sleeve Full Length	STH to SEH	125	13
6	Low Row U-Bends (Low Freq)	07H to 07C	119	87
7	Low Row U-Bends (High Freq)	07H to 07C	119	87
8	Hot Leg Tubesheet Crevice	TEH to TSH+4"	833	949
9	HEJ LWR Upper Joint	STH to STH-6"	0	229
10	HEJ LWR Full Length	STH to SHE	78	59
11	HEJ LWR Ultrasonic Exam	Weld Region	72	62
12	Supplemental RPC Testing	01H-1" to 01H+1"	34	6
12	Supplemental RPC Testing	02H-1" to 02H+1"	11	8
12	Supplemental RPC Testing	03H-1" to 03H+1"	6	8
12	Supplemental RPC Testing	04H-1" to 04H+1"	5	10
12	Supplemental RPC Testing	05H-1" to 05H+1"	2	3
12	Supplemental RPC Testing	06H-1" to 06H+1"	7	5
12	Supplemental RPC Testing	07H-1" to 07H+1"	28	37
12	Supplemental RPC Testing	07C-1" to 07C+1"	24	31
12	Supplemental RPC Testing	06C-1" to 06C+1"	5	18
12	Supplemental RPC Testing	05C-1" to 05C+1"	3	1
12	Supplemental RPC Testing	04C-1" to 04C+1"	1	2
12	Supplemental RPC Testing	03C-1" to 03C+1"	3	7
12	Supplemental RPC Testing	02C-1" to 02C+1"	2	5
12	Supplemental RPC Testing	01C-1" to 01C+1"	2	4

Table 2.1

## Nomenclature

HEJ:	Hybrid Expansion Joint
LWR:	Laser Weld Repair
RPC:	Rotating Pancake Coil
SEH:	Hot leg sleeve end
STH:	Top of sleeve
TEC:	Tube end cold leg side
TEH:	Tube end hot leg side
TSH:	Top of tubesheet hot leg side
01H:	First hot leg tube support plate
02H:	Second hot leg tube support plate
03H:	Third hot leg tube support plate
04H:	Fourth hot leg tube support plate
05H:	Fifth hot leg tube support plate
06H:	Sixth hot leg tube support plate
07H:	Seventh hot leg tube support plate
07C:	Seventh cold leg tube support plate
06C:	Sixth cold leg tube support plate
05C:	Fifth cold leg tube support plate
04C:	Fourth cold leg tube support plate
03C:	Third cold leg tube support plate
02C:	Second cold leg tube support plate
01C:	First cold leg tube support plate



Table 2.2 and Table 2.3  
Location Nomenclature

TEH:	Tube end hot leg side
TSH:	Top of tubesheet hot leg side
CLW:	Centerline of laser or TIG weld
HRT:	Westinghouse mechanical sleeve HEJ hardroll lower transition
01H:	First hot leg tube support plate
02H:	Second hot leg tube support plate
03H:	Third hot leg tube support plate
04H:	Fourth hot leg tube support plate
05H:	Fifth hot leg tube support plate
06H:	Sixth hot leg tube support plate
07H:	Seventh hot leg tube support plate
AV1:	Antivibration bar number 1
AV2:	Antivibration bar number 2
AV3:	Antivibration bar number 3
AV4:	Antivibration bar number 4
07C:	Seventh cold leg tube support plate
06C:	Sixth cold leg tube support plate
05C:	Fifth cold leg tube support plate
04C:	Fourth cold leg tube support plate
03C:	Third cold leg tube support plate
02C:	Second cold leg tube support plate
01C:	First cold leg tube support plate

Table 2.2 and Table 2.3  
Indication Nomenclature

DSS:	Distorted tube support plate signal
MAI:	Multiple axial indication
MCI:	Multiple circumferential Indication
PLP:	Possible loose part
PTI:	Parent tube indication within sleeve pressure boundary
PWI:	Possible weld indication in laser weld
RBD:	Bad Data
SAI:	Single axial indication
SCI:	Single Circumferential Indication
SVI:	Single volumetric indication
VOL:	Volumetric indication
WSI:	Weld surface indication in ABB TIG welded sleeve
WZI:	Weld sub-surface indication in ABB TIG welded sleeve

**TABLE 2.2**  
**STEAM GENERATOR A**  
**LOCATION AND % THROUGHWALL FOR EACH INDICATION OF DEGRADATION**

ROW	COL	VOLTS	INDICATION	LOCATION	PLUGGED OR SLEEVED
3	1	0.96	DSS	02H	
		0.34	DSS	06H	
1	2	0.42	DSS	02H	P
			RBD		
3	2	0.11	DSS	02C	
6	2	0.48	DSS	01H	
8	2	0.31	DSS	03H	
		0.66	DSS/MAI	04H	
9	2	0.87	DSS	02H	
12	2	0.33	DSS	03H	
2	3		RBD		P
3	4	0.43	DSS	06H	
17	4	0.42	DSS	02C	
12	5	0.33	DSS	02H	
13	5	0.43	DSS	02H	
9	6	0.81	SAI	TEH+ 10.70 to 15.71	S
12	6	0.24	DSS	03H	
18	6	0.40	14%	AV2	
		1.75	DSS	01H	
		0.78	DSS	02C	
21	6	1.33	DSS	01H	
1	7		NA	NA	P
4	7	0.99	MAI	TEH+ 2.38 to 13.73	S
		0.45	SCI	TEH+ 1.67	
6	7	0.57	DSS	01H	
9	7	0.82	DSS	01H	
11	7	0.57	DSS	06H	
16	7	0.38	13%	AV2	
18	7	0.24	7%	AV2	
19	7	0.34	10%	AV2	
22	7	0.26	8%	AV2	
23	7	0.96	DSS	06C	
1	8		NA	NA	P
2	8		RBD		P
6	8	0.24	DSS	01H	
8	8	0.15	SAI	TEH+ 6.66	S
13	8	1.22	DSS	01H	
15	8	0.85	DSS	01H	
23	8	0.15	DSS	01H	P
24	8	0.32	DSS	01H	
1	9		RBD		P
15	9	0.98	DSS	01H	
		0.95	DSS	06H	
18	9	0.33	11%	AV2	
20	9	0.42	11%	AV2	
23	9	0.30	8%	AV2	P
		0.51	DSS	02C	
		0.28	SAI	TEH+ 9.39	
		0.20	SAI	TEH+ 10.99	
1	10		NA	NA	P
2	10		RBD		P
12	10	0.65	DSS/MAI	01H	P

**TABLE 2.2**  
**STEAM GENERATOR A**  
**LOCATION AND % THROUGHWALL FOR EACH INDICATION OF DEGRADATION**

ROW	COL	VOLTS	INDICATION	LOCATION	PLUGGED OR SLEEVED
		2.52	SAI	TEH+ 0.93	
17	10	0.10	SAI	TEH+ 17.60	S
19	10	0.36	12%	AV2	
20	10	0.37	10%	AV2	
22	10	0.40	11%	AV2	
23	10	0.35	14%	AV2	
		1.20	DSS	01H	
25	10	0.23	6%	AV2	
		0.80	DSS/SAI	01H	
27	10	0.27	11%	AV2	
		0.38	DSS	01H	
28	10	0.81	DSS	01H	
1	11		NA	NA	P
5	11	0.82	DSS/SAI	01H	S
		0.21	SAI	TEH+ 5.58	
8	11	0.38	DSS	01H	
13	11	1.17	DSS/SAI	01H	P
		0.16	SAI	TEH+ 4.38	
		0.15	SAI	TEH+ 6.01	
24	11	0.16	DSS	01H	
27	11	0.80	DSS	06H	
		0.33	DSS	07C	
1	12		NA	NA	P
4	12	1.07	DSS/SAI	01H	
18	12	0.28	9%	AV2	
23	12	0.40	DSS	07C	
30	12	0.30	8%	AV2	
1	13		NA	NA	P
4	13	0.45	DSS	02C	
7	13	0.20	DSS	07C	
12	13	0.95	DSS	05C	
19	13	0.30	9%	AV2	
21	13	0.40	11%	AV2	
22	13	0.22	DSS	01H	
23	13	0.46	17%	AV2	
24	13	0.34	11%	AV2	
		0.99	DSS	05C	
		0.42	DSS	06C	
		0.41	DSS	07C	
26	13	0.31	12%	AV2	
		0.19	DSS	07C	
4	14	0.38	DSS	02C	
1	15		NA	NA	P
15	15	1.07	DSS	01H	P
20	15	0.19	DSS	06H	
22	15	0.18	DSS	07C	
26	15	0.11	DSS	07C	
4	16	0.85	DSS/SAI	01H	
23	16	0.70	DSS	06C	S
		0.11	SAI	TEH+ 3.81	
26	16	0.76	DSS	03C	
		0.40	DSS	04C	
		0.76	DSS	06C	

**TABLE 2.2**  
**STEAM GENERATOR A**  
**LOCATION AND % THROUGHWALL FOR EACH INDICATION OF DEGRADATION**

ROW	COL	VOLTS	INDICATION	LOCATION	PLUGGED OR SLEEVED
29	16	0.38 0.53 0.73 1.24 1.94	DSS DSS DSS/SAI DSS/SAI MAI	03C 05C 02H 07H TEH+ 1.91 to 16.99	P
31	16	0.80 0.35 0.52	DSS DSS DSS	01C 02H 07H	
33	16	1.79	DSS	01H	
1	17		RBD		P
13	17	0.56	DSS	01H	
24	17	0.92 0.94 0.17	DSS DSS/SAI MAI	07C 06C TEH+ 8.10 to 13.21	S
27	17	0.38 0.66 0.72	14% DSS DSS	AV2 06C 07C	
29	17	0.95	SAI	TEH+ 8.83 to 14.19	
30	17	0.78 0.09 0.29	SAI SAI SAI	TEH+ 2.01 TEH+ 5.93 TEH+ 8.84	
1	18		NA	NA	P
23	18	0.38	11%	AV2	
24	18	0.46 0.20	DSS DSS	02C 02H	
26	18	0.25 0.53	7% DSS	AV2 07H	
27	18	1.45 1.54 0.73	DSS DSS SAI	06C 07C TEH+ 1.31	P
28	18	0.48	DSS	07C	
29	18	1.03 0.59	MCI SAI	TEH+ 1.32 TEH+ 12.99	P
30	18	0.35	DSS	06H	
31	18	0.53	DSS	01H	
6	19	0.70 0.46	DSS DSS	01H 06C	
8	19	0.76	DSS	02C	
24	19	0.65 0.40 0.58	DSS DSS DSS	05C 06C 07C	
26	19	0.28	10%	AV1	
27	19	0.37 0.50 0.73	DSS DSS DSS	01H 06C 07C	
20	20	1.11	DSS/MAI	01H	
24	20	0.44	DSS	01H	
28	20	0.42	DSS	07C	
35	20	0.15 0.26	DSS DSS	06C 07C	
14	21	0.37	11%	AV2	
36	21	0.26	7%	AV2	
8	22	1.13	DSS	01H	

**TABLE 2.2**  
**STEAM GENERATOR A**  
**LOCATION AND % THROUGHWALL FOR EACH INDICATION OF DEGRADATION**

ROW	COL	VOLTS	INDICATION	LOCATION	PLUGGED OR SLEEVED
34	22	0.36	DSS	04C	
38	22	0.27	9%	AV2	
38	22	0.52	DSS	01H	
11	23	1.68	DSS	01H	
19	23	1.08	DSS	01H	
27	23	0.53 0.92 0.85 0.14 21.25	DSS DSS/MAI DSS/SAI SAI WZI	06C 01H 07C TEH+ 5.15 WCH- 0.05	P
30	23		NA	NA	P
7	24	0.18	DSS	07C	
23	24	1.56	DSS	01H	
25	24	0.67	DSS	01H	
30	24	0.17	4%	AV1	
33	24	12.72	SCI	TEH+ 0.91	P
34	24	0.18 26.27	SAI WZI	TEH+ 3.52 WCH- 0.05	P
36	24	0.12	SAI	TEH+ 10.53	
38	24	0.50 0.27	DSS DSS	06C 07C	
40	24	0.30 0.17 0.56 0.97 0.53	DSS DSS DSS DSS/SAI DSS/SAI	06C 07C 07H 04H 06H	
24	25	0.58 0.26	DSS DSS	01H 07C	
35	25	1.71 0.58	DSS/SAI MAI	01H TEH+ 1.98	S
21	26	1.68 0.50	DSS DSS	01H 07C	
34	26	0.29 0.78	9% 22%	AV4 AV3	
37	26	0.77	MAI	TEH+ 1.83 to 13.56	S
40	26	0.40 1.71 1.25 0.69 0.36 0.42 0.78	12% DSS DSS DSS DSS DSS DSS	AV2 01H 02C 06C 06H 07C 07H	
		0.62	DSS/SAI	02H	
41	26	0.36	12%	AV2	
3	27		RBD		P
7	27		NA	NA	P
37	27	0.34	10%	AV2	
41	27	0.32	10%	AV2	
2	28	0.42 0.37	DSS DSS	02C 03C	
16	28	0.56	DSS	01H	
30	28	0.36	11%	AV2	
34	28	5.23 1.63 3.42	MAI SCI SCI	TEH+ 1.79 to 12.37 TEH+ 5.12 TEH+ 11.98	S

**TABLE 2.2**  
**STEAM GENERATOR A**  
**LOCATION AND % THROUGHWALL FOR EACH INDICATION OF DEGRADATION**

ROW	COL	VOLTS	INDICATION	LOCATION	PLUGGED OR SLEEVED
36	28	0.63	MAI	TEH+ 2.06 to 13.19	S
41	28	0.34	11%	AV2	
42	28	0.31	10%	AV2	
		0.74	DSS	01H	
		0.76	DSS	02H	
9	29	0.71	DSS	01C	
13	29	1.16	DSS	01H	
14	29	0.54	DSS	01C	
40	29	0.49	DSS	05C	
		0.45	DSS	06C	
		0.55	DSS/SAI	01H	
		0.80	DSS/SAI	02H	
42	29	0.49	14%	AV1	
		1.05	DSS/SAI	02H	
33	30	0.81	MAI	TEH+ 1.77	S
42	30	0.65	DSS	07C	
43	30	0.90	DSS/SAI	03H	
2	31		RBD		P
35	31	0.25	DSS	07C	
39	31	0.20	DSS	07H	
40	31	0.72	DSS	01H	
		0.22	DSS	02H	
		0.46	DSS	03H	
42	31	0.24	DSS	01H	
24	32	0.28	9%	AV3	
32	33	0.87	DSS	05C	
36	33	0.31	11%	AV2	
		0.34	DSS	07C	
39	33	0.26	9%	AV2	
41	33	0.37	12%	AV2	
42	33	0.35	DSS	02H	
1	34		RBD		P
3	34		RBD		P
14	34	0.75	DSS	01C	P
43	34	0.31	DSS	07C	
2	35		RBD		P
26	35	0.14	DSS	07H	
39	35	0.35	DSS	06H	
41	35	0.43	DSS	06H	
43	35	0.61	DSS	02H	
		0.82	DSS	07C	
44	35	0.31	10%	AV2	
2	36		RBD		P
38	36	0.21	SAI	TEH+ 8.15	P
		0.54	WZI	WCH- 0.02	
		0.73	20%	AV4	
40	36	1.81	35%	AV3	
		0.12	DSS	06H	
42	36	0.91	DSS	03H	
44	36	0.42	13%	AV2	
1	37		RBD		P
18	37	1.55	DSS	01H	
34	37	0.29	DSS	07C	
40	37	0.28	9%	AV3	
		0.38	12%	AV4	
1	38	1.28	SAI	07H+ 10.42	P

**TABLE 2.2**  
**STEAM GENERATOR A**  
**LOCATION AND % THROUGHWALL FOR EACH INDICATION OF DEGRADATION**

ROW	COL	VOLTS	INDICATION	LOCATION	PLUGGED OR SLEEVED
2	38		RBD		P
4	38	0.82	DSS	03H	
1	39	1.87	SAI	TEH+ 2.01	P
2	39		RBD		P
26	39	0.54	DSS	01C	
39	39	0.18	DSS	05H	
2	40		RBD		P
2	41		RBD		P
24	41	0.45	DSS	07C	
27	41	0.12	DSS	02C	
34	41	1.19	DSS/SAI	01H	
40	41	0.48	DSS	01H	
2	42		RBD		P
9	42	0.51	DSS	01C	
17	42	0.55	DSS	02H	
		0.23	DSS	07C	
32	42	0.57	DSS	02C	
39	42	0.40	DSS	01H	
43	42	0.80	DSS	01H	
		0.77	DSS	06C	
		0.22	DSS	06H	
		0.83	DSS	07H	
45	42	1.04	DSS	01C	
3	43		RBD		P
39	43	0.28	DSS	06H	
42	43	0.57	DSS	06C	
44	43	0.80	DSS	01H	
1	44		RBD		P
2	44		RBD		P
12	44	0.41	DSS	01C	
19	44	0.37	DSS	02H	
20	45	0.48	DSS	06C	
28	45	0.28	DSS	02C	
36	45	0.22	DSS	02C	
		0.58	DSS	05C	
44	45	0.29	9%	AV3	
		0.33	DSS	01H	
46	45	0.39	DSS	01H	
2	46		RBD		P
3	46	3.06	FSI/SAA	07H+ 9.32	P
6	46	0.39	DSS	07C	
7	46	0.80	DSS	01C	
18	46		NA	NA	P
41	46	0.31	DSS	07H	
2	47		RBD		P
9	47		NA	NA	P
39	47	0.37	14%	AV1	
41	47	0.51	DSS	01H	
2	48		RBD		P
41	48	0.24	DSS	07H	
43	48	0.29	DSS	04H	
11	49	0.51	DSS	01C	
20	49	0.24	DSS	01C	
38	49	1.70	DSS	07C	

**TABLE 2.2**  
**STEAM GENERATOR A**  
**LOCATION AND % THROUGHWALL FOR EACH INDICATION OF DEGRADATION**

ROW	COL	VOLTS	INDICATION	LOCATION	PLUGGED OR SLEEVED
2	50		RBD		P
41	50	0.34	DSS	02H	
2	51		RBD		P
5	51	0.54	DSS	01C	
6	51	0.48	DSS	01C	
23	51	0.68	DSS	01C	
25	51	0.30	9%	AV2	
26	51	0.25	7%	AV2	
		0.25	7%	AV3	
32	51	0.26	7%	AV3	
34	52	0.29	DSS	06C	
2	53		RBD		P
11	53	0.53	DSS	01C	
31	53	0.38	DSS	01H	
42	53	0.55	DSS	05H	
		0.56	DSS	07H	
45	53	0.22	8%	AV2	
2	54		RBD		P
12	55	0.77	DSS	02C	
13	55	1.88	DSS	02C	P
18	55	0.25	8%	AV4	
		0.51	16%	AV3	
		1.16	29%	AV2	
22	55	0.36	DSS	01C	
24	55	0.24	DSS	02C	
27	55	0.76	DSS	01C	
35	55	0.42	DSS	03C	
2	56		RBD		P
41	56	0.63	DSS	05C	
		0.35	DSS	05H	
44	56	0.37	DSS	02H	
		0.42	DSS	04H	
3	57	1.73	FSI/SAA	07H+ 10.70	P
11	57	1.25	DSS	02C	
18	57	0.36	11%	AV1	
		0.39	12%	AV3	
		0.67	20%	AV2	
39	57	0.43	DSS	06C	
1	58	0.97	SAI	TEH+ 1.51	P
2	58		RBD		P
11	58	0.43	DSS	01C	
13	58	0.93	DSS	01C	
		1.28	DSS	01H	
		0.93	DSS	02C	
15	58	0.26	8%	AV4	
18	58	0.23	7%	AV1	
		0.41	13%	AV4	
		0.54	16%	AV2	
		0.52	16%	AV3	
20	58	0.49	DSS	01C	
24	58	0.61	DSS	01C	
26	58	0.27	DSS	01C	
1	59		NA	NA	P
18	59	2.47	MAI	TEH+ 1.30 to 3.08	
28	59	0.23	7%	AV2	
		0.24	7%	AV3	



**TABLE 2.2**  
**STEAM GENERATOR A**  
**LOCATION AND % THROUGHWALL FOR EACH INDICATION OF DEGRADATION**

ROW	COL	VOLTS	INDICATION	LOCATION	PLUGGED OR SLEEVED
43	59	0.20	8%	AV2	
1	60		NA	NA	P
24	60	0.33	DSS	03C	
35	60	0.24	DSS	07H	
39	60	0.38	DSS	07C	
40	60	2.18 1.37	DSS/SAI SAI	06C TEH+ 1.63	P
8	61	0.31	DSS	01C	
21	61	0.48	DSS	01C	
27	61	0.53	DSS	06C	
41	61	0.51	DSS	06H	
42	61	0.53	DSS	05H	
5	62	0.21	DSS	04C	
7	62	0.61	DSS	01C	
18	62	0.65	DSS	01C	
23	62	0.32	DSS	03C	
31	62	0.29	DSS	06H	
34	62	0.44 0.50	DSS DSS	06C 07C	
36	62	0.66	DSS	05C	
39	62	0.30	DSS	07C	
40	62	0.87 1.30 0.28	DSS/SAI MAI SAI	07C TEH+ 1.79 TEH+ 11.69	S
44	62	0.35	13%	AV2	
6	63	0.52	DSS	01H	
15	63	0.24	6%	AV3	
17	63	0.28	7%	AV3	
18	63	0.28	7%	AV3	
19	63	0.28	7%	AV3	
24	63	0.27	DSS	06C	
26	63	0.19	DSS	02C	
27	63	0.29	DSS	03C	
39	63	0.37	DSS	06C	
42	63	0.21	8%	AV2	
43	63	0.21	8%	AV2	
1	64		NA	NA	P
2	64		RBD		P
13	64	0.58	DSS	02C	
31	64	0.19	DSS	07C	
43	64	0.21	8%	AV2	
1	65		NA	NA	P
25	65	0.21	DSS	03C	
27	65	0.20	DSS	07C	
39	65	0.18	7%	AV2	
41	65	0.25	9%	AV2	
1	66		RBD		P
2	66		RBD		P
10	66	3.42 1.33	DSS/SAI DSS/SAI	03C 07C	P
19	66	0.25	DSS	01C	
24	66	0.51 0.28	DSS DSS	01H 07C	
38	66	0.26	DSS	06C	
41	66	0.69	DSS	06C	
1	67		NA	NA	P

**TABLE 2.2**  
**STEAM GENERATOR A**  
**LOCATION AND % THROUGHWALL FOR EACH INDICATION OF DEGRADATION**

ROW	COL	VOLTS	INDICATION	LOCATION	PLUGGED OR SLEEVED
2	67		RBD		P
15	67	0.38	10%	AV1	
18	67	1.14	27%	AV1	
		1.46	31%	AV3	
		1.58	32%	AV2	
19	67	0.38	10%	AV3	
		0.43	12%	AV2	
23	67	0.34	9%	AV2	
25	67	0.41	11%	AV2	
26	67	0.28	8%	AV2	
27	67	0.34	9%	AV2	
30	67	0.31	9%	AV2	
31	67	0.25	7%	AV2	
34	67	0.28	10%	AV2	S
		0.82	SAI	TEH+ 2.50	
38	67	0.25	10%	AV2	
39	67	0.26	10%	AV2	
24	68		NA	NA	P
37	68		NA	NA	P
1	69		NA	NA	P
2	69		RBD		P
24	69	0.81	DSS	07C	
			NA	NA	P
31	69	0.22	DSS	07C	
34	69	0.62	15%	AV4	
39	69	0.40	DSS	06C	
		0.64	DSS	07C	
1	70		NA	NA	P
2	70		RBD		P
24	70	0.32	DSS	02C	
		0.33	DSS	02H	
32	70	0.49	DSS	02H	
		0.37	DSS	06H	
38	70	0.18	DSS	07C	
40	70	0.23	DSS	07C	
1	71		NA	NA	P
2	71		RBD		P
8	71	0.90	DSS	07H	
18	71	0.83	DSS/MAI	01H	
20	71	0.44	DSS	01H	
21	71	0.59	DSS	07C	
28	71	0.31	8%	AV2	
		0.22	DSS	07C	
35	71	0.22	8%	AV2	
39	71	0.27	10%	AV2	
40	71	0.27	10%	AV2	
1	72		NA	NA	P
16	72	0.32	9%	AV2	
20	72		NA	NA	P
21	72		NA	NA	P
36	72	0.31	12%	AV2	
1	73		RBD		P
34	73	0.28	DSS	04H	
36	73	0.30	11%	AV2	
1	74		RBD		P
4	74	0.67	DSS	01C	

**TABLE 2.2**  
**STEAM GENERATOR A**  
**LOCATION AND % THROUGHWALL FOR EACH INDICATION OF DEGRADATION**

ROW	COL	VOLTS	INDICATION	LOCATION	PLUGGED OR SLEEVED
29	74	0.65	DSS	07C	
32	74	0.81	DSS	07C	
2	75		RBD		P
6	75	0.38	DSS	01C	
8	75	0.53 1.08 0.59 2.49	DSS/SAI DSS/SAI MAI MCI	03C 03H TSH+ 0 to 1.12 TEH+ 1.23	P
25	75	0.71	DSS	02C	
26	75	3.02 0.62 0.44	DSS/SAI DSS/SAI SAI	01H 07C TEH+ 2.57	P
2	76		RBD		P
3	76	1.33 2.98	FSI/SAA FSI/SAA	07H+ 7.20 07H+ 6.19	P
20	76	0.43	14%	AV3	
23	76		NA	NA	P
25	76	0.46	12%	AV3	
26	76	0.22	8%	AV3	
30	76	9.29 0.55	MAI MCI	TEH+ 1.84 to 16.82 TEH+ 1.33	P
35	76	0.36 0.24 0.80	DSS DSS DSS/SAI	03H 04H 02H	
6	77	0.49 0.53 1.33	DSS DSS DSS	01C 02C 07C	
18	77	0.92	DSS	01H	
32	77	0.24	DSS	02H	
36	77	0.48 0.41	DSS DSS	03H 04H	
2	78		RBD		P
9	78	0.79	DSS/MAI	01H	
23	78	0.54	DSS	07C	
24	78	1.52 0.58	DSS DSS/SAI	06C 07C	
29	78	0.69 0.20	DSS/SAI MAI	07C TEH+ 3.84 to 14.93	S
35	78	0.33	DSS	03H	
3	79	0.32	DSS	01C	
8	79		NA	NA	P
14	79	0.40	11%	AV1	
24	79	0.32	DSS	02C	
28	79	0.65	DSS/SAI	05H	
32	79	0.61	DSS	02H	
34	79	0.25	DSS	03H	
2	80	0.83 0.59 0.66 0.39 0.45 0.34 0.20 0.55 0.43 0.10	DSS DSS/SAI DSS/SAI DSS/SAI SAA SAA SAA SAA SAA SAA	01C 05C 07C 07H 07H+ 5.69 07H+ 6.60 07H+ 7.70 07H+ 10.37 07H+ 12.77 07H+ 15.11	P

**TABLE 2.2**  
**STEAM GENERATOR A**  
**LOCATION AND % THROUGHWALL FOR EACH INDICATION OF DEGRADATION**

ROW	COL	VOLTS	INDICATION	LOCATION	PLUGGED OR SLEEVED
4	80	0.46	DSS	01C	
19	80	0.92 0.15	DSS/SAI MAI	07H TEH+ 10.66 to 12.74	S
23	80	0.45 0.22	DSS DSS	02C 07C	
24	80	0.68 0.53 0.26	DSS DSS DSS	02C 03C 05H	
27	80	2.67 0.81	MAI MCI	TEH+ 1.82 to 16.00 TEH+ 1.28	P
28	80	0.71	DSS	01H	
3	81	0.81 0.47	DSS DSS	01C 05C	
5	81	0.59	DSS	01C	
25	81	1.80	MAI	TEH+ 10.52 to 16.21	
2	82	0.35	DSS RBD	06C	P
8	82	0.62	DSS	07C	
11	82		NA	NA	P
18	82	0.36	DSS	07C	
30	82	0.23	DSS	04H	
31	82	0.27 0.35 0.23 0.29	DSS DSS DSS DSS	01H 02H 04H 07C	
2	83		RBD		P
6	83	0.23	DSS	04C	
24	83	1.31	DSS	07C	
29	83	0.51	DSS	02C	
2	84		RBD		P
3	84	0.44	DSS/SAI	07C	
17	84	0.40	13%	AV2	
19	84	0.44	15%	AV2	
25	84	0.50	DSS	04C	
26	84	0.40	15%	AV2	
27	84	0.45 0.30	DSS DSS	04H 05H	
29	84	0.36 0.32 0.37	13% DSS DSS	AV2 02H 03H	
1	85		NA	NA	P
7	85	0.58	DSS	02H	
17	85	0.41	11%	AV2	
20	85	0.36	13%	AV2	
23	85	0.79	DSS	06C	
2	86		RBD		P
4	86	2.12 1.88 1.33 1.26 9.97	DSS DSS DSS MAI MCI	02C 03C 07C TEH+ 2.01 to 15.05 TEH+ 1.46	P
24	86	0.29	DSS	05H	
1	87		NA	NA	P
2	87		RBD		P
4	87	0.53	DSS	04C	
5	87	0.27	DSS	01C	

**TABLE 2.2**  
**STEAM GENERATOR A**  
**LOCATION AND % THROUGHWALL FOR EACH INDICATION OF DEGRADATION**

ROW	COL	VOLTS	INDICATION	LOCATION	PLUGGED OR SLEEVED
12	87	0.94	DSS/SAI	07C	S
19	87	0.33	14%	AV2	
20	87	0.41	15%	AV2	
24	87	0.42	15%	AV1	
1	88		NA	NA	P
14	88	0.78	DSS	03C	S
		0.74	SAI	TEH+ 2.89 to 13.25	
1	89		NA	NA	P
3	89	0.21	DSS	02C	
		0.44	DSS	05C	
20	89	0.43	DSS	01C	
1	90		NA	NA	P
2	90		RBD		P
3	90	0.13	DSS	05C	
4	90	0.64	DSS	02C	
15	90	0.20	DSS	06C	
1	91		NA	NA	P
2	91	0.41	DSS	01C	
		0.38	DSS	02C	
3	91	0.39	DSS	02C	
5	91	0.70	SAI	TEH+ 7.10 to 9.11	P
7	91	0.33	PLP	TSH+ 1.12	P
8	91	0.22	DSS	05C	P
		0.37	PLP	TSH+ 1.15	P
10	91	0.49	DSS	03C	
1	92		NA	NA	P
6	92	0.17	DSS	06C	
11	92	0.27	DSS	06C	
13	92	0.38	DSS	02H	
		0.51	DSS/SAI	01H	
3	93	0.58	DSS	06C	
1	94		NA	NA	P
2	94		RBD		P
3	94	0.23	DSS	06H	
5	94	0.47	DSS	06C	

**TABLE 2.3**  
**STEAM GENERATOR B**  
**LOCATION AND % THROUGHWALL FOR EACH INDICATION OF DEGRADATION**

ROW	COL	VOLTS	INDICATION	LOCATION	PLUGGED OR SLEEVED
1	1	NA	NA	NA	P
2	1	0.21	DSS	04H	P
10	2	0.48	DSS	01C	
15	3	0.76	DSS	02C	
7	4	0.74	DSS	05H	
11	4	0.43	DSS	02C	
12	4	0.54	DSS	02C	
14	4	0.25	DSS	05H	
15	4	0.66	44%/VOL	02C	P
16	4	0.86	DSS	02C	
		0.81	DSS	03C	
		0.29	DSS	04H	
17	4	0.30	10%	AV3	
		0.26	DSS	02C	
		0.32	DSS	03H	
		0.63	DSS/SAI	07C	
6	5	1.13	MAI	TEH+ 4.25 to 16.99	S
7	5	0.42	DSS	06H	P
		0.24	NQI/SAI	TEH+ 10.93	
8	5	0.36	DSS	05H	
13	5	0.41	15%	AV1	
14	5	0.29	DSS	02C	
		0.59	DSS	04H	
		0.41	DSS	05H	
		0.31	DSS	02H	
15	5	0.30	11%	AV3	
		0.36	13%	AV2	
		0.27	DSS	05H	
16	5	0.34	DSS	02C	
17	5	0.26	10%	AV2	
		0.28	DSS	02C	
19	5	0.75	DSS	02C	
		0.45	DSS	05H	
14	6	0.21	DSS	06C	
15	6	0.37	DSS	06H	
16	6	0.26	10%	AV3	
		0.38	14%	AV2	
17	6	0.34	11%	AV3	
		0.42	13%	AV2	
		0.54	DSS	06C	
		0.40	DSS	04H	
		0.19	DSS	07H	
18	6	0.25	DSS	04H	
19	6	0.26	9%	AV3	
		0.41	13%	AV2	
20	6	0.38	14%	AV2	
		0.84	25%	AV3	
		0.65	DSS	03C	
		0.50	DSS	04H	
21	6	0.49	DSS	02C	
8	7	0.61	DSS	06H	S
		0.44	DSS	04H	
		0.89	MAI	TEH+ 3.33 to 16.72	
12	7	0.14	DSS	04H	

**TABLE 2.3**  
**STEAM GENERATOR B**  
**LOCATION AND % THROUGHWALL FOR EACH INDICATION OF DEGRADATION**

ROW	COL	VOLTS	INDICATION	LOCATION	PLUGGED OR SLEEVED
14	7	0.26	DSS	04H	
15	7	0.30	10%	AV4	
16	7	0.20	DSS	06C	
17	7	0.46	DSS	02C	
18	7	0.73	DSS	04H	
20	7	0.49	17%	AV1	
		0.49	17%	AV3	
		0.79	DSS	02C	
3	8	0.47	DSS	01C	
14	8	0.31	12%	AV1	
15	8	0.35	11%	AV1	
		0.39	13%	AV3	
		0.47	15%	AV2	
16	8	0.47	16%	AV2	
		0.45	16%	AV3	
17	8	0.32	11%	AV1	
		0.38	12%	AV3	
		0.45	14%	AV2	
		0.24	DSS	07C	
18	8	0.30	11%	AV1	
		0.41	15%	AV2	
		0.41	15%	AV3	
19	8	0.36	11%	AV3	
		0.39	12%	AV1	
		0.54	16%	AV2	
20	8	0.36	13%	AV1	
		0.40	15%	AV2	
		0.25	DSS	06H	
21	8	0.33	DSS	06C	
		0.47	DSS	01H	
22	8	0.28	10%	AV1	
		0.28	10%	AV3	
		0.34	13%	AV2	
24	8	0.30	11%	AV2	
		0.73	DSS	02C	
1	9	0.44	DSS	01C	P
15	9	0.36	12%	AV2	
16	9	0.40	15%	AV2	
17	9	0.35	11%	AV2	
18	9	0.55	16%	AV2	
19	9	0.77	DSS	01C	
20	9	0.21	8%	AV3	
		0.24	9%	AV4	
		0.28	11%	AV1	
		0.39	14%	AV2	
21	9	0.30	10%	AV2	
2	10		RBD		P
13	10	0.22	8%	AV4	
		0.34	13%	AV1	
		0.39	DSS	04C	
		0.34	DSS	02C	
		0.38	DSS	03C	
14	10	0.48	15%	AV1	
15	10	0.25	10%	AV2	
		0.26	10%	AV3	
		0.28	11%	AV1	

**TABLE 2.3**  
**STEAM GENERATOR B**  
**LOCATION AND % THROUGHWALL FOR EACH INDICATION OF DEGRADATION**

ROW	COL	VOLTS	INDICATION	LOCATION	PLUGGED OR SLEEVED
17	10	0.24	8%	AV1	
		0.30	10%	AV2	
		0.33	11%	AV3	
18	10	0.30	11%	AV3	
19	10	0.23	8%	AV1	
		0.25	9%	AV2	
		0.37	12%	AV3	
21	10	0.33	11%	AV1	
		0.42	13%	AV3	
25	10	0.19	DSS	03H	
27	10	0.68	DSS	04C	
		0.78	DSS/MAI	07C	
5	11	0.38	DSS	01C	
14	11	0.34	13%	AV4	
15	11	0.24	8%	AV4	
		0.33	11%	AV1	
		0.40	13%	AV3	
19	11	0.70	DSS	02C	
5	12	0.89	DSS	01C	
15	12	0.32	12%	AV1	
		0.36	13%	AV2	
17	12	0.24	9%	AV2	
18	12	0.47	14%	AV1	
		0.58	17%	AV2	
19	12	0.34	13%	AV1	
		0.40	14%	AV2	
20	12	0.60	DSS	01C	
21	12	0.22	8%	AV1	
		0.26	10%	AV2	
23	12	0.36	DSS	01H	S
		1.13	MAI	TEH+ 5.12 to 17.31	
24	12	0.57	DSS	06C	S
		0.93	MAI	TEH+ 3.00 to 16.93	
27	12	0.25	9%	AV2	
		0.26	10%	AV1	
2	13	0.69	DSS	06C	
3	13	0.25	DSS	01C	
14	13	0.71	DSS/SAI	06C	S
15	13	0.32	12%	AV4	
		0.27	DSS	02H	
16	13	0.36	DSS	02C	
17	13	0.25	10%	AV3	
		0.31	DSS	05C	
		0.35	DSS	06C	
18	13	0.52	DSS	02C	
21	13	0.48	DSS	04C	
24	13	0.77	DSS	05C	
		0.86	DSS	04C	
25	13	0.22	DSS	05C	
27	13	0.26	DSS	06C	P
		0.17	SAI	TEH+ 12.80	
1	14	NA	NA	NA	P
9	14	0.41	DSS	04C	
14	14	1.07	DSS	02C	
16	14	0.34	DSS	03C	
19	14	1.06	DSS	02C	S
		0.47	DSS	03C	
		0.68	DSS	04C	
		0.87	MAI	TEH+ 4.77 to 12.43	
30	14	0.43	13%	AV2	
8	15	0.34	DSS	01C	
11	15	0.13	DSS	04C	
19	15	0.39	13%	AV2	
		0.42	14%	AV1	
		0.24	DSS	04C	
		1.23	DSS	02C	
		0.51	DSS	07H	



**TABLE 2.3**  
**STEAM GENERATOR B**  
**LOCATION AND % THROUGHWALL FOR EACH INDICATION OF DEGRADATION**

ROW	COL	VOLTS	INDICATION	LOCATION	PLUGGED OR SLEEVED
21	15	0.40	13%	AV2	
25	15	0.79	DSS	02C	
28	15	0.42	DSS	05C	S
		0.61	DSS	02C	
		0.39	DSS	04H	
		0.42	DSS	06C	
		0.95	MAI	TEH+ 3.62 to 16.34	
30	15	0.44	DSS	05H	
		0.43	DSS	05C	
18	16	0.44	DSS	02C	
19	16	0.91	DSS	02C	
22	16	0.27	10%	AV2	
		0.34	13%	AV3	
25	16	0.48	DSS	05C	
		0.33	DSS	06C	
		0.32	DSS	07C	
1	17	NA	NA	NA	P
2	17	0.23	DSS	06C	
12	17	0.39	DSS	04C	
		0.45	DSS	06C	
13	17	1.11	DSS	02C	
		0.57	DSS	06C	
		0.40	DSS	05C	
13	17	0.60	DSS	04C	
18	17	0.26	10%	AV2	
		0.35	13%	AV3	
		0.55	DSS	02C	
19	17	0.41	13%	AV3	
21	17	0.23	8%	AV2	
29	17	0.42	DSS	05C	
		0.43	DSS	04C	
34	17	0.34	12%	AV3	
15	18	0.30	10%	AV2	
16	18	0.41	DSS	02C	
20	18	0.30	DSS	01C	
25	18	0.99	DSS	02C	
		0.51	DSS	04C	
		0.97	DSS	06C	
		1.16	DSS/MAI	03C	
27	18	0.68	DSS	07C	
		0.42	DSS	06C	
		1.29	DSS	05C	
30	18	0.46	DSS	04C	
9	19	0.34	13%	AV4	
10	19	0.33	DSS	01C	
14	19	0.35	DSS	01C	
16	19	0.46	14%	AV3	
20	19	0.46	14%	AV3	
23	19	0.18	SAI	TEH+ 5.20	S
31	19	0.27	DSS	04H	
32	19	0.31	DSS	07H	S
		0.38	DSS	06H	
		0.50	DSS/SAI	04H	
		1.13	MAI	TEH+ 3.31 to 15.96	
35	19	0.20	9%	AV2	
37	19	0.37	15%	AV2	
14	20	0.48	DSS	02C	
		0.55	DSS	03C	
16	20	0.43	DSS	01C	
17	20	0.38	12%	AV2	
27	20	0.44	DSS	07C	
28	20	0.51	DSS	04C	
		0.36	DSS	07C	
30	20	0.47	DSS	05C	
		0.44	DSS	02C	
35	20	0.18	8%	AV2	
		0.18	8%	AV3	

**TABLE 2.3**  
**STEAM GENERATOR B**  
**LOCATION AND % THROUGHWALL FOR EACH INDICATION OF DEGRADATION**

ROW	COL	VOLTS	INDICATION	LOCATION	PLUGGED OR SLEEVED
37	20	0.30	13%	AV2	
12	21	0.69	DSS	01C	
13	21	0.52	DSS	02C	
19	21	0.41	15%	AV2	
27	21	0.46	DSS	02H	
4	22	0.44	DSS	01C	
12	22	0.78	DSS	01C	
		0.53	DSS	02C	
14	22	0.33	DSS	04C	
16	22	0.17	DSS	04C	
		0.81	DSS	02C	
19	22	0.39	13%	AV2	
21	22	0.33	11%	AV2	
29	22	0.50	DSS	04C	S
		0.92	DSS/SAI	06C	
		0.32	SAI	TEH+ 3.02 to 14.44	
30	22	0.60	DSS	06C	
37	22	0.21	10%	AV1	
39	22	0.25	11%	AV3	
6	23	0.55	DSS	01C	
12	23	0.46	DSS	04C	
24	23	0.65	DSS	07C	
		0.55	DSS	02C	
		0.68	DSS	04C	
27	23	0.20	DSS	02C	
32	23	1.18	DSS/SAI	01H	S
		0.76	SAI	TEH+ 11.71 to 14.72	
34	23	0.25	DSS	07H	
39	23	0.33	14%	AV2	
12	24	0.56	DSS	02C	
14	24	0.77	DSS	02C	
20	24	0.35	13%	AV2	
21	24	0.28	9%	AV2	
28	24	0.36	10%	AV2	
30	24	0.66	DSS	04C	
32	24	0.34	11%	AV2	
34	24	0.31	13%	AV2	
36	24	0.21	10%	AV3	
		0.25	11%	AV2	
38	24	0.24	11%	AV2	
39	24	0.47	15%	AV2	
		0.45	15%	AV3	
		0.45	DSS	06C	
40	24	0.30	13%	AV1	
		0.32	14%	AV2	
		0.34	14%	AV3	
		0.48	DSS	06C	
		0.46	DSS	07C	
12	25	0.89	DSS	01C	
16	25	1.41	DSS	02C	
		0.38	DSS	03C	
21	25	0.40	DSS	01C	

**TABLE 2.3**  
**STEAM GENERATOR B**  
**LOCATION AND % THROUGHWALL FOR EACH INDICATION OF DEGRADATION**

ROW	COL	VOLTS	INDICATION	LOCATION	PLUGGED OR SLEEVED
24	25	0.24	DSS	07C	
32	25	0.25	DSS	07C	
		0.60	DSS	04C	
		0.55	DSS/SAI	03C	
35	25	0.17	8%	AV1	
36	25	0.25	9%	AV3	
37	25	0.13	6%	AV2	
		0.18	8%	AV3	
39	25	0.25	11%	AV2	
		0.32	DSS	06H	
11	26	1.21	DSS	01C	
14	26	0.38	DSS	01C	
32	26	0.57	DSS	07C	S
		0.43	SAI	TEH+ 3.39 to 16.79	
36	26	0.57	DSS	06C	
		0.95	DSS	07C	
		0.30	DSS	06H	
37	26	0.30	DSS	06C	
41	26	0.21	9%	AV2	
		1.32	DSS	01C	
12	27	0.47	DSS	01C	
15	27	0.34	DSS	02C	
17	27	0.37	12%	AV3	
33	27	0.43	13%	AV3	
35	27	0.15	7%	AV3	
		0.19	9%	AV2	
41	27	0.46	DSS	07H	
4	28	0.27	DSS	02C	P
16	28	0.38	DSS	04C	
		0.59	DSS	03C	
		0.55	DSS	01C	
24	28	0.55	DSS	07H	
34	28	0.53	DSS	07C	
35	28	0.30	11%	AV3	
36	28	0.14	DSS	06H	
40	28	0.21	10%	AV2	
41	28	0.35	12%	AV2	
		0.27	DSS	05H	
42	28	0.28	12%	AV2	
17	29	0.45	DSS	02C	
20	29	0.45	DSS	01C	
39	29	0.23	10%	AV2	
40	29	0.72	DSS	07H	
41	29	0.40	DSS	07H	
42	29	0.24	11%	AV2	
4	30	0.23	DSS	01C	P
12	30	0.42	DSS	01C	
13	30	0.57	DSS	04C	
		0.43	DSS	02C	
		0.49	DSS	03C	
16	30	1.26	DSS	02C	
		0.67	DSS	03C	
21	30	0.64	DSS	04H	
36	30	0.24	DSS	03H	
41	30	0.43	DSS	06C	
42	30	0.33	DSS	03H	
2	31	0.58	DSS	03C	
13	31	1.02	DSS	01C	
16	31	0.75	DSS	02C	
		0.61	DSS	01C	
25	31	0.29	DSS	01C	

**TABLE 2.3**  
**STEAM GENERATOR B**  
**LOCATION AND % THROUGHWALL FOR EACH INDICATION OF DEGRADATION**

ROW	COL	VOLTS	INDICATION	LOCATION	PLUGGED OR SLEEVED
37	31	0.22	10%	AV2	
14	32	0.21	DSS	03C	
15	32	0.69	DSS	02C	
23	32	0.59	DSS	06C	
27	32	0.55	DSS	06C	
35	32	0.38	DSS	04H	
39	32	0.34	14%	AV2	
40	32	0.25	9%	AV2	
		0.27	9%	AV3	
42	32	0.42	14%	AV2	
43	32	0.28	12%	AV3	
13	33	1.05	DSS	01C	
16	33	0.47	DSS	06C	
35	33	0.83	DSS	05C	
		0.69	DSS	03C	
		0.67	DSS	04C	
		0.54	DSS	06C	
		0.33	DSS	02C	
39	33	0.28	DSS	07H	
41	33	0.28	12%	AV2	
12	34	0.70	DSS	01C	
14	34	0.56	DSS	01C	
16	34	0.37	DSS	02C	
		0.50	DSS	01C	
17	34	0.93	DSS	02C	
26	34	0.57	DSS	01C	
36	34	0.31	DSS	07H	
38	34	1.12	DSS	03C	S
		1.63	DSS	06C	
		1.77	DSS	04C	
		1.51	DSS	07C	
		0.76	DSS	03H	
		0.48	DSS	05C	
		1.51	DSS	05H	
		0.56	DSS	07H	
		1.12	DSS	02C	
		1.64	DSS/SAI	04H	
		0.30	MAI	TEH+ 3.74 to 16.34	
39	34	0.33	DSS	06H	
40	34	0.48	DSS	06C	
44	34	0.77	71%/VOL	01C	P
		0.17	DSS	05H	
		0.23	DSS	03H	
44	34	0.90	DSS	06C	P
13	35	0.52	DSS	01C	
14	35	0.50	DSS	01C	
16	35	0.74	DSS	03C	
		1.42	DSS	02C	
35	35	0.38	13%	AV3	
38	35	0.88	DSS	02C	
		0.75	DSS	03C	
		0.91	DSS	05C	
		1.07	DSS	04H	
		0.45	DSS	04C	
		0.32	DSS	05H	
		1.22	DSS	07H	
40	35	0.60	DSS	06C	S
		0.47	DSS	04H	
		0.75	DSS	07H	
		0.39	DSS	05H	
		0.28	DSS	06H	

**TABLE 2.3**  
**STEAM GENERATOR B**  
**LOCATION AND % THROUGHWALL FOR EACH INDICATION OF DEGRADATION**

ROW	COL	VOLTS	INDICATION	LOCATION	PLUGGED OR SLEEVED
41	35	0.30	DSS	07H	
		0.33	DSS	03H	
43	35	0.62	DSS	06H	
		0.56	DSS	03H	
		0.65	DSS	04H	
		0.70	DSS	05H	
44	35	1.46	DSS	01C	
16	36	0.68	DSS	06C	
17	36	0.51	DSS	03C	
		0.84	DSS	02C	
		0.69	DSS	01C	
22	36	0.39	DSS	01C	
38	36	1.43	DSS	04H	
		0.84	DSS	02C	
		0.98	DSS	07H	
		1.09	DSS	04C	
		0.54	DSS	05C	
		1.17	DSS	03C	
		0.75	DSS	06C	
21	37	0.27	8%	AV2	
		0.59	DSS	01C	
30	37	1.56	DSS	03H	
41	37	0.92	DSS	05C	
		0.69	DSS	06C	
		0.62	DSS	07H	
44	37	0.43	DSS	03C	
9	38	0.86	DSS	01C	
11	38	0.46	DSS	01C	
17	38	1.08	DSS	02C	
20	38	0.57	DSS	02C	
22	38	0.34	10%	AV3	
23	38	0.30	DSS	03C	
36	38	0.27	DSS	06C	
38	38	0.63	DSS	03C	
		0.71	DSS	06C	
		0.78	DSS	02C	
		0.38	DSS	05C	
		0.91	DSS	07H	
		0.48	DSS	04C	
40	38	0.42	DSS	05H	
		1.05	DSS	04H	
		0.51	DSS	03H	
		0.62	DSS	05C	
		0.76	DSS	06C	
		0.48	DSS	06H	
		0.80	DSS	03C	
43	38	0.53	DSS	06H	
45	38	0.30	DSS	07C	
22	39	0.58	DSS	02C	
38	39	1.21	DSS	06C	
		0.40	DSS	03C	
39	39	0.90	DSS	04H	
		0.22	DSS	03H	
		0.36	DSS	06H	
41	39	1.14	DSS	07C	
		0.39	DSS	06C	
		0.51	DSS	05H	
44	39	0.53	DSS	02C	
45	39	0.36	DSS	04H	
11	40	0.85	DSS	01C	

**TABLE 2.3**  
**STEAM GENERATOR B**  
**LOCATION AND % THROUGHWALL FOR EACH INDICATION OF DEGRADATION**

ROW	COL	VOLTS	INDICATION	LOCATION	PLUGGED OR SLEEVED
15	40	0.50	DSS	01C	
		0.72	DSS	02C	
		1.00	DSS/SAI	05C	
17	40	0.48	DSS	06C	
		0.43	DSS	02C	
20	40	0.35	10%	AV3	
		0.68	DSS	02C	
22	40	0.42	12%	AV3	
		0.66	DSS	01C	
36	40	0.34	11%	AV1	
		0.36	12%	AV2	
38	40	1.83	DSS	06C	
		0.42	DSS	03C	
		1.65	DSS	05C	
		1.27	DSS	07H	
		0.26	DSS	04C	
		0.70	DSS	02C	
39	40	0.42	14%	AV2	
40	40	0.30	10%	AV2	
41	40	0.41	14%	AV2	
		0.35	DSS	05H	
		0.55	DSS	07C	
41	40	1.05	DSS/SAI	06C	
		0.60	DSS/SAI	06H	
43	40	0.44	15%	AV2	
44	40	0.32	11%	AV2	
14	41	0.41	DSS	01C	
16	41	0.54	DSS	02C	
		0.63	DSS	01C	
17	41	0.56	DSS	02C	
30	41	1.05	DSS	01H	
38	41	1.20	DSS	04C	
		0.93	DSS	06C	
40	41	0.11	DSS	07H	
		0.75	DSS/SAI	01H	
41	41	0.37	13%	AV2	
		0.27	DSS	07C	
		0.47	DSS	07H	
		1.05	DSS/SAI	06C	
46	41	0.43	14%	AV2	
		0.45	DSS	04H	
		0.50	DSS	03H	
15	42	1.37	DSS	02C	
		0.53	DSS	03C	
		1.32	DSS	01C	
19	42	0.59	18%	AV1	
21	42	0.30	10%	AV3	
		0.39	13%	AV1	
		0.77	DSS	07C	
22	42	0.37	11%	AV3	
37	42	0.61	DSS	01C	
		0.35	DSS	06C	
38	42	0.43	DSS	03C	
		0.93	DSS	06C	
		1.00	DSS	04C	
		1.02	DSS	05C	
		0.55	DSS	07C	
		0.55	DSS	02C	
44	42	0.89	DSS	05H	
		0.45	DSS	04C	
45	42	0.32	DSS	07C	
37	43	0.66	DSS	06C	
		0.38	DSS	07H	

**TABLE 2.3**  
**STEAM GENERATOR B**  
**LOCATION AND % THROUGHWALL FOR EACH INDICATION OF DEGRADATION**

ROW	COL	VOLTS	INDICATION	LOCATION	PLUGGED OR SLEEVED
38	43	0.78	DSS	07C	
		0.37	DSS	02C	
		1.35	DSS	06C	
		1.27	DSS	03C	
41	43	0.58	DSS	03C	
		0.71	DSS	04C	
		0.75	DSS	06C	
44	43	0.77	DSS	07H	
		0.73	DSS	06C	
13	44	0.18	DSS	02C	
		0.92	DSS	01C	
14	44	0.38	DSS	01C	
16	44	0.52	DSS	02C	
		0.75	DSS	01C	
17	44	1.12	DSS	02C	
		0.76	DSS	01C	
20	44	0.97	DSS	01C	
21	44	0.55	DSS	07C	
22	44	0.67	DSS	02C	
		0.41	DSS	06C	
37	44	0.22	DSS	02H	
38	44	0.30	DSS	04C	
39	44	0.67	DSS	06C	
		0.38	DSS	05C	
40	44	0.38	DSS	06C	
41	44	0.26	9%	AV2	
44	44	0.53	DSS	04C	
		0.28	DSS	05H	
		1.37	DSS/SAI	06C	
45	44	0.31	10%	AV1	
13	45	0.36	DSS	01C	
		0.35	DSS	02C	
16	45	0.38	13%	AV1	
		0.43	14%	AV2	
20	45	0.63	DSS	01C	
		0.73	DSS	02C	
37	45	0.82	DSS	06C	
		0.50	DSS	07C	
38	45	0.37	DSS	03C	
		0.65	DSS	07C	
		0.76	DSS	04C	
		0.30	DSS	05C	
		0.59	DSS	06C	
40	45	0.27	9%	AV2	
		0.33	11%	AV3	
41	45	0.36	DSS	04H	
		0.25	DSS	05C	
42	45	0.86	DSS/MAI	07C	
44	45	0.26	DSS	01C	
6	46	0.16	DSS	01C	
13	46	0.27	DSS	06C	
		1.41	DSS	01C	
		0.87	DSS	02C	
36	46	1.02	DSS	07C	
37	46	0.83	DSS	07C	
43	46	0.15	DSS	07C	
		0.34	DSS	06H	
44	46	0.22	DSS	03C	
45	46	0.68	DSS	06C	
4	47	0.43	DSS	01C	

**TABLE 2.3**  
**STEAM GENERATOR B**  
**LOCATION AND % THROUGH WALL FOR EACH INDICATION OF DEGRADATION**

ROW	COL	VOLTS	INDICATION	LOCATION	PLUGGED OR SLEEVED
6	47	0.20	DSS	05C	
		0.20	DSS	04C	
		0.68	DSS	02H	
		0.79	DSS	06C	
13	47	0.57	DSS	01C	
14	47	0.70	DSS	01C	
22	47	0.81	DSS	02C	
		0.33	DSS	06C	
		0.53	DSS	05C	
36	47	1.23	DSS	06C	
		0.19	DSS	04H	
38	47	1.39	DSS	06C	
		0.52	DSS	03C	
		1.61	DSS	02C	
		0.74	DSS	06H	
		1.69	DSS	07C	
		0.81	DSS	05C	
		1.19	DSS	04C	
39	47	0.44	DSS	06C	
41	47	0.35	DSS	02C	
		0.48	DSS	05C	
		0.47	DSS	04H	
43	47	0.98	DSS	06C	
		0.20	DSS	04H	
45	47	0.25	8%	AV2	
		0.24	DSS	05H	
12	48	0.39	DSS	06C	
13	48	0.17	DSS	01C	
15	48	0.16	DSS	01C	
		0.71	DSS	03C	
17	48	0.68	DSS	06C	
		0.39	DSS	07C	
19	48	0.28	DSS	01C	
27	48	3.05	PWI	CLW+ 0.03	P
29	48	4.33	PWI	CLW- 0.11	P
36	48	0.75	DSS	06C	
39	48	0.41	DSS	07C	
		0.28	DSS	04H	
43	48	0.90	DSS	07C	
		0.55	DSS	06C	
		0.90	DSS	03C	
		1.03	DSS	05C	
		0.62	DSS	06H	
		0.93	DSS	04C	
19	49	0.54	DSS	05C	
		0.58	DSS	01C	
20	49	0.94	DSS	01C	
21	49	1.57	DSS	01C	
23	49	0.40	DSS	06C	
31	49	0.80	DSS/SAI	06C	
34	49	1.36	DSS	06C	
		1.65	DSS	07C	
39	49	0.31	DSS	06C	
		0.52	DSS	03C	
40	49	0.33	11%	AV2	
43	49	0.56	DSS/MAI	04C	
		1.57	DSS/SAI	06C	
12	50	0.72	DSS	05C	
14	50	0.26	DSS	06C	
17	50	0.52	DSS	01C	
18	50	0.59	DSS	02C	
20	50	0.51	DSS	02C	
30	50	0.63	DSS	07C	
41	50	0.37	DSS	03C	
42	50	0.60	DSS	07H	



**TABLE 2.3**  
**STEAM GENERATOR B**  
**LOCATION AND % THROUGHWALL FOR EACH INDICATION OF DEGRADATION**

ROW	COL	VOLTS	INDICATION	LOCATION	PLUGGED OR SLEEVED
43	50	1.20	DSS	01H	
		0.92	DSS	07C	
		0.60	DSS	05C	
		0.76	DSS	06C	
		0.75	DSS	02C	
45	50	0.69	DSS	06C	
11	51	0.55	DSS	07C	
12	51	0.76	DSS	02C	
20	51	0.38	DSS	02C	
		0.27	DSS	01C	
21	51	0.33	10%	AV3	
		0.44	12%	AV2	
30	51	1.22	DSS	02H	
32	51	0.62	DSS	06C	
36	51	0.53	16%	AV2	
		1.09	DSS	02C	
37	51	0.29	10%	AV2	
		0.34	12%	AV3	
		0.35	DSS	07C	
		0.55	DSS	06C	
39	51	0.36	12%	AV3	
		0.38	13%	AV2	
40	51	0.35	12%	AV3	
		0.40	14%	AV2	
		0.51	DSS	07C	
41	51	0.38	13%	AV2	
		0.58	DSS	07C	
43	51	0.63	DSS	04C	
		0.72	DSS	06C	
44	51	0.29	10%	AV2	
45	51	0.45	DSS	04H	
22	52	0.28	9%	AV2	
24	52	0.56	DSS	05C	
		1.09	DSS	06C	
24	52	0.44	DSS	03C	
34	52	0.48	13%	AV2	
37	52	0.39	13%	AV2	
40	52	0.33	11%	AV2	
		0.32	11%	AV3	
41	52	0.46	DSS	06C	
42	52	0.21	7%	AV2	
		0.24	8%	AV3	
43	52	0.45	15%	AV3	
		0.45	DSS	07C	
		0.97	DSS	06C	
		0.87	DSS	04C	
		0.24	DSS	02H	
		0.46	DSS	07H	
		0.20	DSS	04H	
44	52	0.42	14%	AV2	
2	53	0.40	DSS/SAI	07C	
7	53	0.38	DSS	07H	
17	53	0.85	DSS	02C	
19	53	0.41	DSS	06C	
20	53	0.42	DSS	01C	
21	53	0.30	9%	AV3	
38	53	0.59	DSS	07C	
		0.49	DSS	06C	
		0.70	DSS	02C	
		1.88	DSS	04C	
		1.17	DSS	05C	
		0.59	DSS	03C	
40	53	0.30	10%	AV2	
41	53	0.94	DSS	01H	
		1.03	DSS	05C	
		0.73	DSS	07H	
		0.28	DSS	05H	

**TABLE 2.3**  
**STEAM GENERATOR B**  
**LOCATION AND % THROUGHWALL FOR EACH INDICATION OF DEGRADATION**

ROW	COL	VOLTS	INDICATION	LOCATION	PLUGGED OR SLEEVED
42	53	0.58	DSS	05H	
43	53	1.64	DSS	07C	
		0.49	DSS	04H	
		0.73	DSS	02C	
		0.89	DSS	05C	
		0.93	DSS	06C	
		0.66	DSS	05H	
		0.71	DSS	04C	
		0.47	DSS	07H	
7	54	0.27	DSS	05H	
17	54	1.15	DSS	02C	
20	54	0.88	DSS	01C	
22	54	1.11	DSS	01C	
39	54	0.30	10%	AV1	
41	54	0.33	11%	AV2	
		0.91	DSS	06C	
42	54	0.40	14%	AV2	
42	54	0.50	DSS	07C	
43	54	0.26	9%	AV1	
46	54	0.39	DSS	03C	
8	55	0.63	DSS	07C	
		0.42	DSS	07H	
12	55	0.72	DSS	02C	
		0.45	DSS	05C	
		0.28	DSS	03C	
		0.86	DSS/MAI	07C	
17	55	0.45	DSS	02C	
19	55	0.72	DSS	01C	
22	55	0.58	DSS	07C	
35	55	0.72	PTI	HRT+ 1.74	P
39	55	0.26	9%	AV2	
		0.46	DSS	06H	
45	55	0.45	DSS	07H	
		0.54	DSS	01C	
		0.74	DSS/SAI	02H	
		0.50	DSS/SAI	03H	
15	56	0.30	DSS	07H	
20	56	0.42	DSS	01C	
30	56	0.46	DSS	07C	
33	56	1.64	DSS	01H	
		1.41	DSS	07H	
		1.02	DSS	03H	
		0.73	DSS	02C	
		0.62	DSS	03C	
		0.86	DSS	06C	
		0.70	DSS	05H	
36	56	0.77	DSS	06C	
41	56	0.56	DSS	04C	
		1.24	DSS	06C	
42	56	0.74	DSS	05H	
		0.39	DSS	06C	
44	56	0.28	9%	AV2	
2	57	0.43	DSS/SAI	07C	
30	57	0.31	DSS	07C	
34	57	1.09	DSS	07C	
36	57	0.83	DSS	01H	
		0.50	DSS	06C	
42	57	0.31	DSS	03H	
45	57	0.31	11%	AV3	
14	58	0.58	DSS	01C	
17	58	0.73	DSS	07C	
		0.82	DSS	02C	
18	58	0.36	DSS	02C	
19	58	0.60	DSS	02C	
36	58	0.38	DSS	03H	
38	58	0.23	8%	AV2	
40	58	0.24	8%	AV1	

**TABLE 2.3**  
**STEAM GENERATOR B**  
**LOCATION AND % THROUGHWALL FOR EACH INDICATION OF DEGRADATION**

ROW	COL	VOLTS	INDICATION	LOCATION	PLUGGED OR SLEEVED
40	58	0.24	8%	AV3	
		0.29	10%	AV2	
42	58	0.30	10%	AV3	
		0.33	11%	AV2	
		0.45	DSS	05H	
43	58	0.25	8%	AV1	
		0.30	10%	AV2	
		0.29	10%	AV3	
15	59	0.71	DSS	03C	
28	59	0.29	9%	AV3	
32	59	0.49	DSS	03H	
37	59	0.57	DSS	06C	
40	59	0.27	7%	AV3	
		0.46	DSS	06C	
41	59	0.31	10%	AV3	
42	59	0.40	14%	AV3	
43	59	0.60	DSS	01C	
17	60	0.33	10%	AV3	
32	60	1.08	DSS/SAI	07H	
36	60	0.25	9%	AV3	
40	60	0.27	9%	AV3	
42	60	0.28	10%	AV2	
		0.34	12%	AV3	
43	60	0.25	8%	AV3	
		0.28	9%	AV2	
4	61	0.38	DSS	03C	P
		0.99	DSS	04C	
		1.90	DSS/MAI	02H	
15	61	0.83	DSS	02C	
25	61	0.65	DSS	02C	
39	61	0.42	14%	AV2	
40	61	0.31	10%	AV2	
41	61	0.30	11%	AV2	
43	61	0.26	9%	AV2	
44	61	0.97	DSS	01H	
29	62	0.48	DSS	01H	
35	62	0.54	DSS	07C	
		0.49	DSS	02C	
36	62	0.31	11%	AV2	
		0.53	DSS	07C	
37	62	0.25	8%	AV2	
		0.67	DSS	06C	
39	62	0.36	DSS	02C	
		0.51	DSS	03C	
		0.60	DSS	05C	
		0.86	DSS	07C	
		1.03	DSS	04C	
7	63	0.24	DSS	02H	
12	63	0.42	DSS	02C	
15	63	0.33	DSS	02C	

**TABLE 2.3**  
**STEAM GENERATOR B**  
**LOCATION AND % THROUGHWALL FOR EACH INDICATION OF DEGRADATION**

ROW	COL	VOLTS	INDICATION	LOCATION	PLUGGED OR SLEEVED
15	63	0.49	DSS	05H	
		0.43	DSS	05C	
		0.60	DSS/MAI	06C	
20	63	0.48	DSS	02C	
21	63	0.39	DSS	07C	
22	63	0.32	DSS	04C	
		0.37	DSS	05C	
36	63	0.59	DSS	05C	
38	63	0.26	DSS	07C	
		0.37	DSS	06C	
39	63	1.11	DSS	01H	P
		0.69	DSS	04C	
		0.84	DSS	02C	
		1.06	DSS	05C	
		0.32	DSS	03C	
		1.90	DSS/MAI	06C	
		0.32	MAI	TEH+ 10.56 to 17.19	
41	63	0.41	14%	AV2	
		0.40	DSS	06C	
		0.48	DSS	07C	
43	63	1.72	DSS	01C	
9	64	0.49	DSS	02C	
12	64	0.57	DSS	02C	
14	64	0.19	DSS	03C	
26	64	0.87	DSS	02C	
27	64	0.22	DSS	01H	
33	64	0.59	DSS	06C	
35	64	0.27	DSS	02H	
36	64	1.11	DSS	07C	
38	64	0.41	DSS	07C	
12	65	0.64	DSS	03C	
13	65	0.56	DSS	02C	
17	65	0.34	10%	AV2	
24	65	0.45	DSS	07C	
25	65	0.44	DSS	07C	
39	65	1.27	DSS	07C	S
		0.91	DSS	03H	
		1.17	DSS	05C	
		1.75	DSS	06C	
		1.02	DSS	04C	
		1.30	DSS	02C	
		1.24	DSS	03C	
		0.33	MAI	TEH+ 5.89 to 16.67	
40	65	0.42	DSS	07C	
41	65	0.38	13%	AV1	
42	65	0.26	9%	AV1	
20	66	1.14	DSS	06C	
35	66	1.01	DSS	06C	
37	66	0.54	DSS	06C	
39	66	1.14	DSS	07C	
39	66	0.55	DSS	06C	
41	66	0.34	11%	AV3	
		0.53	DSS	01H	
		0.26	DSS	04H	
6	67	0.83	DSS	01C	
14	67	0.57	DSS	05C	
		0.63	DSS	03C	
		1.18	DSS	02C	
16	67	0.32	10%	AV2	
17	67	0.25	DSS	02C	
		0.38	DSS	06C	

**TABLE 2.3**  
**STEAM GENERATOR B**  
**LOCATION AND % THROUGHWALL FOR EACH INDICATION OF DEGRADATION**

ROW	COL	VOLTS	INDICATION	LOCATION	PLUGGED OR SLEEVED
19	67	0.48	15%	AV2	
20	67	0.42	14%	AV2	
		0.27	DSS	02C	
26	67	0.29	DSS	02C	
		0.22	DSS	05C	
32	67	0.54	DSS	07C	
34	67	0.34	11%	AV2	
36	67	0.35	12%	AV2	
37	67	0.49	DSS	07C	
38	67	0.38	DSS	06C	
39	67	0.34	13%	AV2	
		1.12	DSS	07C	
		0.77	DSS	02C	
		0.27	DSS	06C	
40	67	0.39	13%	AV2	
		0.34	DSS	06C	
41	67	0.33	13%	AV3	
		0.37	14%	AV2	
42	67	0.26	10%	AV1	
		0.32	12%	AV2	
3	68	0.47	DSS	06C	
6	68	0.68	DSS	01C	
10	68	0.48	DSS	06C	
		0.90	DSS	03H	
13	68	0.37	DSS	04C	
		0.43	DSS	06C	
		0.41	DSS	06H	
14	68	0.38	DSS	05C	
		0.26	DSS	06C	
		0.58	DSS	02C	
		0.65	DSS	06H	
		0.62	DSS	01C	
17	68	0.68	DSS	02C	
23	68	0.45	DSS	02C	
29	68	0.38	DSS	06C	
35	68	0.31	12%	AV2	
36	68	0.34	11%	AV2	
		0.50	DSS	07H	
		0.68	DSS	04C	
36	68	0.57	DSS	05C	
37	68	0.23	9%	AV2	
38	68	0.54	DSS	05C	
39	68	0.34	13%	AV2	
40	68	0.61	18%	AV2	
41	68	0.27	11%	AV1	
		0.36	14%	AV2	
8	69	0.30	DSS	01C	
16	69	0.36	12%	AV2	
17	69	1.01	DSS	02C	
20	69	0.39	13%	AV2	
21	69	0.35	12%	AV2	
28	69	0.35	11%	AV2	
		0.27	DSS	06H	
30	69	0.53	DSS	06C	
		1.57	DSS/MAI	01H	
31	69	0.33	10%	AV2	
35	69	0.27	11%	AV2	
		0.97	DSS	06C	
		0.43	DSS	06H	
36	69	0.36	12%	AV2	
		1.04	DSS	07C	
		0.61	DSS	06C	

**TABLE 2.3**  
**STEAM GENERATOR B**  
**LOCATION AND % THROUGHWALL FOR EACH INDICATION OF DEGRADATION**

ROW	COL	VOLTS	INDICATION	LOCATION	PLUGGED OR SLEEVED
37	69	0.30	12%	AV2	
38	69	0.32	11%	AV2	
39	69	0.27	11%	AV3	
		0.34	13%	AV2	
41	69	0.24	10%	AV2	
		0.29	11%	AV1	
		0.28	11%	AV3	
		0.73	DSS	05H	
2	70	0.36	DSS	03C	
		1.29	DSS	02C	
14	70	0.58	DSS	02C	
		0.66	DSS	01C	
16	70	0.37	13%	AV3	
		0.36	13%	AV4	
		0.43	15%	AV2	
17	70	0.35	12%	AV2	
		0.38	13%	AV3	
		0.87	DSS	01C	
		0.35	DSS	02C	
20	70	0.32	11%	AV2	
		0.36	DSS	02C	
21	70	0.32	11%	AV2	
		0.33	11%	AV3	
26	70	0.34	12%	AV2	
		0.62	DSS	07C	
27	70	0.33	10%	AV2	
31	70	0.72	DSS	03H	
33	70	0.36	11%	AV2	
34	70	0.50	15%	AV2	
35	70	0.29	10%	AV2	
		0.62	DSS	02C	
		1.26	DSS	06C	
36	70	0.43	16%	AV2	
		0.54	DSS	04C	
		0.27	DSS	03C	
38	70	0.27	10%	AV2	
		0.34	DSS	07C	
		0.80	DSS	06C	
39	70	0.41	13%	AV2	
		0.29	DSS	07H	
		0.24	DSS	05H	
40	70	0.37	14%	AV2	
2	71	NA	NA	NA	P
6	71	0.29	DSS	02C	
7	71	0.81	DSS	01C	
12	71	0.50	DSS	02C	
17	71	0.33	11%	AV3	
		0.60	DSS	06C	
20	71	0.20	DSS	04H	
		0.31	DSS	06H	
36	71	0.83	DSS	07C	
40	71	0.30	12%	AV3	
		0.36	14%	AV2	
2	72		RBD		P
6	72	0.56	DSS	02H	
12	72	0.32	DSS	02C	
13	72	0.47	DSS	03C	
		0.65	DSS	02C	
15	72	0.40	14%	AV1	
		0.28	DSS	04H	

**TABLE 2.3**  
**STEAM GENERATOR B**  
**LOCATION AND % THROUGHWALL FOR EACH INDICATION OF DEGRADATION**

ROW	COL	VOLTS	INDICATION	LOCATION	PLUGGED OR SLEEVED
21	72	0.26	8%	AV3	
		0.26	9%	AV2	
27	72	0.31	DSS	02C	
28	72	0.88	DSS	01H	
31	72	0.33	10%	AV3	
		0.15	DSS	07C	
32	72	0.50	DSS	04C	
33	72	0.65	DSS	07H	
		1.61	DSS	07C	
		0.29	DSS	04C	
		0.44	DSS	05C	
		1.48	DSS	06C	
		1.49	DSS/SAI	01H	
		0.65	DSS/SAI	04H	
		0.52	DSS/SAI	03H	
34	72	0.21	8%	AV3	
36	72	0.33	11%	AV1	
36	72	0.38	12%	AV3	
		0.44	14%	AV2	
		0.35	DSS	03C	
		1.05	DSS	07C	
		1.22	DSS	03H	
		0.53	DSS	06C	
		0.40	DSS	07H	
37	72	0.20	8%	AV3	
		0.31	12%	AV1	
		0.47	17%	AV2	
39	72	0.33	13%	AV3	
		0.42	15%	AV2	
14	73	0.85	DSS	03C	
19	73	0.92	DSS	02C	
21	73	0.30	10%	AV1	
		1.71	DSS	02C	
22	73	0.21	DSS	02C	
27	73	0.85	DSS	03H	
		0.44	DSS	03C	
		0.47	DSS	01H	
		0.41	DSS	07H	
31	73	0.45	15%	AV2	
		0.47	DSS	05C	
		1.62	DSS	07C	
		1.67	DSS	03H	
		1.02	DSS	03C	
		1.09	DSS	04C	
		0.47	DSS	04H	
		0.48	DSS	07H	
		0.78	DSS	02H	
		1.31	DSS/MAI	01H	
32	73	0.30	DSS	06C	
34	73	0.29	10%	AV3	
		0.32	11%	AV2	
36	73	0.31	DSS	05H	
37	73	0.34	13%	AV2	
		0.35	13%	AV3	
38	73	1.07	DSS	01H	
39	73	0.32	12%	AV2	
		0.38	14%	AV3	
3	74	2.31	FSI/SAA	07H+ 17.97	P
4	74	0.60	DSS	01C	
26	74	1.03	DSS	06C	
32	74	0.98	DSS	01H	S
		0.39	DSS	02H	
		1.25	DSS	03H	
		0.72	MAI	TEH+ 2.40 to 15.59	
33	74	0.37	12%	AV2	
35	74	0.38	12%	AV2	
		0.53	DSS	07C	

**TABLE 2.3**  
**STEAM GENERATOR B**  
**LOCATION AND % THROUGHWALL FOR EACH INDICATION OF DEGRADATION**

ROW	COL	VOLTS	INDICATION	LOCATION	PLUGGED OR SLEEVED
36	74	0.27	10%	AV2	
37	74	0.51 0.81 0.92 0.50	16% DSS DSS DSS	AV2 07C 05C 06C	
38	74	0.38	14%	AV2	
20	75	0.37 0.36	12% DSS	AV3 05H	
23	75	0.54	DSS	06C	
27	75	0.48	DSS	02C	
30	75	0.47 0.70 1.12 0.52	DSS DSS DSS DSS/MAI	02H 04C 06C 04H	
31	75	1.12 0.22 0.31 0.80	DSS DSS DSS DSS/SAI	06C 04C 02H 03H	S
34	75	0.41 0.52 0.54	13% DSS DSS	AV2 03H 06C	
35	75	0.41 0.30 0.28 0.28 0.76	DSS DSS DSS DSS DSS	02C 03H 06H 05H 02H	
36	75	0.24 0.39 1.00	10% 15% DSS	AV3 AV2 06C	
37	75	0.29 0.28 0.61	11% DSS DSS	AV2 02H 06H	
14	76	0.35	DSS	05C	
25	76	0.33	DSS	07H	
26	76	0.11	DSS	07H	
28	76	0.43 0.21	DSS DSS	02H 07H	
30	76	0.23	DSS	04C	
32	76	0.47 0.34	DSS DSS	02H 04H	
35	76	0.17 0.23 0.32 0.45	7% 9% 12% DSS	AV1 AV3 AV2 07C	
36	76	0.33 0.36 0.59 0.41 0.43 0.27	11% 12% DSS DSS DSS DSS	AV3 AV2 01H 02C 06C 04H	
37	76	0.30	12%	AV2	
37	76	0.39	15%	AV3	
1	77	0.32	DSS	01C	P
18	77	0.68 0.66	DSS DSS	04C 06C	
23	77	0.39	DSS	06C	
26	77	0.80	DSS	06C	
27	77	0.22	DSS	06H	
28	77	0.38	DSS	03H	



**TABLE 2.3**  
**STEAM GENERATOR B**  
**LOCATION AND % THROUGHWALL FOR EACH INDICATION OF DEGRADATION**

ROW	COL	VOLTS	INDICATION	LOCATION	PLUGGED OR SLEEVED
31	77	0.37	DSS	03H	
35	77	1.81	DSS	06H	
		0.24	DSS	01H	
3	78	1.78	FSI/SAA	07H+ 7.47	P
		1.92	FSI/SAA	07H+ 12.75	
		1.72	FSI/SAA	07H+ 13.62	
		1.52	FSI/SAA	07H+ 16.15	
		2.26	FSI/SAA	07H+ 16.99	
		3.70	FSI/SAA	07H+ 19.52	
7	78	0.19	DSS	03H	
19	78	0.35	DSS	02C	
24	78	1.11	DSS	07C	
26	78	0.85	DSS	03H	
		0.71	DSS	05C	
		0.72	DSS	05C	
		0.54	DSS	04C	
		0.43	DSS	06H	
		0.48	DSS	07C	
		0.45	DSS	07H	
28	78	0.27	DSS	06C	
31	78	0.37	DSS	04H	
27	79	1.34	DSS	02H	
		0.46	DSS	06C	
		1.38	DSS	03H	
		0.52	DSS/MAI	04H	
28	79	0.60	DSS	02H	
		0.43	DSS	03H	
		0.34	DSS	04H	
31	79	0.45	DSS	04H	
		0.49	DSS	03H	
		0.28	DSS	02H	
34	79	0.34	DSS	05H	
		0.40	DSS	06H	
4	80	0.18	SAI	TEH+ 9.03 to 13.30	S
		0.40	MAI	TSH+ 0.00 to 1.38	
5	80	0.54	MAI	TSH+ 0.02 to 1.49	P
16	80	0.36	13%	AV2	
		0.37	14%	AV4	
17	80	0.31	12%	AV2	
18	80	0.35	13%	AV2	
19	80	0.33	12%	AV2	
20	80	0.39	14%	AV2	
24	80	0.36	13%	AV2	
27	80	0.79	DSS	02C	
		0.70	DSS	03H	
		0.27	DSS	07C	
		0.41	DSS	04H	
		0.59	DSS	02H	
28	80	0.95	DSS/MAI	02H	S
		0.61	SAI	TEH+ 4.95 to 13.93	
29	80	0.48	17%	AV2	
31	80	0.31	12%	AV2	P
		0.43	DSS	06C	
		0.26	DSS	07C	
		1.57	MAI	TEH+ 1.65	
20	81	0.37	13%	AV2	
25	81	0.31	DSS	03H	
26	81	1.08	DSS	04C	S
		0.68	DSS	01H	
		0.65	DSS	06C	
		0.61	DSS	03H	
		0.82	DSS	07H	
		0.83	DSS/SAI	02H	
		0.52	MAI	TEH+ 6.78 to 14.64	

**TABLE 2.3**  
**STEAM GENERATOR B**  
**LOCATION AND % THROUGHWALL FOR EACH INDICATION OF DEGRADATION**

ROW	COL	VOLTS	INDICATION	LOCATION	PLUGGED OR SLEEVED
27	81	0.29	DSS	02H	
29	81	0.32	DSS	03H	
		1.00	DSS	01H	
30	81	0.53	DSS	07C	
9	82	0.13	DSS	03H	
18	82	0.33	DSS	02C	
20	82	0.38	DSS	02C	
21	82	0.20	SAI	TEH+ 8.60	P
28	82	0.45	DSS	04H	
		0.37	DSS	02H	
30	82	0.35	13%	AV3	
		0.82	DSS	02H	
		0.56	DSS	04H	
		0.58	DSS	01H	
		0.28	DSS	05H	
2	83		RBD		P
14	83	0.50	DSS	02C	
21	83	0.40	SAI	TEH+ 3.25	S
24	83	0.38	DSS	05C	
		0.60	DSS	02C	
14	84	0.62	DSS	06C	
18	84	0.38	13%	AV3	
20	84	0.27	10%	AV4	
		0.36	13%	AV3	
		0.57	DSS	01H	
21	84	0.36	13%	AV3	
22	84	0.35	13%	AV3	
14	85	0.18	DSS	06C	
15	85	0.25	DSS	02C	
		0.25	DSS	04C	
25	85	0.51	DSS	06C	
4	86	1.18	DSS	03H	
7	86	0.18	DSS	02C	
		0.63	DSS/SAI	06C	
17	86	0.50	DSS	07C	
19	86	0.73	DSS	06C	
23	86	0.22	DSS	06C	
24	86	0.34	DSS	06C	
25	86	0.44	DSS	05C	
4	87	0.92	DSS/MAI	07C	P
		0.93	DSS/SAI	03H	
		0.61	DSS/SAI	06C	
		0.85	SAI	TEH+ 1.20	
		0.60	MAI	TEH+ 7.29 to 17.53	
6	87	0.45	DSS	06C	
7	87	0.18	DSS	03H	
14	87	0.83	DSS	06C	
19	87	0.32	12%	AV2	
		0.30	DSS	07C	
		0.36	DSS	06C	
20	87	0.32	12%	AV2	
		0.35	12%	AV3	
21	87	0.35	13%	AV2	
		0.26	DSS	07C	
22	87	0.63	19%	AV2	
6	88	0.34	DSS	06C	P
		0.13	DSS	07C	
		0.40	DSS	04C	
		0.65	MAI	TEH+ 3.70 to 15.12	
8	88	0.52	DSS	06C	
11	88	0.41	15%	AV4	
		0.24	DSS	02H	

**TABLE 2.3**  
**STEAM GENERATOR B**  
**LOCATION AND % THROUGHWALL FOR EACH INDICATION OF DEGRADATION**

ROW	COL	VOLTS	INDICATION	LOCATION	PLUGGED OR SLEEVED
13	88	0.51	16%	AV4	
14	88	0.35	13%	AV1	
		0.35	13%	AV4	
19	88	0.44	15%	AV3	
		0.30	DSS	03C	
20	88	0.52	17%	AV3	
		0.58	DSS	03H	
		0.62	DSS	06C	
21	88	1.20	DSS	02C	
11	89	1.05	DSS/SAI	07C	P
12	89	0.43	15%	AV4	
15	89	0.35	13%	AV4	
		0.50	17%	AV3	
		0.30	DSS	06C	
17	89	0.65	DSS	07C	
18	89	0.53	DSS	01C	
19	89	0.83	DSS	06C	
		0.50	DSS	04H	
		1.18	DSS	01C	
		0.73	DSS	03H	
21	89	0.77	53%/VOL	01C	P
4	90	0.47	DSS	04C	P
		0.77	DSS/MAI	03C	
		0.64	DSS/SAI	07C	
		0.70	DSS/SAI	02H	
12	90	0.58	DSS	01C	
15	90	0.56	DSS	01C	
		0.62	DSS/SAI	06C	
17	90	0.36	13%	AV3	
19	90	0.34	DSS	06H	
		1.62	DSS	04C	
		0.84	DSS	07H	
		1.27	DSS/SAI	07C	
		1.26	DSS/SAI	06C	
		0.99	DSS/SAI	04H	
6	91	0.41	DSS	01C	
		0.30	DSS	04H	
13	91	0.29	DSS	01C	
15	91	0.58	DSS	02C	
1	92	NA	NA	NA	P
8	92	0.64	DSS	04H	
13	92	1.15	DSS	06C	
		0.30	DSS	02C	
15	92	0.18	DSS	02C	
1	93	NA	NA	NA	P
2	93	0.15	DSS	02H	
4	93	0.23	DSS	03H	
10	93	1.07	DSS	01C	
2	94	0.23	DSS	02H	

### **3.0 PERSONNEL EXPOSURE AND MONITORING REPORT**

Table 3.1 presents a tabulation of the total number of individuals for whom monitoring was provided, along with information on total station dose for the year.

Table 3.2 presents a tabulation of the number of station, utility, and other personnel (including contractors) receiving exposures greater than 100 mrem/yr (1.0 mSv/yr) and their associated person-rem exposure according to work and job functions. This table is provided per Regulatory Guide 1.16, Section C.1.b.(3), and Kewaunee Technical Specification 6.9.a.2.B.

**Table 3.1**  
**Total Statistics**  
**1/1/00 To 12/31/00**

Deep Dose Exposure Range	Number of Individuals in Range
None - Detected	412
Less then .100 rem	162
0.100 rem to 0.249 rem	81
0.250 rem to 0.499 rem	85
0.500 rem to 0.749 rem	37
0.750 rem to 0.999 rem	23
1.000 rem to 1.999 rem	5
Greater then 2.000 rem	0
Total Monitored Individuals	805
Total Site Deep Dose (NDE + DDE) = 99.634 rem	

**TABLE 3.2**  
**U.S.N.R.C. REGULATORY GUIDE 1.16 REPORT**  
**KEWAUNEE NUCLEAR POWER PLANT**  
**FROM 1/1/00 TO 12/31/00**

Work and Job Function	Number of Persons > .100 Rem			Total Man-Rem		
	Station	Utility	Contract	Station	Utility	Contract
-----						
Inservice Inspection						
Maintenance Person.	9	0	19	0.374	0.000	4.650
Operating Personnel	0	0	0	0.000	0.000	0.000
Health Physics Per.	1	0	8	0.011	0.000	0.444
Supervisory Person.	1	0	0	0.047	0.000	0.000
Engineering Person.	1	0	0	0.130	0.000	0.000
Routine Maintenance						
Maintenance Person.	42	0	30	3.432	0.000	2.961
Operating Personnel	9	0	2	0.297	0.000	0.006
Health Physics Per.	19	0	28	4.542	0.000	3.969
Supervisory Person.	2	0	0	0.536	0.000	0.000
Engineering Person.	4	0	0	0.269	0.000	0.000
Reactor Operations & Surv						
Maintenance Person.	3	0	1	0.260	0.000	0.001
Operating Personnel	11	0	0	2.587	0.000	0.000
Health Physics Per.	0	0	0	0.000	0.000	0.000
Supervisory Person.	0	0	0	0.000	0.000	0.000
Engineering Person.	3	0	0	0.004	0.000	0.000
Refueling						
Maintenance Person.	21	0	15	5.860	0.000	1.514
Operating Personnel	0	0	2	0.000	0.000	1.119
Health Physics Per.	8	0	2	1.120	0.000	0.159
Supervisory Person.	2	0	0	0.196	0.000	0.000
Engineering Person.	3	0	0	0.556	0.000	0.000
Special Maintenance						
Maintenance Person.	41	0	103	7.087	0.000	39.332
Operating Personnel	4	0	2	0.032	0.000	0.011
Health Physics Per.	17	0	23	1.741	0.000	3.223
Supervisory Person.	3	0	2	0.517	0.000	1.504
Engineering Person.	6	0	0	1.118	0.000	0.000
Waste Processing						
Maintenance Person.	11	0	5	0.056	0.000	0.043
Operating Personnel	0	0	0	0.000	0.000	0.000
Health Physics Per.	11	0	1	0.757	0.000	0.008
Supervisory Person.	0	0	0	0.000	0.000	0.000
Engineering Person.	0	0	0	0.000	0.000	0.000
Sub Totals						
Maintenance Person.	127	0	173	17.069	0.000	48.501
Operating Personnel	24	0	6	2.916	0.000	1.136
Health Physics Per.	56	0	62	8.171	0.000	7.803
Supervisory Person.	8	0	2	1.296	0.000	1.504
Engineering Person.	17	0	0	2.077	0.000	0.000
Grand Totals	232	0	243	31.529	0.000	58.944

Total Site Deep Dose (NDE + DDE) for Ind. with >.100 rem = 92.198 rem

\*\* INDIVIDUALS MAY BE LISTED UNDER MORE THAN ONE WORK AND JOB FUNCTION

#### **4.0 CHANGES IN THE EMERGENCY CORE COOLING SYSTEM MODEL**

The provisions of 10 CFR 50.46 require the reporting of corrections or changes to the emergency core cooling system (ECCS) models that are approved for use in performing the loss of coolant accident (LOCA) safety analysis. Corrections in the model resulted in a one degree increase in the small break LOCA model. The peak clad temperature (PCT) is now 1054°F. There were no changes or corrections to the large break model. The PCT remains at 2001°F.

## **5.0 FAILURES OF TURBINE STOP AND CONTROL VALVES**

There were no failures of the turbine stop and control valves during 2000.



## **6.0 MAXIMUM COOLANT ACTIVITY**

KNPP TS 6.9.a.2.D requires the documentation of the results of specific activity analysis in which the reactor coolant exceeded the limits of TS 3.1.c.1.A during the past year.

The reactor coolant did not exceed the limits of TS 3.1.c.1.A during 2000.