

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

February 24, 1992

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

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Docket No. 50-338
50-338
License No. NPF-4
NPF-7

Gentlemen:

VIRGINIA ELECTRIC AND POWER COMPANY
NORTH ANNA POWER STATION UNITS 1 AND 2
1991 ANNUAL STEAM GENERATOR INSERVICE INSPECTION REPORT


In accordance with the requirements of Technical Specifications 4.4.5.5.b and 6.9.1.4, Virginia Electric and Power Company submits herewith the 1991 Steam Generator Inservice Inspection Report for North Anna Power Station Units 1 and 2. There is no information provided for Unit 2 because there were no steam generator tube inspections performed for Unit 2 during the calendar year 1991.

During the February 1991 refueling outage for North Anna Power Station Unit 1, the tubes in the "A", "B", and "C" steam generators were examined. The information in Attachment 1 is a summary of the results of those examinations. These results include the number and extent of the tubes examined, location and characterization of each indication of an imperfection, and identification of the tubes that were plugged. Attachment 2 provides a glossary of the terms used in the report.

On December 19, 1991, we met with the NRC and informed them of the potential for degraded tubes to be in service that were not plugged in the February 1991 outage. As discussed in that meeting, any degraded tubes in service were analyzed to be bounded by the applicable safety analysis. On December 23, 1991, Unit 1 shutdown for a mid-cycle steam generator inspection outage. The results of the inspection outage will be documented in our 1992 annual steam generator inservice inspection report.

Should you require additional information, please contact us.

Very truly yours,



W. L. Stewart
Senior Vice President - Nuclear

Attachments

AD47.1

cc: U.S. Nuclear Regulatory Commission
Region II
101 Marietta Street, N.W.
Suite 2900
Atlanta, Georgia 30323

Mr. M. S. Lesser
NRC Senior Resident Inspector
North Anna Power Station

ATTACHMENT 1

NORTH ANNA POWER STATION UNIT 1
1991 ANNUAL STEAM GENERATOR
INSERVICE INSPECTION REPORT

VIRGINIA ELECTRIC AND POWER COMPANY

ATTACHMENT 1

NORTH ANNA POWER STATION
UNIT 1

REFUELING OUTAGE - FEBRUARY 1991
EDDY CURRENT EXAMINATION SUMMARY

During the 1991 refueling outage for North Anna Power Station Unit 1, the tubes in the "A", "B", and "C" steam generators were examined. The material that follows presents the results of those examinations. These results include the number and extent of the tubes examined, location and characterization of each indication of an imperfection, and identification of the tubes that were plugged. Attachment 2 to this letter provides a glossary of terms (abbreviations) used.

ATTACHMENT 1a
NORTH ANNA POWER STATION
UNIT 1

REFUELING OUTAGE - FEBRUARY 1991

Steam Generator "A"

In "A" Steam Generator, 3029 tubes were examined full length (tube end to tube end) with bobbin probes. This represents approximately 97% of the available tubes. In row two of this steam generator, 85 tubes were examined from the seventh support plate to the tube end on both the inlet and outlet sides. Supplemental examinations were also performed using Rotating Pancake, 8x1, and Profilometry probes where additional confirmatory or other data was desired. Of the tubes examined, 66 had pluggable circumferential indications, 81 had pluggable axial indications, two had pluggable indications between 90% and 100% through wall, one had a pluggable indication between 80% and 89% through wall, four had pluggable indications between 70% and 79% through wall, two had pluggable indications between 60% and 69% through wall, five had pluggable indications between 50% and 59% through wall, 20 had pluggable indications between 40% and 49% through wall, 17 had indications between 30% and 39% through wall, 26 had indications between 20% and 29% through wall, and 13 had indications between 1% and 19% through wall. A total of 190 tubes were plugged in the "A" Steam Generator. Refer to the table below for details.

ATTACHMENT 1a
NORTH ANNA POWER STATION UNIT 1

STEAM GENERATOR "A"

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
4	4	97	2H	PLUGGED
4	4	MAI	2H	PLUGGED
2	5	DI	1H	PLUGGED
2	5	98	2H	PLUGGED
2	5	MAI	1H	PLUGGED
2	5		2H	PLUGGED
10	5		*	PLUGGED
11	5	*	*	PLUGGED
10	6	98	2H	PLUGGED
10	6	SAI	2H	PLUGGED
13	6	PI	1H	PLUGGED
13	6	MAI	1H	PLUGGED
4	9	DI	2H	PLUGGED
4	9	PI	2H	PLUGGED
4	9	MAI	2H	PLUGGED
9	9	49	TSH	PLUGGED
9	9	98	7H	PLUGGED
9	9	DI	7H	PLUGGED
9	9	PI	1H	PLUGGED
9	9	MAI	1H	PLUGGED
9	9	SAI	7H	PLUGGED
14	9	96	2H	PLUGGED
14	9	SAI	2H	PLUGGED
17	9	PI	1H	PLUGGED
17	9	85	1H	PLUGGED
17	9	99	1H	PLUGGED
2	10	DI	1H	PLUGGED
2	10	MAI	1H	PLUGGED
21	10	23	1H	PLUGGED
21	10	PI	1H	PLUGGED
21	10	MAI	1H	PLUGGED
4	11	DI	5H	PLUGGED
4	11	SAI	5H	PLUGGED
24	12	100	2H	PLUGGED
24	12	SAI	2H	PLUGGED

ATTACHMENT 1a
NORTH ANNA POWER STATION UNIT 1

STEAM GENERATOR "A"

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
4	13	97	1H	PLUGGED
4	13	PI	1H	PLUGGED
4	13	SAI	1H	PLUGGED
31	13	PI	1H	PLUGGED
31	13	COI	1H	PLUGGED
14	14	PI	1H	PLUGGED
14	14	COI	1H	PLUGGED
25	16	DI	2H	PLUGGED
25	16	SAI	2H	PLUGGED
4	17	70	TSH	PLUGGED
4	17	44	TSH	PLUGGED
28	18	PI	2H	PLUGGED
28	18	45	2H	PLUGGED
3	19	97	1H	PLUGGED
3	19	93	2H	PLUGGED
3	19	MAI	1H	PLUGGED
3	19	SAI	2H	PLUGGED
18	19	PI	2H	PLUGGED
18	19	MAI	2H	PLUGGED
36	21	PI	1H	PLUGGED
36	21	SAI	1H	PLUGGED
6	22	SAI	TSH	PLUGGED
6	22	PI	TSH	PLUGGED
22	22	INF	AV3	
24	22	14	AV3	
25	22	INF	AV3	
30	22	INF	AV3	
35	22	PI	1H	PLUGGED
35	22	MAI	1H	PLUGGED
6	23	94	1H	PLUGGED
6	23	DI	2H	PLUGGED
6	23	SAI	1H	PLUGGED
6	23	SAI	2H	PLUGGED

ATTACHMENT 1a
NORTH ANNA POWER STATION UNIT 1

STEAM GENERATOR "A"

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
14	23	SCI	TSH	PLUGGED
12	24	59	TSH	PLUGGED
12	24	SCI	TSH	PLUGGED
13	24	SCI	TSH	PLUGGED
14	24	25	TSH	
16	24	SCI	TSH	PLUGGED
16	24	PI	TSH	PLUGGED
23	24	21	TSH	
39	24	PI	1H	PLUGGED
39	24	MAI	1H	PLUGGED
7	25	SCI	TSH	PLUGGED
7	25	PI	TSH	PLUGGED
16	25	SCI	TSH	PLUGGED
20	25	SCI	TSH	PLUGGED
20	25	PI	TSH	PLUGGED
11	26	SCI	TSH	PLUGGED
11	26	PI	TSH	PLUGGED
23	26	DI	2H	PLUGGED
23	26	78	2H	PLUGGED
23	26	SAI	2H	PLUGGED
32	26	PI	2H	PLUGGED
32	26	COI	2H	PLUGGED
38	26	INF	AV3	PLUGGED
38	26	PI	2H	PLUGGED
38	26	SAI	2H	PLUGGED
41	26	INF	AV1	
2	27	PI	1H	PLUGGED
2	27	COI	1H	PLUGGED
8	27	SCI	TSH	PLUGGED
13	27	26	TSH	
20	27	49	TSH	PLUGGED

ATTACHMENT 1a
NORTH ANNA POWER STATION UNIT 1

STEAM GENERATOR "A"

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
28	27	PI	1H	PLUGGED
28	27	COI	1H	PLUGGED
36	27	INF	AV3	
37	27	INF	AV2	
41	27	INF	AV1	
16	28	SCI	TSH	PLUGGED
16	28	PI	TSH	PLUGGED
18	28	SCI	TSH	PLUGGED
18	28	PI	TSH	PLUGGED
33	28	PI	1H	PLUGGED
33	28	COI	1H	PLUGGED
33	28	PI	1H	PLUGGED
17	29	SCI	TSH	PLUGGED
17	29	PI	TSH	PLUGGED
18	29	MCI	TSH	PLUGGED
18	29	MCI	TSH	PLUGGED
18	29	PI	TSH	PLUGGED
19	29	INF	AV2	
22	29	SCI	TSH	PLUGGED
42	29	INF	AV3	
9	30	TI	TSH	PLUGGED
9	30	55	TSH	PLUGGED
10	30	22	TSH	
16	30	52	3H	PLUGGED
16	30	SAI	3H	PLUGGED
17	30	SCI	TSH	PLUGGED
20	30	SCI	TSH	PLUGGED
20	30	PI	TSH	PLUGGED
20	30	PI	2H	PLUGGED
20	30	COI	2H	PLUGGED

ATTACHMENT 1a
NORTH ANNA POWER STATION UNIT 1

STEAM GENERATOR "A"

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
35	30	PI	2H	PLUGGED
35	30	MAI	2H	PLUGGED
8	31	SCI	TSH	PLUGGED
18	31	SCI	TSH	PLUGGED
18	31	PI	TSH	PLUGGED
9	32	SCI	TSH	PLUGGED
9	32	PI	TSH	PLUGGED
9	32	PI	TSH	PLUGGED
17	32	SCI	TSH	PLUGGED
17	32	PI	TSH	PLUGGED
18	32	SCI	TSH	PLUGGED
3	33	PI	1H	PLUGGED
3	33	72	1H	PLUGGED
3	33	COI	1H	PLUGGED
9	33	SCI	TSH	PLUGGED
10	33	25	TSH	
11	33	11	TSH	
12	33	16	TSH	
13	33	34	TSH	
14	33	42	TSH	PLUGGED
14	33	97	4H	PLUGGED
14	33	SAI	4H	PLUGGED
14	33	SAI	4H	PLUGGED
19	33	26	TSH	PLUGGED
19	33	SCI	TSH	PLUGGED
28	33	58	TSH	PLUGGED
9	34	96	2H	PLUGGED
9	34	91	2H	PLUGGED
9	34	SAI	2H	PLUGGED
9	34	SAI	2H	PLUGGED
14	34	24	TSH	

ATTACHMENT 1a
NORTH ANNA POWER STATION UNIT 1

STEAM GENERATOR "A"

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
19	34	MCI	TSH	PLUGGED
19	34	MCI	TSH	PLUGGED
30	34	PI	1H	PLUGGED
30	34	90	1H	PLUGGED
13	35	29	TSH	
14	35	45	TSH	PLUGGED
14	35	24	TSH	PLUGGED
14	35	19	TSH	PLUGGED
23	35	PI	1H	PLUGGED
23	35	21	1H	PLUGGED
24	35	SCI	TSH	PLUGGED
39	35	98	2H	PLUGGED
39	35	81	2H	PLUGGED
39	35	PI	2H	PLUGGED
39	35	SAI	2H	PLUGGED
10	36	PI	3H	PLUGGED
10	36	43	3H	PLUGGED
11	36	TI	TSH	PLUGGED
11	36	46	TSH	PLUGGED
13	36	36	TSH	
14	36	96	1H	PLUGGED
14	36	SAI	1H	PLUGGED
23	36	SCI	TSH	PLUGGED
34	36	SAI	TSH	PLUGGED
12	37	99	3H	PLUGGED
12	37	77	3H	PLUGGED
12	37	98	4H	PLUGGED
12	37	87	4H	PLUGGED
12	37	SAI	3H	PLUGGED
12	37	SAI	4H	PLUGGED
12	37	SAI	4H	PLUGGED
14	37	42	TSH	PLUGGED
21	37	MCI	TSH	PLUGGED
21	37	MCI	TSH	PLUGGED

ATTACHMENT 1a
NORTH ANNA POWER STATION UNIT 1

STEAM GENERATOR "A"

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
25	37	SCI	TSH	PLUGGED
33	37	PI	1H	PLUGG' D
33	37	SAI	1H	PLUG' ED
9	38	*	*	PLUGGED
10	38	PI	5H	PLUGGED
10	38	42	5H	PLUGGED
12	38	84	2H	PLUGGED
12	38	SAI	2H	PLUGGED
12	38	SAI	2H	PLUGGED
14	38	32	TSH	
18	38	SCI	TSH	PLUGGED
2	39	PI	2H	PLUGGED
2	39	COI	2H	PLUGGED
4	39	96	5H	PLUGGED
4	39	SAI	5H	PLUGGED
4	39	SAI	5H	PLUGGED
10	39	17	TSH	
12	39	13	TSH	
13	39	23	TSH	
15	39	38	TSH	
16	39	17	TSH	
25	39	PI	1H	PLUGGED
25	39	COI	1H	PLUGGED
6	40	DI	1H	PLUGGED
6	40	PI	1H	PLUGGED
6	40	SAI	1H	PLUGGED
10	40	29	TSH	
12	40	27	TSH	
13	40	40	TSH	PLUGGED

ATTACHMENT 1a
NORTH ANNA POWER STATION UNIT 1

STEAM GENERATOR "A"

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
15	40	27	TSH	
16	40	44	TSH	PLUGGED
16	40	DI	1H	PLUGGED
16	40	SAI	1H	PLUGGED
21	40	SCI	TSH	PLUGGED
27	40	43	TSH	PLUGGED
27	40	40	TSH	PLUGGED
27	40	54	TSH	PLUGGED
28	40	54	TSH	PLUGGED
31	41	44	TSH	PLUGGED
32	41	70	TSH	PLUGGED
3	42	25	TSH	
5	42	20	5H	
6	42	PI	1H	PLUGGED
6	42	23	1H	PLUGGED
13	42	21	TSH	
13	42	38	TSH	
19	42	SCI	TSH	PLUGGED
19	42	PI	TSH	PLUGGED
20	42	36	TSH	
23	42	53	TSH	PLUGGED
15	43	45	TSH	PLUGGED
17	43	26	TSH	
22	43	42	TSH	PLUGGED
22	43	60	TSH	PLUGGED
23	43	87	2H	PLUGGED
23	43	SAI	2H	PLUGGED

ATTACHMENT 1a
NORTH ANNA POWER STATION UNIT 1

STEAM GENERATOR "A"

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
32	43	34	TSH	PLUGGED
32	43	44	TSH	PLUGGED
32	43	PI	2H	PLUGGED
32	43	COI	2H	PLUGGED
9	44	17	5H	
10	44	23	TSH	
11	44	3	TSH	
12	44	69	2H	PLUGGED
12	44	PI	2H	PLUGGED
12	44	SAI	2H	PLUGGED
14	44	30	TSH	
14	44	23	TSH	
15	44	30	TSH	
16	44	23	TSH	
17	44	DI	6H	PLUGGED
17	44	SAI	6H	PLUGGED
20	44	30	TSH	
32	44	33	TSH	
7	45	**	**	PLUGGED
9	45	29	TSH	PLUGGED
9	45	36	TSH	PLUGGED
14	45	40	TSH	PLUGGED
15	45	27	TSH	
8	46	SAI	TSH	PLUGGED
14	46	DI	1H	PLUGGED
14	46	SAI	1H	PLUGGED
16	46	30	TSH	
24	47	44	TSH	PLUGGED
33	47	26	TSH	

ATTACHMENT 1a
NORTH ANNA POWER STATION UNIT 1

STEAM GENERATOR "A"

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
16	48	11	TSH	
16	48	15	TSH	
33	48	29	TSH	PLUGGED
33	48	SAI	TSH	PLUGGED
45	48	63	3H	PLUGGED
45	48	SAI	3H	PLUGGED
11	49	42	TSH	PLUGGED
15	49	21	TSH	
15	49	21	TSH	
16	49	58	TSH	PLUGGED
16	49	70	TSH	PLUGGED
25	49	72	5H	PLUGGED
25	49	72	5H	PLUGGED
33	49	26	TSH	PLUGGED
33	49	83	1H	PLUGGED
33	49	79	2H	PLUGGED
33	49	34	TSH	PLUGGED
33	49	SAI	1H	PLUGGED
33	49	COI	1H	PLUGGED
33	49	SAI	2H	PLUGGED
33	49	PI	1H	PLUGGED
45	49	19	AV3	
4	50	90	4H	PLUGGED
4	50	SAI	4H	PLUGGED
7	50	49	TSH	PLUGGED
15	50	SAI	TSH	PLUGGED
18	50	30	TSH	
20	50	47	TSH	PLUGGED
20	50	PI	2H	PLUGGED
20	50	14	2H	PLUGGED
25	50	SCI	TSH	PLUGGED
5	51	99	4H	PLUGGED
5	51	MAI	4H	PLUGGED

ATTACHMENT 1a
NORTH ANNA POWER STATION UNIT 1

STEAM GENERATOR "A"

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
28	51	44	TSH	PLUGGED
33	51	34	TSH	
5	52	86	1H	PLUGGED
5	52	SAI	1H	PLUGGED
5	52	PI	1H	PLUGGED
13	52	SCI	TSH	PLUGGED
14	52	SCI	TSH	PLUGGED
22	52	SCI	TSH	PLUGGED
24	52	PI	TSH	PLUGGED
24	52	SCI	TSH	PLUGGED
30	52	PI	1H	PLUGGED
30	52	SAI	1H	PLUGGED
3	53	DI	1H	PLUGGED
3	53	SAI	1H	PLUGGED
8	53	DI	4H	PLUGGED
8	53	98	5H	PLUGGED
8	53	94	5H	PLUGGED
8	53	MAI	5H	PLUGGED
8	53	DI	4H	PLUGGED
8	53	91	5H	PLUGGED
8	53	DI	5H	PLUGGED
8	53	SAI	4H	PLUGGED
10	53	DI	5H	PLUGGED
10	53	SAI	5H	PLUGGED
16	53	SCI	TSH	PLUGGED
18	53	SCI	TSH	PLUGGED
27	53	DI	2H	PLUGGED
27	53	DI	2H	PLUGGED
27	53	SAI	2H	PLUGGED
27	53	MAI	2H	PLUGGED
31	53	PI	1H	PLUGGED
31	53	PI	2H	PLUGGED
31	53	36	1H	PLUGGED
31	53	13	2H	PLUGGED

ATTACHMENT 1a
NORTH ANNA POWER STATION UNIT 1

STEAM GENERATOR "A"

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
32	53	PI	2H	PLUGGED
32	53	PI	3H	PLUGGED
32	53	SAI	2H	PLUGGED
32	53	1	3H	PLUGGED
33	53	DI	1H	PLUGGED
33	53	DI	1H	PLUGGED
33	53	MAI	1H	PLUGGED
33	53	COI	1H	PLUGGED
33	53	PI	1H	PLUGGED
33	53	PI	2H	PLUGGED
33	53	18	2H	PLUGGED
5	54	88	1H	PLUGGED
5	54	90	1H	PLUGGED
5	54	SAI	1H	PLUGGED
5	54	SAI	1H	PLUGGED
6	54	DI	1H	PLUGGED
6	54	98	1H	PLUGGED
6	54	DI	5H	PLUGGED
6	54	SAI	1H	PLUGGED
6	54	SAI	1H	PLUGGED
6	54	COI	5H	PLUGGED
6	54	SAI	5H	PLUGGED
6	54	PI	1H	PLUGGED
6	54	PI	5H	PLUGGED
25	54	PI	1H	PLUGGED
25	54	COI	1H	PLUGGED
29	54	DI	2H	PLUGGED
29	54	SAI	2H	PLUGGED
34	54	46	TSH	PLUGGED
34	54	70	TSH	PLUGGED
34	54	81	TSH	PLUGGED
34	54	SAI	TSH	PLUGGED
34	54	PI	TSH	PLUGGED
38	54	PI	1H	PLUGGED
38	54	SAI	1H	PLUGGED
40	54	PI	2H	PLUGGED
40	54	SAI	2H	PLUGGED
10	55	DI	2H	PLUGGED
10	55	SAI	2H	PLUGGED

ATTACHMENT 1a
NORTH ANNA POWER STATION UNIT 1

STEAM GENERATOR "A"

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
26	55	SCI	TSH	PLUGGED
26	55	PI	TSH	PLUGGED
30	55	31	TSH	
32	55	DI	2H	PLUGGED
32	55	97	2H	PLUGGED
32	55	SAI	2H	PLUGGED
32	55	SAI	2H	PLUGGED
32	55	SAI	2H	PLUGGED
24	56	DI	2H	PLUGGED
24	56	SCI	TSH	PLUGGED
24	56	SAI	2H	PLUGGED
24	56	PI	TSH	PLUGGED
27	56	53	TSH	PLUGGED
27	56	SAI	TSH	PLUGGED
27	56	PI	TSH	PLUGGED
33	56	94	2H	PLUGGED
33	56	SAI	2H	PLUGGED
4	57	98	1H	PLUGGED
4	57	SAI	1H	PLUGGED
4	57	PI	1H	PLUGGED
29	57	26	TSH	PLUGGED
29	57	44	TSH	PLUGGED
29	57	28	TSH	PLUGGED
29	57	PI	2H	PLUGGED
29	57	SAI	2H	PLUGGED
30	57	33	TSH	
14	58	SCI	TSH	PLUGGED
23	58	85	6H	PLUGGED
23	58	SAI	6H	PLUGGED

ATTACHMENT 1a
NORTH ANNA POWER STATION UNIT 1

STEAM GENERATOR "A"

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
10	59	28	TSH	PLUGGED
10	59	DI	1H	PLUGGED
10	59	PI	1H	PLUGGED
10	59	61	1H	PLUGGED
10	59	COI	1H	PLUGGED
10	59	SAI	1H	PLUGGED
30	59	15	TSH	PLUGGED
30	59	40	TSH	PLUGGED
35	59	PI	2H	PLUGGED
35	59	28	2H	PLUGGED
15	60	SCI	TSH	PLUGGED
37	60	17	AV4	
44	60	14	AV3	
5	61	99	6H	PLUGGED
5	61	SAI	6H	PLUGGED
4	62	69	1H	PLUGGED
4	62	SAI	1H	PLUGGED
13	62	SCI	TSH	PLUGGED
25	62	SCI	TSH	PLUGGED
25	62	PI	TSH	PLUGGED
2	63	SCI	TSH	PLUGGED
21	63	27	TSH	
41	63	81	1H	PLUGGED
41	63	89	2H	PLUGGED
41	63	SAI	1H	PLUGGED
41	63	SAI	2H	PLUGGED
6	64	DI	4H	PLUGGED
6	64	COI	4H	PLUGGED
6	64	SAI	4H	PLUGGED
10	64	28	TSH	
23	64	50	TSH	PLUGGED
23	64	63	TSH	PLUGGED
23	64	52	TSH	PLUGGED

ATTACHMENT 1a
NORTH ANNA POWER STATION UNIT 1

STEAM GENERATOR "A"

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
35	64	INF	AV2	
38	65	INF	AV2	
2	66	81	5H	PLUGGED
2	66	SAI	5H	PLUGGED
11	66	PI	TSH	PLUGGED
11	66	SCI	TSH	PLUGGED
39	66	INF	AV2	
39	66	INF	AV3	
40	66	INF	AV3	
3	68	97	1H	PLUGGED
3	68	SAI	1H	PLUGGED
40	69	77	1H	PLUGGED
40	69	SAI	1H	PLUGGED
6	70	SCI	TSH	PLUGGED
7	70	DI	5H	PLUGGED
7	70	DI	5H	PLUGGED
7	70	SAI	5H	PLUGGED
8	70	75	2H	PLUGGED
8	70	75	3H	PLUGGED
8	70	SAI	2H	PLUGGED
8	70	SAI	2H	PLUGGED
8	70	SAI	3H	PLUGGED
8	70	SAI	3H	PLUGGED
11	71	PI	TSH	PLUGGED
11	71	SCI	TSH	PLUGGED
37	71	PI	1H	PLUGGED
37	71	COI	1H	PLUGGED
9	72	DI	2H	PLUGGED
9	72	SAI	2H	PLUGGED
16	72	14	TSH	
24	72	23	AV2	

ATTACHMENT 1a
NORTH ANNA POWER STATION UNIT 1

STEAM GENERATOR "A"

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
4	73	PI	1H	PLUGGED
4	73	SAI	1H	PLUGGED
4	73	99	1H	PLUGGED
4	73	SAI	1H	PLUGGED
10	74	PI	TSH	PLUGGED
10	74	SCI	TSH	PLUGGED
17	74	75	1H	PLUGGED
17	74	SAI	1H	PLUGGED
27	74	40	TSH	PLUGGED
16	76	DI	1H	PLUGGED
16	76	DI	1H	PLUGGED
16	76	SAI	1H	PLUGGED
16	76	SAI	1H	PLUGGED
20	77	DI	2H	PLUGGED
20	77	SAI	2H	PLUGGED
20	77	SAI	2H	PLUGGED
11	78	DI	1H	PLUGGED
11	78	SAI	1H	PLUGGED
24	81	99	1H	PLUGGED
24	81	DI	1H	PLUGGED
24	81	SAI	1H	PLUGGED
24	81	SAI	1H	PLUGGED
28	81	22	TSH	
28	81	28	TSH	
5	83	96	1H	PLUGGED
5	83	74	5H	PLUGGED
5	83	SAI	5H	PLUGGED
6	83	87	TSH	PLUGGED
29	83	43	TSH	PLUGGED

ATTACHMENT 1a
NORTH ANNA POWER STATION UNIT 1

STEAM GENERATOR "A"

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
17	91	DI	2H	PLUGGED
17	91	SAI	3H	PLUGGED
17	91	SAI	2H	PLUGGED
3	92	46	3H	PLUGGED

* These tubes were scheduled to be restored to service this outage but were plugged due to eddy current indications or other anomalies.

** This tube was plugged by mistake.

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ATTACHMENT 1b
NORTH ANNA POWER STATION
UNIT 1

REFUELING OUTAGE - FEBRUARY 1991
EDDY CURRENT EXAMINATION SUMMARY

Steam Generator "B"

In Steam Generator "B", 3057 tubes were examined full length (tube end to tube end) with bobbin probes. This represents approximately 98% of the available tubes. In row 2 of this steam generator, 59 tubes were examined from the seventh tube support plate to the tube end on both the inlet and outlet sides. Supplemental examinations were also performed using Rotating Pancake, 8x1, and Profilometry probes where additional confirmatory or other data was desired. Of the tubes examined, 65 had pluggable circumferential indications, 84 had pluggable axial indications, 50 had pluggable circumferential indications at the inlet tubesheet, 14 had pluggable circumferentially oriented indications at support plates, two had pluggable indications between 50% and 59% through wall, four had pluggable indications between 40% and 49% through wall, 23 three had indications between 30% and 39% through wall, 71 had indications between 20% and 29% through wall, and 11 had indications between 1% and 19% through wall. A total of 156 tubes were plugged in the "B" Steam Generator. Refer to the table below for details.

ATTACHMENT 1b
NORTH ANNA POWER STATION UNIT 1

STEAM GENERATOR "B"

<u>ROW</u>	<u>COL</u>	<u>IND</u>	<u>LOC</u>	<u>REMARKS</u>
3	2	DI	1H	PLUGGED
3	2	PI	1H	PLUGGED
3	2	SAI	1H	PLUGGED
4	2	PI	3H	PLUGGED
4	2	SAI	3H	PLUGGED
13	5	22	AV4	
15	5	25	AV2	
15	5	20	AV3	
15	5	16	AV4	
3	7	92	2H	PLUGGED
3	7	MAI	2H	PLUGGED
7	7	PI	1H	PLUGGED
7	7	SAI	1H	PLUGGED
15	7	25	AV3	
20	7	32	AV3	
23	7	24	AV4	
2	8	92	1H	PLUGGED
2	8	SAI	1H	PLUGGED
15	8	23	AV2	
23	8	INF	AV	
23	8	INF	AV2	
24	8	32	AV2	
25	8	23	AV1	
2	9	92	1H	PLUGGED
2	9	SAI	1H	PLUGGED
2	9	SAI	1H	PLUGGED
5	9	PI	1H	PLUGGED
5	9	PI	2H	PLUGGED
5	9	COI	1H	PLUGGED
5	9	COI	1H	PLUGGED
5	9	COI	2H	PLUGGED
5	9	COI	2H	PLUGGED
5	9	SAI	2H	PLUGGED

ATTACHMENT 1b
NORTH ANNA POWER STATION UNIT 1

STEAM GENERATOR "B"

<u>ROW</u>	<u>COL</u>	<u>IND</u>	<u>LOC</u>	<u>REMARKS</u>
23	9	INF	AV1	
23	9	31	AV2	
23	9	20	AV3	
23	9	17	AV4	
24	9	21	AV1	
24	9	19	AV3	
25	9	INF	AV1	
26	9	20	AV1	
2	10	90	1H	PLUGGED
2	10	PI	1H	PLUGGED
2	10	MAI	1H	PLUGGED
23	10	INF	AV2	
24	10	INF	AV2	
24	10	27	AV4	
25	10	INF	AV2	
26	10	INF	AV1	
16	11	INF	AV3	
24	11	INF	AV1	
24	11	INF	AV2	
24	11	INF	AV4	
25	11	31	AV2	
25	11	25	AV4	
27	11	INF	AV3	
2	12	98	1H	PLUGGED
2	12	SAI	1H	PLUGGED
9	12	92	1H	PLUGGED
9	12	96	1H	PLUGGED
9	12	PI	1H	PLUGGED
9	12	SAI	1H	PLUGGED
9	12	SAI	1H	PLUGGED
23	12	INF	AV1	
23	12	37	AV2	
23	12	28	AV4	

ATTACHMENT 1b
NORTH ANNA POWER STATION UNIT 1

STEAM GENERATOR "B"

<u>ROW</u>	<u>COL</u>	<u>IND</u>	<u>LOC</u>	<u>REMARKS</u>
24	12	32	AV2	
25	12	33	AV1	
25	12	36	AV2	
25	12	30	AV3	
25	12	26	AV4	
30	12	INF	AV2	
30	12	INF	AV3	
19	13	85	2H	PLUGGED
19	13	SAI	2H	PLUGGED
22	13	22	AV3	
24	13	INF	AV1	
24	13	INF	AV3	
25	13	34	AV1	
25	13	34	AV3	
25	13	32	AV4	
26	13	32	AV1	
26	13	INF	AV2	
26	13	INF	AV3	
26	13	INF	AV4	
27	13	21	AV1	
27	13	INF	AV2	
27	13	32	AV3	
27	13	31	AV4	
28	13	29	AV3	
29	13	36	AV1	
29	13	32	AV2	
29	13	23	AV3	
29	13	29	AV4	
30	13	33	AV1	
30	13	29	AV2	
30	13	17	AV3	
30	13	21	AV4	
11	14	25	TSH	PLUGGED
11	14	PI	1H	PLUGGED
11	14	CGI	1H	PLUGGED
11	14	SAI	1H	PLUGGED

ATTACHMENT 1b
NORTH ANNA POWER STATION UNIT 1

STEAM GENERATOR "B"

<u>ROW</u>	<u>COL</u>	<u>IND</u>	<u>LOC</u>	<u>REMARKS</u>
15	14	INF	AV2	
17	14	22	AV2	
17	14	24	AV3	
17	14	INF	AV4	
20	14	INF	AV4	
21	14	INF	AV3	
21	14	INF	AV4	
23	14	INF	AV2	
23	14	INF	AV4	
24	14	INF	AV1	
24	14	INF	AV2	
24	14	24	AV4	
25	14	24	AV1	
25	14	INF	AV2	
25	14	26	AV4	
26	14	INF	AV1	
26	14	25	AV2	
26	14	22	AV3	
26	14	27	AV4	
27	14	INF	AV1	
27	14	INF	AV2	
27	14	21	AV3	
28	14	INF	AV2	
29	14	INF	AV1	
29	14	INF	AV2	
29	14	INF	AV4	
6	15	PI	1H	PLUGGED
6	15	PI	2H	PLUGGED
6	15	COI	1H	PLUGGED
6	15	COI	2H	PLUGGED
11	15	PI	2H	PLUGGED
11	15	PI	3H	PLUGGED
11	15	COI	2H	PLUGGED
11	15	COI	3H	PLUGGED
13	15	INF	AV3	

ATTACHMENT 1b
NORTH ANNA POWER STATION UNIT 1

STEAM GENERATOR "B"

<u>ROW</u>	<u>COL</u>	<u>IND</u>	<u>LOC</u>	<u>REMARKS</u>
17	15	INF	AV1	
17	15	INF	AV3	
19	15	INF	AV3	
22	15	INF	AV3	
23	15	INF	AV1	
23	15	INF	AV2	
24	15	INF	AV1	
24	15	INF	AV2	
25	15	INF	AV1	PLUGGED
25	15	INF	AV2	PLUGGED
25	15	PI	4H	PLUGGED
25	15	SAI	4H	PLUGGED
26	15	INF	AV2	
27	15	25	AV2	
28	15	21	AV4	
29	15	INF	AV1	
29	15	INF	AV2	
29	15	INF	AV3	
29	15	23	AV4	
29	15	6	5H	
31	15	INF	AV3	
9	16	DI	1H	PLUGGED
9	16	SAI	1H	PLUGGED
16	16	23	AV1	
17	16	23	AV3	
18	16	INF	AV4	
23	16	DI	3H	PLUGGED
23	16	INF	AV1	PLUGGED
23	16	INF	AV2	PLUGGED
23	16	SAI	3H	PLUGGED
24	16	INF	AV1	
24	16	INF	AV2	

ATTACHMENT 1b
 NORTH ANNA POWER STATION UNIT 1

STEAM GENERATOR "B"

<u>ROW</u>	<u>COL</u>	<u>IND</u>	<u>LOC</u>	<u>REMARKS</u>
25	16	INF	AV1	
25	16	INF	AV2	
25	16	INF	AV4	
26	16	INF	AV1	
26	16	25	AV2	
26	16	INF	AV3	
26	16	INF	AV4	
27	16	INF	AV1	
27	16	INF	AV2	
27	16	INF	AV4	
29	16	INF	AV1	
29	16	INF	AV2	
29	16	26	AV3	
29	16	26	AV4	
32	16	25	AV1	
32	16	26	AV2	
32	16	26	AV4	
33	16	INF	AV1	
33	16	INF	AV2	
33	16	22	AV4	
15	17	INF	AV2	
25	17	INF	AV2	
25	17	23	AV3	
27	17	INF	AV1	
27	17	INF	AV2	
27	17	INF	AV3	
27	17	INF	AV4	
30	17	INF	AV2	
32	17	INF	AV1	
32	17	INF	AV2	
7	18	SCI	TSH	PLUGGED
7	18	PI	TSH	PLUGGED
20	18	INF	AV3	
21	18	INF	AV3	
22	18	INF	AV3	

ATTACHMENT 1b
NORTH ANNA POWER STATION UNIT 1

STEAM GENERATOR "B"

<u>ROW</u>	<u>COL</u>	<u>IND</u>	<u>LOC</u>	<u>REMARKS</u>
23	18	INF	AV2	
23	18	INF	AV3	
24	18	INF	AV1	
24	18	INF	AV2	
24	18	INF	AV3	
25	18	INF	AV2	
27	18	INF	AV1	
27	18	INF	AV2	
29	18	27	AV2	
29	18	24	AV4	
32	18	INF	AV1	
32	18	INF	AV2	
33	18	INF	AV1	
33	18	INF	AV2	
33	18	INF	AV3	
35	18	INF	AV4	
10	19	MCI	TSH	PLUGGED
10	19	MCI	TSH	PLUGGED
10	19	PI	TSH	PLUGGED
16	19	INF	AV3	
16	19	INF	AV4	
17	19	INF	AV3	
21	19	INF	AV1	
21	19	INF	AV2	
21	19	INF	AV3	
22	19	INF	AV3	
23	19	INF	AV1	
23	19	INF	AV2	
24	19	INF	AV1	
24	19	INF	AV2	
24	19	INF	AV3	
24	19	INF	AV4	
25	19	INF	AV1	
25	19	INF	AV2	

ATTACHMENT 1b
NORTH ANNA POWER STATION UNIT 1

STEAM GENERATOR "B"

<u>ROW</u>	<u>COL</u>	<u>IND</u>	<u>LOC</u>	<u>REMARKS</u>
26	19	INF	AV1	
26	19	INF	AV2	
26	19	INF	AV3	
26	19	INF	AV4	
27	19	19	AV3	
27	19	INF	AV4	
28	19	INF	AV3	
29	19	INF	AV2	
30	19	INF	AV3	
31	19	18	AV3	
32	19	INF	AV1	
32	19	INF	AV2	
33	19	INF	AV1	
33	19	INF	AV2	
35	19	INF	AV3	
10	20	SCI	TSH	PLUGGED
10	20	PI	TSH	PLUGGED
15	20	98	1H	PLUGGED
15	20	INF	AV3	PLUGGED
15	20	SAI	1H	PLUGGED
17	20	INF	AV3	
18	20	INF	AV3	
21	20	INF	AV3	
23	20	INF	AV3	
24	20	INF	AV1	
24	20	INF	AV2	
24	20	INF	AV3	
25	20	INF	AV1	
25	20	INF	AV2	
25	20	INF	AV3	
25	20	INF	AV4	

ATTACHMENT 1b
NORTH ANNA POWER STATION UNIT 1

STEAM GENERATOR "B"

<u>ROW</u>	<u>COL</u>	<u>IND</u>	<u>LOC</u>	<u>REMARKS</u>
26	20	INF	AV1	
26	20	INF	AV3	
26	20	INF	AV4	
28	20	INF	AV3	
28	20	INF	AV4	
29	20	INF	AV1	
29	20	INF	AV2	
29	20	INF	AV3	
29	20	INF	AV4	
30	20	25	AV1	
30	20	INF	AV2	
30	20	INF	AV3	
30	20	22	AV4	
32	20	INF	AV1	
32	20	INF	AV2	
32	20	24	AV3	
32	20	27	AV4	
33	20	INF	AV2	
34	20	INF	AV2	
34	20	INF	AV4	
36	20	22	AV4	
11	21	28	TSH	
15	21	INF	AV1	
16	21	INF	AV1	
19	21	INF	AV3	
20	21	INF	AV2	
20	21	INF	AV3	
20	21	INF	AV4	
22	21	INF	AV3	
22	21	INF	AV4	
23	21	INF	AV1	
23	21	26	AV2	
23	21	29	AV3	
23	21	INF	AV4	

ATTACHMENT 1b
NORTH ANNA POWER STATION UNIT 1

STEAM GENERATOR "B"

<u>ROW</u>	<u>COL</u>	<u>IND</u>	<u>LOC</u>	<u>REMARKS</u>
24	21	INF	AV1	
24	21	30	AV2	
24	21	25	AV3	
24	21	INF	AV4	
25	21	INF	AV1	
25	21	28	AV2	
25	21	27	AV3	
25	21	23	AV4	
27	21	INF	AV1	
27	21	INF	AV3	
28	21	INF	AV2	
28	21	23	AV3	
29	21	INF	AV1	
29	21	INF	AV2	
29	21	32	AV3	
29	21	25	AV4	
30	21	INF	AV2	
30	21	INF	AV3	
33	21	23	AV2	
33	21	27	AV3	
36	21	INF	AV2	
37	21	26	AV3	
38	21	INF	AV3	
16	22	INF	AV3	
20	22	INF	AV2	
27	22	INF	AV1	
27	22	INF	AV2	
28	22	INF	AV3	
33	22	INF	AV1	
33	22	INF	AV2	
33	22	19	AV4	
37	22	INF	AV4	

ATTACHMENT 1b
NORTH ANNA POWER STATION UNIT 1

STEAM GENERATOR "B"

<u>ROW</u>	<u>COL</u>	<u>IND</u>	<u>LOC</u>	<u>REMARKS</u>
16	23	SCI	TSH	PLUGGED
18	23	INF	AV3	
26	23	INF	AV2	
26	23	INF	AV3	
27	23	INF	AV3	
29	23	INF	AV3	
30	23	INF	AV3	
32	23	INF	AV1	
32	23	INF	AV2	
32	23	INF	AV3	
33	23	INF	AV1	
33	23	INF	AV2	
33	23	INF	AV3	
37	23	PI	1H	PLUGGED
37	23	COI	1H	PLUGGED
37	23	PI	1H	PLUGGED
5	24	PI	1H	PLUGGED
5	24	SAI	1H	PLUGGED
5	24	COI	1H	PLUGGED
17	24	INF	AV1	
24	24	INF	AV2	
24	24	INF	AV3	
25	24	INF	AV2	
26	24	INF	AV2	
26	24	INF	AV3	
29	24	INF	AV1	
29	24	INF	AV2	
29	24	INF	AV3	
29	24	INF	AV4	
32	24	INF	AV1	
32	24	INF	AV2	
32	24	INF	AV3	
32	24	INF	AV4	

ATTACHMENT 1b
NORTH ANNA POWER STATION UNIT 1

STEAM GENERATOR "B"

<u>ROW</u>	<u>COL</u>	<u>IND</u>	<u>LOC</u>	<u>REMARKS</u>
38	24	27	AV4	
40	24	INF	AV3	
7	25	97	1H	PLUGGED
7	25	SAI	1H	PLUGGED
17	25	87	2H	PLUGGED
17	25	SAI	2H	PLUGGED
18	25	INF	AV3	
25	25	INF	AV2	
26	25	INF	AV2	
27	25	INF	AV2	
29	25	INF	AV2	
24	26	INF	AV2	
25	26	INF	AV1	
25	26	INF	AV2	
26	26	INF	AV1	
26	26	INF	AV2	
26	25	INF	AV3	
32	26	28	AV3	
32	26	24	AV4	
33	26	INF	AV2	
34	26	INF	AV3	
34	26	21	AV4	
24	27	INF	AV1	
24	27	INF	AV2	
24	27	INF	AV3	
25	27	INF	AV2	
26	27	INF	AV2	
23	28	INF	AV1	
23	28	INF	AV3	

ATTACHMENT 1b
NORTH ANNA POWER STATION UNIT 1

STEAM GENERATOR "B"

<u>ROW</u>	<u>COL</u>	<u>IND</u>	<u>LOC</u>	<u>REMARKS</u>
24	28	INF	AV1	
24	28	INF	AV2	
24	28	30	AV3	
26	28	INF	AV2	
32	28	25	AV2	
32	28	27	AV3	
36	28	INF	AV3	
38	28	25	AV3	
39	28	INF	AV3	
42	28	21	AV3	
19	29	INF	AV1	
19	29	INF	AV2	
19	29	INF	AV3	
24	29	INF	AV2	
24	29	INF	AV3	
25	29	INF	AV1	
25	29	INF	AV2	
25	29	17	AV3	
26	29	INF	AV1	
26	29	INF	AV2	
26	29	INF	AV3	
27	29	INF	AV3	
29	29	INF	AV2	
34	29	INF	AV3	
7	30	96	1H	PLUGGED
7	30	95	1H	PLUGGED
7	30	MAI	1H	PLUGGED
7	30	SAI	1H	PLUGGED
21	30	INF	AV2	
24	30	INF	AV2	
25	30	INF	AV2	

ATTACHMENT 1b
NORTH ANNA POWER STATION UNIT 1

STEAM GENERATOR "B"

<u>ROW</u>	<u>COL</u>	<u>IND</u>	<u>LOC</u>	<u>REMARKS</u>
26	30	21	AV3	
27	30	INF	AV3	
41	30	21	AV1	
23	31	INF	AV1	
25	31	INF	AV1	
25	31	28	AV2	
25	31	24	AV3	
27	31	29	AV3	
27	31	INF	AV4	
29	31	INF	AV1	
29	31	24	AV2	
29	31	INF	AV3	
34	31	19	AV3	
37	31	INF	AV2	
38	31	INF	AV3	
5	32	SAI	TSH	PLUGGED
5	32	PI	TSH	PLUGGED
13	32	INF	AV3	
24	32	INF	AV1	
24	32	28	AV3	
25	32	INF	AV1	
26	32	20	AV3	
27	32	INF	AV1	
29	32	20	AV3	
30	32	INF	AV2	
32	32	INF	AV1	
15	33	SCI	TSH	PLUGGED
15	33	PI	TSH	PLUGGED

ATTACHMENT 1b
NORTH ANNA POWER STATION UNIT 1

STEAM GENERATOR "B"

<u>ROW</u>	<u>COL</u>	<u>IND</u>	<u>LOC</u>	<u>REMARKS</u>
23	33	INF	AV1	
23	33	INF	AV2	
25	33	INF	AV1	
25	33	INF	AV2	
25	33	INF	AV3	
26	33	INF	AV2	
26	33	INF	AV3	
27	33	INF	AV3	
30	33	INF	AV2	
30	33	INF	AV3	
36	33	INF	AV3	
37	33	INF	AV3	
18	34	INF	AV2	
23	34	INF	AV1	
24	34	INF	AV2	
27	34	INF	AV1	
29	34	INF	AV1	
29	34	INF	AV2	
32	34	INF	AV1	
21	35	98	1H	PLUGGED
21	35	93	1H	PLUGGED
21	35	SAI	1H	PLUGGED
21	35	SAI	1H	PLUGGED
23	35	INF	AV2	
25	35	INF	AV2	
28	35	INF	AV2	
28	35	INF	AV3	
31	35	21	AV2	
33	35	INF	AV1	
33	35	25	AV2	

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STEAM GENERATOR "B"

<u>ROW</u>	<u>COL</u>	<u>IND</u>	<u>LOC</u>	<u>REMARKS</u>
36	35	INF	AV1	
36	35	INF	AV2	
3	36	DI	4H	PLUGGED
?	36	SAI	4H	PLUGGED
14	36	DI	1H	PLUGGED
14	36	SAI	1H	PLUGGED
16	36	SAI	TSH	PLUGGED
34	36	INF	AV1	
34	36	INF	AV2	
35	36	INF	AV1	
35	36	INF	AV2	
36	36	INF	AV1	
36	36	32	AV2	
37	36	INF	AV2	
38	36	INF	AV2	
40	36	INF	AV1	
42	36	INF	AV2	
3	37	96	1H	PLUGGED
3	37	DI	1H	PLUGGED
3	37	SAI	1H	PLUGGED
10	37	SCI	TSH	PLUGGED
15	37	SCI	TSH	PLUGGED
17	37	DI	1H	PLUGGED
17	37	SAI	1H	PLUGGED
27	37	DI	1H	PLUGGED
27	37	DI	2H	PLUGGED
27	37	SAI	1H	PLUGGED
27	37	SAI	2H	PLUGGED
28	37	INF	AV2	
29	37	34	TSH	

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STEAM GENERATOR "B"

<u>ROW</u>	<u>COL</u>	<u>IND</u>	<u>LOC</u>	<u>REMARKS</u>
33	37	INF	AV1	
34	37	INF	AV1	
35	37	INF	AV1	
35	37	INF	AV2	
43	37	INF	AV1	
43	37	INF	AV2	
3	38	78	1H	PLUGGED
3	38	MAI	1H	PLUGGED
4	38	48	1H	PLUGGED
4	38	94	1H	PLUGGED
4	38	96	2H	PLUGGED
4	38	PI	2H	PLUGGED
4	38	SAI	1H	PLUGGED
4	38	SAI	2H	PLUGGED
5	38	93	3H	PLUGGED
5	38	SAI	3H	PLUGGED
12	38	88	1H	PLUGGED
12	38	SAI	1H	PLUGGED
14	38	SCI	TSH	PLUGGED
14	38	PI	TSH	PLUGGED
19	38	DI	1H	PLUGGED
19	38	SAI	1H	PLUGGED
21	38	SCI	TSH	PLUGGED
21	38	PI	TSH	PLUGGED
29	38	28	AV3	
32	38	28	AV3	
34	38	INF	AV1	
34	38	INF	AV2	
3	39	PI	2H	PLUGGED
3	39	SAI	2H	PLUGGED
4	39	79	1H	PLUGGED
4	39	PI	1H	PLUGGED
4	39	COI	1H	PLUGGED
4	39	SAI	1H	PLUGGED

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STEAM GENERATOR "B"

<u>ROW</u>	<u>COL</u>	<u>IND</u>	<u>LOC</u>	<u>REMARKS</u>
6	39	96	1H	PLUGGED
6	39	PI	2H	PLUGGED
6	39	SAI	1H	PLUGGED
6	39	COI	2H	PLUGGED
12	39	PI	1H	PLUGGED
12	39	COI	1H	PLUGGED
29	39	INF	AV2	
35	39	INF	AV1	
35	39	INF	AV2	
37	39	PI	1H	PLUGGED
37	39	COI	1H	PLUGGED
5	40	44	TSC	PLUGGED
11	40	SCI	TSH	PLUGGED
20	40	PI	1H	PLUGGED
20	40	100	1H	PLUGGED
20	40	MCI	TSH	PLUGGED
20	40	MCI	TSH	PLUGGED
20	40	SAI	1H	PLUGGED
20	40	COI	1H	PLUGGED
20	40	SAI	1H	PLUGGED
31	40	PI	1H	PLUGGED
31	40	81	1H	PLUGGED
31	40	80	1H	PLUGGED
31	40	87	1H	PLUGGED
31	40	82	1H	PLUGGED
31	40	MAI	1H	PLUGGED
32	40	INF	AV2	
34	40	INF	AV2	
11	41	SCI	TSH	PLUGGED
21	41	PI	TSH	PLUGGED
21	41	SCI	TSH	PLUGGED
21	41	90	1H	PLUGGED
21	41	SAI	1H	PLUGGED
25	41	SCI	TSH	PLUGGED
27	41	SCI	TSH	PLUGGED

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STEAM GENERATOR "B"

<u>ROW</u>	<u>COL</u>	<u>IND</u>	<u>LOC</u>	<u>REMARKS</u>
5	42	PI	1H	PLUGGED
5	42	SAI	1H	PLUGGED
5	42	97	1H	PLUGGED
5	42	98	1H	PLUGGED
11	42	SCI	TSH	PLUGGED
15	42	SCI	TSH	PLUGGED
17	42	INF	TSH	
20	42	INF	AV3	
21	42	INF	AV4	
27	42	INF	AV3	
32	42	INF	AV4	
2	43	97	1H	PLUGGED
2	43	DI	1H	PLUGGED
2	43	SAI	1H	PLUGGED
6	43	98	1H	PLUGGED
6	43	99	1H	PLUGGED
6	43	MAI	1H	PLUGGED
7	43	67	1H	PLUGGED
7	43	78	1H	PLUGGED
7	43	75	2H	PLUGGED
7	43	MAI	1H	PLUGGED
7	43	SAI	2H	PLUGGED
12	43	SCI	TSH	PLUGGED
13	43	INF	AV4	
17	43	SCI	TSH	PLUGGED
27	43	DI	3H	PLUGGED
27	43	SCI	TSH	PLUGGED
27	43	SAI	3H	PLUGGED
29	43	SCI	TSH	PLUGGED
2	44	DI	1H	PLUGGED
2	44	SAI	1H	PLUGGED

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STEAM GENERATOR "B"

<u>ROW</u>	<u>COL</u>	<u>IND</u>	<u>LOC</u>	<u>REMARKS</u>
3	44	DI	3H	PLUGGED
3	44	MAI	3H	PLUGGED
17	44	SCI	TSH	PLUGGED
20	44	INF	AV4	
31	44	DI	1H	PLUGGED
31	44	SAI	1H	PLUGGED
44	44	18	AV4	
46	44	17	AV1	
46	44	21	AV2	
5	45	78	2H	PLUGGED
5	45	SAI	2H	PLUGGED
12	45	SCI	TSH	PLUGGED
17	45	SCI	TSH	PLUGGED
22	45	SCI	TSH	PLUGGED
12	46	INF	AV4	
21	46	SCI	TSH	PLUGGED
25	46	SCI	TSH	PLUGGED
7	47	DI	1H	PLUGGED
7	47	COI	1H	PLUGGED
7	47	COI	1H	PLUGGED
24	47	SCI	TSH	PLUGGED
21	48	INF	AV4	PLUGGED
21	48	SCI	TSH	PLUGGED
22	48	SCI	TSH	PLUGGED
24	48	SCI	TSH	PLUGGED
34	48	INF	AV2	
41	48	INF	AV1	
8	49	97	2H	PLUGGED
8	49	SAI	2H	PLUGGED

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STEAM GENERATOR "B"

<u>ROW</u>	<u>COL</u>	<u>IND</u>	<u>LOC</u>	<u>REMARKS</u>
20	49	INF	AV4	
22	49	37	TSH	PLUGGED
22	49	MCI	TSH	PLUGGED
22	49	MCI	TSH	PLUGGED
24	49	SCI	TSH	PLUGGED
33	49	30	TSH	
33	49	INF	AV1	
35	49	INF	AV1	
39	49	INF	AV1	
42	49	INF	AV1	
43	49	INF	AV1	
46	49	20	AV3	
10	50	INF	AV1	
14	50	97	2H	PLUGGED
14	50	SAI	2H	PLUGGED
22	50	SCI	TSH	PLUGGED
23	50	PI	TSH	PLUGGED
23	50	SCI	TSH	PLUGGED
25	50	SCI	TSH	PLUGGED
28	50	INF	AV1	
29	50	34	TSH	
29	50	INF	AV1	
31	50	INF	AV1	
32	50	INF	AV3	
35	50	INF	AV1	
37	50	INF	AV1	
40	50	INF	AV1	
41	50	19	AV1	

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STEAM GENERATOR "B"

<u>ROW</u>	<u>COL</u>	<u>IND</u>	<u>LOC</u>	<u>REMARKS</u>
42	50	19	AV1	
43	50	17	AV1	
5	51	PI	4H	PLUGGED
5	51	98	4H	PLUGGED
5	51	97	4H	PLUGGED
5	51	SAI	4H	PLUGGED
5	51	99	4H	PLUGGED
5	51	100	4H	PLUGGED
12	51	64	1H	PLUGGED
12	51	92	1H	PLUGGED
12	51	SAI	1H	PLUGGED
18	51	INF	AV3	
19	51	SCI	TSH	PLUGGED
25	51	INF	AV2	PLUGGED
25	51	SCI	TSH	PLUGGED
29	51	55	TSH	PLUGGED
29	51	32	TSH	PLUGGED
2	52	85	1H	PLUGGED
2	52	100	1H	PLUGGED
2	52	SAI	1H	PLUGGED
6	52	DI	2H	PLUGGED
6	52	95	2H	PLUGGED
6	52	SAI	2H	PLUGGED
6	52	SAI	2H	PLUGGED
13	52	PI	TSH	PLUGGED
13	52	SCI	TSH	PLUGGED
16	52	83	2H	PLUGGED
16	52	97	2H	PLUGGED
16	52	MAI	2H	PLUGGED
16	52	SAI	2H	PLUGGED
25	52	56	TSH	PLUGGED
28	52	33	TSH	
30	52	SAI	TSH	PLUGGED

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STEAM GENERATOR "B"

<u>ROW</u>	<u>COL</u>	<u>IND</u>	<u>LOC</u>	<u>REMARKS</u>
36	52	INF	AV1	
36	52	INF	AV2	
36	52	INF	AV3	
37	52	INF	AV3	
39	52	PI	2H	PLUGGED
39	52	COI	2H	PLUGGED
39	52	21	AV3	PLUGGED
39	52	20	AV4	PLUGGED
41	52	INF	AV1	
41	52	20	AV3	
44	52	PI	1H	PLUGGED
44	52	36	1H	PLUGGED
44	52	17	AV2	PLUGGED
44	52	22	AV3	PLUGGED
44	52	19	AV4	PLUGGED
44	52	INF	AV3	PLUGGED
14	53	MCI	TSH	PLUGGED
14	53	MCI	TSH	PLUGGED
27	53	PI	TSH	PLUGGED
27	53	SCI	TSH	PLUGGED
27	53	23	TSH	PLUGGED
27	53	29	TSH	PLUGGED
27	53	INF	AV3	PLUGGED
39	53	INF	AV3	
40	53	INF	AV3	
4	54	74	1H	PLUGGED
4	54	SAI	1H	PLUGGED
22	54	INF	AV1	
28	54	49	TSH	PLUGGED
36	54	23	AV3	
39	54	INF	AV3	
41	54	INF	AV2	
43	54	INF	AV2	
43	54	INF	AV3	

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STEAM GENERATOR "B"

<u>ROW</u>	<u>COL</u>	<u>IND</u>	<u>LOC</u>	<u>REMARKS</u>
44	54	INF	AV2	
44	54	27	AV3	
19	55	INF	AV3	
43	55	INF	AV2	
12	56	INF	AV4	
14	56	INF	AV4	
21	56	INF	AV3	
21	56	INF	AV4	
23	56	INF	AV4	
26	56	94	1H	PLUGGED
26	56	SAI	1H	PLUGGED
27	56	SCI	TSH	PLUGGED
27	56	PI	TSH	PLUGGED
35	56	INF	AV2	
36	56	INF	AV2	
41	56	INF	AV3	
45	56	INF	AV2	
9	57	PI	1H	PLUGGED
9	57	COI	1H	PLUGGED
13	57	SCI	TSH	PLUGGED
13	57	PI	TSH	PLUGGED
14	57	SCI	TSH	PLUGGED
14	57	PI	TSH	PLUGGED
20	57	22	AV3	
25	57	DI	1H	PLUGGED
25	57	97	1H	PLUGGED
25	57	MAI	1H	PLUGGED
26	57	SAI	TSH	PLUGGED
27	57	47	TSH	PLUGGED
27	57	40	TSH	PLUGGED

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STEAM GENERATOR "B"

<u>ROW</u>	<u>COL</u>	<u>IND</u>	<u>LOC</u>	<u>REMARKS</u>
28	57	25	TSH	
28	57	30	TSH	
29	57	DI	2H	PLUGGED
29	57	INF	AV1	PLUGGED
29	57	SAI	2H	PLUGGED
36	57	17	AV2	
42	57	INF	AV2	
43	57	21	AV2	
44	57	INF	AV2	
9	58	92	1H	PLUGGED
9	58	97	1H	PLUGGED
9	58	PI	1H	PLUGGED
9	58	MAI	1H	PLUGGED
9	58	SAI	1H	PLUGGED
18	58	INF	AV4	
21	58	DI	4H	PLUGGED
21	58	SAI	4H	PLUGGED
22	58	INF	AV3	
25	58	22	AV3	
27	58	SAI	TSH	PLUGGED
28	58	INF	AV2	
28	58	INF	AV3	
37	58	INF	AV3	
40	58	INF	AV3	
41	58	INF	AV3	
44	58	19	AV2	
44	58	INF	AV3	
45	58	26	AV2	
45	58	INF	AV3	
16	59	INF	AV3	

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STEAM GENERATOR "B"

<u>ROW</u>	<u>COL</u>	<u>IND</u>	<u>LOC</u>	<u>REMARKS</u>
19	59	INF	AV4	
21	59	25	AV3	
27	59	SCI	TSH	PLUGGED
32	59	INF	AV2	
44	59	INF	AV2	PLUGGED
44	59	SAI	TSH	PLUGGED
45	59	INF	AV2	
15	60	INF	AV2	
15	60	INF	AV3	
22	60	INF	AV3	
27	60	INF	AV2	
27	60	INF	AV3	
28	60	INF	AV1	
30	60	25	AV1	
31	60	INF	AV2	
32	60	INF	AV1	
32	60	INF	AV2	
33	60	INF	AV1	
33	60	INF	AV3	
36	60	95	1H	PLUGGED
36	60	SAI	1H	PLUGGED
11	61	48	3H	PLUGGED
11	61	98	3H	PLUGGED
11	61	SAI	3H	PLUGGED
13	61	INF	AV3	
16	61	INF	AV3	
11	62	INF	AV2	
28	62	INF	AV2	

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STEAM GENERATOR "B"

<u>ROW</u>	<u>COL</u>	<u>IND</u>	<u>LOC</u>	<u>REMARKS</u>
32	62	INF	AV3	
34	62	INF	AV2	
38	62	89	1H	PLUGGED
38	62	PI	1H	PLUGGED
38	62	SAI	1H	PLUGGED
22	63	98	1H	PLUGGED
22	63	SAI	1H	PLUGGED
29	63	INF	AV1	
31	63	INF	AV2	
35	63	INF	AV1	
37	63	INF	AV1	
37	63	INF	AV2	
41	63	INF	AV3	
4	64	90	3H	PLUGGED
4	64	SAI	3H	PLUGGED
11	64	93	3H	PLUGGED
11	64	SAI	3H	PLUGGED
11	64	SAI	3H	PLUGGED
18	64	32	AV3	
23	64	INF	AV1	
27	65	INF	AV1	
29	65	INF	AV1	
31	65	INF	AV2	
33	65	INF	AV1	
40	65	INF	AV2	
17	66	97	1H	PLUGGED
17	66	PI	1H	PLUGGED
17	66	SAI	1H	PLUGGED
28	66	INF	AV2	

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STEAM GENERATOR "B"

<u>ROW</u>	<u>COL</u>	<u>IND</u>	<u>LOC</u>	<u>REMARKS</u>
29	66	INF	AV2	
29	66	INF	AV3	
38	66	PI	1H	PLUGGED
38	66	SAI	1H	PLUGGED
21	67	INF	AV3	
21	67	INF	TSC	
22	67	INF	AV2	
22	67	INF	AV3	
22	67	INF	AV4	
30	67	INF	AV1	
30	67	INF	AV2	
32	67	INF	AV1	
32	67	28	AV2	
32	67	INF	AV3	
32	67	INF	AV4	
37	67	INF	AV2	
39	67	INF	AV2	
42	67	INF	AV1	
42	67	INF	AV2	
11	68	98	2H	PLUGGED
11	68	DI	2H	PLUGGED
11	68	SCI	TSH	PLUGGED
11	68	SAI	2H	PLUGGED
19	68	INF	AV4	
20	68	INF	AV2	
30	68	INF	AV1	
30	68	INF	AV2	
33	68	INF	AV2	
40	68	29	AV2	
9	69	MCI	TSH	PLUGGED
9	69	MCI	TSH	PLUGGED
24	69	INF	AV2	

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STEAM GENERATOR "B"

<u>ROW</u>	<u>COL</u>	<u>IND</u>	<u>LOC</u>	<u>REMARKS</u>
32	69	INF	AV2	
41	69	INF	AV2	
7	70	SCI	TSH	PLUGGED
7	70	PI	TSH	PLUGGED
8	70	MCI	TSH	PLUGGED
8	70	MCI	TSH	PLUGGED
8	70	PI	TSH	PLUGGED
23	70	INF	AV3	
24	70	INF	AV3	
24	70	INF	AV4	
27	70	INF	AV3	
28	70	INF	AV2	
31	70	INF	AV2	
33	70	INF	AV2	
35	70	99	2H	PLUGGED
35	70	INF	AV1	PLUGGED
35	70	INF	AV2	PLUGGED
35	70	INF	AV3	PLUGGED
35	70	PI	2H	PLUGGED
35	70	MAI	2H	PLUGGED
36	70	INF	AV2	
36	70	INF	AV3	
39	70	INF	AV3	
40	70	INF	AV3	
2	71	97	2H	PLUGGED
2	71	SAI	2H	PLUGGED
12	71	INF	AV1	
12	71	INF	AV4	
16	71	INF	AV2	
17	71	INF	AV2	
21	71	INF	AV3	

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STEAM GENERATOR "B"

<u>ROW</u>	<u>COL</u>	<u>IND</u>	<u>LOC</u>	<u>REMARKS</u>
23	71	INF	AV2	
24	71	INF	AV3	
24	71	INF	AV4	
25	71	INF	AV2	
26	71	INF	AV2	
31	71	INF	AV2	
31	71	INF	AV3	
32	71	INF	AV2	
32	71	INF	AV3	
33	71	INF	AV1	
33	71	INF	AV2	
33	71	INF	AV3	
35	71	INF	AV2	
39	71	INF	AV2	
15	72	INF	AV2	
24	72	INF	AV1	
24	72	INF	AV2	
27	72	INF	AV1	
27	72	INF	AV2	
28	72	INF	AV1	
30	72	INF	AV2	
31	72	INF	AV2	
32	72	INF	AV2	
15	73	INF	AV2	
17	73	27	AV2	
17	73	INF	AV3	
19	73	INF	AV1	
33	73	INF	AV3	
34	73	INF	AV3	

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STEAM GENERATOR "B"

<u>ROW</u>	<u>COL</u>	<u>IND</u>	<u>LOC</u>	<u>REMARKS</u>
2	74	94	3H	PLUGGED
2	74	95	3H	PLUGGED
2	74	SAI	3H	PLUGGED
2	74	SAI	3H	PLUGGED
10	74	SCI	TSH	PLUGGED
10	74	PI	TSH	PLUGGED
12	74	INF	AV4	
13	74	INF	AV4	
21	74	INF	AV2	
32	74	INF	AV2	
33	74	INF	AV2	
35	74	DI	2H	PLUGGED
35	74	MAI	2H	PLUGGED
35	74	MAI	2H	PLUGGED
17	75	PI	1H	PLUGGED
17	75	MAI	1H	PLUGGED
24	75	INF	AV2	
27	75	INF	AV1	
27	75	INF	AV2	
37	75	88	1H	PLUGGED
37	75	92	1H	PLUGGED
37	75	INF	AV3	PLUGGED
37	75	INF	AV4	PLUGGED
37	75	PI	1H	PLUGGED
37	75	MAI	1H	PLUGGED
14	77	INF	AV1	
14	77	INF	AV2	
14	77	INF	AV3	
14	77	INF	AV4	
16	77	INF	AV1	
16	77	INF	AV3	
16	77	INF	AV4	
23	77	INF	AV3	
33	77	25	AV2	

ATTACHMENT 1b
NORTH ANNA POWER STATION UNIT 1

STEAM GENERATOR "B"

<u>ROW</u>	<u>COL</u>	<u>IND</u>	<u>LOC</u>	<u>REMARKS</u>
15	78	99	1H	PLUGGED
15	78	PI	1H	PLUGGED
15	78	MAI	1H	PLUGGED
17	78	INF	AV1	
17	78	INF	AV2	
17	78	INF	AV3	
24	78	INF	AV1	
24	78	INF	AV2	
24	78	INF	AV3	
24	78	INF	AV4	
26	78	INF	AV4	
29	78	INF	AV1	
30	78	INF	AV1	
31	78	INF	AV2	
32	78	INF	AV2	
33	78	INF	AV2	
17	79	INF	AV1	
21	79	INF	AV1	
7	80	DI	1H	PLUGGED
7	80	99	1H	PLUGGED
7	80	SAI	1H	PLUGGED
16	80	INF	AV2	
17	80	INF	AV2	
21	80	INF	AV2	
21	80	INF	AV3	
21	80	INF	AV4	
22	80	INF	AV2	
29	80	PI	4H	PLUGGED
29	80	SAI	4H	PLUGGED
7	81	DI	1H	PLUGGED
7	81	SAI	1H	PLUGGED
11	82	99	1H	PLUGGED

ATTACHMENT 1b
NORTH ANNA POWER STATION UNIT 1

STEAM GENERATOR "B"

<u>ROW</u>	<u>COL</u>	<u>IND</u>	<u>LOC</u>	<u>REMARKS</u>
11	82	PI	1H	PLUGGED
11	82	MAI	1H	PLUGGED
11	82	SAI	1H	PLUGGED
21	83	INF	AV2	
21	83	INF	AV3	
21	83	INF	AV4	
26	83	29	AV2	
30	83	INF	AV1	
16	84	DI	2H	PLUGGED
16	84	SAI	2H	PLUGGED
24	84	92	2H	PLUGGED
24	84	92	2H	PLUGGED
24	84	PI	2H	PLUGGED
24	84	MAI	2H	PLUGGED
24	84	SAI	2H	PLUGGED
2	85	99	4H	PLUGGED
2	85	100	4H	PLUGGED
2	85	SAI	4H	PLUGGED
2	85	SAI	4H	PLUGGED
7	85	100	1H	PLUGGED
7	85	SAI	1H	PLUGGED
16	85	INF	AV2	
17	85	INF	AV2	
17	85	INF	AV4	
18	85	INF	AV2	
18	85	INF	AV4	
22	85	INF	AV1	
22	85	INF	AV3	
24	85	INF	AV2	
24	85	INF	AV4	
25	85	INF	AV2	

ATTACHMENT 1b
NORTH ANNA POWER STATION UNIT 1

STEAM GENERATOR "B"

<u>ROW</u>	<u>COL</u>	<u>IND</u>	<u>LOC</u>	<u>REMARKS</u>
2	86	95	3H	PLUGGED
2	86	67	3H	PLUGGED
2	86	PI	3H	PLUGGED
2	86	SAI	3H	PLUGGED
2	86	SAI	3H	PLUGGED
7	86	55	1H	PLUGGED
7	86	89	1H	PLUGGED
7	86	SAI	1H	PLUGGED
17	86	INF	AV3	
25	86	INF	AV1	
25	86	INF	AV2	
26	86	INF	AV3	
-	87	PI	3H	PLUGGED
!	87	43	3H	PLUGGED
11	87	INF	AV1	
17	87	INF	AV4	
18	87	INF	AV2	
18	87	INF	AV4	
22	87	INF	AV4	
12	88	INF	AV2	PLUGGED
12	88	PI	1H	PLUGGED
12	88	COI	1H	PLUGGED
17	88	INF	AV2	
22	88	INF	AV1	
22	88	INF	AV2	
22	88	INF	AV3	
4	89	SCI	TSH	PLUGGED
21	89	27	AV3	
2	90	90	3H	PLUGGED
2	90	DI	3H	PLUGGED
2	90	SAI	3H	PLUGGED
2	90	SAI	3H	PLUGGED
11	90	INF	AV1	

ATTACHMENT 1b
NORTH ANNA POWER STATION UNIT 1

STEAM GENERATOR "B"

<u>ROW</u>	<u>COL</u>	<u>IND</u>	<u>LOC</u>	<u>REMARKS</u>
17	91	INF	AV3	
2	93	DI	3H	PLUGGED
2	93	SAI	3H	PLUGGED

ATTACHMENT 1c
NORTH ANNA POWER STATION
UNIT 1

REFUELING OUTAGE - FEBRUARY 1991
EDDY CURRENT EXAMINATION SUMMARY

Steam Generator "C"

In Steam Generator "C", 2926 tubes were examined full length (tube end to tube end) with bobbin probes. This represents approximately 98% of the available tubes. In row two of this steam generator, 69 tubes were examined from the seventh support plate to the tube end on both the inlet and the outlet sides. Supplemental examinations were also performed using Rotating Pancake, 8x1, and Profilometry probes where additional confirmatory or other data was desired. Of the tubes examined, 130 had pluggable circumferential indications, 99 had pluggable axial indications, three had pluggable indications between 90% and 100% through wall, five had pluggable indications between 80% and 89% through wall, four had pluggable indications between 70% and 79% through wall, two had pluggable indications between 60% and 69% through wall, seven had pluggable indications between 50% and 59% through wall, eight had pluggable indications between 40% and 49% through wall, 10 had indications between 30% and 39% through wall, 32 had indications between 20% and 29% through wall, and 53 had indications between 1% and 19% through wall. A total of 261 tubes were plugged in the "C" Steam Generator. Refer to the table below for details.

ATTACHMENT 1c
PORT ANNA POWER STATION UNIT 1

STEAM GENERATOR "C"

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
3	3	PI	1H	PLUGGED
3	3	38	1H	PLUGGED
10	5	98	2H	PLUGGED
10	5	SAI	2H	PLUGGED
11	7	79	3H	PLUGGED
11	7	93	3H	PLUGGED
11	7	MAI	3H	PLUGGED
6	8	PI	1H	PLUGGED
6	8	MAI	1H	PLUGGED
6	8	99	1H	PLUGGED
10	8	DI	2H	PLUGGED
10	8	99	2H	PLUGGED
10	8	92	3H	PLUGGED
10	8	MAI	2H	PLUGGED
10	8	MAI	3H	PLUGGED
11	8	DI	2H	PLUGGED
11	8	SAI	2H	PLUGGED
17	8	DI	1H	PLUGGED
17	8	SAI	1H	PLUGGED
7	9	DI	2H	PLUGGED
7	9	SAI	2H	PLUGGED
16	9	23	AV3	
20	9	20	AV2	
20	9	INF	AV3	
24	9	INF	AV2	
24	9	INF	AV3	
24	9	INF	AV4	
6	10	DI	1H	PLUGGED
6	10	97	1H	PLUGGED
6	10	SAI	1H	PLUGGED
19	10	INF	AV3	
19	10	23	AV3	
20	10	INF	AV2	
20	10	INF	AV3	
26	10	INF	AV2	

ATTACHMENT 1c
NORTH ANNA POWER STATION UNIT 1

STEAM GENERATOR "C"

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
28	10	DI	2H	PLUGGED
28	10	SAI	2H	PLUGGED
5	11	PI	3H	
5	11	1	3H	
11	11	DI	2H	PLUGGED
11	11	SAI	2H	PLUGGED
16	11	PI	1H	PLUGGED
16	11	SAI	1H	PLUGGED
20	11	INF	AV1	
22	11	INF	AV3	
23	11	INF	AV1	
23	11	INF	AV3	
26	11	10	TSH	
26	11	10	TSH	
5	12	91	4H	PLUGGED
5	12	SAI	4H	PLUGGED
22	12	INF	AV3	
24	12	INF	AV1	
26	12	INF	AV2	
28	12	INF	AV4	
29	12	INF	AV4	
30	12	INF	AV2	
7	14	PI	3H	PLUGGED
7	14	PI	3H	PLUGGED
7	14	PI	3H	PLUGGED
7	14	SAI	3H	PLUGGED
7	14	48	1H	PLUGGED
7	14	55	3H	PLUGGED
7	14	61	3H	PLUGGED
7	14	MAI	1H	PLUGGED

ATTACHMENT 1c
NORTH ANNA POWER STATION UNIT 1

STEAM GENERATOR "C"

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
10	14	PI	3H	PLUGGED
10	14	44	3H	PLUGGED
10	14	83	1H	PLUGGED
10	14	80	1H	PLUGGED
10	14	77	2H	PLUGGED
10	14	MAI	1H	PLUGGED
10	14	SAI	1H	PLUGGED
10	14	SAI	2H	PLUGGED
10	14	MAI	2H	PLUGGED
18	14	INF	AV3	
24	14	INF	AV2	
24	14	INF	AV3	
25	14	83	1H	PLUGGED
25	14	SAI	1H	PLUGGED
26	14	INF	AV1	
26	14	25	AV2	
27	14	INF	AV3	
16	15	PI	2H	PLUGGED
16	15	75	2H	PLUGGED
10	16	70	3H	PLUGGED
10	16	SAI	3H	PLUGGED
16	16	INF	AV2	
20	16	INF	AV3	
31	16	20	AV3	
3	17	PI	1H	PLUGGED
3	17	81	1H	PLUGGED
10	18	PI	2H	
10	18	1	2H	
12	18	98	2H	PLUGGED
12	18	99	3H	PLUGGED
12	18	SAI	2H	PLUGGED
12	18	SAI	3H	PLUGGED
21	18	100	1H	PLUGGED
21	18	SAI	1H	PLUGGED

ATTACHMENT 1c
NORTH ANNA POWER STATION UNIT 1

STEAM GENERATOR "C"

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
32	18	DI	1H	PLUGGED
32	18	MAI	1H	PLUGGED
15	19	25	TSH	
19	19	DI	1H	PLUGGED
19	19	SAI	1H	PLUGGED
30	19	19	AV3	
34	19	20	AV3	
36	19	19	AV3	
36	19	16	AV4	
37	19	17	AV4	
8	20	PI	1H	PLUGGED
8	20	SAI	1H	PLUGGED
8	20	DI	1H	PLUGGED
16	20	PI	TSH	PLUGGED
16	20	49	TSH	PLUGGED
24	20	INF	AV2	
24	20	INF	AV3	
11	21	25	TSH	
29	21	INF	AV3	
5	22	34	TSH	
7	22	DI	2H	PLUGGED
7	22	SAI	2H	PLUGGED
11	22	PI	TSH	PLUGGED
11	22	SCI	TSH	PLUGGED
14	22	INF	AV1	
17	22	INF	AV4	
25	22	INF	AV3	
3	23	69	3H	PLUGGED
3	23	SAI	3H	PLUGGED

ATTACHMENT 1c
NORTH ANNA POWER STATION UNIT 1

STEAM GENERATOR "C"

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
11	23	94	2H	PLUGGED
11	23	SAI	2H	PLUGGED
18	23	INF	AV3	
18	23	INF	AV4	
20	23	20	TSH	
20	23	15	TSH	
22	23	20	AV2	
22	23	20	AV3	
28	23	INF	AV3	
31	23	18	AV2	
32	23	INF	AV2	
32	23	24	AV3	
39	23	INF	AV3	
5	24	PI	1H	
5	24	1	1H	
10	24	PI	TSH	PLUGGED
10	24	PI	2H	PLUGGED
10	24	SAI	2H	PLUGGED
10	24	50	2H	PLUGGED
10	24	SCI	TSH	PLUGGED
10	24	97	2H	PLUGGED
14	24	SCI	TSH	PLUGGED
14	24	INF	AV4	PLUGGED
17	24	38	TSH	
19	24	33	TSH	
37	24	21	AV1	
37	24	22	AV2	
5	25	92	3H	PLUGGED
5	25	SAI	3H	PLUGGED

ATTACHMENT 1c
 NORTH ANNA POWER STATION UNIT 1

STEAM GENERATOR "C"

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
10	25	MAI	TSH	PLUGGED
10	25	PI	TSH	PLUGGED
10	25	PI	1H	PLUGGED
10	25	PI	4H	PLUGGED
10	25	PI	TSH	PLUGGED
10	25	PI	1H	PLUGGED
10	25	PI	4H	PLUGGED
10	25	PI	TSH	PLUGGED
10	25	PI	1H	PLUGGED
10	25	PI	4H	PLUGGED
10	25	COI	1H	PLUGGED
10	25	COI	1H	PLUGGED
10	25	COI	1H	PLUGGED
10	25	49	4H	PLUGGED
10	25	20	4H	PLUGGED
17	25	SCI	TSH	PLUGGED
17	25	24	TSH	PLUGGED
22	25	27	TSH	PLUGGED
22	25	PI	2H	PLUGGED
22	25	COI	2H	PLUGGED
39	25	PI	2H	PLUGGED
39	25	SAI	2H	PLUGGED
6	26	77	2H	PLUGGED
6	26	MAI	2H	PLUGGED
13	26	MCI	TSH	PLUGGED
13	26	MCI	TSH	PLUGGED
13	26	PI	TSH	PLUGGED
13	26	PI	3H	PLUGGED
13	26	SAI	3H	PLUGGED
14	26	SCI	TSH	PLUGGED
14	26	PI	TSH	PLUGGED
16	26	SCI	TSH	PLUGGED
16	26	19	TSH	PLUGGED
19	26	MCI	TSH	PLUGGED
19	26	MCI	TSH	PLUGGED
39	26	INF	AV2	
3	27	97	2H	PLUGGED
3	27	100	2H	PLUGGED
3	27	MAI	2H	PLUGGED

ATTACHMENT 1c
NORTH ANNA POWER STATION UNIT 1

STEAM GENERATOR "C"

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
5	27	94	2H	PLUGGED
5	27	94	2H	PLUGGED
5	27	SAI	2H	PLUGGED
20	27	SCI	TSH	PLUGGED
20	27	PI	TSH	PLUGGED
35	27	INF	AV3	
38	27	INF	AV2	
38	27	23	AV3	
14	28	PI	3H	PLUGGED
14	28	86	3H	PLUGGED
18	28	SCI	TSH	PLUGGED
19	28	MCI	TSH	PLUGGED
19	28	MCI	TSH	PLUGGED
19	28	SCI	TSH	PLUGGED
19	28	PI	TSH	PLUGGED
22	28	MCI	TSH	PLUGGED
22	28	MCI	TSH	PLUGGED
22	28	PI	TSH	PLUGGED
31	28	INF	2C	
32	28	INF	AV2	
13	29	SCI	TSH	PLUGGED
18	29	INF	AV4	
19	29	SCI	TSH	PLUGGED
19	29	PI	TSH	PLUGGED
20	29	MCI	TSH	PLUGGED
20	29	MCI	TSH	PLUGGED
20	29	PI	TSH	PLUGGED
23	29	INF	AV3	
24	29	INF	AV3	
29	29	INF	AV4	
30	29	21	AV3	

ATTACHMENT 1c
NORTH ANNA POWER STATION UNIT 1

STEAM GENERATOR "C"

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
32	29	INF	AV3	
3	30	62	2H	PLUGGED
3	30	SAI	2H	PLUGGED
12	30	DI	2H	PLUGGED
12	30	SAI	2H	PLUGGED
14	30	PI	TSH	PLUGGED
14	30	SCI	TSH	PLUGGED
19	30	SCI	TSH	PLUGGED
20	30	MCI	TSH	PLUGGED
20	30	MCI	TSH	PLUGGED
20	30	MCI	TSH	PLUGGED
20	30	PI	TSH	PLUGGED
24	30	MCI	TSH	PLUGGED
24	30	MCI	TSH	PLUGGED
24	30	22	TSH	PLUGGED
24	30	PI	TSH	PLUGGED
16	31	SCI	TSH	PLUGGED
16	31	PI	TSH	PLUGGED
18	31	SCI	TSH	PLUGGED
18	31	PI	TSH	PLUGGED
19	31	SCI	TSH	PLUGGED
19	31	PI	TSH	PLUGGED
21	31	SCI	TSH	PLUGGED
21	31	99	1H	PLUGGED
21	31	96	1H	PLUGGED
21	31	PI	TSH	PLUGGED
21	31	MAI	1H	PLUGGED
10	32	36	TSH	PLUGGED
10	32	DI	1H	PLUGGED
10	32	SAI	1H	PLUGGED
15	32	PI	1H	PLUGGED
15	32	COI	1H	PLUGGED
16	32	SCI	TSH	PLUGGED
16	32	32	TSH	PLUGGED
16	32	PI	TSH	PLUGGED
16	32	PI	TSH	PLUGGED

ATTACHMENT 1c
NORTH ANNA POWER STATION UNIT 1

STEAM GENERATOR "C"

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
19	32	INF	AV3	
22	32	MCI	TSH	PLUGGED
22	32	MCI	TSH	PLUGGED
22	32	PI	TSH	PLUGGED
23	32	INF	AV1	
29	32	PI	2H	PLUGGED
29	32	54	2H	PLUGGED
17	33	MCI	TSH	PLUGGED
17	33	MCI	TSH	PLUGGED
17	33	MCI	TSH	PLUGGED
17	33	PI	TSH	PLUGGED
18	33	SCI	TSH	PLUGGED
18	33	PI	TSH	PLUGGED
21	33	15	AV4	
22	33	SCI	TSH	PLUGGED
22	33	PI	TSH	PLUGGED
25	33	20	AV3	
32	33	21	AV3	
7	33	INF	AV1	
37	33	INF	AV3	
37	33	INF	AV1	
37	33	16	AV3	
37	33	INF	AV1	
37	33	INF	AV3	
40	33	INF	AV3	
6	34	41	TSH	PLUGGED
6	34	45	TSH	PLUGGED
16	34	SCI	TSH	PLUGGED
18	34	SCI	TSH	PLUGGED
24	34	DI	1H	PLUGGED
24	34	92	1H	PLUGGED
24	34	SAI	1H	PLUGGED

ATTACHMENT 1c
NORTH ANNA POWER STATION UNIT 1

STEAM GENERATOR "C"

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
25	34	54	1H	PLUGGED
25	34	SAI	1H	PLUGGED
41	34	19	AV3	
14	35	21	TSH	
19	35	SCI	TSH	PLUGGED
19	35	PI	TSH	PLUGGED
22	35	SCI	TSH	PLUGGED
24	35	86	TSH	PLUGGED
24	35	PI	2H	PLUGGED
24	35	COI	2H	PLUGGED
25	35	INF	AV2	
12	36	23	TSH	
12	36	20	TSH	
18	36	SCI	TSH	PLUGGED
19	36	SCI	TSH	PLUGGED
19	36	PI	TSH	PLUGGED
21	36	SCI	TSH	PLUGGED
44	36	INF	AV2	
2	37	PI	1H	PLUGGED
2	37	PI	2H	PLUGGED
2	37	COI	1H	PLUGGED
2	37	SAI	1H	PLUGGED
2	37	COI	2H	PLUGGED
2	37	MAI	2H	PLUGGED
7	37	34	TSH	
11	37	PI	4H	PLUGGED
11	37	COI	4H	PLUGGED
19	37	MCI	TSH	PLUGGED
19	37	MCI	TSH	PLUGGED
19	37	PI	TSH	PLUGGED
21	37	SCI	TSH	PLUGGED
24	37	SCI	TSH	PLUGGED

ATTACHMENT 1c
 NORTH ANNA POWER STATION UNIT 1

STEAM GENERATOR "C"

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
24	37	PI	TSH	PLUGGED
27	37	SAI	TSH	PLUGGED
27	37	32	TSH	PLUGGED
22	38	INF	AV2	
22	38	INF	AV3	
25	38	SAI	TSH	PLUGGED
25	38	56	TSH	PLUGGED
27	38	MAI	TSH	PLUGGED
27	38	52	TSH	PLUGGED
27	38	INF	AV3	PLUGGED
28	38	11	TSH	
28	38	18	AV2	
28	38	21	AV3	
30	38	INF	AV3	
31	38	17	AV3	
32	38	15	AV3	
33	38	21	AV1	
33	38	21	AV2	
12	39	16	TSH	
13	39	17	TSH	
17	39	MCI	TSH	PLUGGED
17	39	MCI	TSH	PLUGGED
17	39	PI	TSH	PLUGGED
19	39	SCI	TSH	PLUGGED
19	39	PI	TSH	PLUGGED
20	39	SCI	TSH	PLUGGED
22	39	SCI	TSH	PLUGGED
22	39	PI	TSH	PLUGGED
25	39	PI	1H	PLUGGED
25	39	43	1H	PLUGGED
28	39	INF	AV3	

ATTACHMENT 1c
NORTH ANNA POWER STATION UNIT 1

STEAM GENERATOR "C"

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
29	39	40	TSH	PLUGGED
29	39	PI	TSH	PLUGGED
30	39	15	AV3	
2	40	89	3H	PLUGGED
2	40	SAI	3H	PLUGGED
8	40	32	TSH	
18	40	SCI	TSH	PLUGGED
18	40	PI	TSH	PLUGGED
19	40	MCI	TSH	PLUGGED
19	40	MCI	TSH	PLUGGED
19	40	90	TSH	PLUGGED
23	40	SCI	TSH	PLUGGED
24	40	SCI	TSH	PLUGGED
24	40	PI	TSH	PLUGGED
28	40	SAI	TSH	PLUGGED
28	40	47	TSH	PLUGGED
28	40	35	TSH	PLUGGED
28	40	PI	TSH	PLUGGED
39	40	14	AV3	
41	40	15	AV3	
2	41	82	3H	PLUGGED
2	41	SAI	3H	PLUGGED
2	41	SAI	3H	PLUGGED
5	41	PI	3H	PLUGGED
5	41	20	3H	PLUGGED
7	41	99	1H	PLUGGED
7	41	97	2H	PLUGGED
7	41	SAI	1H	PLUGGED
7	41	SAI	2H	PLUGGED
7	41	SAI	2H	PLUGGED
20	41	SCI	TSH	PLUGGED
23	41	SCI	TSH	PLUGGED

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NORTH ANNA POWER STATION UNIT 1

STEAM GENERATOR "C"

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
24	41	MCI	TSH	F. 3GED
24	41	MCI	TSH	F. 3GED
26	41	SCI	TSH	PLUGGED
30	41	30	TSH	
41	41	PI	2H	PLUGGED
41	41	SAI	2H	PLUGGED
3	42	98	2H	PLUGGED
3	42	MAI	2H	PLUGGED
11	42	25	TSH	
11	42	19	TSH	
11	42	19	TSH	
12	42	28	TSH	
16	42	85	2H	PLUGGED
16	42	PI	2H	PLUGGED
16	42	MAI	2H	PLUGGED
19	42	SCI	TSH	PLUGGED
24	42	SCI	TSH	PLUGGED
25	42	SCI	TSH	PLUGGED
26	42	28	TSH	
27	42	SCI	TSH	PLUGGED
10	43	15	TSH	
18	43	SCI	TSH	PLUGGED
18	43	PI	TSH	PLUGGED
25	43	MCI	TSH	PLUGGED
25	43	MCI	TSH	PLUGGED
25	43	PI	TSH	PLUGGED
31	43	99	2H	PLUGGED
31	43	DI	2H	PLUGGED
31	43	SAI	2H	PLUGGED

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NORTH ANNA POWER STATION UNIT 1

STEAM GENERATOR "C"

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
19	44	99	1H	PLUGGED
19	44	82	1H	PLUGGED
19	44	SAI	1H	PLUGGED
19	44	SAI	1H	PLUGGED
24	44	MCI	TSH	PLUGGED
24	44	MCI	TSH	PLUGGED
29	44	75	TSH	PLUGGED
29	44	74	TSH	PLUGGED
29	44	PI	TSH	PLUGGED
45	44	INF	AV2	
3	45	80	1H	PLUGGED
3	45	SAI	1H	PLUGGED
12	45	32	TSH	PLUGGED
12	45	PI	2H	PLUGGED
12	45	COI	2H	PLUGGED
12	45	COI	2H	PLUGGED
13	45	SCI	TSH	PLUGGED
13	45	PI	TSH	PLUGGED
13	45	PI	2H	PLUGGED
13	45	COI	2H	PLUGGED
14	45	PI	2H	PLUGGED
14	45	COI	2H	PLUGGED
17	45	16	AV4	
18	45	14	AV4	PLUGGED
18	45	SCI	TSH	PLUGGED
19	45	19	AV4	
24	45	MCI	TSH	PLUGGED
24	45	MCI	TSH	PLUGGED
24	45	MCI	TSH	PLUGGED
24	45	PI	TSH	PLUGGED
39	45	INF	AV1	
45	45	PI	1H	PLUGGED
45	45	SAI	1H	PLUGGED
9	46	**	**	PLUGGED

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NORTH ANNA POWER STATION UNIT 1

STEAM GENERATOR "C"

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
15	46	PI	2H	PLUGGED
15	46	COI	2H	PLUGGED
23	46	SCI	TSH	PLUGGED
23	46	PI	TSH	PLUGGED
25	46	SCI	TSH	PLUGGED
25	46	PI	TSH	PLUGGED
32	46	38	TSH	PLUGGED
32	46	SAI	TSH	PLUGGED
32	46	PI	TSH	PLUGGED
34	46	29	TSH	
8	47	PI	3H	PLUGGED
8	47	COI	3H	PLUGGED
9	47	PI	1H	PLUGGED
9	47	PI	1H	PLUGGED
9	47	PI	1H	PLUGGED
9	47	COI	1H	PLUGGED
9	47	COI	1H	PLUGGED
9	47	COI	1H	PLUGGED
18	47	PI	2H	PLUGGED
18	47	COI	2H	PLUGGED
20	47	SCI	TSH	PLUGGED
25	47	SCI	TSH	PLUGGED
14	48	SCI	Tsh	PLUGGED
23	48	SCI	TSH	PLUGGED
24	48	SCI	TSH	PLUGGED
24	48	PI	TSH	PLUGGED
28	48	INF	AV3	
32	48	42	TSH	PLUGGED
33	48	41	TSH	PLUGGED
12	49	PI	2H	PLUGGED
12	49	COI	2H	PLUGGED
14	49	19	TSH	

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STEAM GENERATOR "C"

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
32	49	SAI	TSH	PLUGGED
44	49	10	AV2	
38	50	INF	AV3	
17	51	98	2H	PLUGGED
17	51	PI	2H	PLUGGED
17	51	COI	2H	PLUGGED
19	51	98	2H	PLUGGED
19	51	72	2H	PLUGGED
19	51	MAI	2H	PLUGGED
19	51	MAI	2H	PLUGGED
20	51	INF	AV1	
25	51	MCI	TSH	PLUGGED
25	51	MCI	TSH	PLUGGED
25	51	MCI	TSH	PLUGGED
25	51	MC1	TSH	PLUGGED
25	51	PI	TSH	PLUGGED
27	51	INF	AV3	
28	51	INF	AV3	
29	51	INF	AV3	
31	51	SAI	TSH	PLUGGED
31	51	PI	2H	PLUGGED
31	51	COI	2H	PLUGGED
32	51	INF	AV3	
7	52	96	2H	PLUGGED
7	52	SAI	TSH	PLUGGED
7	52	SAI	2H	PLUGGED
13	52	SCI	TSH	PLUGGED
13	52	PI	TSH	PLUGGED
13	52	PI	1H	PLUGGED
13	52	COI	1H	PLUGGED
21	52	PI	2H	PLUGGED
21	52	COI	2H	PLUGGED

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STEAM GENERATOR "C"

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
23	52	DI	2H	PLUGGED
23	52	86	2H	PLUGGED
23	52	SAI	2H	PLUGGED
23	52	MAI	2H	PLUGGED
30	52	INF	AV3	
34	52	INF	AV2	
37	52	INF	AV2	
39	52	INF	AV3	
20	53	PI	2H	PLUGGED
20	53	COI	2H	PLUGGED
25	53	SCI	TSH	PLUGGED
17	55	SCI	TSH	PLUGGED
25	55	MCI	TSH	PLUGGED
25	55	MCI	TSH	PLUGGED
25	55	PI	TSH	PLUGGED
26	55	SCI	TSH	PLUGGED
27	55	19	TSH	
27	55	14	TSH	
44	55	18	AV3	
2	56	88	1H	PLUGGED
2	56	SAI	1H	PLUGGED
13	56	SCI	TSH	PLUGGED
13	56	PI	TSH	PLUGGED
17	56	MCI	TSH	PLUGGED
17	56	MCI	TSH	PLUGGED
27	56	SCI	TSH	PLUGGED
28	56	SCI	TSH	PLUGGED
29	56	PI	2H	PLUGGED
29	56	93	2H	PLUGGED
9	57	PI	1H	PLUGGED
9	57	SAI	1H	PLUGGED

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STEAM GENERATOR "C"

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
17	57	SCI	TSH	PLUGGED
17	57	PI	TSH	PLUGGED
19	57	97	1H	PLUGGED
19	57	98	1H	PLUGGED
19	57	SAI	1H	PLUGGED
19	57	SAI	1H	PLUGGED
26	57	PI	2H	PLUGGED
26	57	SAI	2H	PLUGGED
28	57	75	TSH	PLUGGED
28	57	SCI	TSH	PLUGGED
28	57	SAI	TSH	PLUGGED
5	58	79	1H	PLUGGED
5	58	SAI	1H	PLUGGED
14	58	INF	AV4	PLUGGED
14	58	SCI	TSH	PLUGGED
20	58	31	1H	
25	58	SCI	TSH	PLUGGED
43	58	29	AV1	
44	58	18	AV3	
14	59	MCI	TSH	PLUGGED
14	59	MCI	TSH	PLUGGED
16	59	MCI	TSH	PLUGGED
16	59	MCI	TSH	PLUGGED
17	59	SCI	TSH	PLUGGED
17	59	PI	TSH	PLUGGED
25	59	PI	TSH	PLUGGED
25	59	MCI	TSH	PLUGGED
25	59	MCI	TSH	PLUGGED
26	59	PI	TSH	PLUGGED
26	59	SCI	TSH	PLUGGED
31	59	98	4H	PLUGGED
31	59	SAI	4H	PLUGGED

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STEAM GENERATOR "C"

<u>Row</u>	<u>Col</u>	<u>Id</u>	<u>Loc</u>	<u>Remarks</u>
13	60	SCI	TSH	PLUGGED
14	60	SCI	TSH	PLUGGED
17	60	SCI	TSH	PLUGGED
23	60	SCI	TSH	PLUGGED
23	60	MCI	TSH	PLUGGED
23	60	MCI	TSH	PLUGGED
23	60	PI	TSH	PLUGGED
26	60	PI	TSH	PLUGGED
26	60	SCI	TSH	PLUGGED
14	61	MCI	TSH	PLUGGED
14	61	MCI	TSH	PLUGGED
14	61	MCI	TSH	PLUGGED
14	61	MCI	TSH	PLUGGED
14	61	MCI	TSH	PLUGGED
21	61	SCI	TSH	PLUGGED
21	61	PI	TSH	PLUGGED
26	61	PI	TSH	PLUGGED
26	61	SCI	TSH	PLUGGED
26	61	PI	TSH	PLUGGED
27	61	34	TSH	
14	62	DI	1H	PLUGGED
14	62	MAI	1H	PLUGGED
24	62	INF	AV2	PLUGGED
24	62	PI	2H	PLUGGED
24	62	55	2H	PLUGGED
14	63	PI	2H	PLUGGED
14	63	53	2H	PLUGGED
31	63	18	AV3	
7	64	96	1H	PLUGGED
7	64	81	1H	PLUGGED
7	64	SAI	1H	PLUGGED
13	64	SCI	TSH	PLUGGED
13	64	PI	TSH	PLUGGED

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STEAM GENERATOR "C"

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
15	64	22	TSH	PLUGGED
15	64	29	TSH	PLUGGED
15	64	PI	2H	PLUGGED
15	64	COI	2H	PLUGGED
26	64	26	TSH	PLUGGED
26	64	PI	2H	PLUGGED
26	64	PI	3H	PLUGGED
26	64	32	2H	PLUGGED
26	64	43	3H	PLUGGED
27	64	PI	2H	PLUGGED
27	64	COI	2H	PLUGGED
2	65	DI	1H	PLUGGED
2	65	MAI	1H	PLUGGED
7	65	74	1H	PLUGGED
7	65	DI	1H	PLUGGED
7	65	SAI	1H	PLUGGED
7	65	SAI	1H	PLUGGED
9	65	38	TSH	
13	65	DI	1H	PLUGGED
13	65	SCI	TSH	PLUGGED
13	65	SAI	1H	PLUGGED
25	65	43	TSH	PLUGGED
25	65	DI	2H	PLUGGED
25	65	PI	2H	PLUGGED
25	65	COI	2H	PLUGGED
6	66	DI	2H	PLUGGED
6	66	SAI	2H	PLUGGED
20	66	INF	AV1	
20	66	INF	AV4	
22	66	SCI	TSH	PLUGGED
23	66	MCI	TSH	PLUGGED
23	66	MCI	TSH	PLUGGED
31	66	97	2H	PLUGGED
31	66	DI	2H	PLUGGED
31	66	SAI	2H	PLUGGED
31	66	SAI	2H	PLUGGED

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STEAM GENERATOR "C"

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
4	67	DI	1H	PLUGGED
4	67	SAI	1H	PLUGGED
11	67	87	2H	PLUGGED
11	67	SAI	2H	PLUGGED
29	67	10	AV2	
29	67	15	AV3	
5	68	98	2H	PLUGGED
5	68	DI	3H	PLUGGED
5	68	PI	2H	PLUGGED
5	68	SAI	2H	PLUGGED
5	68	SAI	3H	PLUGGED
33	68	98	2H	PLUGGED
33	68	SAI	2H	PLUGGED
4	69	99	3H	PLUGGED
4	69	SAI	3H	PLUGGED
5	69	DI	3H	PLUGGED
5	69	SAI	3H	PLUGGED
8	69	94	1H	PLUGGED
8	69	98	1H	PLUGGED
8	69	PI	1H	PLUGGED
8	69	MAI	1H	PLUGGED
20	69	SCI	TSH	PLUGGED
20	69	PI	TSH	PLUGGED
22	69	94	1H	PLUGGED
22	69	SAI	1H	PLUGGED
41	69	100	2H	PLUGGED
41	69	SAI	2H	PLUGGED
41	69	PI	2H	PLUGGED
11	70	54	TSH	PLUGGED
24	70	INF	AV1	
24	70	INF	AV2	
29	70	PI	3H	PLUGGED
29	70	71	3H	PLUGGED
32	70	16	AV3	

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STEAM GENERATOR "C"

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
33	70	INF	AV1	
33	70	INF	AV3	
35	70	14	AV3	
37	70	20	AV3	
38	70	18	AV3	
39	70	15	AV3	
23	71	PI	2H	PLUGGED
23	71	SAI	2H	PLUGGED
24	71	INF	AV2	
28	71	PI	2H	PLUGGED
28	71	64	2H	PLUGGED
35	71	12	AV2	PLUGGED
35	71	15	AV3	PLUGGED
35	71	PI	2H	PLUGGED
35	71	70	2H	PLUGGED
37	71	20	AV3	
38	71	18	AV3	
8	72	SCI	TSH	PLUGGED
11	72	SCI	TSH	PLUGGED
12	72	54	TSH	PLUGGED
13	72	44	TSH	PLUGGED
24	72	22	AV3	
24	72	21	AV4	
25	72	18	AV4	
31	72	16	AV3	
35	72	15	AV4	
37	72	20	AV3	
39	72	16	AV4	

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STEAM GENERATOR "C"

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
2	73	PI	4H	PLUGGED
2	73	58	4H	PLUGGED
4	73	PI	1H	PLUGGED
4	73	PI	2H	PLUGGED
4	73	PI	3H	PLUGGED
4	73	PI	3H	PLUGGED
4	73	32	1H	PLUGGED
4	73	89	2H	PLUGGED
4	73	50	3H	PLUGGED
6	73	96	1H	PLUGGED
6	73	74	1H	PLUGGED
6	73	SAI	1H	PLUGGED
7	73	SCI	TSH	PLUGGED
10	73	94	1H	PLUGGED
10	73	98	1H	PLUGGED
10	73	SAI	1H	PLUGGED
10	73	SAI	1H	PLUGGED
10	73	PI	1H	PLUGGED
10	73	PI	1H	PLUGGED
11	73	SCI	TSH	PLUGGED
11	73	PI	TSH	PLUGGED
18	73	DI	1H	PLUGGED
18	73	SAI	1H	PLUGGED
24	73	15	AV2	
24	73	INF	AV3	
25	73	18	AV2	
29	73	INF	AV3	
32	73	18	AV3	
34	73	INF	AV3	
36	73	20	AV3	
37	73	18	AV3	
10	74	88	1H	PLUGGED
10	74	SAI	1H	PLUGGED
37	74	INF	AV3	

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STEAM GENERATOR "C"

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
5	75	84	2H	PLUGGED
5	75	SAI	2H	PLUGGED
5	75	PI	2H	PLUGGED
7	75	SCI	TSH	PLUGGED
7	75	PI	TSH	PLUGGED
19	75	14	AV3	
20	75	DI	1H	PLUGGED
20	75	DI	2H	PLUGGED
20	75	SAI	1H	PLUGGED
20	75	SAI	2H	PLUGGED
20	75	PI	1H	PLUGGED
21	75	17	AV3	
22	75	16	AV3	
23	75	INF	AV3	
25	75	15	AV3	
30	75	INF	AV3	
32	75	18	AV3	
34	75	18	AV3	
7	76	SCI	TSH	PLUGGED
10	76	MCI	TSH	PLUGGED
10	76	MCI	TSH	PLUGGED
14	76	DI	1H	PLUGGED
14	76	SAI	1H	PLUGGED
16	76	PI	1H	PLUGGED
16	76	92	1H	PLUGGED
19	76	INF	AV3	
20	76	INF	AV3	
22	76	17	AV3	
26	76	INF	AV3	

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STEAM GENERATOR "C"

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
27	76	INF	AV3	PLUGGED
27	76	PI	2H	PLUGGED
27	76	58	2H	PLUGGED
28	76	17	AV3	
29	76	INF	AV3	
30	76	INF	AV3	
31	76	15	AV3	
33	76	INF	AV3	
35	76	19	AV3	
37	76	15	AV2	
10	77	MCI	TSH	PLUGGED
10	77	MCI	TSH	PLUGGED
18	77	PI	2H	PLUGGED
18	77	COI	2H	PLUGGED
5	78	98	2H	PLUGGED
5	78	SAI	2H	PLUGGED
5	78	PI	2H	PLUGGED
11	78	89	2H	PLUGGED
11	78	SAI	2H	PLUGGED
11	78	PI	2H	PLUGGED
13	78	92	1H	PLUGGED
13	78	95	1H	PLUGGED
13	78	SAI	1H	PLUGGED
6	79	SCI	TSH	PLUGGED
10	79	DI	1H	PLUGGED
10	79	DI	1H	PLUGGED
10	79	MAI	1H	PLUGGED
28	79	PI	2H	PLUGGED
28	79	37	2H	PLUGGED
28	79	87	2H	PLUGGED
28	79	94	2H	PLUGGED
29	79	21	AV2	
29	79	17	AV4	

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STEAM GENERATOR "C"

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
2	80	48	1H	PLUGGED
2	80	SAI	1H	PLUGGED
6	80	SCI	TSH	PLUGGED
7	80	63	2H	PLUGGED
7	80	SAI	2H	PLUGGED
10	80	97	5H	PLUGGED
10	80	SAI	5H	PLUGGED
5	83	83	3H	PLUGGED
5	83	SAI	3H	PLUGGED
17	83	PI	2H	PLUGGED
17	83	SAI	2H	PLUGGED
18	83	99	2H	PLUGGED
18	83	SAI	2H	PLUGGED
8	84	91	3H	PLUGGED
8	84	98	3H	PLUGGED
8	84	SAI	3H	PLUGGED
16	84	91	2H	PLUGGED
15	84	99	2H	PLUGGED
16	84	SAI	2H	PLUGGED
16	84	SAI	2H	PLUGGED
3	85	92	2H	PLUGGED
3	85	DI	2H	PLUGGED
3	85	MAI	2H	PLUGGED
14	86	19	AV4	
7	87	72	2H	PLUGGED
7	87	SAI	2H	PLUGGED
2	90	DI	2H	PLUGGED
2	90	SAI	2H	PLUGGED
2	90	SAI	2H	PLUGGED
2	90	PI	3H	PLUGGED
2	90	PI	4H	PLUGGED
2	90	MAI	3H	PLUGGED
2	90	SAI	4H	PLUGGED
7	90	PI	2H	PLUGGED
7	90	63	2H	PLUGGED

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STEAM GENERATOR "C"

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
11	90	PI	4H	PLUGGED
11	90	86	4H	PLUGGED
16	90	PI	1H	PLUGGED
16	90	86	1H	PLUGGED
12	93	87	1H	PLUGGED
12	93	92	3H	PLUGGED
12	93	DI	4H	PLUGGED
12	93	70	4H	PLUGGED
12	93	91	5H	PLUGGED
12	93	89	5H	PLUGGED
12	93	SAI	1H	PLUGGED
12	93	MAI	3H	PLUGGED
12	93	SAI	4H	PLUGGED
12	93	SAI	4H	PLUGGED
12	93	SAI	5H	PLUGGED
12	93	SAI	5H	PLUGGED
2	94	99	2H	PLUGGED
2	94	SAI	2H	PLUGGED

** This tube was plugged by mistake
cindar.doc

ATTACHMENT 2

GLOSSARY OF TERMS
NORTH ANNA POWER STATION
ANNUAL STEAM GENERATOR
INSERVICE INSPECTION REPORT

VIRGINIA ELECTRIC AND POWER COMPANY

VIRGINIA ELECTRIC AND POWER COMPANY
STEAM GENERATOR EDDY CURRENT TUBE INSPECTION

GLOSSARY OF TERMS

- 1) COI - Circumferentially Oriented Indication - describes a circumferentially oriented indication signal from Rotating Pancake probe data - either single or multiple signals - SCI or MCI will be used if it is possible to clearly detect the number of signals present.
- 2) DI - Distorted indication - a possible tube wall loss condition that is unquantifiable with a numeric percent call due to the existing signal characteristics.
- 3) INF - Indication Not Found - indicates that a previously reported Indication, from current inspection data or historical data, is not found in the data being analyzed - also used to address the case where a tube/signal is being retested for positive identification (PID) and the retest data does not show any signal present.
- 4) INR - Indication Not Reportable - indicates that a very small tube wall loss condition exists in the data being analyzed that is below the reportable criteria threshold for this specific inspection - can be used to address indications called in previous inspections that are still detectable but fall below current criteria.
- 5) MAI - Multiple Axial Indication - describes multiple axially oriented indication signals from Rotating Pancake probe data.
- 6) MCI - Multiple Circumferentially oriented Indication - describes multiple circumferentially oriented indication signals from Rotating Pancake probe data - COI is used if it is impossible to clearly detect the number of signals present.
- 7) PI - Possible Indication (retest) - generally used with 8x1 analysis, sometimes with bobbin analysis - describes a potential wall loss condition signal that typically requires a retest for verification - sometimes retested with a special probe, e.g., MRPC, etc.
- 8) SAI - Single Axial Indication - describes a single axially oriented signal from Rotating Pancake probe data.

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GLOSSARY OF TERMS

- 9) SCI - Single Circumferentially oriented Indication - describes a single circumferentially oriented indication signal from Rotating Pancake probe data - COI is used if it is impossible to clearly detect the number of signals present.
- 10) 55 - A number in the indication column shows the % thru wall depth of the indication.
- 11) TEH - Tube End Hot leg.
- 12) TEC - Tube End Cold leg.
- 13) TSH - Top of Tubesheet Hot leg.
- 14) TSC - Top of Tubesheet Cold leg.
- 15) #C, #H - (# = number) of Support Plate Hot or Cold leg. e.g., 3H, 6H, 7C.
- 16) AV1, AV2, AV3, AV4 - Anti-Vibration Bars 1 thru 4.

Note: Where no comment appears in the remarks column the tube is still in service.

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