

ATTACHMENT "A"

NORTH ANNA POWER STATION UNIT 1
1992 ANNUAL STEAM GENERATOR
INSERVICE INSPECTION REPORT

VIRGINIA ELECTRIC AND POWER COMPANY

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ATTACHMENT "A"

STEAM GENERATOR "A" MID - CYCLE OUTAGE JANUARY/FEBRUARY 1992 NORTH ANNA 1

In Steam Generator "A", 2,924 tubes were inspected full length with bobbin probes except for the U-bend area of the Row 2 tubes which were examined in the 7H to 7C tube support region (U-bend) with RPC probes. One tube (R7C93) could not be examined full length, because a restriction prevented passage of the eddy current probe. That tube was plugged as a precautionary measure. This is 100% of the available tubes. Supplemental examinations were also performed using Rotating Pancake and 8x1 probes where additional confirmatory or other data was desired. Of the tubes examined 60 had pluggable circumferential indications, 98 had pluggable axial indications, one had a pluggable indication between 40% and 49% through wall, nine had indications between 30% and 39% through wall, 21 had indications between 20% and 29% through wall, 21 had indications between 10% and 19% through wall seven were plugged as a precautionary measure, and one tube was replugged. See "Unit 1 S/G 'A' Examination Summary" for details.

ATTACHMENT "A"

NORTH ANNA UNIT #1
MID - CYCLE OUTAGE - JANUARY / FEBRUARY 1992

UNIT 1 S/G "A" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
2	2	47	2H	P
2	2	SAI	2H	P
5	2	DI	1H	P
5	2	SAI	1H	P
5	3	99	2H	P
5	3	SAI	2H	P
12	3	SAI	1H	P
13	3	SCI	1H	P
13	3	SCI	4H	P
3	4	SAI	1H	P
5	4	SCI	1H	P
6	4	SAI	1H	P
7	4	SAI	1H	P
10	4	SAI	1H	P
7	5	SAI	3H	P
14	5	80	1H	P
14	5	SAI	1H	P
17	5	SCI	1H	P
17	5	SCI	2H	P
18	5	77	1H	P
18	5	SAI	1H	P
18	5	SAI	5H	P
19	5	SCI	1H	P
6	6	MCi	1H	P
7	6	SCI	2H	P

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UNIT 1 S/G "A" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
9	7	SAI	1H	P
11	7	SCI	1H	P
17	7	SCI	1H	P
2	8	DIN	2H	P
2	8	89	5H	P
2	8	SAI	5H	P
16	8	INR	2H	
16	8	INR	3H	
20	9	INR	4C	
20	9	INR	3C	
22	9	SCI	2H	P
4	10	SAI	1H	P
8	10	SCI	1H	P
17	10	MCI	1H	P
18	10	SAI	1H	P
17	11	SCI	1H	P
9	12	99	2H	P
9	12	SAI	2H	P
17	13	SCI	1H	P
6	14	SAI	1H	P
5	15	SAI	2H	P
22	15	SCI	1H	P
4	16	SCI	TSH	P
5	16	23	TSH	

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UNIT 1 S/G "A" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
18	16	SAI	2H	P
17	18	SCI	1H	P
21	18	SCI	1H	P
29	18	INR	AV2	
34	18	INR	1H	
2	19	SCI	1H	P
27	19	INR	AV3	
2	20	SAI	1H	P
2	20	SAI	2H	P
18	20	DI	2H	P
18	20	SAI	2H	P
19	20	SAI	2H	P
19	20	SAI	3H	P
32	20	INR	AV3	
8	21	93	3H	P
8	21	SAI	3H	P
8	21	SAI	5H	P
28	21	SCI	1H	P
34	21	SAI	1H	P
5	22	DI	2H	P
5	22	SAI	2H	P
20	22	SCI	2H	P
22	22	DI	5H	P
22	22	SAI	5H	P

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UNIT 1 S/G "A" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
27	22	SCI	1H	P
33	22	SAI	1H	P
33	22	SAI	2H	P
20	23	SCI	TSH	P
21	23	SCI	TSH	P
38	23	DI	1H	P
38	23	SAI	1H	P
39	23	SAI	1H	P
7	24	SCI	1H	P
8	24	88	2H	P
8	24	98	5H	P
8	24	SAI	2H	P
8	24	SAI	5H	P
10	24	SAI	4H	P
22	24	SCI	2H	P
30	24	SCI	2H	P
34	25	12	AV3	
12	26	85	2H	P
12	26	MAI	2H	P
15	26	SCI	TSH	P
35	26	29	TSH	
5	27	80	1H	P
5	27	SAI	1H	P
7	27	SCI	2H	P

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UNIT 1 S/G "A" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
9	27	81	3H	P
9	27	SAI	3H	P
13	27	INR	TSH	
7	28	SAI	4H	P
26	28	SAI	2H	P
5	29	92	1H	P
5	29	SAI	1H	P
19	29	SCI	TSH	P
24	29	SCI	1H	P
24	29	SCI	4H	P
5	30	SCI	3H	P
10	30	INR	TSH	
15	30	DI	3H	P
15	30	100	3H	P
15	30	SAI	3H	P
29	30	MCI	1H	P
12	31	17	TSH	
13	31	27	TSH	
31	31	SCI	1H	P
10	32	SCI	3H	P
16	32	100	5H	P
16	32	SAI	5H	P
19	32	MCI	TSH	P
10	33	INR	TSH	
11	33	19	TSH	

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UNIT 1 S/G "A" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
12	33	21	TSH	
24	33	MCI	TSH	P
36	33	SAI	2H	P
13	34	22	TSH	
14	34	35	TSH	
4	35	SAI	1H	P
13	35	27	TSH	
18	35	SAI	1H	P
13	36	31	TSH	P
13	36	DI	2H	P
13	36	SAI	2H	P
15	36	28	TSH	
13	37	38	TSH	
11	38	SCI	1H	P
14	38	32	TSH	
28	38	SAI	3H	P
43	38	INR	4C	
6	39	INR	5H	
12	39	27	TSH	
13	39	17	TSH	
15	39	38	TSH	
16	39	16	TSH	

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<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
18	39	SCI	1H	P
40	39	SCI	1H	P
15	40	24	TSH	
34	40	SAI	1H	P
38	40	SAI	1H	P
41	40	SAI	4H	P
42	40	SAI	1H	P
44	40	SAI	3H	P
4	41	SAI	1H	P
12	41	SAI	1H	P
15	41	15	TSH	
39	41	DI	1H	P
39	41	SCI	1H	P
39	41	SCI	2H	P
5	42	95	5H	P
5	42	SAI	5H	P
7	42	SAI	1H	P
9	42	SAI	1H	P
13	42	29	TSH	
17	42	14	TSH	
30	42	INR	7H	

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<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
34	42	SCI	1H	P
34	42	SCI	2H	P
17	43	18	TSH	
9	44	22	5H	
10	44	INR	TSH	
11	44	12	TSH	
14	44	22	TSH	
15	44	23	TSH	
16	44	15	TSH	
32	44	29	TSH	
15	45	25	TSH	
20	45	SCI	TSH	P
20	45	SCI	2H	P
31	45	SCI	1H	P
13	46	SCI	TSH	P
30	46	23	TSH	
19	47	SAI	5H	P
20	47	SCI	2H	P
23	47	SAI	5H	P
33	47	INR	TSH	P
33	47	SAI	TSH	P
33	47	SAI	1H	P
3	48	SAI	4H	P

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UNIT 1 S/G "A" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
44	52	SCI	1H	P
22	53	99	2H	P
22	53	SAI	2H	P
11	54	SCI	1H	P
11	54	SCI	2H	P
32	54	SCI	2H	P
37	54	SAI	1H	P
39	54	SCI	1H	P
46	54	MAI	2H	P
3	55	SCI	5H	P
25	55	SCI	TSH	P
30	55	31	TSH	
5	56	INR	5H	
7	56	DI	5H	P
7	56	SAI	5H	P
8	56	INR	6H	
15	56	SCI	TSH	P
2	57	SAI	5H	P
10	57	INR	6H	
30	57	INR	TSH	
33	58	SAI	2H	P
44	58	14	AV3	

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UNIT 1 S/G "A" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
5	59	DI	1H	P
5	59	SAI	1H	P
25	59	SAI	TSH	P
43	59	39	1H	P
43	59	SAI	1H	P
8	60	SAI	6H	P
25	60	17	AV4	
37	60	26	AV4	
42	60	15	AV3	
44	60	16	AV3	
3	61	SAI	5H	P
8	62	DI	5H	P
8	62	SAI	5H	P
20	63	32	1H	
20	63	30	2H	
20	63	INR	2H	
21	63	30	TSH	
10	64	INR	TSH	
21	64	INR	TSH	
42	64	DI	1H	P
42	64	SAI	1H	P
22	65	INR	6C	
5	66	DI	5H	P
5	66	SAI	4H	P
5	66	SAI	5H	P
9	66	SAI	4H	P

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UNIT 1 S/G "A" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
13	66	INR	TSH	
23	66	47	TSH	P
15	67	DI	5H	P
15	67	SAI	5H	P
2	68	87	5H	P
2	68	SAI	5H	P
9	68	SCI	2H	P
5	69	DIN	7H	
26	69	INR	TSH	
36	69	25	AV3	
5	70	SAI	1H	P
5	70	SAI	5H	P
36	70	SAI	2H	P
10	71	SCI	TSH	P
16	72	INR	TSH	
24	72	16	AV2	
32	72	SAI	2H	P
17	73	SAI	1H	P
17	73	SCI	2H	P
24	73	24	AV2	
27	73	INR	AV2	
29	73	14	AV2	
32	73	INR	AV2	

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NORTH ANNA UNIT #1
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UNIT 1 S/G "A" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
35	74	13	AV3	
36	74	INR	AV3	
38	74	INR	AV2	
13	75	16	AV4	
19	75	87	1H	P
19	75	DI	1H	P
19	75	SAI	1H	P
36	75	87	2H	P
36	75	SAI	2H	P
15	76	INR	6H	
20	76	DI	2H	P
20	76	SAI	2H	P
25	76	17	AV3	
36	76	INR	AV2	
33	78	INR	AV1	
8	79	INR	4H	
6	81	SCI	4H	P
22	81	SAI	5H	P
28	81	INR	TSH	
4	83	INR	6H	
4	83	INR	7H	
4	84	INR	7H	P
4	84	SAI	1H	P
20	84	INR	AV2	
3	85	INR	7H	

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NORTH ANNA UNIT #1
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UNIT 1 S/G "A" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
4	85	INR	6H	
4	85	INR	7H	
22	85	12	AV3	
26	85	INR	AV2	
4	87	INR	7H	
9	87	INR	AV1	
3	88	INR	6H	
3	88	INR	7H	
4	88	INR	7H	
6	88	SCI	1H	P
11	88	48	2H	P
11	88	SAI	1H	P
11	88	SAI	2H	P
5	89	SAI	5H	P
11	89	99	1H	P
11	89	SAI	1H	P
19	90	SAI	5H	P
19	90	SAI	6H	P
12	91	SAI	5H	P
3	92	97	3H	P
3	92	SAI	3H	P
3	94	21	5C	P
5	94	DI	1H	P
5	94	SAI	1H	P
13	43	--	--	P, *

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NORTH ANNA UNIT #1 MID - CYCLE OUTAGE - JANUARY / FEBRUARY 1992

UNIT 1 S/G "A" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
33	50	--	--	P, 1
14	70	--	--	P, 1
7	92	--	--	P, 2, **
6	93	--	--	P, 2, **
7	93	RST	TSH	P, 3
8	93	--	--	P, 2, **
7	94	--	--	P, 2, **

EXPLANATION OF REMARKS

P. Plugged Tube

1. These tubes were suspect from the last Eddy Current Examination. Re-examination failed to reveal any rejectable indication of defects, but the tubes were plugged as a precautionary measure.
2. These tubes were Eddy Current tested with no indications found, but the tubes were plugged because they are adjacent to tube R7C93. That tube could not be examined completely because a restriction prevented the passage of the Eddy Current probe.
3. Restricted tube could not be examined over its entire length.

* Plug removed from Cold Leg, Replugged.

** Sentinel Plug in Cold Leg.

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NORTH ANNA UNIT #1
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UNIT 1 S/G "A" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
13	48	98	2H	P
13	48	SAI	2H	P
16	48	13	TSH	
26	48	10	5C	
32	48	DI	2H	P
32	48	SAI	2H	P
46	48	96	2H	P
46	48	SAI	2H	P
2	49	SAI	5H	P
2	49	SAI	6H	P
10	49	DI	5H	P
10	49	SAI	5H	P
15	49	29	TSH	
32	49	35	TSH	
45	49	INR	AV3	
18	50	20	TSH	
28	50	INR	AV3	
32	50	SAI	1H	P
45	50	SCI	1H	P
33	51	30	TSH	
38	51	SAI	2H	P
42	51	SCI	1H	P
46	51	SCI	1H	P
8	52	TI	TSH	P
8	52	SAI	TSH	P

ATTACHMENT "A"

STEAM GENERATOR "B" MID - CYCLE OUTAGE JANUARY/FEBRUARY 1992 NORTH ANNA 1

In Steam Generator "B", 2,963 tubes were inspected full length with bobbin probes except for the U-bend region of the Row 2 tubes which were examined in the 7H to 7C tube support region (U-bend) with RPC probes. This is 100% of the available tubes. Supplemental examinations were also performed using Rotating Pancake and 8X1 probes where additional confirmatory or other data was desired. Of the tubes examined 76 had pluggable circumferential indications, 82 had pluggable axial indications, 5 had indications between 30% and 39% through wall, 67 had indications between 20% and 29% through wall, 37 had indications between 10% and 19% through wall, and 2 tubes were plugged as a precautionary measure. See "Unit 1 S/G 'B' Examination Summary" for details.

ATTACHMENT "A"

NORTH ANNA UNIT #1 MID - CYCLE OUTAGE JANUARY / FEBRUARY 1992

UNIT 1 S/G "B" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
2	4	SAI	1H	P
13	5	21	AV4	
15	5	INR	AV2	
15	5	INR	AV3	
15	5	INR	AV4	
17	5	23	AV1	
17	5	23	AV2	
4	6	SCI	1H	P
4	6	SAI	1H	P
16	6	SAI	2H	
11	7	SCI	2H	
15	7	18	AV3	
17	7	17	AV2	
23	7	20	AV4	
11	8	MCI	2H	P
12	8	SCI	2H	P
12	8	MCI	3H	P
15	8	INR	AV2	
24	8	21	AV2	
25	8	SCI	TSH	P *
6	9	SCI	3H	P
15	9	SCI	1H	P
23	9	29	AV1	
23	9	28	AV2	
23	9	24	AV3	
23	9	14	AV4	

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UNIT 1 S/G "B" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
24	9	18	AV1	
24	9	19	AV3	
16	10	INR	AV3	
22	10	INR	AV2	
22	10	INR	AV3	
22	10	INR	AV4	
24	10	23	AV4	
25	10	22	AV3	
25	10	24	AV4	
26	10	21	AV4	
28	10	23	AV3	
11	11	SCI	2H	P
16	11	DI	2H	
16	11	SAI	2H	
25	11	17	AV2	
25	11	21	AV4	
18	12	77	1H	P
18	12	73	3H	P
18	12	SAI	1H	P
18	12	SAI	3H	P
23	12	INR	AV2	
23	12	16	AV4	
24	12	INR	AV2	
25	12	INR	AV1	
25	12	25	AV2	
25	12	INR	AV3	
25	12	23	AV4	
27	12	INR	AV3	

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UNIT 1 S/G "B" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
28	12	INR	AV1	
28	12	INR	AV4	
29	12	20	AV3	
29	12	21	AV4	
30	12	21	AV3	
30	12	19	AV4	
2	13	SAI	1H	P
8	13	SCI	1H	P
8	13	SCI	2H	P
10	13	DI	1H	P
10	13	SAI	1H	P
11	13	SC:	2H	P
22	13	INR	AV3	
23	13	INR	AV1	
23	13	INR	AV2	
23	13	INR	AV3	
23	13	INR	AV4	
25	13	INR	AV1	
25	13	INR	AV3	
25	13	INR	AV4	
26	13	21	AV1	
27	13	21	AV1	
27	13	27	AV3	
27	13	24	AV4	
28	13	INR	AV3	
29	13	3	AV1	
29	13	INR	AV2	
29	13	INR	AV3	
29	13	INR	AV4	

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NORTH ANNA UNIT #1
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UNIT 1 S/G "B" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
30	13	23	AV1	
30	13	INR	AV2	
30	13	23	AV3	
30	13	21	AV4	
13	14	90	4H	P
13	14	SAI	4H	P
15	14	SCI	2H	P
17	14	INR	AV2	P
17	14	INR	AV3	P
17	14	SCI	2H	P
24	14	INR	AV4	
25	14	INR	AV1	
25	14	INR	AV4	
26	14	21	AV2	
26	14	INR	AV3	
26	14	20	AV4	
27	14	INR	AV3	
12	15	DI	1H	P
12	15	94	1H	P
12	15	SAI	1H	P
20	15	SAI	2H	P
29	15	INR	AV1	
17	16	INR	AV3	
18	16	SCI	2H	P
29	16	25	AV2	
29	16	27	AV4	
32	16	27	AV1	
32	16	20	AV4	

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NORTH ANNA UNIT #1
MID - CYCLE OUTAGE JANUARY / FEBRUARY 1992

UNIT 1 S/G "B" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
33	16	15	AV1	
33	16	21	AV4	
4	17	35	TSH	
8	17	SAI	2H	P
21	18	23	AV3	
23	18	26	AV3	
23	18	22	AV4	
24	18	26	AV3	
24	18	22	AV4	
25	18	20	AV3	
29	18	22	AV3	
29	18	22	AV4	
33	18	19	AV3	
17	19	22	AV3	
26	19	27	AV3	
27	19	25	AV3	
29	19	23	AV3	
35	19	18	AV4	
2	20	SCI	2H	P
32	20	21	AV3	
32	20	24	AV4	
33	20	17	AV3	
10	21	SCI	1H	P
14	21	SCI	2H	P

ATTACHMENT "A"

NORTH ANNA UNIT #1
MID - CYCLE OUTAGE JANUARY / FEBRUARY 1992

UNIT 1 S/G "B" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
23	21	25	AV2	
23	21	28	AV3	
24	21	36	AV2	
24	21	INR	AV3	
25	21	INR	AV2	
25	21	INR	AV3	
25	21	INR	AV4	
27	21	30	AV3	
28	21	22	AV3	
29	21	23	AV2	
29	21	31	AV3	
29	21	INR	AV4	
33	21	INR	AV2	
33	21	22	AV3	
36	21	SCI	1H	P
37	21	INR	AV3	P
37	21	SAI	2H	P
3	22	SCI	2H	P
16	22	SCI	TSH	P
18	22	INR	5H	
21	22	SCI	2H	P
24	22	24	AV3	
33	22	17	AV4	
35	22	SCI	1H	P
2	23	DI	1H	P
2	23	DI	2H	P
2	23	MAI	1H	P
2	23	SAI	2H	P

ATTACHMENT "A"

NORTH ANNA UNIT #1 MID - CYCLE OUTAGE JANUARY / FEBRUARY 1992

UNIT 1 S/G "B" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
3	23	95	1H	P
3	23	MAI	1H	P
19	23	INR	AV3	
25	23	27	AV3	
26	23	28	AV3	
29	23	28	AV3	
32	23	29	AV3	
35	23	INR	AV3	
6	24	SCI	2H	P
7	24	SCI	TSH	P
7	24	SAI	1H	P
9	24	INR	AV4	
15	24	MAI	2H	P
22	24	SCI	1H	P
22	24	MCI	2H	P
20	25	SCI	2H	P
21	25	SCI	2H	P
39	25	SCI	2H	P
32	26	INR	AV3	
32	26	27	AV4	
34	26	19	AV4	
5	27	SCI	1H	P
7	27	96	1H	P
7	27	SAI	1H	P
8	27	SAI	2H	P

ATTACHMENT "A"

NORTH ANNA UNIT #1
MID - CYCLE OUTAGE JANUARY / FEBRUARY 1992

UNIT 1 S/G "B" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
14	27	DI	1H	P
14	27	SAI	1H	P
21	27	SAI	1H	P
23	27	INR	AV1	
23	27	INR	AV3	
37	27	SCI	1H	P
37	27	SCI	2H	P
9	28	SCI	2H	P
11	28	SAI	3H	P
12	28	SAI	3H	P
20	28	SCI	2H	P
24	28	INR	AV3	
28	28	INR	AV1	
28	28	INR	AV3	
28	28	INR	AV4	
32	28	INR	AV2	
32	28	INR	AV3	
37	28	SCI	2H	P
5	29	SAI	1H	P
9	29	SAI	2H	P
25	29	29	AV3	
3	30	SAI	1H	P
6	30	SCI	1H	P
6	30	SCI	3H	P
15	30	SCI	2H	P
6	31	SCI	3H	P

ATTACHMENT "A"

NORTH ANNA UNIT #1
MID - CYCLE OUTAGE JANUARY / FEBRUARY 1992

UNIT 1 S/G "B" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
10	31	SAI	1H	P
15	31	SCI	3H	P
21	31	SAI	1H	P
25	31	INR	AV2	
25	31	22	AV3	
27	31	INR	AV3	
29	31	INR	AV2	
41	31	13	AV2	
12	32	98	1H	P
12	32	SAI	1H	P
24	32	INR	AV3	
24	32	TIU		
26	32	TIU		
29	32	TIU		
35	32	18	AV1	
35	32	TIU		
3	33	SCI	1H	P
4	33	23	TSH	
6	33	SCI	1H	P
10	33	SAI	1H	P
18	33	78	2H	P
18	33	MAI	2H	P
22	33	SAI	1H	P
2	34	SCI	1H	P
15	34	SAI	1H	P

ATTACHMENT "A"

NORTH ANNA UNIT #1
MID - CYCLE OUTAGE JANUARY / FEBRUARY 1992

UNIT 1 S/G "B" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
42	34	INR	3H	
4	35	SCI	2H	P
4	35	SCI	3H	P
31	35	13	AV2	
2	36	SAI	1H	P
9	36	MCI	TSH	P
9	36	SCI	1H	P
15	36	SCI	2H	P
18	36	SAI	1H	P
25	36	SCI	TSH	P *
36	36	24	AV2	
42	36	17	AV2	
4	37	SCI	2H	P
8	37	SCI	2H	P
28	37	SCI	1H	P
29	37	32	TSH	
15	38	22	TSH	
28	38	22	TSH	
29	38	24	AV3	
32	38	24	AV3	
15	39	26	TSH	
6	40	SAI	1H	P
7	40	SCI	1H	P

ATTACHMENT "A"

NORTH ANNA UNIT #1
MID - CYCLE OUTAGE JANUARY / FEBRUARY 1992

UNIT 1 S/G "B" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
15	40	SCI	2H	P
41	40	SAI	1H	P
2	41	SAI	1H	P
2	41	MCI	3H	P
4	41	SAI	1H	P
5	41	DI	1H	P
5	41	DI	3H	P
5	41	SAI	1H	P
5	41	SAI	2H	P
5	41	SAI	3H	P
9	41	SAI	4H	P
14	41	18	TSH	
18	41	SCI	3H	P
22	41	SCI	2H	P
28	41	SCI	TSH	P
28	41	SAI	1H	P
34	41	DI	2H	P
34	41	SAI	1H	P
34	41	SCI	2H	P
41	41	DI	2H	P
41	41	SAI	2H	P
10	42	SCI	1H	P
12	42	INR	AV1	
12	42	INR	AV4	
14	42	INR	TSH	P
14	42	SCI	2H	P
23	42	SCI	2H	P

ATTACHMENT "A"

NORTH ANNA UNIT #1
MID - CYCLE OUTAGE JANUARY / FEBRUARY 1992

UNIT 1 S/G "B" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
26	42	DI	3H	P
26	42	SAI	3H	P
28	42	20	AV1	P
28	42	15	AV2	P
28	42	SAI	1H	P
32	42	24	AV4	
33	42	SAI	1H	P
41	42	96	1H	P
41	42	SAI	1H	P
35	43	22	AV4	
37	43	SCI	2H	P
39	43	SCI	1H	P
42	43	17	AV4	
43	43	19	AV4	
44	43	18	AV4	
13	44	SAI	1H	P
13	44	SAI	2H	P
19	44	SCI	1H	P
20	44	22	AV4	
44	44	19	AV4	
46	44	14	AV1	
46	44	16	AV2	
46	44	24	AV3	
6	45	SAI	2H	P
14	45	SAI	1H	P
33	45	INR	6H	

ATTACHMENT "A"

NORTH ANNA UNIT #1
MID - CYCLE OUTAGE JANUARY / FEBRUARY 1992

UNIT 1 S/G "B" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
10	46	SCI	1H	P
10	46	SAI	2H	P
19	46	SAI	1H	P
20	46	SCI	2H	P
33	46	19	AV4	
45	46	SCI	2H	P
2	47	29	TSH	
6	47	71	4H	P
6	47	SAI	4H	P
10	47	DI	1H	P
10	47	SAI	1H	P
19	47	INR	AV2	
26	47	INR	4H	
27	47	SCI	1H	P
38	47	INR	6H	
44	47	INR	6H	
46	47	18	AV2	
46	47	18	AV3	
46	47	17	AV4	
26	48	SAI	1H	P
28	48	71	1H	P
28	48	SAI	1H	P
46	48	18	AV2	
46	48	21	AV3	
29	49	SAI	1H	P
33	49	INR	TSH	

ATTACHMENT "A"

NORTH ANNA UNIT #1
MID - CYCLE OUTAGE JANUARY / FEBRUARY 1992

UNIT 1 S/G "B" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
26	50	24	TSH	
29	50	28	TSH	
33	50	SAI	1H	P
41	50	INR	AV1	
42	50	14	AV1	
43	50	15	AV1	
20	51	70	1H	P
20	51	SAI	1H	P
20	51	SAI	4H	P
34	51	SAI	1H	P
40	51	SAI	1H	P
45	51	SCI	2H	P
46	51	15	AV1	
12	52	SAI	1H	P
28	52	19	TSH	
33	53	SAI	1H	P
46	53	17	AV2	P
46	53	SAI	1H	P
3	54	11	TSH	
10	54	SCI	1H	P
14	54	SCI	TSH	P
27	54	SCI	TSH	P
34	54	SAI	1H	P

ATTACHMENT "A"

NORTH ANNA UNIT #1
MID - CYCLE OUTAGE JANUARY / FEBRUARY 1992

UNIT 1 S/G "B" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
35	54	MAI	1H	P
36	54	17	AV3	
39	54	SAI	1H	P
43	54	SAI	1H	P
44	54	21	AV3	
24	55	INR	AV1	
24	55	INR	AV2	
42	55	--	--	P **
9	56	SAI	3H	P
13	56	SAI	1H	P
16	56	SCI	TSH	P
43	57	13	AV2	
8	58	SCI	1H	P
28	58	23	AV3	
45	58	21	AV2	
26	59	SCI	3H	P
18	60	SCI	1H	P
25	60	27	AV3	
27	60	19	AV3	
28	60	22	AV1	
37	60	INR	AV4	
44	60	INR	AV3	
36	62	MCI	2H	P

ATTACHMENT "A"

NORTH ANNA UNIT #1
MID - CYCLE OUTAGE JANUARY / FEBRUARY 1992

UNIT 1 S/G "B" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
3	63	SAI	4H	P
41	63	17	AV4	
24	64	20	AV1	
26	64	SAI	1H	P
34	64	SAI	2H	P
2	65	INR	1H	
9	65	SCI	1H	P
13	65	SCI	1H	P
16	65	SAI	1H	P
36	65	21	AV3	
3	66	INR	1H	
4	66	DI	3H	P
4	66	DI	6H	P
4	66	98	3H	P
4	66	SAI	3H	P
4	66	SAI	6H	P
10	66	SAI	1H	P
24	66	17	AV3	
29	66	13	AV1	
32	66	DI	2H	P
32	66	SAI	2H	P
32	67	15	AV2	
32	67	19	AV3	
32	67	17	AV4	
8	68	SAI	1H	P

ATTACHMENT "A"

NORTH ANNA UNIT #1 MID - CYCLE OUTAGE JANUARY / FEBRUARY 1992

UNIT 1 S/G "B" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
40	68	15	AV2	
2	70	INR	1H	
15	70	95	1H	P
15	70	DI	1H	P
15	70	SAI	1H	P
13	72	SAI	1H	P
35	72	78	2H	P
35	72	SAI	2H	P
38	72	DI	1H	P
38	72	SAI	1H	P
12	74	SCI	TSH	P
15	74	SAI	1H	P
33	74	DI	2H	P
33	74	MAI	2H	P
2	76	83	5H	P
2	76	SAI	5H	P
16	76	MAI	1H	P
15	77	SAI	1H	P
35	78	INR	1H	
24	79	INR	1H	
27	79	INR	5H	
28	79	INR	7H	
30	79	INR	7H	
34	79	INR	5H	
27	80	17	AV3	

ATTACHMENT "A"

NORTH ANNA UNIT #1
MID - CYCLE OUTAGE JANUARY / FEBRUARY 1992

UNIT 1 S/G "B" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
22	83	SCI	2H	P
26	83	INR	AV2	
25	85	17	AV4	
25	86	22	AV4	
18	87	19	AV4	
22	88	24	AV3	
17	89	18	AV1	
17	89	15	AV4	
21	89	21	AV3	
13	90	DI	1H	P
13	90	SAI	1H	P

EXPLANATION OF REMARKS

P. Plugged

* Stabilizers installed

** Virginia Electric and Power Company decision to plug as a precautionary measure.

ATTACHMENT "A"

STEAM GENERATOR "C" MID - CYCLE OUTAGE JANUARY/FEBRUARY 1992 NORTH ANNA 1

In Steam Generator "C", 2,738 tubes were inspected full length with bobbin probes except for the U-bend region of the Row 2 tubes which were examined in the 7H to 7C tube support region (U-bend) with RPC probes. This is 100% of the available tubes. Supplemental examinations were also performed using Rotating Pancake and 8x1 probes where additional confirmatory or other data was desired. Of the tubes examined 105 had pluggable circumferential indications, 84 had pluggable axial indications, 1 had a pluggable indication between 50% and 59% through wall, 1 had a pluggable indication between 40% and 49% through wall, 8 had indications between 30% and 39% through wall, 31 had indications between 20% and 29% through wall, 25 had indications between 10% and 19% through wall, and 10 tubes were plugged as a precautionary measure. See "Unit 1 S/G 'C' Examination Summary" for details.

ATTACHMENT "A"

NORTH ANNA UNIT #1
MID - CYCLE OUTAGE JANUARY/FEBRUARY 1992

UNIT 1 S/G "C" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
6	3	SCI	1H	P
2	4	SAI	1H	P
6	4	SAI	3H	P
12	4	--	--	P*
14	4	SCI	1H	P
12	5	SCI	1H	P
12	5	SCI	3H	P
13	5	SCI	1H	P
16	5	SCI	2H	P
14	6	SCI	2H	P
17	6	SAI	2H	P
3	7	SAI	2H	P
16	7	MAI	1H	P
17	7	SAI	1H	P
21	7	MAI	1H	P
14	8	SCI	3H	P
25	8	SAI	2H	P
4	9	SAI	1H	P
8	9	--	--	P*
15	9	SAI	2H	P
16	9	24	AV3	

ATTACHMENT "A"

NORTH ANNA UNIT #1
MID - CYCLE OUTAGE JANUARY/FEBRUARY 1992

UNIT 1 S/G "C" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
20	9	19	AV2	P
20	9	17	AV3	P
20	9	19	AV4	P
20	9	SAI	3H	P
20	9	MCI	3H	P
20	9	PMI	3H	P
12	10	SCI	1H	P
14	10	86	2H	P
14	10	SAI	2H	P
14	10	SCI	2H	P
14	10	SAI	3H	P
16	10	SAI	2H	P
19	10	20	AV3	
24	10	SCI	3H	P
24	10	MCI	3H	P
5	11	MAI	1H	P
5	11	SCI	3H	P
5	11	SAI	3H	P
5	11	MCI	1H	P
5	11	PMI	1H	P
5	11	SAI	1H	P
18	11	SAI	1H	P
24	11	SAI	1H	P
26	11	SAI	TSH	P
27	11	TI	TSH	P
27	11	SAI	TSH	P
24	12	18	AV2	
24	12	24	AV3	
24	12	20	AV4	

ATTACHMENT "A"

NORTH ANNA UNIT #1
MID - CYCLE OUTAGE JANUARY/FEBRUARY 1992

UNIT 1 S/G "C" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
25	12	DI	1H	P
25	12	SAI	1H	P
6	13	95	2H	P
6	13	SAI	2H	P
4	14	DI	2H	P
4	14	SAI	2H	P
9	14	100	2H	P
9	14	SAI	2H	P
11	14	SCI	3H	P
26	14	20	AV1	
26	14	23	AV2	
11	16	SCI	1H	P
26	16	SAI	1H	P
27	16	92	1H	P
27	16	MAI	1H	P
29	16	SAI	1H	P
29	16	SCI	1H	P
29	16	PMI	1H	P
31	16	17	AV3	
19	17	93	1H	P
19	17	SAI	1H	P
24	17	SAI	1H	P
27	17	SAI	6H	P
17	18	51	1H	P
17	18	SAI	1H	P

ATTACHMENT "A"

NORTH ANNA UNIT #1
MID - CYCLE OUTAGE JANUARY/FEBRUARY 1992UNIT 1 S/G "C" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
27	18	SAI	6H	P
30	18	SCI	2H	P
11	19	SAI	1H	P
11	19	SAI	2H	P
15	19	35	TSH	
20	19	21	AV3	
22	19	15	AV3	P
22	19	SAI	4H	P
28	19	22	AV3	
28	19	17	AV4	
30	19	17	AV3	
34	19	17	AV3	
5	20	SAI	2H	P
20	20	SAI	1H	P
22	20	SAI	1H	P
37	20	--	--	P*
12	21	SAI	2H	P
16	21	SCI	2H	P
16	21	SAI	2H	P
16	21	SCI	1H	P
22	21	SAI	1H	P
2	22	SAI	1H	P
5	22	24	TSH	P
5	22	SCI	1H	P

ATTACHMENT "A"

NORTH ANNA UNIT #1
MID - CYCLE OUTAGE JANUARY/FEBRUARY 1992UNIT 1 S/G "C" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
15	22	29	TSH	P
15	22	SCI	1H	P
15	22	SCI	2H	P
32	22	DI	2H	P
32	22	SAI	2H	P
2	23	SAI	1H	P
10	23	SCI	1H	P
10	23	SCI	2H	P
10	23	MAI	3H	P
10	23	SCI	3H	P
20	23	37	TSH	P
22	23	21	AV2	
22	23	23	AV3	
22	23	22	AV4	
23	23	SAI	4H	P
30	23	SCI	1H	P
5	24	SAI	2H	P
5	24	SCI	3H	P
6	24	SAI	4H	P
8	24	SCI	3H	P
17	24	59	TSH	P
23	24	INR	5H	
35	24	SAI	1H	P
37	24	24	AV1	
37	24	27	AV2	
37	24	22	AV3	

ATTACHMENT "A"

NORTH ANNA UNIT #1
MID - CYCLE OUTAGE JANUARY/FEBRUARY 1992

UNIT 1 S/G "C" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
3	25	SAI	2H	P
3	25	SAI	4H	P
23	25	SCI	3H	P
7	26	SCI	1H	P
7	26	SAI	3H	P
10	26	SAI	2H	P
22	26	SCI	1H	P
40	26	25	1H	
2	27	MAI	1H	P
21	27	SCI	TSH	P
24	27	SCI	2H	P
38	27	22	AV3	
16	28	DI	2H	P
16	28	SAI	2H	P
10	29	MCI	2H	P
10	29	SAI	2H	P
10	29	25	TSH	P
18	29	DI	2H	P
18	29	SAI	2H	P
30	29	INR	AV3	
16	30	SCI	1H	P
18	30	SCI	2H	P
25	30	INR	AV3	
38	31	SCI	2H	P

ATTACHMENT "A"

NORTH ANNA UNIT #1
MID - CYCLE OUTAGE JANUARY/FEBRUARY 1992

UNIT 1 S/G "C" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
39	31	INR	AV3	
40	31	INR	AV2	P
40	31	INR	AV3	P
40	31	26	2C	P
40	31	SCI	2H	P
5	33	SCI	1H	P
6	33	DI	1H	P
6	33	SCI	1H	P
6	33	SAI	1H	P
8	33	SAI	2H	P
8	33	PMI	2H	P
8	33	SCI	2H	P
9	33	SCI	4H	P
12	33	20	TSH	
25	33	19	AV3	
32	33	24	AV3	
36	33	SCI	2H	P
38	33	--	--	P*
11	34	DI	1H	P
11	34	SAI	1H	P
12	34	19	TSH	
21	34	SCI	1H	P
41	34	19	AV3	
11	35	SAI	2H	P
12	35	SCI	3H	P

ATTACHMENT "A"

NORTH ANNA UNIT #1
MID - CYCLE OUTAGE JANUARY/FEBRUARY 1992

UNIT 1 S/G "C" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
13	35	25	TSH	P
13	35	SCI	1H	P
14	35	INR	TSH	
25	35	SAI	1H	P
38	35	--	--	P*
39	35	SCI	2H	P
4	36	SCI	1H	P
4	36	SCI	3H	P
4	36	SCI	4H	P
7	36	SCI	1H	P
11	36	SAI	1H	P
11	36	SAI	2H	P
12	36	15	TSH	
14	36	SAI	1H	P
24	36	SCI	1H	P
33	36	SAI	1H	P
38	36	--	--	P*
40	36	--	--	P*
5	37	SCI	5H	P
7	37	SCI	4H	P
13	37	32	TSH	
26	37	DI	1H	P
26	37	SAI	1H	P

ATTACHMENT "A"

NORTH ANNA UNIT #1
MID - CYCLE OUTAGE JANUARY/FEBRUARY 1992

UNIT 1 S/G "C" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
32	37	SCI	2H	P
23	38	DI	2H	P
23	38	SAI	2H	P
28	38	INR	AV2	
28	38	INR	AV3	
31	38	INR	AV3	
32	36	INR	AV3	
33	38	INR	AV1	
33	38	INR	AV2	
11	39	SCI	1H	P
12	39	22	TSH	
13	39	6	TSH	P
13	39	SCI	1H	P
13	39	SCI	2H	P
13	39	SCI	3H	P
5	40	93	2H	P
5	40	SAI	2H	P
6	40	SCI	2H	P
6	40	SAI	3H	P
6	40	SCI	3H	P
6	40	PMI	3H	P
6	40	SAI	4H	P
25	40	SCI	2H	P
36	40	SAI	1H	P
39	40	14	AV3	
41	40	16	AV3	

ATTACHMENT "A"

NORTH ANNA UNIT #1
MID - CYCLE OUTAGE JANUARY/FEBRUARY 1992

UNIT 1 S/G "C" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
15	41	SCI	2H	P
34	41	83	1H	P
34	41	MAI	1H	P
45	41	--	--	P
12	42	18	TSH	
26	42	36	TSH	
34	42	SAI	2H	P
41	42	SAI	3H	P
41	42	SCI	3H	P
45	42	SCI	2H	P
3	43	DI	1H	P
3	43	SCI	1H	P
3	43	SAI	1H	P
3	43	PMI	1H	P
3	43	SCI	2H	P
8	43	SAI	1H	P
10	43	13	TSH	
15	43	SCI	2H	P
19	43	24	AV4	
20	43	SAI	2H	P
37	43	SCI	2H	P
16	44	SAI	3H	P
16	44	SAI	4H	P
18	44	MCI	2H	P

ATTACHMENT "A"

NORTH ANNA UNIT #1 MID - CYCLE OUTAGE JANUARY/FEBRUARY 1992

UNIT 1 S/G "C" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
36	44	SCI	2H	P
11	45	43	3H	P
17	45	19	AV4	
19	45	98	2H	P
19	45	24	AV4	P
19	45	SCI	TSH	P
19	45	MAI	2H	P
16	46	SCI	2H	P
18	46	87	1H	P
18	46	SAI	1H	P
18	46	SCI	1H	P
18	46	PMI	1H	P
27	46	SCI	TSH	P
34	46	30	TSH	
26	47	DI	1H	P
26	47	87	1H	P
26	47	SAI	1H	P
26	47	SAI	2H	P
37	47	SCI	2H	P
28	48	SCI	TSH	P
8	49	SCI	1H	P
9	49	SCI	1H	P
14	49	DI	2H	P
14	49	24	TSH	P
14	49	SAI	2H	P
15	49	SCI	1H	P
15	49	SCI	3H	P

ATTACHMENT "A"

NORTH ANNA UNIT #1
MID - CYCLE OUTAGE JANUARY/FEBRUARY 1992

UNIT 1 S/G "C" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
16	49	SAI	2H	P
17	49	SCI	TSH	P
37	49	SCI	2H	P
22	50	SAI	2H	P
25	50	MCI	TSH	P
40	50	17	AV4	
44	50	SCI	2H	
18	51	DI	4H	P
18	51	SAI	4H	P
35	51	SCI	2H	P
5	52	21	TSH	
20	52	SCI	2H	P
20	52	SCI	2H	P
36	52	SCI	3H	P
42	53	SAI	2H	P
42	53	SAI	2H	P
18	54	SCI	2H	P
18	54	97	2H	P
18	54	DI	2H	P
18	54	SCI	2H	P
37	54	SCI	3H	P
16	55	SCI	2H	P
27	55	34	TSH	

ATTACHMENT "A"

NORTH ANNA UNIT #1
MID - CYCLE OUTAGE JANUARY/FEBRUARY 1992

UNIT 1 S/G "C" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
33	55	SAI	1H	P
25	56	SCI	TSH	P
26	56	85	2H	P
26	56	SAI	2H	P
7	57	SCI	1H	P
10	57	96	2H	P
10	57	99	5H	P
10	57	SAI	2H	P
10	57	SAI	5H	P
25	57	SCI	TSH	P
32	57	98	2H	P
32	57	SAI	2H	P
12	58	97	1H	P
12	58	SAI	1H	P
20	58	33	1H	
43	58	32	AV1	
44	58	--	--	P *
28	59	SCI	2H	P
12	60	SCI	1H	P
27	60	26	TSH	P
27	60	SCI	2H	P
10	61	99	1H	P
10	61	SAI	1H	P
28	61	SCI	2H	P
17	62	SCI	2H	P

ATTACHMENT "A"

NORTH ANNA UNIT #1 MID - CYCLE OUTAGE JANUARY/FEBRUARY 1992

UNIT 1 S/G "C" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
6	63	25	TSH	P
6	63	DI	1H	P
6	63	SAI	1H	P
17	63	SAI	2H	P
30	63	SCI	2H	P
11	64	80	1H	P
11	64	SAI	1H	P
23	64	96	2H	P
23	64	SAI	2H	P
29	64	SCI	2H	P
29	64	SAI	2H	P
29	64	89	2H	P
31	64	SAI	2H	P
9	65	SCI	2H	P
9	65	38	TSH	P
9	65	SCI	3H	P
10	65	DI	1H	P
10	65	SAI	1H	P
30	65	50	2H	P
30	65	SAI	2H	P
4	66	SCI	1H	P
24	66	SCI	1H	P
15	67	SAI	1H	P
29	67	17	AV2	
29	67	23	AV3	

ATTACHMENT "A"

NORTH ANNA UNIT #1
MID - CYCLE OUTAGE JANUARY/FEBRUARY 1992

UNIT 1 S/G "C" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
30	67	SCI	2H	P
30	67	SAI	2H	P
30	67	PMI	2H	P
34	68	SCI	2H	P
7	69	SCI	3H	P
24	69	19	AV3	
24	69	21	AV4	
29	69	SAI	2H	P
36	69	19	AV3	
3	70	SAI	1H	
4	70	DI	1H	P
4	70	SAI	1H	P
18	70	--	--	P*
28	70	SCI	2H	P
30	70	SAI	2H	P
30	70	SCI	2H	P
30	70	PMI	2H	P
32	70	14	AV3	
35	70	20	AV3	
37	70	20	AV3	
38	70	21	AV3	
39	70	22	AV3	
19	71	29	TSH	
27	71	MCI	2H	P

ATTACHMENT "A"

NORTH ANNA UNIT #1
MID - CYCLE OUTAGE JANUARY/FEBRUARY 1992

UNIT 1 S/G "C" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
37	71	19	AV3	
38	71	INR	AV3	
10	72	MCI	TSH	P
20	72	20	AV4	
24	72	25	AV3	
24	72	27	AV4	
25	72	22	AV4	
26	72	SCI	2H	P
31	72	17	AV3	
31	72	18	AV4	
35	72	20	AV4	
36	72	20	AV4	
37	72	20	AV3	
37	72	22	AV4	
39	72	18	AV3	
39	72	20	AV4	
3	73	DI	4H	P
3	73	SAI	4H	P
24	73	17	AV2	
25	73	21	AV2	
32	73	INR	AV3	
36	73	18	AV3	
37	73	INR	AV3	

ATTACHMENT "A"

NORTH ANNA UNIT #1
MID - CYCLE OUTAGE JANUARY/FEBRUARY 1992

UNIT 1 S/G "C" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
19	75	INR	AV3	
21	75	15	AV3	
22	75	16	AV3	
25	75	INR	AV3	
27	75	SCI	2H	P
32	75	19	AV3	
34	75	21	AV3	
22	76	18	AV3	
31	76	13	AV3	
35	76	INR	AV3	
37	76	13	AV2	
27	79	INR	7H	
17	80	SCI	1H	P
11	83	SCI	1H	P
6	86	SCI	3H	P
11	86	SCI	2H	P
12	87	SAI	1H	P

EXPLANATION OF REMARKS

P. Plugged

* Virginia Electric and Power Company decision to plug as a precautionary measure.

ATTACHMENT "A"

VIRGINIA ELECTRIC AND POWER COMPANY NORTH ANNA UNIT 1 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 using 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 not quantifiable with a numeric percent call due to the existing signal characteristics.
- 3) 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.
- 4) MAI - Multiple Axial Indication - describes multiple axially oriented indication signals from Rotating Pancake probe data.
- 5) 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.
- 6) 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. Tube is sometimes retested with a special probe, e.g., MRPC (Motorized Rotating Pancake Coil), etc.
- 7) RST - Restricted - indicates that the probe listed in the record would not physically pass the location specified.
- 8) SAI - Single Axial Indication - describes a single axially oriented signal from Rotating Pancake probe data.
- 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) TIU - Tube I.D. Uncertain - (retest) - indicates that the ROW and/or COL (column) identifier for a given tube is in doubt and that the tube must be retested.

- 11) A number in the indication column shows the percent (%) through wall depth of the indication.
- 12) TEH - Tube End Hot leg.
- 13) TEC - Tube End Cold leg.
- 14) TSH - Top of Tubesheet Hot leg.
- 15) TSC - Top of Tubesheet Cold leg.
- 16) #C, #H - (# = number) of Support Plate Hot or Cold leg. e.g., 3H, 6H, 7C.
- 17) AV1, AV2, AV3, and AV4 - Anti-Vibration Bars 1 through 4.
- 18) "P" in "Remarks" column indicates a plugged tube. No comment in the remarks column indicates that the tube remains in service.

ATTACHMENT "B"

NORTH ANNA POWER STATION UNIT 2
1992 ANNUAL STEAM GENERATOR
INSERVICE INSPECTION REPORT

VIRGINIA ELECTRIC AND POWER COMPANY

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ATTACHMENT "B"

STEAM GENERATOR "A" 8TH REFUELING MARCH 1992 OUTAGE NORTH ANNA 2

In Steam Generator "A", 3156 tubes were inspected full length with bobbin probes. This is 100% of the available tubes. Eighty-eight Row 2 tubes were examined in the U-bend region (tube support 7H to 7C) with RPC probes. Supplemental examinations were also performed using Rotating Pancake, and Profilometry probes where additional confirmatory or other data was desired. Of the tubes examined 13 had pluggable circumferential indications, 14 had pluggable axial indications, 1 had a pluggable indication between 90% and 99% through wall, 2 had pluggable indications between 80% and 89% through wall, 2 had pluggable indications between 60% and 69% through wall, 1 had a pluggable indication between 50% and 59% through wall, 10 had pluggable indications between 40% and 49% through wall, 21 had indications between 30% and 39% through wall, 29 had indications between 20% and 29% through wall, and 4 had indications between 10% and 19% through wall. Two additional tubes were plugged as a precautionary measure. A total of 45 tubes were plugged in this steam generator. See "Unit 2 S/G 'A' Examination Summary" for details.

ATTACHMENT "B"

NORTH ANNA UNIT #2
8th REFUELING OUTAGE - MARCH 1992

UNIT #2 S/G "A" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
3	1	34	1H	
6	1	21	1C	
5	3	15	1H	
13	3	LSC	7H	P ***
15	3	27	1C	
18	6	23	1C	
9	9	SCI	1H	P
10	9	SAI	1H	P
19	10	SAI	1H	P
19	10	SCI	1H	P
19	10	PMI	1H	P
4	11	92	1H	P
10	11	45	1H	P
5	14	SAI	1H	P
6	14	SCI	TSH	P
12	16	SCI	TSH	P
11	17	SAI	1H	P
35	17	24	3H	
9	19	80	1H	P *
15	22	57	1H	P *
16	24	80	1H	P

ATTACHMENT "B"

NORTH ANNA UNIT #2
8th REFUELING OUTAGE - MARCH 1992UNIT #2 S/G "A" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
7	25	DI	1H	P **
7	25	DI	2H	P **
7	25	SCI	1H	P **
7	25	MAI	2H	P **
21	27	100	TSH	P
21	27	SAI	TSH	P
10	29	DI	1H	P
10	29	SCI	1H	P
13	30	40	1H	P
31	30	18	AV2	
31	30	18	AV3	
31	30	19	AV4	
35	30	24	AV1	
35	30	23	AV2	
42	30	SAI	1H	P
5	31	DI	1H	P
5	31	SAI	1H	P
18	31	INR	AV2	
34	31	28	AV3	
42	31	24	2C	
10	32	DI	1H	P
10	32	SAI	1H	P
19	32	16	AV2	
36	33	26	AV1	
36	33	27	AV2	
8	34	DI	1H	P *
8	34	MCI	1H	P *

ATTACHMENT "B"

NORTH ANNA UNIT #2 8th REFUELING OUTAGE - MARCH 1992

UNIT #2 S/G "A" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
14	35	35	TSH	
15	35	SAI	TSH	P
25	35	14	AV3	
34	35	20	AV2	
34	35	25	AV3	
34	35	21	AV4	
44	35	23	1H	P
44	35	SAI	1H	P
33	36	19	AV3	
33	36	21	AV4	
5	37	DI	1H	P
5	37	SCI	1H	P
13	37	DI	1H	P
13	37	SAI	1H	P
10	38	DI	1H	P
10	38	SAI	1H	P
11	38	DI	1H	P
11	38	SAI	1H	P
26	38	SCI	TSH	P
33	38	20	AV1	
33	38	25	AV2	
33	38	17	AV3	
41	38	40	AV3	P
41	38	39	AV4	P
45	38	LSC	7H	P ***
23	39	25	AV2	

ATTACHMENT "B"

NORTH ANNA UNIT #2
8th REFUELING OUTAGE - MARCH 1992UNIT #2 S/G "A" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
23	39	24	AV3	
23	39	18	AV4	
16	40	SCI	TSH	P
24	41	23	AV1	
24	41	INR	AV3	
24	41	23	AV4	
28	41	64	1H	P
37	41	20	AV1	P
37	41	40	AV2	P
37	41	46	AV3	P
33	42	41	AV1	P
33	42	23	AV2	P
33	42	18	AV3	P
33	42	INR	AV4	P
11	43	46	TSH	P **
11	43	DI	1H	P **
11	43	DI	2H	P **
11	43	SCI	1H	P **
11	43	SCI	2H	P **
22	44	20	AV1	
22	44	30	AV2	
22	44	28	AV3	
22	44	INR	AV4	
23	44	INR	AV1	
23	44	23	AV2	
23	44	30	AV3	
23	44	26	AV4	
25	44	24	AV1	
25	44	32	AV2	
25	44	20	AV3	
25	44	29	AV4	

ATTACHMENT "B"

NORTH ANNA UNIT #2
8th REFUELING OUTAGE - MARCH 1992UNIT #2 S/G "A" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
34	44	19	AV2	
34	44	21	AV3	
34	44	26	AV4	
8	45	DI	1H	P *
8	45	SCI	1H	P *
22	45	23	AV1	
22	45	39	AV2	
22	45	39	AV3	
22	45	29	AV4	
34	45	21	AV2	
34	45	30	AV3	
34	45	20	AV4	
35	45	28	AV1	
35	45	29	AV2	
35	45	19	AV3	
36	46	34	AV2	
36	46	21	AV3	
36	46	25	AV4	
35	47	23	AV1	
35	47	32	AV2	
35	47	35	AV3	
35	47	28	AV4	
11	48	65	1H	P
25	48	19	AV1	
25	48	23	AV2	
25	48	17	AV3	
25	48	INR	AV4	
36	48	31	AV1	P
36	48	44	AV2	P
36	48	35	AV3	P
36	48	26	AV4	P

ATTACHMENT "B"

NORTH ANNA UNIT #2
8th REFUELING OUTAGE - MARCH 1992UNIT #2 S/G "A" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
35	49	16	AV1	P
35	49	39	AV2	P
35	49	46	AV3	P
35	49	13	AV4	P
34	50	19	AV1	
34	50	35	AV3	
34	50	23	AV4	
35	50	32	AV2	
35	50	33	AV3	
35	50	30	AV4	
4	51	36	1H	
34	52	13	AV2	
34	52	32	AV3	
34	52	24	AV4	
36	52	16	AV1	
36	52	33	AV2	
36	52	33	AV3	
36	52	27	AV4	
24	53	16	AV1	
24	53	25	AV4	
24	55	18	AV1	
24	55	32	AV2	
24	55	29	AV3	
36	55	37	AV3	P
36	55	41	AV4	P
6	57	SAI	2H	P
18	57	22	AV1	
18	57	15	AV2	
25	57	28	AV2	
25	57	21	AV3	

ATTACHMENT "B"

NORTH ANNA UNIT #2
8th REFUELING OUTAGE - MARCH 1992UNIT #2 S/G "A" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
32	57	26	AV2	
32	57	27	AV3	
29	60	16	AV1	
29	60	32	AV2	
29	60	30	AV3	
29	60	29	AV4	
24	61	11	AV1	
24	61	22	AV2	
24	61	20	AV3	
36	61	35	AV3	
36	61	33	AV4	
24	63	21	AV1	
23	66	23	AV2	
23	66	21	AV3	
23	66	15	AV4	
23	67	22	AV1	
23	67	29	AV2	
23	67	31	AV3	
37	67	21	AV2	
37	67	34	AV3	
37	67	20	AV4	
36	68	43	AV3	P
36	68	38	AV4	P
37	68	25	AV2	P
37	68	47	AV3	P
37	68	19	AV4	P
18	69	24	AV4	
31	69	22	AV1	
31	69	36	AV2	
31	69	25	AV3	

ATTACHMENT "B"

NORTH ANNA UNIT #2 8th REFUELING OUTAGE - MARCH 1992

UNIT #2 S/G "A" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
37	69	37	AV2	
37	69	38	AV3	
37	69	31	AV4	
26	70	10	AV3	
36	71	25	AV2	
36	71	28	AV3	
13	72	SCI	1H	P
24	75	22	AV4	
27	79	21	AV3	
28	85	22	2C	
12	87	DI	1H	P
12	87	SAI	1H	P

EXPLANATION OF REMARKS

- P. Plugged
- * Tubes Stabilized and Plugged
- ** Tubes Pulled and Weld Plugged in Hot Leg
- *** Virginia Electric and Power Company decision to plug as a precautionary measure.

ATTACHMENT "B"

STEAM GENERATOR "B" 8TH REFUELING MARCH 1992 OUTAGE NORTH ANNA 2

In Steam Generator "B", 3164 tubes were inspected full length with bobbin probes. This is 100% of the available tubes. Eighty-nine Row 2 tubes were examined in the U-bend region (tube support 7H to 7c) RPC probes. Supplemental examinations were also performed using Rotating Pancake, and Profilometry probes where additional confirmatory or other data was desired. Of the tubes examined 8 had pluggable circumferential indications, 2 had pluggable axial indications, 1 had a pluggable indication between 60% and 69% through wall, 3 had pluggable indications between 40% and 49% through wall, 9 had indications between 30% and 39% through wall, 7 had indications between 20% and 29% through wall, and 4 had indications between 10% and 19% through wall. A total of 14 tubes were plugged in this steam generator. See "Unit 2 S/G 'B' Examination Summary" for details.

ATTACHMENT "B"

NORTH ANNA UNIT #2
8th REFUELING OUTAGE - MARCH 1992

UNIT #2 S/G "B" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
26	10	INR	1C	
4	11	SAI	TSH	P
21	11	SCI	1H	P
35	17	SCI	1H	P
35	21	22	AV3	
35	21	26	AV4	
19	22	66	1H	P
34	23	33	1H	
25	28	34	AV1	
25	28	INR	AV2	
17	29	36	AV2	
34	31	20	AV2	
34	31	38	AV3	
34	31	37	AV4	
35	34	19	AV3	
35	34	17	AV4	
23	36	SCI	TSH	P
22	37	SCI	TSH	P
29	37	42	1H	P
17	43	35	TSH	
33	43	17	AV1	
33	43	33	AV2	
33	43	28	AV3	
14	44	SCI	TSH	P*

ATTACHMENT "B"

NORTH ANNA UNIT #2 8th REFUELING OUTAGE - MARCH 1992

UNIT #2 S/G "B" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
18	45	SCI	TSH	P
26	45	46	TSH	P
16	46	22	TSH	
36	53	24	AV3	
12	58	DI	1H	P
12	58	SAI	1H	P
30	59	22	AV3	
39	59	30	AV3	
39	59	25	AV4	
37	60	33	AV3	
37	60	39	AV4	
15	61	SCI	TSH	P *
25	62	SCI	TSH	P
29	62	40	AV1	P
29	62	24	AV2	P
29	62	29	AV3	P
29	62	22	AV4	P
21	63	15	AV1	
21	63	28	AV2	
21	63	32	AV3	
21	63	28	AV4	
34	69	14	AV3	
34	69	25	AV4	
36	72	17	AV4	
36	75	24	AV3	
36	75	17	AV4	

ATTACHMENT "B"

NORTH ANNA UNIT #2
8th REFUELING OUTAGE - MARCH 1992

UNIT #2 S/G "B" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
15	77	INR	TSC	
28	78	22	AV3	
28	83	10	1C	
17	90	14	1C	

EXPLANATION OF REMARKS

P. Plugged

* Tubes Stabilized and Plugged.

ATTACHMENT "B"

STEAM GENERATOR "C " 8TH REFUELING MARCH 1992 OUTAGE NORTH ANNA 2

In Steam Generator "C", 3135 tubes were inspected full length with bobbin probes. This is 100% of the available tubes. Seventy Row 2 tubes were examined in the U-bend region (tube support 7H to 7C) with RPC probes. Supplemental examinations were also performed using Rotating Pancake and Profilometry probes where additional confirmatory or other data was desired. Of the tubes examined 130 had pluggable circumferential indications, 18 had pluggable axial indications, 1 had a pluggable indication between 80% and 89% through wall, 1 had a pluggable indication between 70% and 79% through wall, 2 had pluggable indications between 50% and 59% through wall, 3 had pluggable indications between 40% and 49% through wall, 12 had indications between 30% and 39% through wall, 12 had indications between 20% and 29% through wall, 11 had indications between 10% and 19% through wall. Thirty six additional tubes were plugged as a precautionary measure. A total of 191 tubes were plugged in this steam generator. See "Unit 2 S/G 'C' Examination Summary" for details.

ATTACHMENT "B"

NORTH ANNA UNIT #2
8th REFUELING OUTAGE - MARCH 1992UNIT #2 S/G "C" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
3	1	SCI	1H	P
7	1	SCI	2H	P
10	5	SAI	1H	P
15	6	LSC	1H	P **
16	6	MCI	1H	P
16	6	SCI	1H	P
12	7	LSC	2H	P **
23	7	SCI	1H	P *
23	7	LSC	1H	P *
23	7	LSC	2H	P *
23	7	SCI	4H	P *
11	8	LSC	2H	P **
14	8	SCI	2H	P
19	9	SCI	2H	P
11	10	SCI	2H	P
26	10	LSC	1H	P *
26	10	LSC	2H	P **
27	10	LSC	1H	P
27	10	SCI	2H	P
27	10	LSC	2H	P
4	11	DNT	1H	
4	11	DNT	3H	
4	11	DNT	4H	
15	11	LSC	1H	P **
15	11	LSC	2H	P **
15	11	LSC	3H	P **

ATTACHMENT "B"

NORTH ANNA UNIT #2 8th REFUELING OUTAGE - MARCH 1992

UNIT #2 S/G "C" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
28	11	LSC	1H	P **
15	12	SCI	1H	P
3	13	DNT	1H	P
3	13	DNT	4H	P
3	13	SCI	1H	P
14	13	SCI	1H	P
14	13	LSC	2H	P
27	13	SCI	1H	P
10	14	SCI	1H	P
16	14	LSC	1H	P **
17	14	MCI	1H	P *
25	14	SCI	1H	P
25	14	MCI	3H	P
25	14	DI	1H	P
2	15	DNT	2H	P
2	15	DI	2H	P
2	15	SAI	2H	P
10	15	LSC	2H	P **
16	15	LSC	1H	P **
19	16	SCI	1H	P
26	16	LSC	1H	P **
30	16	LSC	1H	P **
31	16	SCI	1H	P
30	17	SCI	1H	P *

ATTACHMENT "B"

NORTH ANNA UNIT #2 8th REFUELING OUTAGE - MARCH 1992

UNIT #2 S/G "C" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
3	18	DNT	4H	P
3	18	SCI	4H	P
5	18	SCI	1H	P
12	18	SCI	2H	P
13	18	LSA	1H	P *
13	18	LSC	1H	P **
13	18	LSC	3H	P
19	18	SCI	2H	P
23	19	SCI	1H	P
23	19	SCI	2H	P
26	19	SCI	2H	P
27	20	LSC	1H	P **
27	20	LSC	2H	P **
3	21	DNT	1H	P *
3	21	DNT	2H	P **
3	21	LSC	1H	P
7	22	LSC	1H	P **
7	22	LSC	2H	P **
8	22	SCI	1H	P
9	22	LSC	1H	P **
25	22	SCI	1H	P
25	22	LSC	1H	P
25	22	LSC	3H	P
29	22	LSC	1H	P **
31	22	SCI	3H	P
37	22	SCI	2H	P

ATTACHMENT "B"

NORTH ANNA UNIT #2
8th REFUELING OUTAGE - MARCH 1992

UNIT #2 S/G "C" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
2	23	DNT	1H	P
2	23	DNT	2H	P
2	23	DNT	3H	P
2	23	SAI	1H	P
3	23	DNT	1H	P*
3	23	DNT	2H	P*
3	23	DNT	3H	P*
3	23	DNT	4H	P*
3	23	SCI	1H	P*
24	23	MAI	3H	P
24	23	SCI	3H	P
30	23	MCI	1H	P
32	23	SCI	2H	P
25	24	LSC	1H	P*, **
30	24	DIN	3H	P**
30	24	LSC	2H	P**
32	24	SCI	1H	P
39	24	LSC	5H	P**
16	25	SCI	1H	P
21	25	SCI	1H	P
23	25	LSC	2H	P**
24	25	SCI	1H	P
25	25	SCI	1H	P
36	25	21	AV2	
37	25	SCI	1H	P

ATTACHMENT "B"

NORTH ANNA UNIT #2
8th REFUELING OUTAGE - MARCH 1992

UNIT #2 S/G "C" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
9	26	SCI	1H	P
13	26	SCI	2H	P
14	26	SCI	1H	P
20	26	30	TSH	
25	26	SCI	1H	P
25	26	SCI	2H	P
26	26	LSC	1H	P*, **
39	26	32	AV2	
39	26	26	AV3	
12	27	SCI	1H	P
12	27	SCI	2H	P
4	28	SCI	1H	P
14	28	18	TSH	
18	28	SCI	2H	P
31	28	PMI	2H	P
31	28	SAI	2H	P
31	28	SCI	2H	P
31	28	SCI	3H	P
24	29	SCI	1H	P
25	29	SCI	1H	P
27	29	SAI	2H	P
30	29	25	2H	P
30	29	SCI	2H	P
31	29	SCI	1H	P

ATTACHMENT "B"

NORTH ANNA UNIT #2
8th REFUELING OUTAGE - MARCH 1992

UNIT #2 S/G "C" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
2	30	SCI	1H	P
10	30	SCI	2H	P
9	31	SCI	1H	P
15	31	18	TSH	
39	31	32	AV2	
39	31	27	AV3	
3	32	SCI	1H	P
10	32	SCI	1H	P
17	32	SCI	1H	P
23	32	SCI	1H	P
23	32	SCI	3H	P
23	32	DI	1H	P
28	32	SCI	1H	P
28	32	LSC	1H	P
7	33	LSC	2H	P **
10	33	SCI	1H	P *
12	33	27	TSC	
13	33	10	TSC	
16	33	73	TSH	P
17	33	11	TSC	
22	33	15	TSC	
23	33	39	TSH	P
23	33	SCI	1H	P

ATTACHMENT "B"

NORTH ANNA UNIT #2 8th REFUELING OUTAGE - MARCH 1992

UNIT #2 S/G "C" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
28	33	LSC	1H	P *
28	33	LSC	2H	P **
2	34	SCI	1H	P
6	34	LSC	1H	P **
6	34	LSC	3H	P **
16	34	35	TSH	P
16	34	LSC	1H	P
16	34	SCI	1H	P
17	34	16	TSC	P
17	34	SCI	1H	P
18	34	27	TSH	
20	34	44	TSH	P
24	34	SCI	1H	P
18	35	28	TSH	P **
18	35	LSC	3H	P **
20	35	37	TSH	
3	36	SCI	1H	P
12	36	SCI	1H	P
12	36	SCI	2H	P
15	36	24	TSH	
18	36	35	TSH	P
18	36	MCI	1H	P
19	36	25	TSH	
29	36	28	AV3	
42	36	LSC	1H	P **
42	36	LSC	2H	P **

ATTACHMENT "B"

NORTH ANNA UNIT #2
8th REFUELING OUTAGE - MARCH 1992

UNIT #2 S/G "C" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
4	37	80	1H	P
5	37	LSC	1H	P *, **
23	37	16	AV2	
3	38	SAI	2H	P
19	38	SCI	2H	P
20	38	SCI	2H	P
28	38	54	TSH	P
2	39	SCI	1H	P
18	39	43	TSH	P
23	39	SCI	2H	P
24	39	21	AV2	P
24	39	24	AV3	P
24	39	SCI	1H	P
42	39	SCI	1H	P *
14	40	SCI	2H	P
18	40	SCI	1H	P
18	40	SCI	2H	P
18	41	29	TSH	P
18	41	MCI	1H	P
18	41	SCI	2H	P
20	41	SCI	2H	P
23	41	16	AV2	
23	41	26	AV3	
39	41	SCI	1H	P

ATTACHMENT "B"

NORTH ANNA UNIT #2
8th REFUELING OUTAGE - MARCH 1992UNIT #2 S/G "C" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
3	42	SAI	3H	P
8	42	SAI	1H	P
12	42	LSC	1H	P **
17	42	34	TSH	P
17	42	SAI	3H	P
19	42	39	TSH	
45	42	SCI	1H	P
45	42	SCI	2H	P
10	43	SCI	1H	P
11	43	SCI	1H	P
33	43	INR	AV1	
33	43	19	AV2	
43	43	SAI	3H	P
45	43	12	1C	
8	44	SCI	1H	P
25	44	SCI	TSH	P
28	44	16	TSH	P
28	44	SCI	2H	P
31	44	SCI	2H	P
25	45	SCI	TSH	P
30	45	SAI	1H	P
6	46	SCI	1H	P
18	46	SCI	1H	P

ATTACHMENT "B"

NORTH ANNA UNIT #2
8th REFUELING OUTAGE - MARCH 1992UNIT #2 S/G "C" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
20	46	SAI	1H	P *
20	46	SCI	1H	P *
24	46	SCI	TSH	P
46	47	SAI	1H	P
22	48	LSC	7H	P *, **
27	48	SAI	1H	P
28	48	SCI	2H	P
35	48	SAI	4H	P
45	48	LSC	1H	P **
28	49	SCI	1H	P *
29	49	LSC	1H	P **
35	49	SCI	2H	P
36	49	SCI	2H	P
19	50	50	TSH	P
22	50	SCI	3H	P
27	50	LSC	1H	P *
27	50	LSC	3H	P **
38	50	SCI	1H	P
8	51	SCI	1H	P
18	51	SCI	1H	P
21	51	16	TSH	

ATTACHMENT "B"

NORTH ANNA UNIT #2
8th REFUELING OUTAGE - MARCH 1992UNIT #2 S/G "C" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
27	51	24	AV3	
27	51	38	AV4	
32	51	SCI	2H	P
18	52	SCI	1H	P
20	52	SCI	1H	P
34	52	SCI	2H	P
17	53	19	AV2	
17	53	21	AV3	
17	53	17	AV4	
19	53	LSC	1H	P *
19	53	SCI	2H	P *
12	54	SCI	1H	P
29	54	SAI	1H	P
37	54	SCI	1H	P
19	55	MCI	1H	P *
19	55	LSC	2H	P *
31	55	SAI	2H	P
18	56	SCI	1H	P *
29	56	21	AV3	
44	56	32	1C	
33	57	23	AV1	
33	57	19	AV2	
33	57	26	AV3	
33	57	28	AV4	
15	58	SCI	1H	P

ATTACHMENT "B"

NORTH ANNA UNIT #2
8th REFUELING OUTAGE - MARCH 1992

UNIT #2 S/G "C" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
20	58	SCI	1H	P
27	58	LSC		P **
20	59	SAI	3H	P
16	60	SCI	1H	P
17	60	SAI	1H	P
39	60	35	AV1	
39	60	36	AV2	
39	60	32	AV3	
42	60	31	AV3	
42	60	32	AV4	
24	61	LSC	1H	P **
27	61	SCI	2H	P
29	62	24	AV1	
29	62	36	AV2	
29	62	29	AV3	
32	62	SCI	1H	P
18	63	SCI	2H	P *
18	63	LSC	5H	P *
23	63	34	TSH	
35	63	SCI	2H	P
23	64	SAI	1H	P
23	64	SCI	1H	P
23	64	SAI	3H	P
12	65	SCI	1H	P
19	65	22	TSH	

ATTACHMENT "B"

NORTH ANNA UNIT #2 8th REFUELING OUTAGE - MARCH 1992

UNIT #2 S/G "C" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
20	65	SCI	2H	P
8	66	MCI	1H	P
35	66	SCI	1H	P
35	66	SCI	2H	P
19	67	SCI	1H	P
36	67	SCI	2H	P
17	68	MCI	1H	P
21	69	SCI	2H	P
30	69	SCI	2H	P
34	69	37	AV1	
34	69	31	AV2	
38	71	17	1H	
33	72	LSC	1H	P **
33	72	LSA	1H	P **
32	74	SCI	1H	P
36	74	SCI	1H	P
31	76	40	1H	P
3	77	MCI	1H	P
27	80	SCI	1H	P
29	82	SCI	2H	P
31	82	DI	2H	P
31	82	SAI	2H	P
20	87	SCI	1H	P
20	87	SCI	2H	P

ATTACHMENT "B"

NORTH ANNA UNIT #2
8th REFUELING OUTAGE - MARCH 1992

UNIT #2 S/G "C" EXAMINATION SUMMARY

<u>Row</u>	<u>Col</u>	<u>Ind</u>	<u>Loc</u>	<u>Remarks</u>
21	88	INR	1C	
6	93	INR	1C	

EXPLANATION OF REMARKS

P Plugged

* Tubes Stabilized and Plugged.

** Virginia Electric and Power Company decision to plug as a precautionary measure.

ATTACHMENT "B"

VIRGINIA ELECTRIC AND POWER COMPANY NORTH ANNA UNIT 2 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 using 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) DNT - Dent - the tube has been deformed inward to a reduced diameter condition from that of a nominal tube. Dents may often be located at an interference such as a tube support plate.
- 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. INR can be used to address indications identified in previous inspections that are still detectable but fall below current criteria.
- 5) LSA - Liftoff Signal Axial - liftoff signal that may contain possible axial degradation based on visual examination of the RPC 3-d terrain plot (C-SCAN).
- 6) LSC - Liftoff Signal Circumferential - liftoff signal that may contain possible circumferential degradation based on visual examination of the RPC 3-d terrain plot (C-SCAN).
- 7) MAI - Multiple Axial Indication - describes multiple axially oriented indication signals from Rotating Pancake probe data.
- 8) 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.
- 9) 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. Tube is sometimes retested using a special probe, e.g., MRPC (Motorized Rotating Pancake Coil), etc.
- 10) PMI - Possible Mixed Mode Indication - used when there is a possible circumferential and axial indication at the same intersection.

- 11) SAI - Single Axial Indication - describes a single axially oriented signal from Rotating Pancake probe data.
- 12) 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.
- 13) TIU - Tube I.D. Uncertain (retest) - indicates that the ROW and/or COL identifier for a given tube is in doubt and that the tube must be retested.
- 14) A number in the indication column shows the % through wall depth of the indication.
- 15) TEH - Tube End Hot leg.
- 16) TEC - Tube End Cold leg.
- 17) TSH - Top of Tubesheet Hot leg.
- 18) TSC - Top of Tubesheet Cold leg.
- 19) #C, #H - (# = number) of Support Plate Hot or Cold leg. e.g., 3H, 6H, 7C.
- 20) AV1, AV2, AV3, and AV4 - Anti-Vibration Bars 1 through 4.
- 21) "P" in "Remarks" column indicates a plugged tube. No comment in the remarks column indicates the tube is still in service.

ATTACHMENT "C"

NORTH ANNA UNIT 1 STEAM GENERATORS "A", "B", AND "C" PRE-SERVICE EXAMINATION

The tubes for the new North Anna Unit 1 Steam Generators were pre-service examined at a Westinghouse site. Each steam generator has 3592 tubes. None of the tubes required plugging. One tube (Row 10 - Column 36) exhibited a 16% through wall indication at location 5H (10.82 inches above the fifth support plate on the hot leg side). Manufacture buff marks (MBM) were found throughout both hot and cold leg tubes. Some tubes had multiple manufacture buff marks (MMB) (i.e., two or more buff marks in series along a tube wall). A summary of the number of manufacture buff marks and multiple manufacture buff marks is provided below:

<u>Steam Generator</u>	<u>Total Number of Tubes with MBM Indications</u>	<u>Total Number of MBM Indications</u>	<u>Total Number of Tubes with MMB Indications</u>	<u>Total Number of MMB Indications</u>
A	301	400	18	21
B	256	384	77	86
C	244	327	35	41

GLOSSARY OF TERMS

Manufacturing Buff Marks (MBM) - a tube wall loss condition due to a tube manufacturing process step. An MBM is generally a relatively long and shallow area which remains constant and does not present any operating problems for the affected tube. Such indications are noted for reference purposes only.

Multiple Manufacturing Buff marks (MMB) - Multiple MBM's existing over a length of tube section which are in relatively close proximity to each other.