

ATTACHMENT 1

VIRGINIA ELECTRIC AND POWER COMPANY
SURRY NUCLEAR POWER STATION NO. 2
1991 ANNUAL STEAM GENERATOR
INSERVICE INSFECTION REPORT

VIRGINIA ELECTRIC AND POWER COMPANY

9203060258 920228
PDR 4DOCK 05000281
R PDR

**REFUELING OUTAGE - APRIL 1991
SURRY UNIT 2 STEAM GENERATOR "A"
EXAMINATION SUMMARY**

In "A" Steam Generator 1180 tubes were examined full length (tube end to tube end) with bobbin probes. This is approximately 35% of the available tubes. Of the tubes examined, two had indications between 10% and 19% through wall, one had a indication between 20% and 29% through wall, five had indications between 30% and 39% through wall, two were characterized as "Manufacturing Buff Marks" and four were characterized as "Indication Not Reportable." Refer to the table below for details. No tubes were plugged as a result of this inspection. However, one tube (R41, C28) that was previously plugged was replugged in response to NRC Bulletin 89-01 concerns. Another tube (R41, C27) previously plugged was unplugged, tested, and returned to service.

Ind.	Location	Row-Column
MBM	4H	R36C20
32	7H	R31C27
INR	6C	R42C34
33	TSC	R6C38
35	6C	R12C39
32	6C	R12C41
INR	6H	R45C47
MBM	1C	R45C48
30	3C	R36C51
INR	7H	R12C63
INR	AV4	R32C79
10	6C	R11C87
10	6C	R12C87
25	1C	R12C92

**REFUELING OUTAGE - 1991
SURRY UNIT NO. 2, STEAM GENERATOR "C"
EXAMINATION SUMMARY**

In "C" Steam Generator 1175 tubes were examined full length (tube end to tube end) with bobbin probes. This represents approximately 35% of the available tubes. Of the tubes examined, five had indications between 10% and 19% through wall, six had indications between 20% and 29% through wall, ten had indications between 30% and 39% through wall, and four were characterized as "Indication Not Reportable." Refer to the table below for details.

Ind.	Location	Row-Column
29	6H	R34C16
36	6C	R18C18
31	6C	R22C22
26	6H	R14C26
30	AV4	R43C31
37	5C	R27C41
34	4H	R27C41
33	5C	R35C44
13	AV3	R46C48
27	AV4	R28C49
35	6C	R45C53
19	AV3	R40C54
23	AV3	R17C56
17	5H	R40C62
13	6C	R42C62
19	AV4	R40C63
21	2C	R14C66
INR	3H	R23C71
34	BPC	R18C82
32	3C	R25C84
39	3H	R24C86
INR	7H	R2C88
INR	7H	R2C90
31	3C	R15C90
24	3H	R12C91
INR	7H	R2C92

ATTACHMENT 2

GLOSSARY OF TERMS
SURRY POWER STATION
ANNUAL STEAM GENERATOR
INSERVICE INSPECTION REPORT

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ANNUAL STEAM GENERATOR REPORT 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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EDDY CURRENT TUBE INSPECTION

GLOSSARY OF TERMS

- 9) CI - 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.
- 17) MBM - Manufacturing Buff Mark - a tube wall loss condition due to a tube manufacturing process step - generally a long and shallow loss area - remains constant and does not present any operating problems for the tube - noted for reference only.
- 18) BPC - Baffle Plate Cold leg.