



CALVERT CLIFFS NUCLEAR POWER PLANT  
1650 CALVERT CLIFFS PARKWAY • LUSBY, MARYLAND 20657-4702

CHARLES H. CRUSE  
PLANT GENERAL MANAGER  
CALVERT CLIFFS

February 22, 1993

U. S. Nuclear Regulatory Commission  
Washington, DC 20555

ATTENTION: Document Control Desk

SUBJECT: Calvert Cliffs Nuclear Power Plant  
Unit Nos. 1 & 2; Docket Nos. 50-317 & 50-318  
1992 Steam Generator Inspection Results Report

REFERENCES: (a) Calvert Cliffs Units 1 and 2 Technical Specification 6.9.1.5.b  
(b) Letter from Mr. G. C. Creel (BG&E) to Document Control Desk (NRC), dated July 17, 1992, Report of Steam Generator Tube Plugging

Gentlemen:

Reference (a) requires that we report, on an annual basis, the results of steam generator tube examinations conducted in the past year. This report includes the number and extent of tubes examined, imperfections noted and the identity of tubes plugged. Attached please find the report of steam generator tube examinations conducted on Units 1 and 2 during 1992. Reference (b) reports the 1992 steam generator tube plugging results for Calvert Cliffs Units 1 and 2.

Should you have any further questions regarding this matter, we will be pleased to discuss them with you.

Very truly yours,

CHC/WDM/bjd

Attachments

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P PDR

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Document Control Desk  
February 22, 1993  
Page 2

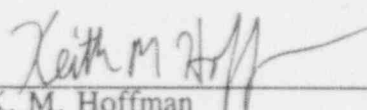
cc: D. G. McDonald, Jr., NRC  
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R. A. Capra, NRC

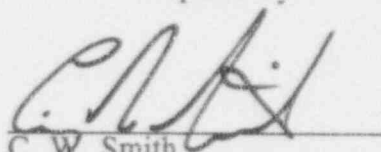
**CALVERT CLIFFS**  
**UNIT #1**

**STEAM GENERATORS #11 AND #12**  
**EDDY CURRENT TESTING**  
**FINAL REPORT**  
**APRIL/MAY 1992**

Approved by:

  
K. M. Hoffman  
Principal Engineer

Prepared by:

  
C. W. Smith  
Steam Generator Engineer

## TABLE OF CONTENTS

### I. INTRODUCTION

### II. DISCUSSION

#### APPENDIX I - Eddy Current Test Results for Steam Generator #11

- A. Plot with List of All Indications April/May 1992
- B. Plot with List of < 20% Indications April/May 1992
- C. Plot with List of 20% - 39% Indications April/May 1992
- D. Plot with List of > 39% Indications April/May 1992
- E. Plot with List of Dented Tubes April/May 1992
- F. Plot with List of Tubes Plugged During April/May 1992
- G. Plot with List of All Tubes Plugged All Outages

#### APPENDIX II - Eddy Current Test Results for Steam Generator #12

- A. Plot with List of All Indications April/May 1992
- B. Plot with List of < 20% Indications April/May 1992
- C. Plot with List of 20% - 39% Indications April/May 1992
- D. Plot with List of > 39% Indications April/May 1992
- E. Plot with List of Dented Tubes April/May 1992
- F. Plot with List of Tubes Plugged During April/May 1992
- G. Plot with List of All Tubes Plugged All Outages

#### APPENDIX III - Steam Generator Inspection Information

- A. Steam Generator Support Locations and Nomenclature
- B. Eddy Current Inspection Acronyms



## I. INTRODUCTION

This report summarizes the April/May 1992 eddy current inspection results of the Calvert Cliffs Unit #1 Steam Generators. The report contains a brief description of the inspection plan, written and tabular summaries of the inspection results, and detailed lists of all indications found.

## II. DISCUSSION

The Zetec, Inc. MIZ-18A digital data acquisition system was used to examine the U-tubes of the Unit #1 Steam Generators.

The primary analysis frequency selected was 400 KHz. Frequencies of 800, 100 and 30 KHz were also selected to enhance the data analysis. All eddy current data collected received both a primary and a secondary analysis in addition to an independent third party review. Zetec, Inc. was contracted to perform the primary analysis. The secondary analysis was performed by Coraputer Data Screening (CDS). NDE Technology served as the independent, third party reviewer.

Prior to conducting data analysis, all of the analysts, including the CDS system, were required to pass a site specific examination.

The scope of the inspection plan was a full length bobbin coil examination of all the in-service tubes in both steam generators. In addition to the 100% bobbin coil inspection, a motorized rotating pancake coil (MRPC) was used to perform more detailed examinations at selected locations in both steam generators. MRPC was used to examine 25% of the tubes in each steam generator at the hot leg tubesheet expansion zone. This examination was designed to look for circumferential cracking identified at plants of similar design and age. No circumferential cracking was found. MRPC examination was also performed on 100 tubes in each steam generator at dent locations adjacent to the solid tube support plates. No circumferential cracking was found at these locations. All of the distorted indications from the bobbin coil examination were further characterized by MRPC examination.

Table II-1 summarizes the Unit #1 April/May 1992 Eddy Current Examination results. Appendices I and II contain detailed lists of all eddy current indications found during this examination. All indications were on the outside surfaces of the tubes. The examination results were consistent with the known, active corrosion mechanisms present in the steam generators. There were no noteworthy or unexpected results.

As a result of eddy current examination and analysis, eleven (11) tubes in the #11 Steam Generator and seven (7) tubes in the #12 Steam Generator were removed from service by inserting mechanical tube plugs. In addition, one (1) mechanical tube plug was installed on the #12 Steam Generator hot leg tubesheet opposite a cold leg plug that had been placed in a wrong location in 1986.

TABLE II - I

## Unit One Eddy Current Inspection Results

	SG #11	SG #12
Number of In-service Tubes	8412	8450
Percent of In-service Tubes Inspected	100%	100%
Number of Indications < 20% (Imperfections)	209	236
Number of Tubes with < 20% Indications	166	181
Percent of Tubes with < 20% Indications	1.97%	2.14%
Number of Indications 20-39% (Degraded)	112	120
Number of Tubes with 20-39% Indications	102	114
Percent of Tubes with 20-39% Indications	1.21%	1.35%
Number of Indications > 39% (Defective)	12	5
Number of Tubes with > 39% Indications	10	5
Percent of Tubes with > 39% Indications	0.19%	0.06%
Number of Tubes Plugged this Outage	11	8
Total Tubes Plugged	118	77
Percent of Tubes Plugged	1.40%	0.91%

**NOTE:** Tubes which contained more than one indication in more than one category (< 20%, 20-39%, and > 39% are listed in all appropriate categories.

## **APPENDIX I**

### **Eddy Current Test Results for #11 Steam Generator**

- A. Plot with List of All Indications April/May 1992
- B. Plot with List of < 20% Indications April/May 1992
- C. Plot with List of 20% - 39% Indications April/May 1992
- D. Plot with List of > 39% Indications April/May 1992
- E. Plot with List of Dented Tubes April/May 1992
- F. Plot with List of Tubes Plugged April/May 1992
- G. Plot with List of All Tubes Plugged All Outages April/May 1992

STEAM GENERATOR #11

A. Plot with List of All Indications April/May 1992



# ALL EDDY CURRENT INDICATIONS - ALL LOCATIONS

PLANT: CALVERT CLIFFS UNIT 1  
OUTAGE: 4/92

GENERATOR: 11

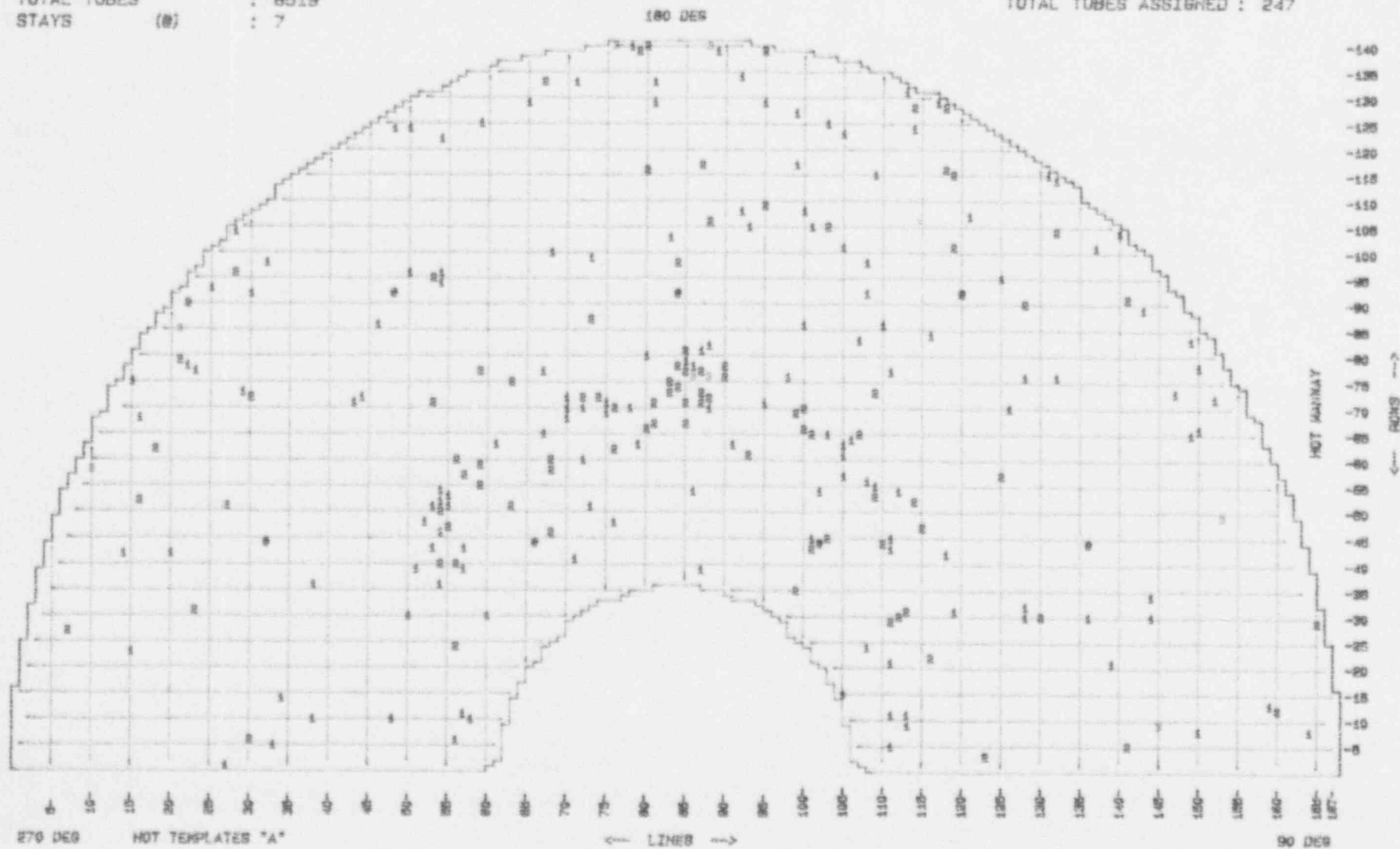
1 = <20 (148)

2 = 20-39 (91)

3 = >39 (8)

TOTAL TUBES : 8519  
STAYS (8) : 7

TOTAL TUBES ASSIGNED : 247



Plant: CALVERT CLIFFS UNIT 1  
Outage: 4/92

Steam Generator: 11

QUERY: ALL EDDY CURRENT INDICATIONS - ALL LOCATIONS

ROW	LINE OUTAGE	INDICATION	VALUE	VOLTS	LOCATION	INCHES	COMMENTS	REEL
27	7 4/92	OD	30 % TW	0.46	HTS-SF	+ 3.23		C60
58	10 4/92	OD	91 % TW	0.50	CTS-SF	+14.27		C79
42	14 4/92	OD	8 % TW	1.35	H5	+ 7.59		C78
23	15 4/92	OD	19 % TW	0.80	CTS-SF	+ 5.35		C76
75	15 4/92	OD	19 % TW	1.54	C1	+15.56	NRH HTS-PF + 21.0"	77A
52	16 4/92	OD	32 % TW	0.98	C4	+ 2.73		77A
	4/92	OD	S/N	3.06	C4	+ 2.73		77A
68	16 4/92	OD	13 % TW	0.92	C3	+ 0.38		77A
62	18 4/92	OD	36 % TW	0.55	C5	+ 1.34		C76
	4/92	OD	S/N	1.82	C5	+ 1.34		C76
42	20 4/92	OD	14 % TW	1.49	H2	+21.52		C75
79	21 4/92	OD	23 % TW	2.22	C1	+17.21		C75
85	21 4/92	OD	56 % TW	1.10	C5	+ 4.80		C75
76	22 4/92	OD	12 % TW	1.41	C6	+25.62		C75
90	22 4/92	OD	37 % TW	0.58	C2	+30.86		C75
31	23 4/92	OD	32 % TW	0.92	C4	+ 5.04		C74
77	23 4/92	OD	18 % TW	0.54	YM	- 2.67		C74
	4/92	OD	S/N	0.45	YM	- 2.67		C74
93	25 4/92	OD	S/N	0.89	YM	+27.16		73A
	4/92	OD	14 % TW	1.10	YM	+13.88		73A
	4/92	OD	10 % TW	0.95	YM	+26.21		73A
	4/92	OD	14 % TW	0.61	DC			73A
1	27 4/92	OD	5 % TW	1.07	H5	+ 2.95		C66
51	27 4/92	OD	24 % TW	1.07	C7	+ 3.10		C44
	4/92	OD	S/N	0.95	C7	+ 3.10		C44
96	28 4/92	OD	31 % TW	0.56	H1	+ 0.51		C71
104	28 4/92	OD	18 % TW	0.46	HTS-SF	+ 1.16		C44
73	29 4/92	OD	19 % TW	1.31	H6	+19.32		C56
	4/92	OD	2 % TW	1.91	C8	+13.57		C56
6	30 4/92	OD	21 % TW	0.88	C2	+16.28		C69
72	30 4/92	OD	33 % TW	1.56	C1	+26.65		C56
92	30 4/92	OD	8 % TW	2.32	H5	+ 7.31		C71
98	32 4/92	OD	9 % TW	1.86	H4	+21.30		C70
5	33 4/92	OD	0 % TW	0.24	C3	+17.83		62A
14	34 4/92	OD	4 % TW	0.20	C5	+34.72		62A
10	38 4/92	OD	1 % TW	0.24	C6	+ 6.15		C62
36	38 4/92	OD	27 % TW	0.55	H2	+28.85		H01
	4/92	OD	18 % TW	0.71	H2	+28.85		H01
71	43 4/92	OD	19 % TW	1.08	H3	+16.23		H03
72	44 4/92	OD	15 % TW	2.08	H5	+ 9.76		H03
66	46 4/92	OD	4 % TW	3.09	C2	+20.12		C39
10	48 4/92	OD	14 % TW	0.52	C4	+32.63		C61
124	48 4/92	OD	15 % TW	2.50	H3	+ 4.27		C36
	4/92	OD	19 % TW	0.73	H9	+ 5.47		C38
30	50 4/92	OD	9 % TW	1.12	C1	+25.08		C37
96	50 4/92	OD	3 % TW	1.17	C7	+12.59		C37
124	50 4/92	OD	3 % TW	1.66	DH	+12.88		C37
	4/92	OD	18 % TW	0.45	DH	+12.85		C37
	4/92	OD	S/N	1.07	DH	+19.65		C37
39	51 4/92	OD	15 % TW	0.54	HTS-SF	+ 0.21		H05
48	52 4/92	OD	10 % TW	0.94	HTS-SF	+ 1.08		H05
43	53 4/92	OD	10 % TW	1.33	HTS-SF	+ 2.48		H06
51	53 4/92	OD	19 % TW	1.99	HTS-SF	+ 0.92		H06
71	53 4/92	OD	23 % TW	0.44	HTS-SF	- 0.54		H06
95	53 4/92	OD	20 % TW	0.68	C4	+28.05		H6A
	4/92	OD	S/N	1.09	C4	+28.05		H6A
96	54 4/92	OD	15 % TW	1.21	H5	+24.87		H6A
40	54 4/92	OD	21 % TW	0.53	HTS-SF	+ 3.58		H6A
46	54 4/92	OD	19 % TW	0.65	HTS-SF	+ 1.11		H6A
50	54 4/92	OD	25 % TW	2.12	HTS-SF	+ 1.06		H6A
52	54 4/92	OD	16 % TW	0.43	HTS-SF	+ 1.05		H6A
54	54 4/92	OD	19 % TW	0.55	HTS-SF	+ 1.31		H6A
94	54 4/92	OD	10 % TW	1.37	H7	+14.57		H6A
96	54 4/92	OD	12 % TW	0.72	YM	+ 2.65		H6A
122	54 4/92	OD	9 % TW	1.73	H9	+18.73		C35
47	55 4/92	OD	23 % TW	0.48	HTS-SF	+ 1.79		H07
51	55 4/92	OD	15 % TW	0.83	HTS-SF	+ 0.61		H07

Plant: CALVERT CLIFFS UNIT 1  
Outage: 4/92

Steam Generator: 11

QUERY: ALL EDDY CURRENT INDICATIONS - ALL LOCATIONS

ROW	LINE	OUTAGE	INDICATION	VALUE	VOLTS	LOCATION	INCHES	COMMENTS	REEL
53	55	4/92	OD	19 % TW	2.59	HTS-SF	+ 0.75		H07
6	56	4/92	OD	11 % TW	0.65	HTS-SF	- 0.80		C61
24	56	4/92	OD	21 % TW	0.91	HTS-SF	+ 0.90		C70
		4/92	OD	S/N	2.46	HTS-SF	+ 0.90		C70
40	56	4/92	OD	23 % TW	0.94	HTS-SF	+ 3.64		H07
60	56	4/92	OD	22 % TW	1.02	HTS-SF	+ 0.99		H07
31	57	4/92	OD	15 % TW	0.60	CTS-SF	+ 0.76		C61
39	57	4/92	OD	19 % TW	0.64	HTS-SF	+ 2.51		H07
43	57	4/92	OD	11 % TW	0.74	HTS-SF	+ 3.57		H07
57	57	4/92	OD	26 % TW	1.75	HTC-SF	+ 0.80		H08
10	58	4/92	OD	10 % TW	0.90	HTS-SF	+ 0.58		H08
55	59	4/92	OD	20 % TW	1.42	HTS-SF	+ 0.99		H08
59	59	4/92	OD	21 % TW	0.62	HTS-SF	+ 2.53		H08
77	59	4/92	OD	26 % TW	1.60	H6	+13.87		H09
125	59	4/92	OD	7 % TW	2.22	C4	+ 3.31		C34
		4/92	OD	22 % TW	0.72	C3	+15.76		C34
		4/92	OD	S/N	1.76	C3	+18.76		C34
30	60	4/92	OD	13 % TW	1.34	C5	+ 1.96		C70
83	61	4/92	OD	14 % TW	0.61	H3	+10.39		H9A
		4/92	OD	S/N	0.99	H3	+10.39		H9A
51	63	4/92	OD	36 % TW	0.62	HTS-SF	+ 2.00		10M
75	63	4/92	OD	33 % TW	0.50	DH	+17.06		H11
		4/92	OD	S/N	1.02	DH	+17.06		H11
129	65	4/92	OD	13 % TW	0.78	H6			47A
		4/92	OD	15 % TW	2.35	H6	+23.84		47A
65	67	4/92	OD	16 % TW	0.87	HTS-SF	+ 1.23		H12
77	67	4/92	OD	7 % TW	0.94	VH	+25.55		H12
133	67	4/92	OD	22 % TW	0.54	CTS-SF	+ 0.81		C46
46	68	4/92	OD	31 % TW	0.40	HTS-SF	+ 0.72		H13
58	68	4/92	OD	31 % TW	0.57	HTS-SF	+ 1.64		H13
60	68	4/92	OD	27 % TW	0.51	HTS-SF	+ 1.61		H13
100	68	4/92	OD	1 % TW	1.47	C1	+21.51		H13
68	70	4/92	OD	15 % TW	0.78	HTS-SF	+ 0.34		H14
70	70	4/92	OD	18 % TW	0.97	HTS-SF	+ 1.60		H14
72	70	4/92	OD	19 % TW	0.42	HTS-SF	+ 1.43		H14
41	71	4/92	OD	16 % TW	0.55	H2	+37.03		H14
133	71	4/92	OD	8 % TW	1.37	H3	+ 7.70		C49
60	72	4/92	OD	19 % TW	0.52	HTS-SF	+ 1.66		15M
78	72	4/92	OD	14 % TW	0.99	HTS-SF	+ 2.10		15M
72	72	4/92	OD	21 % TW	1.08	HTS-SF	+ 1.48		15M
51	73	4/92	OD	10 % TW	0.60	H4	+ 7.98		H16
		4/92	OD	S/N	0.70	H4	+ 7.98		H16
87	73	4/92	OD	33 % TW	0.53	C6	- 0.36		15M
99	73	4/92	OD	23 % TW	0.97	VH	+26.32		15M
		4/92	OD	14 % TW	0.86	VH	+17.02		15M
		4/92	OD	S/N	1.60	VH	+17.02		15M
72	74	4/92	OD	20 % TW	0.74	HTS-SF	+ 0.89		H16
69	75	4/92	OD	11 % TW	0.37	HTS-SF	+ 1.08		H16
71	75	4/92	OD	11 % TW	0.89	HTS-SF	+ 0.94		H16
48	76	4/92	OD	13 % TW	0.91	C5	+31.60		H17
		4/92	OD	S/N	0.83	C5	+31.60		H17
62	76	4/92	OD	26 % TW	1.87	H2	+22.29		H17
70	76	4/92	OD	23 % TW	0.73	HTS-SF	+ 2.11		H17
140	76	4/92	OD	41 % TW	1.15	CTS-SF	+10.87	POSS. FOREIGN OBJ CONTACTING TUBE	C51
		4/92	OD	55 % TW	5.19	CTS-SF	+10.41	POSS. FOREIGN OBJ CONTACTING TUBE	C51
70	78	4/92	OD	11 % TW	1.50	HTS-SF	+ 2.36		H18
140	78	4/92	OD	16 % TW	0.69	C10	+ 5.22		C51
63	79	4/92	OD	11 % TW	1.18	HTS-SF	+ 2.85		H18
139	79	4/92	OD	22 % TW	1.02	C10	+ 7.36		C52
66	80	4/92	OD	21 % TW	0.63	H3	+ 4.82		H19
		4/92	OD	S/N	1.36	H3	+ 4.82		H19
80	80	4/92	OD	16 % TW	0.94	H2	+18.45		H19
		4/92	OD	11 % TW	0.74	H1	+29.29		H19
116	80	4/92	OD	33 % TW	0.53	H6	+ 0.16		C52
140	80	4/92	OD	27 % TW	0.74	CTS-SF	+19.77		C52
67	81	4/92	OD	27 % TW	0.71	C5	+10.25		H19
		4/92	OD	S/N	1.43	C5	+10.25		H19

Plant: CALVERT CLIFFS UNIT 1  
Outage: 4/92

Steam Generator: 11

QUERY: ALL EDDY CURRENT INDICATIONS - ALL LOCATIONS

ROW	LINE	OUTAGE	INDICATION	VALUE	VOLTS	LOCATION	INCHES	COMMENTS	REF.
71	81	4/92	OD	26 % TW	0.50	HTS-SF	+ 1.04		H19
129	81	4/92	OD	11 % TW	0.81	DN	+10.34		C52
		4/92	OD	S/N	0.91	DN	+10.34		C52
133	81	4/92	OD	8 % TW	1.87	C6	+11.24		C52
		4/92	OD	16 % TW	0.70	C6	+15.56		C52
		4/92	OD	S/N	0.89	C6	+15.56		C52
73	83	4/92	OD	20 % TW	1.09	HTS-SF	+ 2.28		H20
75	83	4/92	OD	25 % TW	0.74	HTS-SF	+ 0.92		H20
103	83	4/92	OD	20 % TW	0.75	H5	+ 4.70		C53
		4/92	OD	S/N	1.40	H5	+ 4.70		C53
		4/92	OD	25 % TW	1.05	H5	+ 8.41		C53
		4/92	OD	S/N	1.96	H5	+ 8.41		C53
		4/92	OD	2 % TW	0.85	H5	+16.82		C53
74	84	4/92	OD	27 % TW	0.85	HTS-SF	+10.03		H20
		4/92	OD	S/N	1.45	HTS-SF	+10.03		H20
78	84	4/92	OD	37 % TW	0.67	HTS-SF	+ 1.20		H20
		4/92	OD	30 % TW	0.90	HTS-SF	+ 0.28		H20
98	84	4/92	OD	26 % TW	0.61	CTS-SF	+23.26		H20
87	85	4/92	OD	23 % TW	0.45	HTS-SF	+ 1.67		H21
71	85	4/92	OD	31 % TW	0.89	HTS-SF	+ 0.84		H21
77	85	4/92	OD	23 % TW	1.45	HTS-SF	+ 1.20		H20
		4/92	OD	36 % TW	0.39	HTS-SF	- 0.33		H20
79	85	4/92	OD	16 % TW	0.79	HTS-SF	+ 1.53		H20
81	85	4/92	OD	30 % TW	0.67	H5	+17.07		H20
		4/92	OD	S/N	1.40	H5	+17.07		H20
54	86	4/92	OD	1 % TW	0.81	C3	+25.50		H23
76	86	4/92	OD	45 % TW	0.84	HTS-SF	+ 0.79		H21
78	86	4/92	OD	18 % TW	0.62	HTS-SF	+ 1.10		H21
39	87	4/92	OD	19 % TW	0.68	H6	+24.14		H23
71	87	4/92	OD	34 % TW	1.16	HTS-SF	+ 0.75		21H
73	87	4/92	OD	21 % TW	0.89	HTS-SF	+ 0.64		21H
77	87	4/92	OD	29 % TW	0.97	HTS-SF	+ 0.94		21H
81	87	4/92	OD	14 % TW	0.64	H4	+35.66		21H
		4/92	OD	S/N	1.01	H4	+35.66		21H
117	87	4/92	OD	23 % TW	0.79	VH	+10.56		C54
		4/92	OD	S/N	1.61	VH	+10.56		C54
70	88	4/92	OD	18 % TW	1.26	HTS-SF	+ 0.59		21H
		4/92	OD	59 % TW	0.86	HTS-SF	+ 0.84		21H
		4/92	OD	28 % TW	0.81	HTS-SF	+ 2.91		21H
72	88	4/92	OD	36 % TW	0.98	HTS-SF	+ 0.61		21H
		4/92	OD	55 % TW	1.03	HTS-SF	+ 0.89		21H
76	88	4/92	OD	52 % TW	0.47	HTS-PF	+ 1.38		21H
82	88	4/92	OD	9 % TW	1.11	C3	+29.39		21H
106	88	4/92	OD	32 % TW	1.82	VH			C54
140	88	4/92	OD	54 % TW	3.84	CTS-SF	+20.19		C54
		4/92	OD	50 % TW	0.74	C2			C54
139	89	4/92	OD	19 % TW	1.96	CTS-SF	+15.68	NRH HTS-PF + 21.0	39A
76	90	4/92	OD	21 % TW	1.88	HTS-SF	+ 2.70		H22
78	90	4/92	OD	25 % TW	1.75	HTS-SF	+ 1.15		H22
83	91	4/92	OD	10 % TW	1.15	HTS-SF	+ 2.89		H23
168	92	4/92	OD	7 % TW	1.95	H7	+24.38		C32
		4/92	OD	11 % TW	1.86	H8	+ 5.26		C32
134	92	4/92	OD	19 % TW	0.59	H7	+ 6.13		C32
		4/92	OD	S/N	1.33	H7	+ 6.13		C32
51	93	4/92	OD	35 % TW	0.67	H3	+30.49		H34
		4/92	OD	S/N	1.21	G3	+30.49		H24
105	93	4/92	OD	19 % TW	0.97	C2	+35.90		C32
		4/92	OD	18 % TW	0.90	C2	+12.78		C32
		4/92	OD	36 % TW	0.60	C1			C32
		4/92	OD	29 % TW	0.93	CTS-SF	+31.70		C32
		4/92	OD	19 % TW	0.69	C4	+ 3.30		C32
71	95	4/92	OD	11 % TW	0.68	HTS-SF	+ 1.52		H25
109	95	4/92	OD	33 % TW	0.53	H1	+27.66		C31
		4/92	OD	S/N	0.35	H1	+27.66		C31
129	95	4/92	OD	11 % TW	1.18	C1	+10.40		C31
139	95	4/92	OD	34 % TW	1.64	H9	+ 1.64	NRH HTS-PF + 21.0	C31
76	98	4/92	OD	14 % TW	0.84	H5	+ 4.90		H27

Plant: CALVERT CLIFFS UNIT 1  
Outage: 4/92

Steam Generator: 11

QUERY: ALL EDDY CURRENT INDICATIONS - ALL LOCATIONS

ROW	LINE	OUTAGE	INDICATION	VALUE	VOLTS	LOCATION	INCHES	COMMENTS	FEEL
		4/92	OD	S/N	1.37	H5	+ 4.90		H27
35	99	4/92	OD	27 % TW	0.57	H4			H27
69	99	4/92	OD	36 % TW	0.81	HTS-SF	+ 0.77		H27
117	99	4/92	OD	15 % TW	0.47	H6	+ 7.67		C30
		4/92	OD	S/N	1.54	H6	+ 7.67		C30
127	99	4/92	OD	19 % TW	1.10	C1	+33.92		C30
		4/92	OD	S/N	1.79	C1	+33.92		C30
66	100	4/92	OD	33 % TW	0.61	HTS-SF	+ 2.27		H28
70	100	4/92	OD	26 % TW	0.69	HTS-SF	+ 1.81		H28
86	100	4/92	OD	10 % TW	0.71	HTS-SF	+16.06		H28
108	100	4/92	OD	13 % TW	2.29	H2	+27.67		C30
43	101	4/92	OD	28 % TW	1.05	HTS-SF	+ 9.43		H28
45	101	4/92	OD	14 % TW	0.71	HTS-SF	+ 3.55		H28
65	101	4/92	OD	21 % TW	1.14	HTS-SF	+ 1.79		H28
		4/92	OD	21 % TW	0.86	HTS-SF	+ 1.28		H29
105	101	4/92	OD	19 % TW	1.49	C4	+19.82		29A
54	102	4/92	OD	10 % TW	0.80	HTS-SF	+ 0.82		H29
45	103	4/92	OD	20 % TW	0.63	HTS-SF	+ 2.18		H29
65	103	4/92	OD	10 % TW	1.20	HTS-SF	+ 1.05		H29
105	103	4/92	OD	30 % TW	1.48	H7	+10.91		C28
125	103	4/92	OD	4 % TW	1.22	CR	+16.20		C28
15	105	4/92	OD	18 % TW	0.64	HTS-SF	+ 1.68		C60
		4/92	OD	S/N	0.15	CTS-SF	+ 1.68		C60
57	105	4/92	OD	12 % TW	1.59	HTS-SF	+ 1.91		H30
61	105	4/92	OD	16 % TW	0.95	HTS-SF	+ 2.00		H30
		4/92	OD	18 % TW	0.81	HTS-SF	+ 1.66		H30
63	105	4/92	OD	18 % TW	1.26	HTS-SF	+ 2.18		H30
101	105	4/92	OD	13 % TW	0.77	HTS-SF	+ 1.07		30M
123	105	4/92	OD	19 % TW	0.53	VH	+20.84		C28
		4/92	OD	S/N	1.00	VH	+20.54		C28
64	106	4/92	OD	18 % TW	0.57	HTS-SF	+ 0.99		H31
65	107	4/92	OD	26 % TW	1.00	HTS-SF	+ 1.32		H31
83	107	4/92	OD	19 % TW	0.92	C2	+ 5.52		H32
24	108	4/92	OD	13 % TW	0.52	HTS-SF	+ 1.07		C24
56	108	4/92	OD	10 % TW	0.68	HTS-SF	+ 2.51		H32
92	108	4/92	OD	15 % TW	0.51	H5	+17.86		H32
		4/92	OD	S/N	0.92	H5	+17.86		H32
		4/92	OD	30 % TW	0.61	H5	+ 8.29		H32
		4/92	OD	S/N	1.83	H5	+ 8.29		H32
98	108	4/92	OD	14 % TW	0.49	HTS-SF	+21.29		H32
53	109	4/92	OD	25 % TW	1.30	HTS-SF	+ 0.74		H32
55	109	4/92	OD	16 % TW	1.02	C1	+31.22		H32
73	109	4/92	OD	25 % TW	0.51	HTS-SF	+19.25		H32
		4/92	OD	31 % TW	0.50	HTS-SF	+15.19		H32
115	109	4/92	OD	3 % TW	1.57	H6	+19.83		C26
44	110	4/92	OD	22 % TW	0.78	H5	+ 6.19		H33
		4/92	OD	28 % TW	0.59	HTS-SF	+ 1.50		H33
		4/92	OD	S/N	0.82	H5	+ 6.19		H33
86	110	4/92	OD	13 % TW	0.80	C3	+11.44		H33
		4/92	OD	S/N	1.10	C3	+11.44		H33
5	111	4/92	OD	19 % TW	1.04	HTS-SF	+ 3.76		C60
11	111	4/92	OD	19 % TW	0.79	HTS-SF	+ 1.73		57A
21	111	4/92	OD	18 % TW	0.49	HTS-SF	+ 1.00		C25
29	111	4/92	OD	35 % TW	0.48	HTS-SF	+ 0.96		C25
43	111	4/92	OD	10 % TW	0.61	HTS-SF	+ 1.62		H33
45	111	4/92	OD	10 % TW	0.52	HTS-SF	+ 1.19		H33
77	111	4/92	OD	8 % TW	1.01	H2	+28.90		H33
30	112	4/92	OD	23 % TW	1.11	HTS-SF	+ 1.45		C25
54	112	4/92	OD	14 % TW	0.90	HTS-SF	+ 1.02		H34
9	113	4/92	OD	18 % TW	0.64	HTS-SF	+ 1.00		57A
11	113	4/92	OD	14 % TW	0.72	HTS-SF	+ 1.14		57A
31	113	4/92	OD	20 % TW	0.57	HTS-SF	+ 0.69		CR2
121	113	4/92	OD	14 % TW	1.70	VH	+ 4.24		C25
52	114	4/92	OD	34 % TW	1.20	HTS-SF	+ 0.35		H35
124	114	4/92	OD	18 % TW	1.57	C3	+37.23		C25
		4/92	OD	27 % TW	1.39	C3	+33.59		C25
128	114	4/92	OD	36 % TW	0.75	HTS-SF	+ 0.71		C25



Plant: CALVERT CLIFFS UNIT 1  
Outage: 4/92

Steam Generator: 11

QUERY: ALL EDDY CURRENT INDICATIONS - ALL LOCATIONS

ROW	LINE	OUTAGE	INDICATION	VALUE	VOLTS	LOCATION	INCHES	COMMENTS	REEL
47	115	4/92	OD	31 % TW	0.57	HTS-SF	+ 0.80		H35
22	116	4/92	OD	29 % TW	1.98	H1	+83.58		23A
		4/92	OD	29 % TW	0.83	C4	+37.16		23A
84	116	4/92	OD	15 % TW	0.56	CTS-SF	+30.62		C24
129	117	4/92	OD	6 % TW	0.74	C7	+21.34		C23
42	118	4/92	OD	18 % TW	0.92	HTS-SF	+ 1.72		H34
116	118	4/92	OD	37 % TW	0.69	C9	+11.28		C23
		4/92	OD	S/N	1.72	C9	+11.28		C23
128	118	4/92	OD	30 % TW	0.86	C6	+ 8.25		C23
		4/92	OD	S/N	2.19	C6	+ 8.25		C23
31	119	4/92	OD	11 % TW	1.38	HTS-SF	+ 0.13		C22
101	119	4/92	OD	30 % TW	0.67	H4	- 0.33		C22
115	119	4/92	OD	23 % TW	0.47	H9			C22
107	121	4/92	OD	19 % TW	0.59	VH	+ 5.98		C21
		4/92	OD	S/N	1.33	VH	+ 5.98		C21
3	123	4/92	OD	30 % TW	0.71	CTS-SF	+ 1.16		64A
57	125	4/92	OD	25 % TW	0.49	HTS-SF	+15.83		H36
95	125	4/92	OD	21 % TW	0.89	H5	- 0.08		C19
		4/92	OD	14 % TW	0.92	H3	+29.70		C19
		4/92	OD	S/N	1.95	H3	+29.70		C19
70	126	4/92	OD	8 % TW	1.25	C1	+25.95		H33
30	128	4/92	OD	16 % TW	0.64	HTS-SF	+ 0.78		C18
32	128	4/92	OD	16 % TW	0.44	HTS-SF	+ 0.64		C18
76	128	4/92	OD	14 % TW	0.53	H4	+ 4.85		C18
		4/92	OD	S/N	1.16	H4	+ 4.85		C18
90	128	4/92	OD	20 % TW	0.99	H8	+ 4.89		C18
30	130	4/92	OD	26 % TW	1.13	H5	+ 5.80		C17
		4/92	OD	27 % TW	0.91	H6	+ 3.77		C17
115	131	4/92	OD	10 % TW	1.01	C9	+21.39		C16
76	132	4/92	OD	28 % TW	0.66	H4	+ 4.19		C16
		4/92	OD	S/N	1.56	H4	+ 4.19		C16
		4/92	OD	15 % TW	1.78	H4	+13.64		C16
		4/92	OD	27 % TW	1.62	H4	+20.48		C16
		4/92	OD	16 % TW	0.50	H5	+ 6.85		C16
		4/92	OD	S/N	1.19	H5	+ 6.85		C16
		4/92	OD	8 % TW	1.26	H5	+28.11		C16
104	132	4/92	OD	21 % TW	1.03	H3	+ 6.41		C16
		4/92	OD	S/N	2.15	H3	+ 6.41		C16
114	132	4/92	OD	17 % TW	1.87	H4	+30.85		C16
		4/92	OD	32 % TW	1.72	H5	+25.76		C16
30	136	4/92	OD	17 % TW	0.93	C2	+22.95		C14
101	137	4/92	OD	1 % TW	1.08	C2	+29.82		C14
21	139	4/92	OD	17 % TW	0.98	HTS-SF	- 0.26		C12
104	140	4/92	OD	5 % TW	1.03	C3	+20.69		C11
5	141	4/92	OD	23 % TW	1.09	C3	+ 5.29		65A
91	141	4/92	OD	22 % TW	0.57	H3	+37.03		C11
		4/92	OD	S/N	0.89	H3	+37.03		C11
89	143	4/92	OD	5 % TW	1.19	H2	+16.03		C10
30	144	4/92	OD	11 % TW	1.45	C3	+26.68		C9A
34	144	4/92	OD	19 % TW	1.60	C4	+27.27		C9A
9	145	4/92	OD	91 % TW	0.81	VH			C09
73	147	4/92	OD	18 % TW	0.85	HTS-SF	+25.31		C08
65	149	4/92	OD	S/N	3.33	H4	+34.11		C07
		4/92	OD	11 % TW	0.88	H4	+34.11		C07
63	149	4/92	OD	16 % TW	0.70	H2	+ 7.93		C07
		4/92	OD	S/N	0.59	H2	+ 7.93		C07
8	150	4/92	OD	4 % TW	3.76	VH		APT AT VH	B1A
66	150	4/92	OD	14 % TW	2.18	DH	+12.41		C06
78	150	4/92	OD	3 % TW	3.40	C7	+22.50		C06
72	152	4/92	OD	3 % TW	1.53	H3	+32.25		C06
49	153	4/92	OD	51 % TW	0.76	H3	- 0.40		C5A
13	159	4/92	OD	13 % TW	1.25	C2	+28.99		C03
12	160	4/92	OD	23 % TW	1.18	H2	+ 4.12		C02
8	164	4/92	OD	10 % TW	1.53	C4	+16.62		C59
29	170	4/92	OD	28 % TW	0.74	HTS-PF	+20.70	NRH HTS-SF + 21.2"	C01

TOTAL TUBES FOUND = 247  
TOTAL INDICATIONS FOUND = 333TOTAL TUBES IN INPUT FILE = 8519  
TOTAL TUBES INSPECTED = 8412

STEAM GENERATOR #11

B. Plot with List of <20% Indications April/May 1992

# < 20% EDDY CURRENT INDICATIONS - ALL ELEVATIONS

PLANT: CALVERT CLIFFS UNIT 1

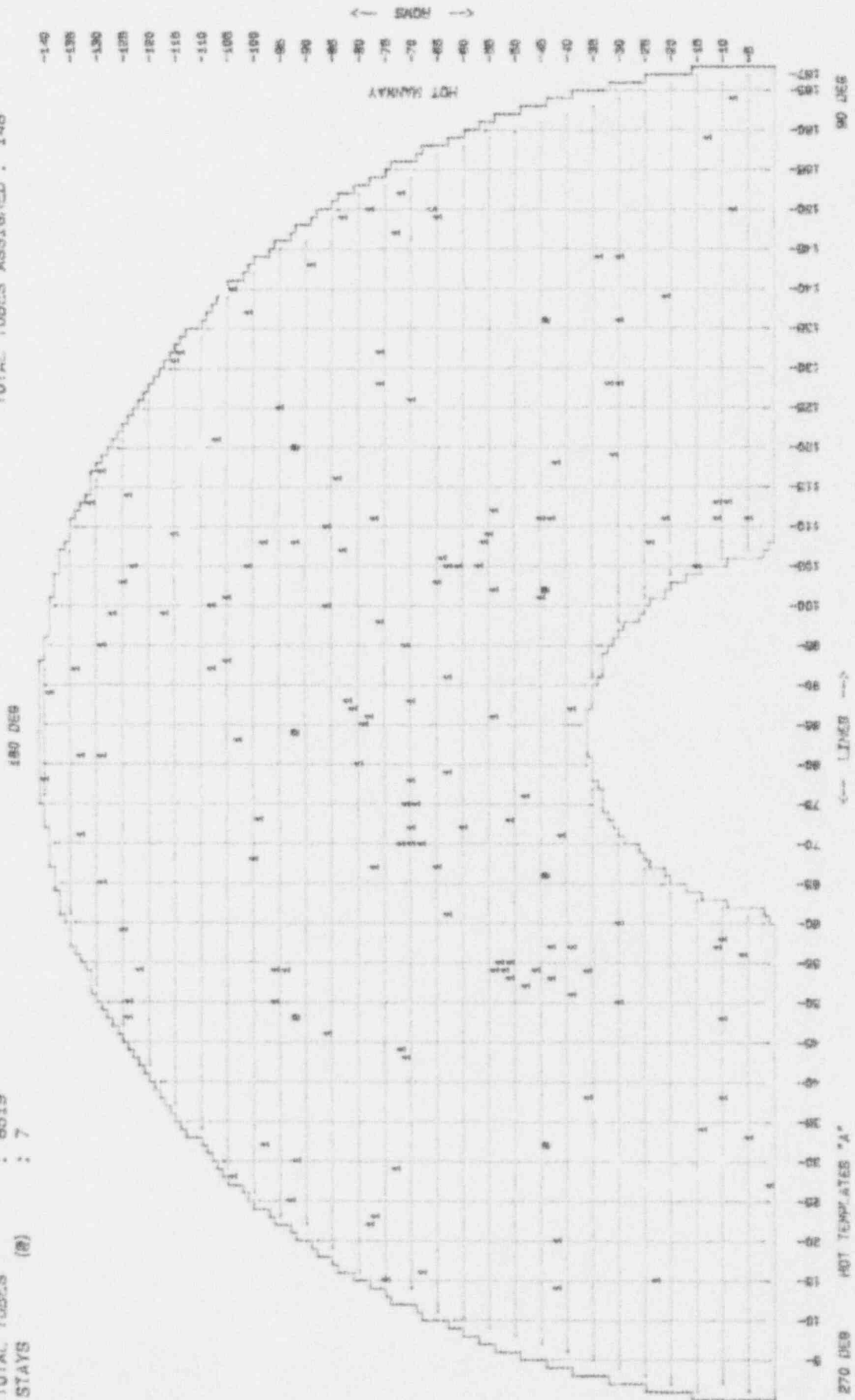
GENERATOR 11

OUTAGE: 4/92

1 - <20 (148)

TOTAL TUBES : 8519  
STAYS : 7

TOTAL TUBES ASSIGNED : 148



Plant: CALVERT CLIFFS UNIT 1  
Outage: 4/92

Steam Generator: 11

QUERY: < 20% EDDY CURRENT INDICATIONS - ALL ELEVATIONS

ROW	LINE	OUTAGE	INDICATION	VALUE	VOLTS	LOCATION	INCHES	COMMENTS	REFL
42	14	4/92	OD	8 % TW	1.35	H5	+ 7.69		C78
23	15	4/92	OD	18 % TW	0.80	CTS-SF	+ 5.35		C78
75	15	4/92	OD	29 % TW	1.54	C1	+15.56	NRH HTS-PF + 21.2"	77A
52	16	4/92	OD	S/N	2.06	C4	+ 2.73		77A
68	16	4/92	OD	13 % TW	0.92	C3	+ 8.28		77A
62	18	4/92	OD	S/N	1.82	C5	+ 1.34		C76
42	20	4/92	OD	16 % TW	1.49	H2	+21.52		C75
78	22	4/92	OD	12 % TW	1.41	C8	+23.62		C75
77	23	4/92	OD	18 % TW	0.54	VM	- 2.67		C74
		4/92	OD	S/N	0.45	VM	- 2.67		C74
93	25	4/92	OD	S/N	0.89	VM	+27.16		73A
		4/92	OD	14 % TW	1.10	VM	+13.88		73A
		4/92	OD	10 % TW	0.95	VM	+26.21		73A
		4/92	OD	14 % TW	0.61	DC			73A
1	27	4/92	OD	5 % TW	1.07	H5	+ 2.95		C66
51	27	4/92	OD	S/N	0.35	C7	+ 3.10		C44
104	28	4/92	OD	18 % TW	0.46	HTS-SF	+ 1.16		C44
73	29	4/92	OD	19 % TW	1.31	H6	+19.32		C56
		4/92	OD	2 % TW	1.91	C8	+13.57		C56
92	30	4/92	OD	8 % TW	3.32	H5	+ 7.31		C71
98	32	4/92	OD	9 % TW	1.88	H4	+21.30		C70
5	33	4/92	OD	2 % TW	0.24	C3	+17.83		62A
14	34	4/92	OD	4 % TW	0.20	C5	+34.72		62A
10	38	4/92	OD	1 % TW	0.24	C6	+ 6.15		C62
36	38	4/92	OD	18 % TW	0.71	H2	+38.85		H01
71	43	4/92	OD	19 % TW	1.08	H3	+18.23		H03
72	44	4/92	OD	18 % TW	2.08	H5	+ 9.76		H03
86	46	4/92	OD	4 % TW	3.09	C3	+10.12		C89
10	48	4/92	OD	14 % TW	0.52	C4	+32.63		C61
124	48	4/92	OD	15 % TW	2.50	H3	+ 8.27		C38
		4/92	OD	19 % TW	0.73	H9	+ 5.47		C38
30	50	4/92	OD	9 % TW	1.12	C1	+25.08		C37
96	50	4/92	OD	3 % TW	1.17	C7	+12.59		C37
124	50	4/92	OD	3 % TW	1.66	DH	+12.88		C37
		4/92	OD	18 % TW	0.45	DH	+17.65		C37
		4/92	OD	S/N	1.07	DH	+17.65		C37
39	51	4/92	OD	15 % TW	0.54	HTS-SF	+ 0.21		H05
48	52	4/92	OD	10 % TW	0.94	HTS-SF	+ 1.08		H05
43	53	4/92	OD	10 % TW	1.33	HTS-SF	+ 2.46		H06
51	53	4/92	OD	19 % TW	1.99	HTS-SF	+ 0.92		H06
95	53	4/92	OD	S/N	1.09	C4	+28.05		H6A
36	54	4/92	OD	15 % TW	1.21	H5	+24.87		H6A
46	54	4/92	OD	19 % TW	0.65	HTS-SF	+ 1.11		H6A
52	54	4/92	OD	16 % TW	0.43	HTS-SF	+ 1.05		H6A
54	54	4/92	OD	19 % TW	0.55	HTS-SF	+ 1.31		H6A
94	54	4/92	OD	10 % TW	1.33	H7	+14.57		H6A
96	54	4/92	OD	12 % TW	0.72	VM	+ 2.65		H6A
122	54	4/92	OD	9 % TW	1.73	H9	+18.73		C35
51	55	4/92	OD	15 % TW	0.83	HTS-SF	+ 0.61		H07
53	55	4/92	OD	19 % TW	2.59	HTS-SF	+ 0.75		H07
8	56	4/92	OD	11 % TW	0.65	HTS-SF	- 0.80		C61
24	56	4/92	OD	S/N	2.46	HTS-SF	+ 0.90		C70
11	57	4/92	OD	15 % TW	0.60	CTS-SF	+ 0.76		C61
39	57	4/92	OD	19 % TW	0.64	HTS-SF	+ 2.51		H07
43	57	4/92	OD	11 % TW	0.74	HTS-SF	+ 3.57		H07
10	58	4/92	OD	10 % TW	0.90	HTS-SF	+ 0.58		60A
125	59	4/92	OD	7 % TW	2.32	C4	+ 5.31		C34
		4/92	OD	S/N	1.76	C3	+16.76		C34
30	60	4/92	OD	13 % TW	1.34	C5	+ 1.96		C70
63	61	4/92	OD	14 % TW	0.61	H3	+19.39		H9A
		4/92	OD	S/N	0.99	H3	+18.39		H9A
75	63	4/92	OD	S/N	1.02	DH	+17.06		H11
129	65	4/92	OD	13 % TW	0.78	H6			47A
		4/92	OD	15 % TW	2.35	H6	+23.84		47A
65	67	4/92	OD	18 % TW	0.87	HTS-SF	+ 1.23		H12
77	67	4/92	OD	7 % TW	0.94	VM	+28.55		H12
100	68	4/92	OD	1 % TW	1.47	C1	+21.51		H13

QUERY: < 20% EDDY CURRENT INDICATIONS - ALL ELEVATIONS



Plant: CALVERT CLIFFS UNIT 1  
Outage: 4/92

Steam Generator: 11

QUERY: 20% EDDY CURRENT INDICATIONS - ALL ELEVATIONS

ROW	LINE	OUTAGE	INDICATION	VALUE	VOLTS	LOCATION	INCHES	COMMENTS	REEL
15	105	4/92	OD	18 % TW	0.64	CTS-SF	+ 1.68		C60
		4/92	OD	S/N	0.15	CTS-SF	+ 1.68		C60
57	105	4/92	OD	11 % TW	1.59	HTS-SF	+ 1.91		H30
61	105	4/92	OD	25 % TW	0.95	HTS-SF	+ 2.00		H30
		4/92	OD	18 % TW	0.81	HTS-SF	+ 1.66		H30
63	105	4/92	OD	18 % TW	1.26	HTS-SF	+ 2.18		H30
101	105	4/92	OD	13 % TW	0.77	HTS-SF	+ 1.07		30X
123	105	4/92	OD	19 % TW	0.53	VH	+20.34		C28
		4/92	OD	S/N	1.00	VH	+20.54		C28
64	106	4/92	OD	18 % TW	0.57	HTS-SF	+ 0.99		H31
83	107	4/92	OD	19 % TW	0.92	C2	+ 8.52		H32
24	108	4/92	OD	13 % TW	0.52	HTS-SF	+ 1.07		C26
56	108	4/92	OD	10 % TW	0.68	HTS-SF	+ 2.51		H32
92	108	4/92	OD	15 % TW	0.51	H5	+17.86		H32
		4/92	OD	S/N	0.92	H5	+17.86		H32
		4/92	OD	S/N	1.83	H5	+ 8.29		H32
98	108	4/92	OD	14 % TW	0.49	HTS-SF	+21.29		H32
55	109	4/92	OD	16 % TW	1.02	C1	+31.22		H32
115	109	4/92	OD	3 % TW	1.57	H8	+19.83		C26
44	110	4/92	OD	S/N	0.82	H5	+ 8.19		H33
86	110	4/92	OD	13 % TW	0.80	C3	+11.44		H33
		4/92	OD	S/N	1.10	C3	+11.44		H33
5	111	4/92	OD	19 % TW	1.04	HTS-SF	+ 2.76		C60
11	111	4/92	OD	19 % TW	0.79	HTS-SF	+ 1.73		57A
21	111	4/92	OD	18 % TW	0.49	HTS-SF	+ 1.00		C25
43	111	4/92	OD	10 % TW	0.61	HTS-SF	+ 1.52		H33
45	111	4/92	OD	10 % TW	0.52	HTS-SF	+ 1.79		H33
77	111	4/92	OD	8 % TW	1.01	H2	+28.90		H38
54	112	4/92	OD	14 % TW	0.90	HTS-SF	+ 1.02		H34
9	113	4/92	OD	19 % TW	0.54	HTS-SF	+ 1.00		57A
11	113	4/92	OD	14 % TW	0.72	HTS-SF	+ 1.14		57A
131	113	4/92	OD	14 % TW	1.70	VH	+ 4.24		C25
124	114	4/92	OD	18 % TW	1.57	C2	+37.23		C25
84	116	4/92	OD	15 % TW	0.55	CTS-SF	+20.62		C34
129	117	4/92	OD	6 % TW	0.74	C7	+21.34		C23
42	118	4/92	OD	18 % TW	0.92	HTS-SF	+ 1.72		H36
116	118	4/92	OD	S/N	1.72	C9	+11.28		C23
128	118	4/92	OD	S/N	2.19	C6	+ 8.25		C23
31	119	4/92	OD	11 % TW	1.38	HTS-SF	+ 0.13		C22
107	121	4/92	OD	19 % TW	0.59	VH	+ 5.98		C21
		4/92	OD	S/N	1.33	VH	+ 5.98		C21
95	125	4/92	OD	14 % TW	0.92	H3	+29.70		C19
		4/92	OD	S/N	1.95	H3	+29.70		C19
70	126	4/92	OD	8 % TW	1.25	C1	+25.95		H38
30	128	4/92	OD	16 % TW	0.64	HTS-SF	+ 0.78		C18
52	128	4/92	OD	15 % TW	0.44	HTS-SF	+ 0.64		C18
75	128	4/92	OD	14 % TW	0.53	H4	+ 4.85		C18
		4/92	OD	S/N	1.16	H4	+ 4.85		C18
115	131	4/92	OD	10 % TW	1.01	C9	+21.39		C16
76	132	4/92	OD	S/N	1.56	H4	+ 4.19		C16
		4/92	OD	15 % TW	1.78	H4	+13.64		C16
		4/92	OD	16 % TW	0.50	H5	+ 8.85		C16
		4/92	OD	S/N	1.19	H5	+ 8.85		C16
		4/92	OD	8 % TW	1.25	H5	+26.11		C16
104	132	4/92	OD	S/N	2.15	H3	+ 8.47		C16
114	132	4/92	OD	17 % TW	1.87	H4	+30.85		C16
30	136	4/92	OD	17 % TW	0.93	C2	+22.95		C14
101	137	4/92	OD	1 % TW	1.08	C2	+29.62		C14
21	139	4/92	OD	17 % TW	0.98	HTS-SF	- 0.26		C12
104	140	4/92	OD	5 % TW	1.03	C8	+20.69		C17
91	141	4/92	OD	S/N	0.89	H3	+37.03		C11
89	143	4/92	OD	5 % TW	1.19	H2	+15.03		C10
30	144	4/92	OD	11 % TW	1.45	C3	+26.68		C9A
34	144	4/92	OD	19 % TW	1.60	C4	+27.27		C9A
73	147	4/92	OD	18 % TW	0.85	HTS-SF	+25.31		C08
65	149	4/92	OD	S/N	1.32	H4	+34.11		C07
		4/92	OD	11 % TW	0.88	H4	+34.11		C07

Plant: CALVERT CLIFFS UNIT 1  
Outage: 4/92

Steam Generator: 11

QUERY: < 20% EDDY CURRENT INDICATIONS - ALL ELEVATIONS

ROW	LINE	OUTAGE	INDICATION	VALUE	VOLTS	LOCATION	INCHES	COMMENTS	REEL
83	149	4/92	OD	16 % TW	0.70	H2	+ 7.93		C07
		4/92	OD	S/N	0.59	H2	+ 7.93		C07
8	150	4/92	OD	4 % TW	1.76	VM		APT AT VM	81A
66	150	4/92	OD	14 % TW	2.16	DM	+10.41		C06
78	150	4/92	OD	3 % TW	1.40	C7	+22.50		C06
72	152	4/92	OD	3 % TW	1.63	H3	+32.35		C06
13	159	4/92	OD	13 % TW	1.25	C2	+28.99		C03
8	164	4/92	OD	10 % TW	1.53	C4	+18.62		C59

TOTAL TUBES FOUND = 166

TOTAL INDICATIONS FOUND = 209

TOTAL TUBES IN INPUT FILE = 8619

TOTAL TUBES INSPECTED = 8412

STEAM GENERATOR #11

C. Plot with List of 20% - 39% Indications April/May 1992

# 20% - 39% EDDY CURRENT INDICATIONS - ALL ELEVATIONS

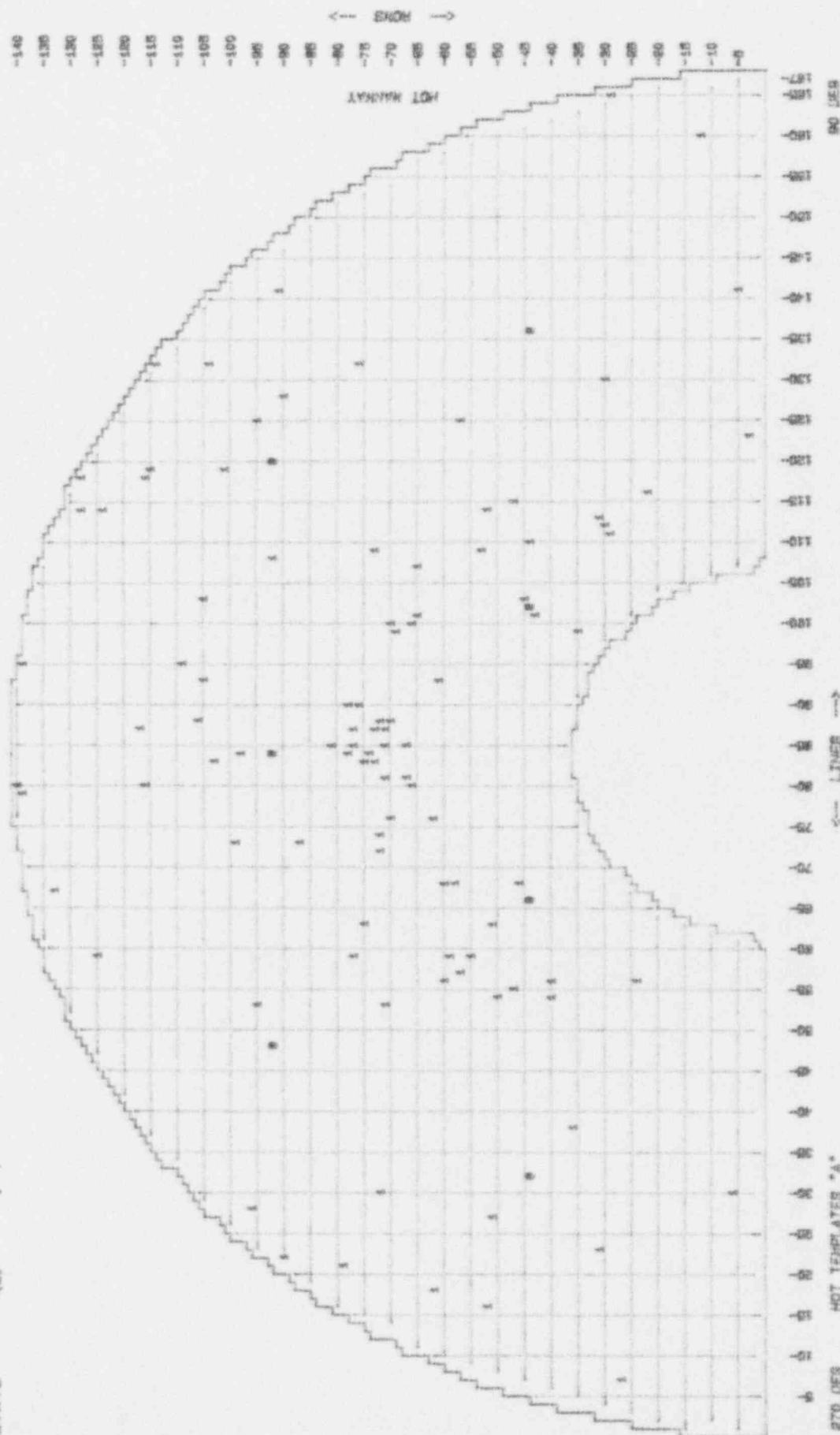
PLANT: CALVERT CLIFFS UNIT 1  
OUTAGE: 4/92

GENERATOR 13

1 - 20-39 (102)

TOTAL TUBES : 8519  
STAYS : 7

TOTAL TUBES ASSIGNED : 102









STEAM GENERATOR #11

D. Plot with List of  $>39\%$  Indications April/May 1992

# > 39% EDDY CURRENT INDICATIONS - ALL ELEVATIONS

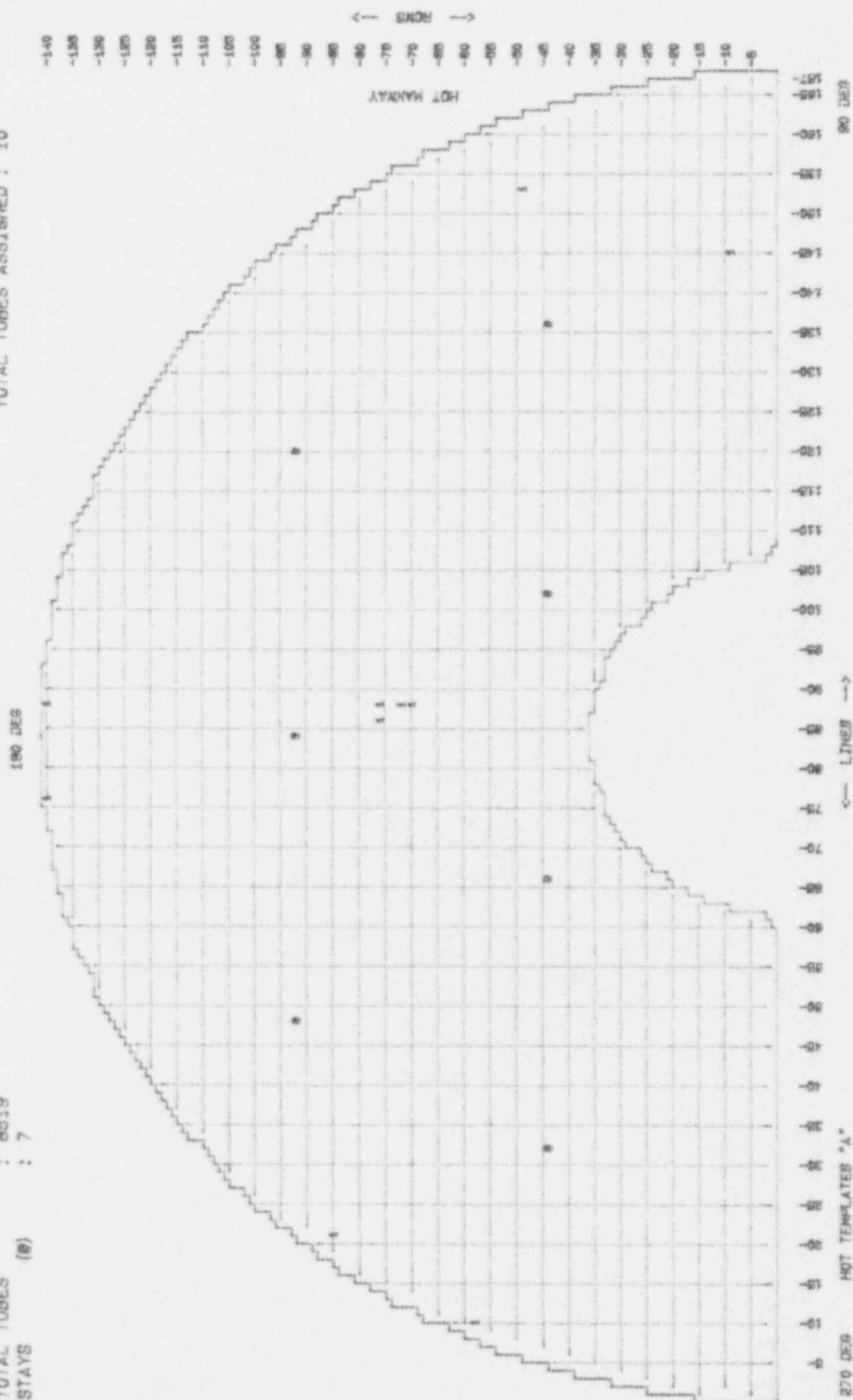
PLANT: CALVERT CLIFFS UNIT 1  
OUTAGE: 4/92

GENERATOR: 11

1 = >30 (10)

TOTAL TUBES : 8519  
STAYS : 7

TOTAL TUBES ASSIGNED : 10



Plant: CALVERT CLIFFS UNIT 1  
Outage: 4/92

Steam Generator: 11

QUERY: > 39% EDDY CURRENT INDICATIONS - ALL ELEVATIONS

ROW	LINE	OUTAGE	INDICATION	VALUE	VOLTS	LOCATION	INCHES	COMMENTS	REEL
58	10	4/92	OD	91 % TW	0.50	CTS-SF	+14.27		C79
85	21	4/92	OD	56 % TW	1.10	CS	+ 4.88		C75
140	76	4/92	OD	41 % TW	1.15	CTS-SF	+10.87	POSS. FOREIGN OBJ CONTACTING TUBE	C51
		4/92	OD	55 % TW	5.19	CTS-SF	+10.41	POSS. FOREIGN OBJ CONTACTING TUBE	C51
76	86	4/92	OD	45 % TW	0.84	HTS-SF	+ 0.79		H21
70	88	4/92	OD	59 % TW	0.86	HTS-SF	+ 0.84		21H
72	88	4/92	OD	55 % TW	1.03	HTS-SF	+ 0.89		21H
76	88	4/92	OD	52 % TW	0.47	HTS-PF	+ 1.28		21H
140	88	4/92	OD	54 % TW	2.84	CTS-SF	+20.19		C54
		4/92	OD	50 % TW	0.74	C2			C54
9	145	4/92	OD	91 % TW	0.81	VM			C09
49	153	4/92	OD	51 % TW	0.76	N3	- 0.40		C5A

TOTAL TUBES FOUND = 10  
TOTAL INDICATIONS FOUND = 12

TOTAL TUBES IN INPUT FILE = 8519  
TOTAL TUBES INSPECTED = 8412

STEAM GENERATOR #11

E. Plot with List of Dented Tubes April/May 1992

# ALL DENT INDICATIONS - ALL ELEVATIONS

PLANT: CALVERT CLIFFS UNIT 1  
OUTAGE: 4/92

GENERATOR: 11

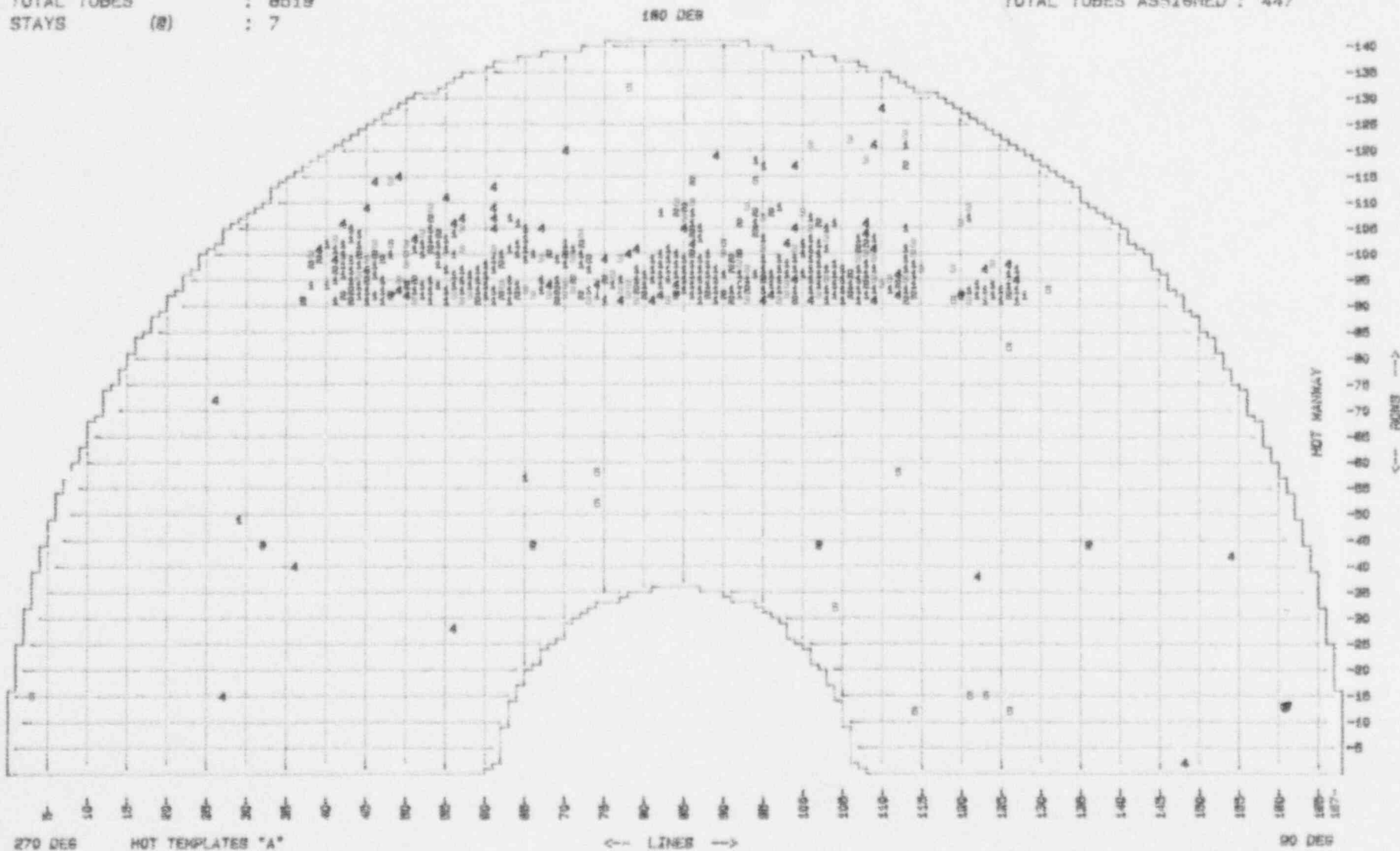
1 = >49.99 (238)  
4 = 20.00-29.99 (56)  
5 = 5.00-9.99 (1)

2 = 40.00-49.99 (60)  
6 = 15.00-19.99 (16)  
8 = <5.00 (0)

3 = 30.00-39.99 (76)  
7 = 10.00-14.99 (1)

TOTAL TUBES : 8519  
STAYS (8) : 7

TOTAL TUBES ASSIGNED : 447







Plant: CALVERT CLIFFS UNIT 1  
Outage: 4/92

Steam Generator: 11

QUERY: ALL DENT INDICATIONS - ALL ELEVATIONS

ROW	LINE	OUTAGE	INDICATION	VALUE	VOLTS	LOCATION	INCHES	COMMENTS	REEL
93	51	4/92	DENT	75.82	H9		+ 0.06		H05
95	51	4/92	DENT	45.27	H9		+ 0.17		H05
101	51	4/92	DENT	60.90	H9		- 0.20		36A
103	51	4/92	DENT	26.83	H9		- 0.13		36A
92	52	4/92	DENT	94.02	H9		+ 0.03		H05
94	52	4/92	DENT	67.71	H9		- 0.14		H05
100	52	4/92	DENT	95.16	H9		- 0.03		H05
102	52	4/92	DENT	72.16	H9		- 0.04		C36
104	52	4/92	DENT	34.42	H9		- 0.04		C36
91	53	4/92	DENT	84.21	H9		- 0.03		H6A
93	53	4/92	DENT	101.60	H9		- 0.14		H6A
95	53	4/92	DENT	111.90	H9		- 0.20		H6A
101	53	4/92	DENT	42.73	H9		- 0.16		C36
103	53	4/92	DENT	93.62	H9		- 0.12		C36
105	53	4/92	DENT	94.82	H9		- 0.31		C36
107	53	4/92	DENT	47.76	H9		- 0.09		C36
109	53	4/92	DENT	32.01	H9		+ 0.05		C36
94	54	4/92	DENT	84.28	H9		+ 0.11		H6A
98	54	4/92	DENT	51.90	H9		- 0.25		H6A
100	54	4/92	DENT	76.49	H9		- 0.08		H6A
102	54	4/92	DENT	118.80	H9		- 0.37		C35
104	54	4/92	DENT	41.25	H9		- 0.05		C35
91	55	4/92	DENT	54.66	H9		- 0.09		H07
93	55	4/92	DENT	53.68	H9		- 0.25		H07
97	55	4/92	DENT	94.16	H9		+ 0.16		H07
101	55	4/92	DENT	109.00	H9		- 0.03		C35
103	55	4/92	DENT	76.77	H9		- 0.17		C35
111	55	4/92	DENT	29.93	H9		- 0.12		C35
28	56	4/92	DENT	20.59	C6		+38.11		C70
92	56	4/92	DENT	86.70	H9		- 0.23		H07
94	56	4/92	DENT	139.10	H9		+ 0.22		H07
96	56	4/92	DENT	72.62	H9		+ 0.03		H07
100	56	4/92	DENT	67.17	H9		- 0.11		H07
104	56	4/92	DENT	73.36	H9		- 0.17		C35
106	56	4/92	DENT	28.86	H9		- 0.12		C35
91	57	4/92	DENT	38.77	H9		- 0.25		H08
93	57	4/92	DENT	125.00	H9		+ 0.09		H08
95	57	4/92	DENT	110.50	H9		+ 0.03		H08
97	57	4/92	DENT	138.20	H9		- 0.11		H08
101	57	4/92	DENT	34.76	H9		- 0.13		C35
105	57	4/92	DENT	33.75	H9		- 0.10		C35
107	57	4/92	DENT	38.88	H9				C35
92	58	4/92	DENT	34.72	H9		- 0.34		H08
94	58	4/92	DENT	144.20	H9		- 0.17		H08
96	58	4/92	DENT	64.78	H9		- 0.17		H08
91	59	4/92	DENT	44.73	H9		- 0.22		H09
93	59	4/92	DENT	130.70	H9		- 0.11		H09
95	59	4/92	DENT	81.70	H9				H9A
97	59	4/92	DENT	51.43	H9		- 0.28		H9A
92	60	4/92	DENT	86.80	H9		+ 0.14		H9A
94	60	4/92	DENT	83.69	H9		+ 0.17		H9A
96	60	4/92	DENT	78.55	H9		- 0.20		H9A
98	60	4/92	DENT	61.40	H9		- 0.11		H9A
91	61	4/92	DENT	91.15	H9		- 0.06		H10
93	61	4/92	DENT	77.20	H9		+ 0.11		H10
97	61	4/92	DENT	92.01	H9		+ 0.40		H10
99	61	4/92	DENT	53.41	H9		- 0.08		H10
101	61	4/92	DENT	38.79	H9		- 0.03		H10
105	61	4/92	DENT	26.36	H9		- 0.07		C46
107	61	4/92	DENT	23.25	H9		- 0.07		C46
109	61	4/92	DENT	21.73	H9		- 0.22		C46
113	61	4/92	DENT	23.91	H9		- 0.03		C46
		4/92	DENT	23.91	H9		- 0.07		C46
92	62	4/92	DENT	46.30	H9		- 0.22		10M
94	62	4/92	DENT	32.07	H9		+ 0.03		10M
96	62	4/92	DENT	42.33	H9		+ 0.27		10M
100	62	4/92	DENT	57.80	H9				H10





Plant: CALVERT CLIFFS UNIT 1  
Outage: 4/92

Steam Generator: 11

QUERY: ALL DENT INDICATIONS - ALL ELEVATIONS

ROW	LINE	OUTAGE	INDICATION	VALUE	VOLTS	LOCATION	INCHES	COMMENTS	REF.
102	90	4/92	DENT	19.98	H9		+ 0.09		H22
91	91	4/92	DENT	42.64	H9		- 0.11		H24
93	91	4/92	DENT	53.04	H9		+ 0.23		H24
97	91	4/92	DENT	47.98	H9		+ 0.03		H24
99	91	4/92	DENT	48.34	H9		+ 0.14		H24
92	92	4/92	DENT	115.40	H9		- 0.08		H24
94	92	4/92	DENT	57.08	H9		- 0.06		H24
96	92	4/92	DENT	63.55	H9		- 0.29		H24
98	92	4/92	DENT	32.79	H9		- 0.11		H24
100	92	4/92	DENT	47.30	H9		+ 0.03		H24
106	92	4/92	DENT	48.54	H9		- 0.08		C32
91	93	4/92	DENT	34.41	H9		- 0.06		H24
93	93	4/92	DENT	48.41	H9		- 0.14		H24
95	93	4/92	DENT	62.02	H9		- 0.11		H24
97	93	4/92	DENT	36.34	H9		- 0.11		H24
109	93	4/92	DENT	31.90	H9		- 0.32		C32
96	94	4/92	DENT	62.62	H9		+ 0.23		H25
104	94	4/92	DENT	46.16	H9		- 0.06		C31
106	94	4/92	DENT	72.31	H9		- 0.11		C31
108	94	4/92	DENT	40.39	H9		- 0.03		C31
114	94	4/92	DENT	16.10	C9		+19.33		C31
118	94	4/92	DENT	66.25	H10				C31
91	95	4/92	DENT	29.78	H8		+19.33		H25
93	95	4/92	DENT	105.30	H9		- 0.09		H25
95	95	4/92	DENT	42.67	H9		- 0.09		H25
97	95	4/92	DENT	102.20	H9		+ 0.12		H25
99	95	4/92	DENT	65.85	H9		- 0.14		H25
101	95	4/92	DENT	35.62	H9		- 0.36		H25
103	95	4/92	DENT	63.62	H9				C31
107	95	4/92	DENT	33.43	H9		- 0.16		C31
117	95	4/92	DENT	74.49	H10		+ 0.08		C31
92	96	4/92	DENT	25.06	H9		- 0.11		H26
94	96	4/92	DENT	55.00	H9		- 0.14		H26
96	96	4/92	DENT	91.19	H9		- 0.14		H26
108	96	4/92	DENT	49.22	H9		- 0.16		C31
91	97	4/92	DENT	35.04	H9				H26
93	97	4/92	DENT	96.13	H9		- 0.09		H26
95	97	4/92	DENT	90.37	H9		+ 0.11		H26
97	97	4/92	DENT	148.30	H9		+ 0.17		H26
99	97	4/92	DENT	70.10	H9		+ 0.14		H26
109	97	4/92	DENT	62.04	H9		- 0.16		C30
92	98	4/92	DENT	34.90	H9		- 0.11		H27
94	98	4/92	DENT	36.74	H9		+ 0.11		H27
96	98	4/92	DENT	119.00	H9				H27
98	98	4/92	DENT	82.17	H9		- 0.06		H26
102	98	4/92	DENT	38.81	H9		- 0.25		H26
91	99	4/92	DENT	46.21	H9		- 0.12		H27
93	99	4/92	DENT	64.19	H9		+ 0.14		H27
95	99	4/92	DENT	26.30	H9				H27
97	99	4/92	DENT	74.48	H9		- 0.14		H27
99	99	4/92	DENT	105.90	H9		+ 0.32		H27
101	99	4/92	DENT	35.52	H9		- 0.14		H27
105	99	4/92	DENT	28.31	H9		- 2.18		C30
117	99	4/92	DENT	34.79	H10				C30
96	100	4/92	DENT	62.00	H9		+ 0.09		H27
100	100	4/92	DENT	79.85	H8		+ 0.29		H27
102	100	4/92	DENT	84.28	H9		+ 0.09		H27
106	100	4/92	DENT	36.35	H9				C-4
91	101	4/92	DENT	21.31	H9		- 0.09		H28
93	101	4/92	DENT	79.92	H9				H28
95	101	4/92	DENT	77.26	H9		- 0.20		H28
97	101	4/92	DENT	54.65	H9		- 0.11		H28
99	101	4/92	DENT	125.00	H9		+ 0.06		H28
101	101	4/92	DENT	90.43	H9		+ 0.03		H28
103	101	4/92	DENT	82.95	H9		- 0.08		C29
105	101	4/92	DENT	33.44	H9				29A
107	101	4/92	DENT	54.89	H9		- 0.21		29A





Plant: CALVERT CLIFFS UNIT 1  
Outage: 4/92

Steam Generator: 11

QUERY: ALL DENT INDICATIONS - ALL ELEVATIONS

ROW	LINE	OUTAGE	INDICATION	VALUE	VOLTS	LOCATION	INCHES	COMMENTS	REEL
99	113	4/92	DENT	138.00	H9	-	0.08		C25
101	113	4/92	DENT	89.48	H9	-	0.11		C25
105	113	4/92	DENT	53.69	H9	-	0.27		C25
117	113	4/92	DENT	46.00	H10	+	0.08		C25
121	113	4/92	DENT	51.68	H10	+	0.11		C25
123	113	4/92	DENT	31.68	H10				C25
12	114	4/92	DENT	15.89	C6	+	9.61		57A
92	114	4/92	DENT	49.81	H9	-	0.26		H34
94	114	4/92	DENT	99.26	H9	-	0.09		H34
96	114	4/92	DENT	91.73	H9	-	0.29		H34
98	114	4/92	DENT	51.32	H9	-	0.03		34A
100	114	4/92	DENT	37.11	H9				34A
102	114	4/92	DENT	38.96	H9	+	0.11		34A
97	115	4/92	DENT	37.23	H9	-	0.19		34A
91	119	4/92	DENT	16.38	C6	+	21.01		C22
97	111	4/92	DENT	36.47	H9	-	0.03		C22
106	120	4/92	DENT	38.46	H9	-	0.19		C22
15	121	4/92	DENT	17.79	C6	+	37.87		C58
		4/92	DENT	17.79	C6	+	37.87		C58
91	121	4/92	DENT	34.13	H9	-	0.03		C21
		4/92	DENT	34.84	C6	+	19.98		C21
		4/92	DENT	27.90	C6	+	18.96		C21
		4/92	DENT	17.34	C6	+	15.17		C21
93	121	4/92	DENT	71.48	H9	-	0.24		C21
107	121	4/92	DENT	55.05	H9	-	0.08		C21
109	121	4/92	DENT	30.20	H9	-	0.05		C21
38	122	4/92	DENT	34.97	C4	+	2.72		H37
92	122	4/92	DENT	86.69	H9				C21
94	122	4/92	DENT	74.64	H9	-	0.05		C21
15	123	4/92	DENT	15.80	C6	+	37.78		C58
		4/92	DENT	15.80	C6	+	37.78		C58
91	123	4/92	DENT	54.04	H9	-	0.27		C20
93	123	4/92	DENT	56.63	H9				C20
97	123	4/92	DENT	29.03	H9	-	0.11		C20
92	124	4/92	DENT	110.90	H9	-	0.03		C20
94	124	4/92	DENT	109.60	H9	-	0.08		C20
98	124	4/92	DENT	34.15	H9	-	0.08		C20
91	125	4/92	DENT	51.97	H9	-	0.06		C19
93	125	4/92	DENT	67.90	H9	-	0.25		C19
12	126	4/92	DENT	15.78	C6	+	9.66		C58
		4/92	DENT	15.78	C6	+	9.66		C58
82	126	4/92	DENT	15.78	H7	+	15.02		C19
92	126	4/92	DENT	46.23	H9	-	0.13		C19
94	126	4/92	DENT	77.82	H9	-	0.16		C19
96	126	4/92	DENT	86.07	H9	-	0.03		C19
98	126	4/92	DENT	25.66	H9	-			C19
91	127	4/92	DENT	63.73	H9	-	0.25		C18
92	127	4/92	DENT	76.12	H9	-	0.35		C18
95	127	4/92	DENT	29.83	H9	-	0.11		C18
97	127	4/92	DENT	54.20	H9	-	0.06		C18
92	128	4/92	DENT	52.94	H9	-	0.05		C16
93	131	4/92	DENT	19.09	H9	-	0.11		C17
2	148	4/92	DENT	16.37	C6	+	4.89		65A
		4/92	DENT	25.80	C6	+	4.41		65A
		4/92	DENT	17.28	C6	+	7.80		65A
		4/92	DENT	25.59	C6	+	7.24		65A
		4/92	DENT	19.12	H6	+	7.66		65A
		4/92	DENT	27.68	H6	+	8.09		65A
42	154	4/92	DENT	21.91	C7	+	7.70		C05
		4/92	DENT	20.13	C7	+	0.51		C05
13	161	4/92	DENT	12.74	C6	+	8.20		C02
		4/92	DENT	12.74	C6	+	8.20		C02
31	161	4/92	DENT	8.83	VM				C02
		4/92	DENT	8.83	VM				C02

TOTAL TUBES FOUND = 447  
TOTAL INDICATIONS FOUND = 466

TOTAL TUBES IN INPUT FILE = 8519  
TOTAL TUBES INSPECTED = 8412

STEAM GENERATOR #11

F. Plot with List of Tubes Plugged April/May 1992

# TUBES PLUGGED IN 4/92 OUTAGE

PLANT: CALVERT CLIFFS UNIT 1

GENERATOR: 11

OUTAGE: 4/92

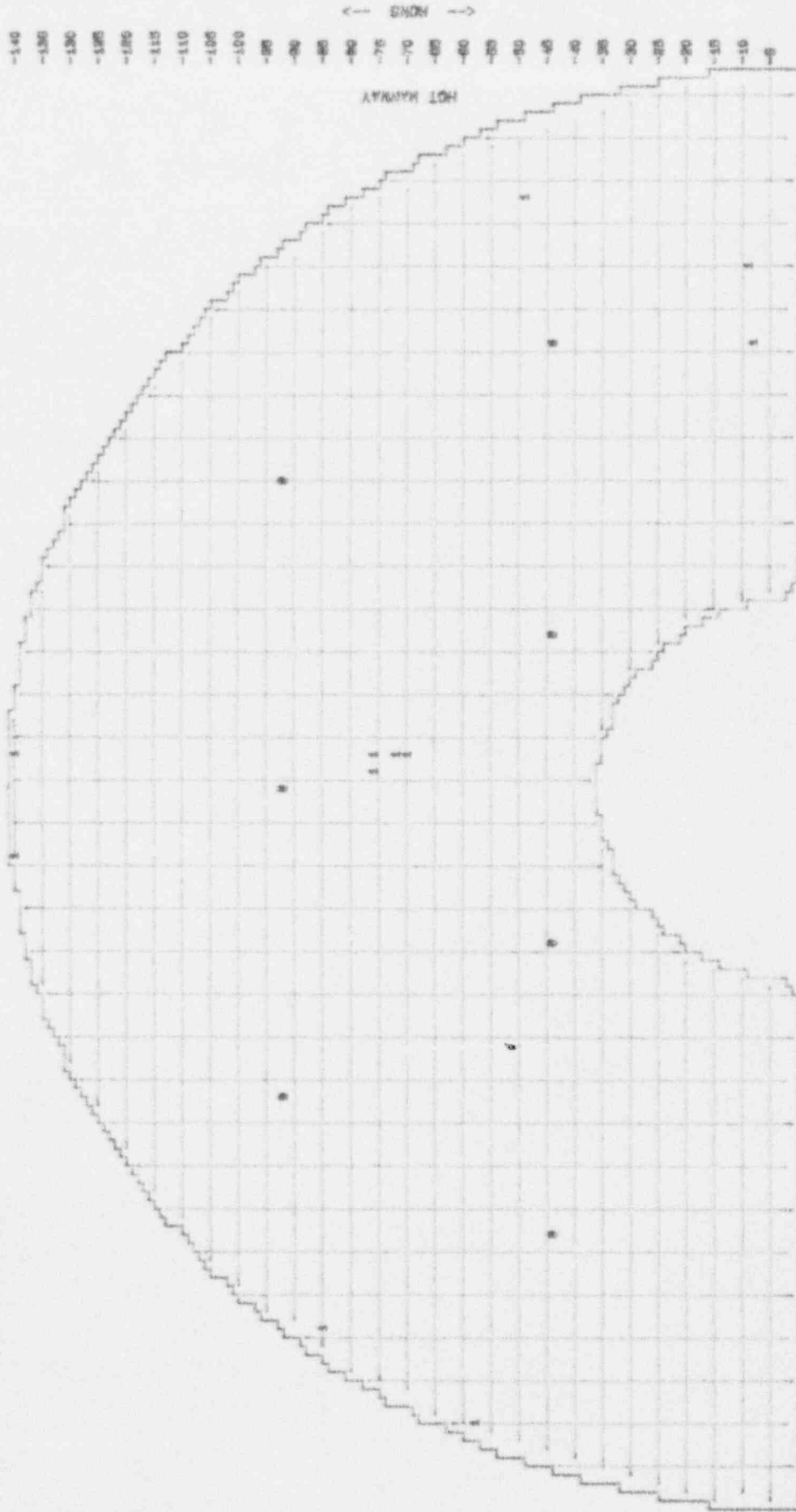
1 = RECH-N (14)

2 = NELD-N (0)

TOTAL TUBES : 8519  
STAYS : 7

TOTAL TUBES ASSIGNED : 11

180 DEG



270 DEG HOT TEMPLATES \*A\* 180 DEG 90 DEG

Plant: CALVERT CLIFFS UNIT 1  
Outage: 4/92

Steam Generator: 11

QUERY: TUBES PLUGGED IN 4/92 OUTAGE

ROW	LINE	OUTAGE	INDICATION	VALUE	VOLTS	LOCATION	INCHES	COMMENTS	REEL
58	10	4/92	PLUGGED	MECH-W		HTS-PF			C79
		4/92	PLUGGED	MECH-W		CTS-PF			C79
85	21	4/92	PLUGGED	MECH-W		HTS-PF			C75
		4/92	PLUGGED	MECH-W		CTS-PF			C75
140	76	4/92	PLUGGED	MECH-W		HTS-PF		POSS. FOREIGN OBJ CONTACTING TUBE	C51
		4/92	PLUGGED	MECH-W		CTS-PF		POSS. FOREIGN OBJ CONTACTING TUBE	C51
76	86	4/92	PLUGGED	MECH-W		HTS-PF			H21
		4/92	PLUGGED	MECH-W		CTS-PF			H21
70	88	4/92	PLUGGED	MECH-W		HTS-PF			21M
		4/92	PLUGGED	MECH-W		CTS-PF			21M
72	88	4/92	PLUGGED	MECH-W		HTS-PF			21M
		4/92	PLUGGED	MECH-W		CTS-PF			21M
76	88	4/92	PLUGGED	MECH-W		HTS-PF			21M
		4/92	PLUGGED	MECH-W		CTS-PF			21M
140	88	4/92	PLUGGED	MECH-W		HTS-PF			C54
		4/92	PLUGGED	MECH-W		CTS-PF			C54
8	136	4/92	PLUGGED	MECH-W		HTS-PF		APT AT VM; NOT RPC; PLG PRECAUTION	C59
		4/92	PLUGGED	MECH-W		CTS-PF		API AT VM; NOT RPC; PLG PRECAUTION	C59
9	145	4/92	PLUGGED	MECH-W		HTS-PF			C09
		4/92	PLUGGED	MECH-W		CTS-PF			C09
49	153	4/92	PLUGGED	MECH-W		HTS-PF			C5A
		4/92	PLUGGED	MECH-W		CTS-PF			C5A

TOTAL TUBES FOUND = 11  
TOTAL INDICATIONS FOUND = 22

TOTAL TUBES IN INPUT FILE = 8519  
TOTAL TUBES INSPECTED = 8412

STEAM GENERATOR #11

G. Plot with List of All Tubes Plugged All Outages

# ALL PLUGGED TUBES - ALL OUTAGES

PLANT: CALVERT CLIFFS UNIT 1

GENERATOR: 11

OUTAGES: 12/80 06/82 10/83 04/85 10/86 04/88 5/90 4/92

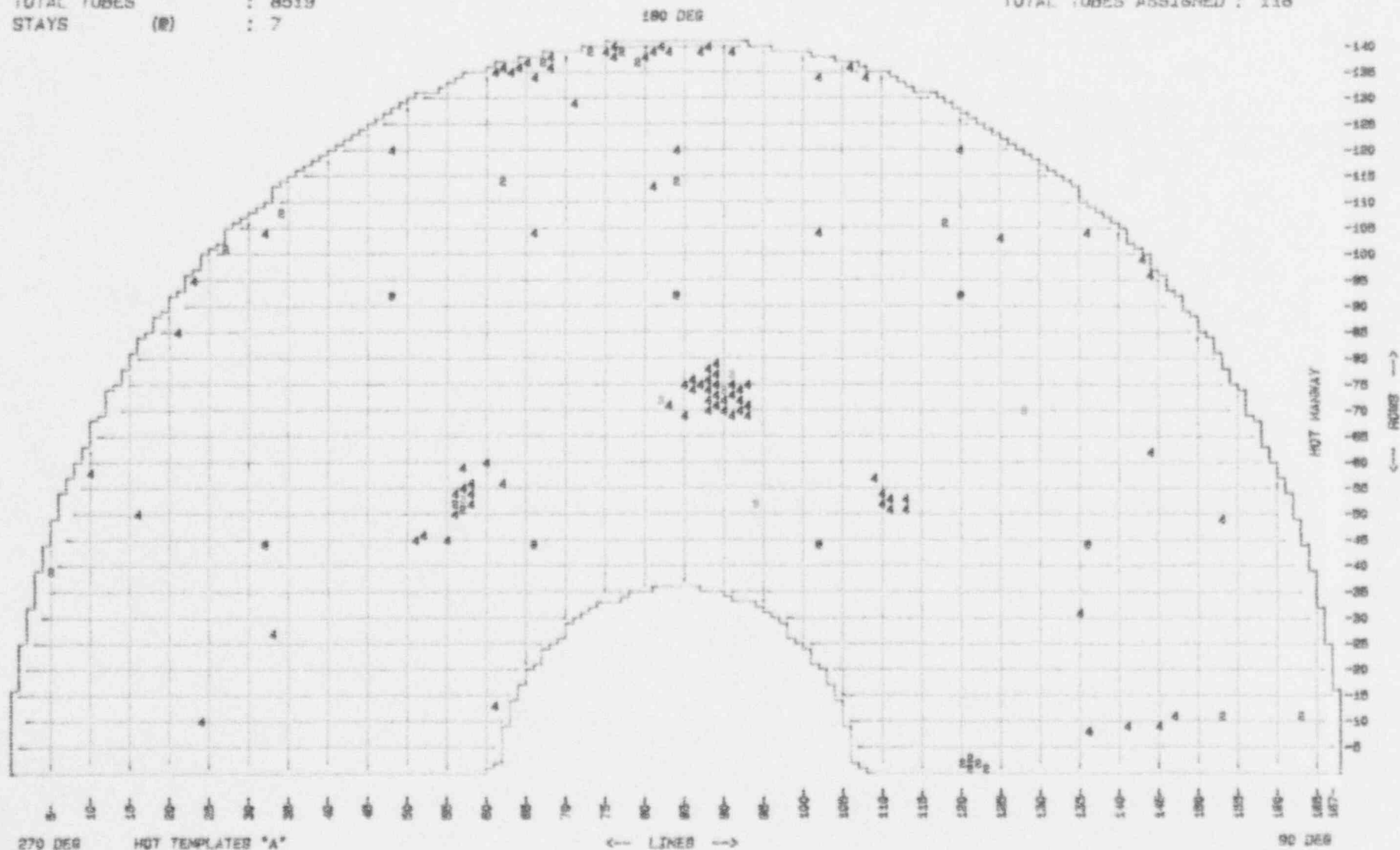
1 - CONST (0)  
4 - MECH-W (93)

2 - MECH-CE (19)  
5 - WELD-W (0)

3 - WELD-CE (6)

TOTAL TUBES : 8519  
STAYS (8) : 7

TOTAL TUBES ASSIGNED : 118





Plant: CALVERT CLIFFS UNIT 1  
 Outages: 12/80 04/82 10/83 04/85 10/86 04/88 5/90 4/92 Steam Generator: 11

QUERY: ALL PLUGGED TUBES - ALL OUTAGES

ROW	LINE	OUTAGE	INDICATION	VALUE	VOLTS	LOCATION	INCHES	COMMENTS	REEL
39	5	10/86	PLUGGED	MECH-CE		HTS-PF			C88
		10/86	PLUGGED	MECH-CE		CTS-PF			
58	10	4/92	PLUGGED	MECH-W		HTS-PF			C79
		4/92	PLUGGED	MECH-W		CTS-PF			
50	16	04/88	PLUGGED	MECH-W		HTS-PF			C2
		04/88	PLUGGED	MECH-W		CTS-PF			
85	21	4/92	PLUGGED	MECH-W		HTS-PF			C75
		4/92	PLUGGED	MECH-W		CTS-PF			
95	23	06/82	PLUGGED	MECH-W	1.00	CTS-PF		95% SATURATED	5.10
		06/82	PLUGGED	MECH-W		HTS-PF			
10	24	5/90	PLUGGED	MECH-W		HTS-PF			C09
		5/90	PLUGGED	MECH-W		CTS-PF			
101	27	10/86	PLUGGED	MECH-CE		HTS-PF			C33
		10/86	PLUGGED	MECH-CE		CTS-PF			
104	32	06/82	PLUGGED	MECH-W		CTS-PF		STAKING LOC. RIM CUT	5.9
		06/82	PLUGGED	MECH-W		HTS-PF			
27	33	04/88	PLUGGED	MECH-W		HTS-PF			C38
		04/88	PLUGGED	MECH-W		CTS-PF			
108	34	10/86	PLUGGED	MECH-CE		HTS-PF		LWR	C20
		10/86	PLUGGED	MECH-CE		CTS-PF			7
120	48	06/82	PLUGGED	MECH-W		CTS-PF		STAKING LOC. RIM CUT	8
		06/82	PLUGGED	MECH-W		HTS-PF			
45	51	04/88	PLUGGED	MECH-W		HTS-PF			C2
		04/88	PLUGGED	MECH-W		CTS-PF			
46	52	04/88	PLUGGED	MECH-W		HTS-PF			C32
		04/88	PLUGGED	MECH-W		CTS-PF			
45	55	04/88	PLUGGED	MECH-W		HTS-PF			C2, H53
		04/88	PLUGGED	MECH-W		CTS-PF			
50	56	04/88	PLUGGED	MECH-W		HTS-PF			C2
		04/88	PLUGGED	MECH-W		CTS-PF			
52	56	10/86	PLUGGED	MECH-CE		HTS-PF			C39
		10/86	PLUGGED	MECH-CE		CTS-PF			
54	56	04/88	PLUGGED	MECH-W		HTS-PF			C2
		04/88	PLUGGED	MECH-W		CTS-PF			
51	57	10/86	PLUGGED	MECH-CE		HTS-PF			C30
		10/86	PLUGGED	MECH-CE		CTS-PF			
53	57	10/86	PLUGGED	WELD-CE		HTS-PF			C39
		10/86	PLUGGED	WELD-CE		CTS-PF			
55	57	04/88	PLUGGED	MECH-W		HTS-PF			C2
		04/88	PLUGGED	MECH-W		CTS-PF			
59	57	04/88	PLUGGED	MECH-W		HTS-PF			C62/27
		04/88	PLUGGED	MECH-W		CTS-PF			
52	58	04/88	PLUGGED	MECH-W		HTS-PF			C2
		04/88	PLUGGED	MECH-W		CTS-PF			
54	58	04/88	PLUGGED	MECH-W		HTS-PF			C2
		04/88	PLUGGED	MECH-W		CTS-PF			
56	58	04/88	PLUGGED	MECH-W		HTS-PF			C2
		04/88	PLUGGED	MECH-W		CTS-PF			
60	60	5/90	PLUGGED	MECH-W		HTS-PF			C35
		5/90	PLUGGED	MECH-W		CTS-PF			
13	61	5/90	PLUGGED	MECH-W		HTS-PF		DISTORTED ROLL TRANSITION HTS-SF	C36
		5/90	PLUGGED	MECH-W		CTS-PF			
135	61	06/82	PLUGGED	MECH-W		CTS-PF		RIM CUT PROBLEM	4
		06/82	PLUGGED	MECH-W		HTS-PF			6
56	62	04/88	PLUGGED	MECH-W		HTS-PF		3 INCH BULGE ABOVE TUBESHEET	C20P53
		04/88	PLUGGED	MECH-W		CTS-PF			
114	62	10/86	PLUGGED	MECH-CE		HTS-PF			C19
		10/86	PLUGGED	MECH-CE		CTS-PF			6
136	62	06/82	PLUGGED	MECH-W		CTS-PF		95% SATURATED	7
		06/82	PLUGGED	MECH-W		HTS-PF			6
135	63	06/82	PLUGGED	MECH-W		CTS-PF		RIM CUT PROBLEM	4
		06/82	PLUGGED	MECH-W		HTS-PF			6
136	64	06/82	PLUGGED	MECH-W		CTS-PF		RIM CUT PROBLEM	4
		06/82	PLUGGED	MECH-W		HTS-PF			6
137	65	06/82	PLUGGED	MECH-W		CTS-PF		RIM CUT PROBLEM	4
		06/82	PLUGGED	MECH-W		HTS-PF			6
104	66	06/82	PLUGGED	MECH-W		CTS-PF		STAKING LOC. RIM CUT	7

Plant: CALVERT CLIFFS UNIT 1 Steam Generator: 11  
Outages: 12/80 06/82 10/83 04/85 10/86 04/88 5/90 4/92

QUERY: ALL PLUGGED TUBES - ALL OUTAGES

ROW	LINE	OUTAGE	INDICATION	VALUE	VOLTS	LOCATION	INCHES	COMMENTS	REEL
134	66	06/82	PLUGGED	MECH-W		HTS-PF			
	66	06/82	PLUGGED	MECH-W		CTS-PF		STAKING LOC. RIM CUT	4
	66	06/82	PLUGGED	MECH-W		HTS-PF			6
137	67	10/86	PLUGGED	MECH-CE		HTS-PF			C88
	67	10/86	PLUGGED	MECH-CE		CTS-PF			6
136	66	04/88	PLUGGED	MECH-W		HTS-PF			C4
	66	04/88	PLUGGED	MECH-W		CTS-PF			6
138	68	04/88	PLUGGED	MECH-W		HTS-PF			C4
	68	04/88	PLUGGED	MECH-W		CTS-PF			
129	71	5/90	PLUGGED	MECH-W		HTS-PF			C43
	71	5/90	PLUGGED	MECH-W		CTS-PF			
139	73	10/86	PLUGGED	MECH-CE		HTS-PF			C88
	73	10/86	PLUGGED	MECH-CE		CTS-PF			5
139	75	04/88	PLUGGED	MECH-W		HTS-PF		SQR HTS-SF-1.0, NRH HTS-SF-21.5	C4H53
	75	04/88	PLUGGED	MECH-W		CTS-PF			5
138	76	04/88	PLUGGED	MECH-W		HTS-PF			C4
	76	04/88	PLUGGED	MECH-W		CTS-PF			6
140	74	4/92	PLUGGED	MECH-W		HTS-PF		POSS. FOREIGN OBJ CONTACTING TUBE	C51
	74	4/92	PLUGGED	MECH-W		CTS-PF			
139	77	10/86	PLUGGED	MECH-CE		HTS-PF		PID	C2
	77	10/86	PLUGGED	MECH-CE		CTS-PF			5
137	79	10/86	PLUGGED	MECH-CE		HTS-PF		PID	C2
	79	10/86	PLUGGED	MECH-CE		CTS-PF			5
138	80	04/85	PLUGGED	MECH-W		CTS-PF		CTS+19.7	20
	80	04/85	PLUGGED	MECH-W		HTS-PF			5
113	81	5/90	PLUGGED	MECH-W		HTS-PF		DISTORTED ROLL TRANSITION HTS-SF	C50
	81	5/90	PLUGGED	MECH-W		CTS-PF			
139	81	04/85	PLUGGED	MECH-W		CTS-PF		HTS NOT ROLLED; CTS+19.5 MULTIPLE	30
	81	04/85	PLUGGED	MECH-W		HTS-PF			5
72	82	10/86	PLUGGED	WELD-CE		HTS-PF			C14
	82	10/86	PLUGGED	WELD-CE		CTS-PF			
140	82	04/85	PLUGGED	MECH-W		CTS-PF		CTS+0.5	30
	82	04/85	PLUGGED	MECH-W		HTS-PF			5
71	83	04/88	PLUGGED	MECH-W		HTS-PF			C6
	83	04/88	PLUGGED	MECH-W		CTS-PF			
139	83	5/90	PLUGGED	MECH-W		HTS-PF		NRH HTS-PF SEE OTHER	H01
	83	5/90	PLUGGED	MECH-W		CTS-PF			
114	84	10/86	PLUGGED	MECH-CE		HTS-PF			C4
	84	10/86	PLUGGED	MECH-CE		CTS-PF			4
120	84	06/82	PLUGGED	MECH-W		CTS-PF		STAKING LOC. RIM CUT	10
	84	06/82	PLUGGED	MECH-W		HTS-PF			4
69	85	04/88	PLUGGED	MECH-W		HTS-PF			C7
	85	04/88	PLUGGED	MECH-W		CTS-PF			
75	85	04/88	PLUGGED	MECH-W		HTS-PF			C6, H53
	85	04/88	PLUGGED	MECH-W		CTS-PF			
74	86	04/88	PLUGGED	MECH-W		HTS-PF			C6
	86	04/88	PLUGGED	MECH-W		CTS-PF			
76	86	4/92	PLUGGED	MECH-W		HTS-PF			H21
	86	4/92	PLUGGED	MECH-W		CTS-PF			
75	87	04/85	PLUGGED	MECH-W		CTS-PF		HTS+0.6	58
	87	04/85	PLUGGED	MECH-W		HTS-PF			
139	87	04/88	PLUGGED	MECH-W		HTS-PF		SQR HTS-SF-2.0, NRH HTS-SF-21.5	C4H53
	87	04/88	PLUGGED	MECH-W		CTS-PF			4
70	88	4/92	PLUGGED	MECH-W		HTS-PF			21M
	88	4/92	PLUGGED	MECH-W		CTS-PF			
72	88	4/92	PLUGGED	MECH-W		HTS-PF			21M
	88	4/92	PLUGGED	MECH-W		CTS-PF			
74	88	04/88	PLUGGED	MECH-W		HTS-PF			C6
	88	04/88	PLUGGED	MECH-W		CTS-PF			
76	88	4/92	PLUGGED	MECH-W		HTS-PF			21M
	88	4/92	PLUGGED	MECH-W		CTS-PF			
78	88	04/88	PLUGGED	MECH-W		HTS-PF			C6
	88	04/88	PLUGGED	MECH-W		CTS-PF			
140	88	4/92	PLUGGED	MECH-W		HTS-PF			C54
	88	4/92	PLUGGED	MECH-W		CTS-PF			4
71	89	04/88	PLUGGED	MECH-W		HTS-PF			C6
	89	04/88	PLUGGED	MECH-W		CTS-PF			

Plant: CALVERT CLIFFS UNIT 1  
 Outages: 12/80 06/82 10/83 04/85 10/86 04/88 5/90  
 Steam Generator: 11 4/92 5/90

QUERY: ALL PLUGGED TUBES - ALL OUTAGES

ROW	TIME	OUTAGE	INDICATION	VALUE	VOLTS	LOCATION	INCHES	COMMENTS	REFL
73	89	04/88	PLUGGED	MECH-M	H15-PF				
75	89	04/85	PLUGGED	MECH-M	C15-PF			H15+0.8	
77	89	04/88	PLUGGED	MECH-M	H15-PF				
79	89	04/88	PLUGGED	MECH-M	C15-PF				
70	90	5/90	PLUGGED	MECH-M	H15-PF				
72	90	04/88	PLUGGED	MECH-M	C15-PF				
74	90	10/86	PLUGGED	WELD-CE	H15-PF			PID	
69	91	04/85	PLUGGED	MECH-M	C15-PF			H15+0.5	
73	91	04/85	PLUGGED	MECH-M	H15-PF				
75	91	04/85	PLUGGED	MECH-M	C15-PF			H15+0.8; H15+2.5	
77	91	10/86	PLUGGED	WELD-CE	H15-PF			PID	
139	91	04/85	PLUGGED	MECH-M	C15-PF			H15 NOT ROLLED-BETEST; H15+20.1, 19.1, 20.9	
70	92	04/88	PLUGGED	MECH-M	H15-PF				
72	92	04/85	PLUGGED	MECH-M	C15-PF			H15+0.5; H15+1.1	
74	92	04/88	PLUGGED	MECH-M	H15-PF				
69	93	04/88	PLUGGED	MECH-M	C15-PF				
71	93	04/88	PLUGGED	MECH-M	H15-PF				
75	93	04/88	PLUGGED	MECH-M	C15-PF				
52	94	10/86	PLUGGED	WELD-CE	H15-PF			PID	
104	102	06/92	PLUGGED	MECH-M	C15-PF			STAKING LOC. NIM CUT	
134	102	06/82	PLUGGED	MECH-M	H15-PF			STAKING LOC. NIM CUT	
106	106	10/83	PLUGGED	MECH-M	C15-PF			Mech. Plug Instr. 11/83	
134	108	04/88	PLUGGED	MECH-M	H15-PF				
57	109	04/88	PLUGGED	MECH-M	C15-PF				
52	110	04/88	PLUGGED	MECH-M	H15-PF				
54	110	04/88	PLUGGED	MECH-M	C15-PF				
51	111	04/88	PLUGGED	MECH-M	H15-PF				
53	111	04/85	PLUGGED	MECH-M	C15-PF			H15 +0.4	
51	113	5/90	PLUGGED	MECH-M	H15-PF				
53	113	5/90	PLUGGED	MECH-M	C15-PF				
106	118	10/86	PLUGGED	MECH-M	H15-PF			PID	
3	120	06/82	PLUGGED	MECH-M	C15-PF			STAKING LOC. NIM CUT	
1	121	10/86	PLUGGED	MECH-M	H15-PF				

Plant: CALVERT CLIFFS UNIT 1

Steam Generator: 11

Outages: 12/80 06/82 10/83 04/85 10/86 04/88 5/90 4/92

QUERY: ALL PLUGGED TUBES - ALL OUTAGES

ROW	LINE	OUTAGE	INDICATION	VALUE	VOLTS	LOCATION	INCHES	COMMENTS	REEL
3	121	10/86	PLUGGED	MECH-CE		CTS-PF			
		10/86	PLUGGED	MECH-CE		HTS-PF		FID	C4
		10/86	PLUGGED	MECH-CE		CTS-PF			
2	122	10/86	PLUGGED	MECH-CE		HTS-PF			C12
		10/86	PLUGGED	MECH-CE		CTS-PF			
1	123	10/86	PLUGGED	MECH-CE		HTS-PF			C12
		10/86	PLUGGED	MECH-CE		CTS-PF			
103	125	04/88	PLUGGED	MECH-W		HTS-PF			H12
		04/88	PLUGGED	MECH-W		CTS-PF			
70	128	10/86	PLUGGED	WELD-CE		HTS-PF			C10
		10/86	PLUGGED	WELD-CE		CTS-PF			
31	135	04/88	PLUGGED	MECH-W		HTS-PF		DOUBLE EXPANSION, TO BE PLUGGED	H35
		04/88	PLUGGED	MECH-W		CTS-PF			
8	136	4/92	PLUGGED	MECH-W		HTS-PF		APT AT VM; NOT NPC; PLG PRECAUTION	C59
		4/92	PLUGGED	MECH-W		CTS-PF			
104	136	06/82	PLUGGED	MECH-W		CTS-PF		STAKING LOC. HIM CUT	
		06/82	PLUGGED	MECH-W		HTS-PF			
9	141	04/85	PLUGGED	MECH-W		CTS-PF		U-BEND APEX	73
		04/85	PLUGGED	MECH-W		HTS-PF			
99	143	10/83	PLUGGED	MECH-W		CTS-PF		REMOVED DN-DC FOR MULT. INDICATIONS	1
		10/83	PLUGGED	MECH-W		HTS-PF			2
62	144	04/85	PLUGGED	MECH-W		CTS-PF		H3 0030.9	45
		04/85	PLUGGED	MECH-W		HTS-PF			
96	144	10/83	PLUGGED	MECH-W		CTS-PF		REMOVED DN-DC FOR VM INDICATION	1&18
		10/83	PLUGGED	MECH-W		HTS-PF			2
9	145	4/92	PLUGGED	MECH-W		HTS-PF			C09
		4/92	PLUGGED	MECH-W		CTS-PF			
11	147	04/88	PLUGGED	MECH-W		HTS-PF			H3
		04/88	PLUGGED	MECH-W		CTS-PF		U-BEND SATURATED	1
11	153	10/86	PLUGGED	MECH-CE		HTS-PF			C106
		10/86	PLUGGED	MECH-CE		CTS-PF			
49	153	4/92	PLUGGED	MECH-W		HTS-PF			C5A
		4/92	PLUGGED	MECH-W		CTS-PF			
11	163	10/86	PLUGGED	MECH-CE		HTS-PF			C10
		10/86	PLUGGED	MECH-CE		CTS-PF			

TOTAL TUBES FOUND = 118

TOTAL INDICATIONS FOUND = 236

## **APPENDIX II**

### **Eddy Current Test Results for #12 Steam Generator**

- A. Plot with List of All Indications April/May 1992
- B. Plot with List of <20% Indications April/May 1992
- C. Plot with List of 20% - 39% Indications April/May 1992
- D. Plot with List of >39% Indications April/May 1992
- E. Plot with List of Dented Tubes April/May 1992
- F. Plot with List of Tubes Plugged April/May 1992
- G. Plot with List of All Tubes Plugged All Outages April/May 1992

STEAM GENERATOR #12

A. Plot with List of All Indications April/May 1992



# ALL EDDY CURRENT INDICATIONS -- ALL LOCATIONS

PLANT: GALVERT CLIFFS UNIT 1  
OUTAGE: 5/92

GENERATOR 12

1 = <20 (163)

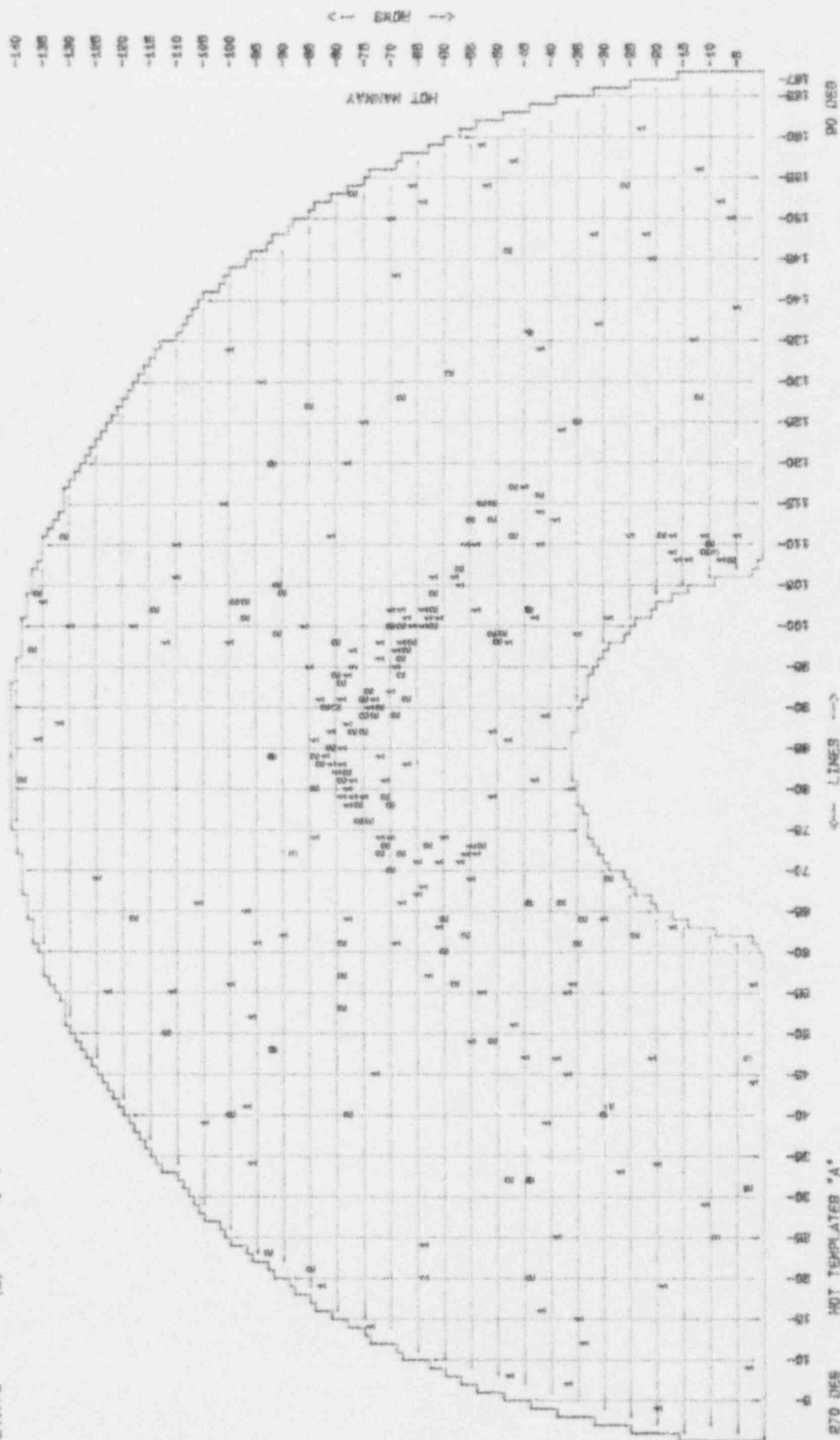
2 = 20-39 (98)

3 = >39 (4)

TOTAL TUBES : 8519  
STAYS : 7

TOTAL TUBES ASSIGNED : 265

180 DEG



Plant: CALVERT CLIFFS UNIT 1  
Outage: 5/92

Steam Generator: 12

QUERY: ALL EDDY CURRENT INDICATIONS - ALL LOCATIONS

ROW	LINE	OUTAGE	INDICATION	VALUE	VOLTS	LOCATION	INCHES	COMMENTS	REEL
36	4	5/92	OD	13 % TW	0.68	C2	+23.47		C01
37	7	5/92	OD	16 % TW	0.52	H2	+15.94		C1A
		5/92	OD	S/N	0.57	H2	+15.94		C1A
48	8	5/92	OD	7 % TW	1.35	H5	+ 4.61		C02
3	9	5/92	OD	19 % TW	1.79	C5	+ 4.21		89A
34	12	5/92	OD	15 % TW	0.97	HTS-SF	+31.40		C03
74	14	5/92	OD	5 % TW	1.03	HTS-SF	+15.49		C04
35	15	5/92	OD	10 % TW	0.48	HTS-SF	+ 3.38		C04
		5/92	OD	S/N	0.91	HTS-SF	+ 3.38		C04
42	16	5/92	OD	16 % TW	1.28	H1	+17.63		C60
		5/92	OD	S/N	1.45	H1	+17.63		C60
19	19	5/92	OD	10 % TW	1.11	HTS-SF	+13.14		C06
		5/92	OD	S/N	0.93	HTS-SF	+13.14		C06
83	19	5/92	OD	S/N	1.88	H6	+22.24		C06
		5/92	OD	37 % TW	1.55	H7	+ 3.42		C06
		5/92	OD	10 % TW	0.88	H7	+10.62		C06
		5/92	OD	S/N	1.10	H7	+10.62		C06
44	20	5/92	OD	32 % TW	0.87	H5	+12.90		C07
64	20	5/92	OD	14 % TW	0.57	H5	+34.56		C07
		5/92	OD	S/N	0.66	H5	+34.56		C07
85	21	5/92	OD	39 % TW	1.72	H5	+11.01		C07
93	23	5/92	OD	23 % TW	0.40	C6	+ 8.02		C08
64	24	5/92	OD	10 % TW	0.62	H5	+11.24		C09
		5/92	OD	S/N	0.95	H5	+11.24		C09
		5/92	OD	20 % TW	0.59	H6	+ 9.95		C09
		5/92	OD	S/N	0.68	H6	+ 9.95		C09
		5/92	OD	10 % TW	0.75	H6	+19.44		C09
		5/92	OD	S/N	1.02	H6	+19.44		C09
9	25	5/92	OD	55 % TW	0.78	VH		PLG	61A
39	25	5/92	OD	4 % TW	0.99	CTS-SF	+13.67		C09
11	29	5/92	OD	18 % TW	0.59	C1	- 0.71		61A
3	31	5/92	OD	20 % TW	0.64	CTS-SF	+26.30		C69
48	32	5/92	OD	24 % TW	2.37	DH	+ 6.80		68A
27	33	5/92	OD	18 % TW	0.54	H5	+37.69		C14
		5/92	OD	S/N	1.02	H5	+37.69		C14
20	34	5/92	OD	9 % TW	1.07	HTS-SF	+31.53		C14
96	34	5/92	OD	18 % TW	1.31	C7	+ 1.42		C14
		5/92	OD	15 % TW	1.26	C6	+23.78		C14
		5/92	OD	S/N	1.15	C6	+23.78		C14
41	39	5/92	OD	8 % TW	1.07	H6	+ 2.03		H02
105	39	5/92	OD	11 % TW	1.11	H1	+ 3.18		C17
		5/92	OD	S/N	1.47	H1	+ 3.18		C17
30	40	5/92	OD	23 % TW	1.37	HTS-SF	+ 0.81		H02
78	40	5/92	OD	25 % TW	2.06	HTS-SF	+ 0.25		C17
100	40	5/92	OD	26 % TW	1.24	C5	+ 1.46		C17
		5/92	OD	S/N	2.29	C5	+ 1.46		C17
29	41	5/92	OD	23 % TW	0.75	HTS-SF	+ 0.73		H02
97	41	5/92	OD	1 % TW	0.81	C5	+ 2.46		C18
2	44	5/92	OD	02 % TW	0.42	HTS-SF	+ 1.53		89A
		5/92	OD	16 % TW	1.61	CTS-SF	+ 0.80		89A
37	45	5/92	OD	13 % TW	1.07	HTS-SF	+ 0.31		C20
73	45	5/92	OD	5 % TW	0.93	H3	+11.79		C20
3	47	5/92	OD	65 % TW	0.45	HTS-SF	+ 5.55	PLG	C69
21	47	5/92	OD	15 % TW	0.54	C3	+14.82		C21
		5/92	OD	S/N	0.77	C3	+14.82		C21
39	47	5/92	OD	16 % TW	0.57	C3	+11.05		C21
		5/92	OD	S/N	0.47	C3	+11.05		C21
45	47	5/92	OD	14 % TW	0.91	C3	+26.28		H03
		5/92	OD	S/N	1.18	C3	+26.28		H03
51	49	5/92	OD	23 % TW	1.38	H4	+24.61		H04
55	49	5/92	OD	11 % TW	0.72	DC	+ 5.18		H3H
		5/92	OD	S/N	0.65	DC	+ 5.18		H3H
112	50	5/92	OD	36 % TW	0.72	H6	+19.89		C23
47	51	5/92	OD	12 % TW	2.32	VH	+ 5.74		H04
96	52	5/92	OD	14 % TW	1.52	C5	+13.16		C24
79	53	5/92	OD	23 % TW	0.58	C4	+25.30		C24
		5/92	OD	S/N	0.43	C4	+25.30		C24



Plant: CALVERT CLIFFS UNIT 1  
Outage: 5/92

Steam Generator: 12

QUERY: ALL EDDY CURRENT INDICATIONS - ALL LOCATIONS

ROW	LINE	OUTAGE	INDICATION	VALUE	VOLTS	LOCATION	INCHES	COMMENTS	REEL
70	78	5/92	OD	25 % TW	0.80	HTS-SF	+ 0.68		H34
76	78	5/92	OD	31 % TW	1.51	HTS-SF	+ 0.89		H34
78	78	5/92	OD	19 % TW	1.22	H4	+11.74		H34
51	79	5/92	OD	14 % TW	1.37	C4	+ 6.65		H15
71	79	5/92	OD	32 % TW	0.70	HTS-SF	+ 0.99		H15
75	79	5/92	OD	35 % TW	0.43	HTS-SF	+ 1.34		H15
		5/92	OD	10 % TW	0.52	HTS-SF	+ 2.11		H15
77	79	5/92	OD	16 % TW	0.66	HTS-SF	+ 1.65		H15
79	79	5/92	OD	14 % TW	1.06	C2	+16.33		H15
		5/92	OD	16 % TW	0.65	HTS-SF	+ 1.29		H15
86	80	5/92	OD	11 % TW	0.56	H3	+14.42		C53
78	80	5/92	OD	18 % TW	1.01	C5	+26.01		15H
		5/92	OD	S/N	1.04	C5	+26.01		15H
84	80	5/92	OD	27 % TW	0.76	H3	+34.63		15H
		5/92	OD	S/N	1.45	H3	+34.63		15H
43	81	5/92	OD	13 % TW	0.68	HTS-SF	+27.11		H16
		5/92	OD	S/N	0.48	HTS-SF	+27.11		H16
71	81	5/92	OD	13 % TW	0.06	HTS-SF	+ 0.94		H16
77	81	5/92	OD	10 % TW	0.71	HTS-SF	+ 1.20		H16
		5/92	OD	27 % TW	1.45	HTS-SF	+ 1.59		H16
		5/92	OD	39 % TW	0.48	HTS-SF	+ 2.14		H16
79	81	5/92	OD	23 % TW	1.29	HTS-SF	+ 0.64		H16
139	81	5/92	OD	24 % TW	0.53	C5	+ 0.42		C95
78	82	5/92	OD	25 % TW	0.49	HTS-SF	+ 2.53		H16
		5/92	OD	S/N	0.63	HTS-SF	+ 2.53		H16
80	82	5/92	OD	14 % TW	0.51	HTS-SF	+ 1.13		H16
		5/92	OD	S/N	1.55	HTS-SF	+1.13		H16
67	83	5/92	OD	11 % TW	0.75	HTS-SF	+ 2.58		H17
79	83	5/92	OD	15 % TW	0.49	HTS-SF	+ 2.57		H17
81	83	5/92	OD	16 % TW	0.51	HTS-SF	+ 1.35		H17
83	83	5/92	OD	22 % TW	1.67	HTS-SF	+ 0.82		H17
72	84	5/92	OD	13 % TW	0.64	HTS-SF	+ 1.51		H17
82	84	5/92	OD	10 % TW	1.36	HTS-SF	+ 1.19		H17
		5/92	OD	27 % TW	0.63	HTS-SF	+ 0.86		H17
84	84	5/92	OD	26 % TW	0.48	HTS-SF	+ 1.82		H17
79	85	5/92	OD	16 % TW	0.66	HTS-SF	+ 2.17		H17
81	85	5/92	OD	21 % TW	0.99	HTS-SF	+ 1.52		H17
48	86	5/92	OD	3 % TW	1.01	C3	+26.41		H18
84	86	5/92	OD	15 % TW	0.55	HTS-SF	+ 0.21		H18
136	86	5/92	OD	14 % TW	0.53	H7	+16.54		C37
		5/92	OD	S/N	1.00	H7	+16.54		C37
51	87	5/92	OD	11 % TW	0.58	C1	+18.65		H19
		5/92	OD	S/N	0.64	C1	+18.65		H19
		5/92	OD	25 % TW	0.64	C1	+27.94		H19
		5/92	OD	S/N	1.02	C1	+27.94		H19
75	87	5/92	OD	27 % TW	1.18	HTS-SF	+ 1.43		H18
77	87	5/92	OD	27 % TW	0.86	HTS-SF	+ 1.58		H18
81	87	5/92	OD	13 % TW	1.10	HTS-SF	+ 1.94		H18
		5/92	OD	15 % TW	1.45	HTS-SF	+ 0.66		H18
78	88	5/92	OD	14 % TW	1.96	HTS-SF	+ 3.87		19H
		5/92	OD	34 % TW	0.84	HTS-SF	+ 1.53		19H
132	88	5/92	OD	18 % TW	0.53	H5	+ 0.47		C83
41	89	5/92	OD	2 % TW	0.88	H1	+20.76		19H
		5/92	OD	32 % TW	0.31	H1	+13.78		19H
69	89	5/92	OD	27 % TW	0.65	C2	+34.26		19H
73	89	5/92	OD	27 % TW	1.33	HTS-SF	+ 0.81		19H
75	89	5/92	OD	21 % TW	0.80	HTS-SF	+ 1.61		19H
72	90	5/92	OD	34 % TW	0.76	HTS-SF	+ 1.09		H20
74	90	5/92	OD	14 % TW	0.63	HTS-SF	+ 1.79		H20
		5/92	OD	19 % TW	1.01	HTS-SF	+ 1.48		H20
80	90	5/92	OD	22 % TW	0.78	HTS-SF	+ 0.61		H20
82	90	5/92	OD	23 % TW	2.66	HTS-SF	+ 0.67		H20
87	91	5/92	OD	24 % TW	0.78	H3	+ 6.13		H20
		5/92	OD	S/N	0.20	H3	+ 6.13		H20
73	91	5/92	OD	18 % TW	1.28	HTS-SF	+ 1.92		H20
75	91	5/92	OD	28 % TW	1.93	HTS-SF	+ 1.46		H20
79	91	5/92	OD	15 % TW	1.22	HTS-SF	+ 0.78		H20

Plant: CALVERT CLIFFS UNIT 1  
Outage: 5/92

Steam Generator: 12

QUERY: ALL EDDY CURRENT INDICATIONS - ALL LOCATIONS

ROW	LINE	OUTAGE	INDICATION	VALUE	VOLTS	LOCATION	INCHES	COMMENTS	REEL
63	91	5/92	OD	9 % TW	1.73	H7	+13.73		H20
		5/92	OD	25 % TW	0.53	H6	+21.95		H20
		5/92	OD	S/N	1.35	H6	+21.95		H20
70	92	5/92	OD	19 % TW	0.45	HTS-SF	+ 1.01		H21
74	92	5/92	OD	22 % TW	1.24	HTS-SF	+ 1.67		H21
		5/92	OD	31 % TW	1.73	HTS-SF	+ 0.56		H21
79	93	5/92	OD	21 % TW	0.45	HTS-SF	+ 0.65		H21
58	94	5/92	OD	26 % TW	1.94	HTS-SF	+ 0.82		H21
78	94	5/92	OD	11 % TW	0.84	HTS-SF	+ 1.79		H21
		5/92	OD	32 % TW	0.18	HTS-SF	+ 0.79		H21
80	94	5/92	OD	25 % TW	0.84	HTS-SF	+ 1.11		H21
69	95	5/92	OD	1 % TW	2.65	H5	+32.82		H22
77	95	5/92	OD	19 % TW	0.76	HTS-SF	+ 1.99		H22
85	95	5/92	OD	12 % TW	0.14	VH	+19.56		H22
68	96	5/92	OD	39 % TW	0.69	HTS-SF	+ 3.16		C2A
		5/92	OD	26 % TW	0.45	HTS-SF	+ 0.62		C2A
72	96	5/92	OD	11 % TW	1.57	HTS-SF	+ 0.59		C2A
67	97	5/92	OD	27 % TW	0.87	HTS-SF	+ 0.86		H23
69	97	5/92	OD	16 % TW	1.72	HTS-SF	+ 0.58		H23
77	97	5/92	OD	11 % TW	1.12	HTS-SF	+ 1.38		H23
137	97	5/92	OD	21 % TW	0.98	C10	+10.32		C40
		5/92	OD	S/N	1.74	C10	+10.32		C40
48	98	5/92	OD	18 % TW	0.98	CTS-SF	+ 1.04		H23
50	98	5/92	OD	30 % TW	0.53	CTS-SF	+ 1.77		H23
66	98	5/92	OD	20 % TW	0.64	HTS-SF	+ 0.84		H23
68	98	5/92	OD	13 % TW	4.12	HTS-SF	+ 0.56		H23
72	98	5/92	OD	14 % TW	1.02	HTS-SF	+ 1.51		H23
80	98	5/92	OD	37 % TW	0.58	CTS-SF	+ 1.33		H23
100	98	5/92	OD	13 % TW	0.65	C8	+11.86		H23
		5/92	OD	S/N	0.81	C8	+11.86		H23
112	98	5/92	OD	14 % TW	2.05	H6	+13.38		C40
		5/92	OD	S/N	2.72	H6	+13.38		C40
35	99	5/92	OD	10 % TW	0.80	C4	+ 9.38		C53
		5/92	OD	S/N	0.42	C4	+ 9.38		C53
49	99	5/92	OD	36 % TW	0.51	HTS-SF	+ 1.36		H23
51	99	5/92	OD	20 % TW	0.81	HTS-SF	+ 1.01		H23
91	99	5/92	OD	33 % TW	0.50	HTS-SF	+ 2.55		H24
62	100	5/92	OD	27 % TW	0.82	HTS-SF	+ 1.03		H24
64	100	5/92	OD	13 % TW	0.40	HTS-SF	+ 0.89		H24
66	100	5/92	OD	23 % TW	1.03	HTS-SF	+ 1.43		H24
		5/92	OD	8 % TW	0.96	C3	+29.27		H24
68	100	5/92	OD	34 % TW	1.01	HTS-SF	+ 1.56		H24
70	100	5/92	OD	27 % TW	1.16	HTS-SF	+ 0.56		H24
		5/92	OD	36 % TW	0.81	HTS-SF	+ 1.34		H24
86	100	5/92	OD	11 % TW	1.34	H2	+11.78		H24
		5/92	OD	S/N	0.34	H2	+11.78		H24
118	100	5/92	OD	14 % TW	0.76	VH	+ 7.89		C41
130	100	5/92	OD	25 % TW	0.48	HTS-SF	+12.44		C41
		5/92	OD	19 % TW	1.00	HTS-SF	+12.44		C41
29	101	5/92	OD	15 % TW	0.55	HTS-SF	+24.72		C53
		5/92	OD	S/N	0.68	HTS-SF	+24.72		C53
43	101	5/92	OD	18 % TW	0.61	HTS-SF	+ 1.75		H24
61	101	5/92	OD	15 % TW	0.98	HTS-SF	+ 0.74		H24
63	101	5/92	OD	15 % TW	1.06	HTS-SF	+ 1.45		H24
67	101	5/92	OD	18 % TW	0.42	HTS-SF	+ 1.42		H24
97	101	5/92	OD	24 % TW	0.62	H1	+ 5.40		H25
		5/92	OD	S/N	0.13	H1	+ 5.40		H25
54	102	5/92	OD	11 % TW	0.59	HTS-SF	+ 0.74		H25
62	102	5/92	OD	26 % TW	1.03	HTS-SF	+ 0.82		H25
		5/92	OD	28 % TW	1.14	HTS-SF	+ 1.16		H25
64	102	5/92	OD	18 % TW	0.70	HTS-SF	+ 1.13		H25
68	102	5/92	OD	27 % TW	0.60	HTS-SF	+ 0.65		H25
		5/92	OD	11 % TW	0.60	HTS-SF	+ 0.91		H25
70	102	5/92	OD	14 % TW	0.58	HTS-SF	+ 0.14		H25
		5/92	OD	20 % TW	0.78	HTS-SF	+ 0.84		H25
114	102	5/92	OD	32 % TW	0.54	H7	+ 3.84		C41
97	103	5/92	OD	21 % TW	0.59	VH			H26

Plant: CALVERT CLIFFS UNIT 1  
Outage: 5/92

Steam Generator: 12

QUERY: ALL EDDY CURRENT INDICATIONS - ALL LOCATIONS

ROW	LINE	OUTAGE	INDICATION	VALUE	VOLTS	LOCATION	INCHES	COMMENTS	REEL
99	103	5/92	OD	37 % TW	0.35	CTS-SF	+ 3.35		H26
135	103	5/92	OD	19 % TW	0.43	CTS-SF	+ 2.67		C41
12	104	5/92	OD	28 % TW	1.70	HTS-SF	+ 1.27		26M
90	104	5/92	OD	35 % TW	0.70	H2	+13.56		H26
136	104	5/92	OD	35 % TW	0.53	CTS-SF	+ 1.23		C42
57	105	5/92	OD	19 % TW	0.85	HTS-SF	+ 0.80		26M
91	105	5/92	OD	28 % TW	0.67	C9	- 1.17		26M
58	106	5/92	OD	11 % TW	0.75	HTS-SF	+ 0.41		H27
62	106	5/92	OD	19 % TW	0.92	HTS-SF	+ 1.58		H27
110	106	5/92	OD	3 % TW	1.30	H7	+17.15		C42
57	107	5/92	OD	26 % TW	2.76	HTS-SF	+ 0.67		29M
6	108	5/92	OD	30 % TW	0.50	HTS-SF	+ 0.93		C65
8	108	5/92	OD	10 % TW	0.98	HTS-SF	+ 0.96		C65
14	108	5/92	OD	15 % TW	0.56	HTS-SF	+ 0.99		C65
16	108	5/92	OD	11 % TW	0.51	HTS-SF	+ 3.09		C65
9	109	5/92	OD	48 % TW	0.52	HTS-SF	+ 0.97	PLG	C65
11	109	5/92	OD	33 % TW	0.41	HTS-SF	+ 1.66		C65
17	109	5/92	OD	13 % TW	0.44	HTS-SF	+ 1.17		C65
10	110	5/92	OD	25 % TW	0.86	HTS-SF	+ 0.80		C65
42	110	5/92	OD	15 % TW	0.62	HTS-SF	+ 7.85		C85
		5/92	OD	S/N	1.36	HTS-SF	+ 7.85		C85
54	110	5/92	OD	10 % TW	0.73	HTS-SF	+ 3.27		H33
56	110	5/92	OD	15 % TW	0.55	HTS-SF	+ 0.51		H33
110	110	5/92	OD	2 % TW	1.39	C8	+19.06		C43
5	111	5/92	OD	13 % TW	0.51	CTS-SF	+20.77		C65
11	111	5/92	OD	13 % TW	0.41	HTS-SF	+ 1.19		C65
17	111	5/92	OD	10 % TW	0.55	HTS-SF	+ 3.53		C65
19	111	5/92	OD	23 % TW	0.49	HTS-SF	+ 1.56		C65
25	111	5/92	OD	10 % TW	0.74	HTS-SF	+ 0.93		C54
47	111	5/92	OD	31 % TW	0.44	HTS-SF	+ 0.75		H32
81	111	5/92	OD	1 % TW	2.19	HTS-SF	+36.66		C44
131	111	5/92	OD	28 % TW	0.70	C8	+14.77		C43
		5/92	OD	S/N	0.92	C8	+14.77		C43
39	113	5/92	OD	7 % TW	1.05	H1	+20.26		C54
91	113	5/92	OD	26 % TW	0.42	HTS-SF	+ 2.58		H32
55	113	5/92	OD	36 % TW	1.00	HTS-SF	+ 5.93		H32
42	114	5/92	OD	11 % TW	1.49	H3	+ 8.87		H32
51	115	5/92	OD	25 % TW	0.62	VH	+10.30		H32
53	115	5/92	OD	33 % TW	0.39	HTS-SF	+ 0.18		H32
101	115	5/92	OD	18 % TW	0.65	VH			C45
42	116	5/92	OD	26 % TW	1.08	HTS-SF	+ 0.67		H31
45	117	5/92	OD	16 % TW	0.50	HTS-SF	+ 2.48		H31
47	117	5/92	OD	22 % TW	2.09	HTS-SF	+ 0.82		H31
76	120	5/92	OD	18 % TW	1.14	H2	+17.85		47A
38	124	5/92	OD	10 % TW	0.63	H5			29M
35	125	5/92	OD	31 % TW	1.25	CTS-SF	+33.05		H29
75	125	5/92	OD	18 % TW	0.89	HTS-SF	+ 1.02		C50
85	127	5/92	OD	28 % TW	0.24	C3	+11.35		C50
		5/92	OD	22 % TW	0.77	C3	+12.06		C50
		5/92	OD	S/N	0.19	C3	+13.06		C50
12	128	5/92	OD	38 % TW	1.30	HTS-SF	+29.85		C66
68	128	5/92	OD	22 % TW	1.16	C4	+30.47		C51
		5/92	OD	S/N	2.11	C4	+30.47		C51
94	130	5/92	OD	19 % TW	1.01	HTS-SF	+33.88		C53
59	131	5/92	OD	20 % TW	0.60	H3	+26.52		H27
		5/92	OD	S/N	0.95	H3	+26.52		H27
42	134	5/92	OD	16 % TW	0.55	H1	+30.30		C57
		5/92	OD	S/N	0.71	H1	+30.30		C57
100	134	5/92	OD	8 % TW	0.76	H4	+13.13		C57
13	135	5/92	OD	14 % TW	1.90	C5	+11.77		C66
31	137	5/92	OD	11 % TW	1.02	H1	+ 2.12		C60
5	139	5/92	OD	13 % TW	0.71	C4	+15.76		C71
		5/92	OD	S/N	0.97	C4	+15.76		C71
69	143	5/92	OD	15 % TW	1.20	C4	+ 3.04		C80
		5/92	OD	S/N	1.32	C4	+ 3.04		C80
21	145	5/92	OD	7 % TW	0.95	HTS-SF	+22.16		C80
48	146	5/92	OD	21 % TW	0.61	H2	+25.21		C79

Plant: CALVERT CLIFFS UNIT 1  
Outage: 5/92

Steam Generator: 12

QUERY: ALL EDDY CURRENT INDICATIONS - ALL LOCATIONS

ROW	LINE	OUTAGE	INDICATION	VALUE	VOLTS	LOCATION	INCHES	COMMENTS	REEL
		5/92	OD	S/N	1.13	H2	+25.21		C79
22	148	5/92	OD	18 % TW	0.77	CTS-SF	+38.00		C78
		5/92	OD	S/N	0.80	CTS-SF	+36.00		C78
32	148	5/92	OD	8 % TW	1.52	C6	+15.12		C78
6	150	5/92	OD	1 % TW	0.83	C2	+ 5.05		C7A
70	150	5/92	OD	11 % TW	1.29	C3	+22.61		C77
8	152	5/92	OD	61 % TW	0.95	VM		PLC	C7A
		5/92	OD	16 % TW	1.38	VM	- 0.28	PLC	C7A
64	152	5/92	OD	4 % TW	1.41	DH	+24.97		C77
77	153	5/92	OD	22 % TW	0.66	H4	+30.87		C76
		5/92	OD	S/N	1.13	H4	+30.87		C76
26	154	5/92	OD	23 % TW	0.57	H1	+17.45		C76
		5/92	OD	S/N	0.55	H1	+17.45		C76
52	154	5/92	OD	11 % TW	0.84	H2	+35.66		C76
		5/92	OD	S/N	0.93	H2	+35.66		C76
		5/92	OD	4 % TW	1.14	C5	+24.59		C76
66	154	5/92	OD	16 % TW	0.56	C5	+ 4.58		C76
		5/92	OD	S/N	0.93	C5	+ 4.58		C76
		5/92	OD	18 % TW	0.51	C4	+35.32		C76
		5/92	OD	S/N	0.73	C4	+35.32		C76
12	156	5/92	OD	18 % TW	0.81	C2	+25.70		C73
		5/92	OD	S/N	1.13	C2	+25.70		C73
47	157	5/92	OD	6 % TW	1.35	H7	+10.04		C75
53	159	5/92	OD	11 % TW	0.86	C3	+23.90		C74
23	161	5/92	OD	10 % TW	1.19	C4	+17.01		C74
		5/92	OD	S/N	0.35	C4	+17.01		C74

TOTAL TUBES FOUND = 265

TOTAL INDICATIONS FOUND = 361

TOTAL TUBES IN INPUT FILE = 6519

TOTAL TUBES INSPECTED = 8450



STEAM GENERATOR #12

B. Plot with List of <20% Indications April/May 1992

# < 20% EDDY CURRENT INDICATIONS - ALL ELEVATIONS

PLANT: CALVERT CLIFFS UNIT 1

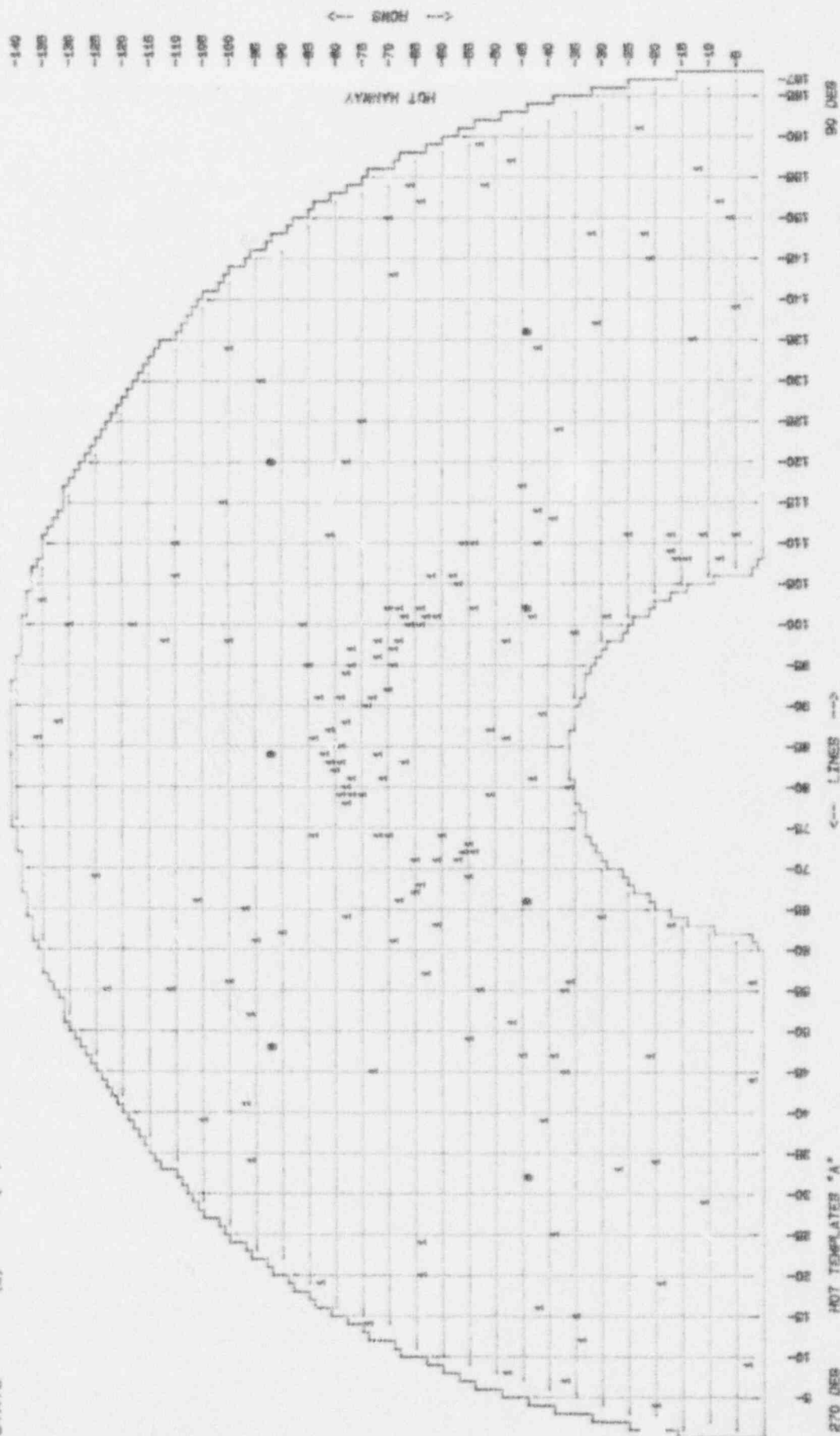
GENERATOR 12

OUTAGE: 5/92

1 - <20 (183)

TOTAL TUBES : 8519  
STAYS : 7

TOTAL TUBES ASSIGNED : 163



Plant: CALVERT CLIFFS UNIT 1  
Outage: 5/92

Steam Generator: 12

QUERY: < 20% EDDY CURRENT INDICATIONS - ALL ELEVATIONS

ROW	LINE	OUTAGE	INDICATION	VALUE	VOLTS	LOCATION	INCHES	COMMENTS	REEL
20	4	5/92	OD	13 % TW	0.68	C2	+23.47		C01
37	7	5/92	OD	16 % TW	0.52	H2	+15.94		C1A
		5/92	OD	S/N	0.57	H2	+15.94		C1A
48	8	5/92	OD	7 % TW	1.35	H5	+ 4.61		C02
3	9	5/92	OD	19 % TW	1.79	C5	+ 4.21		49A
34	12	5/92	OD	15 % TW	0.97	HTS-SF	+31.40		C03
74	14	5/92	OD	5 % TW	1.02	HTS-SF	+15.49		C04
35	15	5/92	OD	10 % TW	0.48	HTS-SF	+ 3.98		C04
		5/92	OD	S/N	0.91	HTS-SF	+ 3.38		C04
42	16	5/92	OD	16 % TW	1.28	H1	+17.63		C60
		5/92	OD	S/N	1.45	H1	+17.63		C60
19	19	5/92	OD	10 % TW	1.11	HTS-SF	+13.14		C06
		5/92	OD	S/N	0.93	HTS-SF	+13.14		C06
83	19	5/92	OD	S/N	1.88	H6	+22.24		C06
		5/92	OD	10 % TW	0.88	H7	+10.62		C06
		5/92	OD	S/N	1.10	H7	+10.62		C06
64	20	5/92	OD	14 % TW	0.57	H5	+34.56		C07
		5/92	OD	S/N	0.66	H5	+34.56		C07
64	24	5/92	OD	10 % TW	0.61	H5	+11.24		C09
		5/92	OD	S/N	0.95	H5	+11.24		C09
		5/92	OD	S/N	0.48	H4	+ 9.95		C09
		5/92	OD	10 % TW	0.75	H6	+19.44		C09
		5/92	OD	S/N	1.02	H6	+19.44		C09
39	25	5/92	OD	4 % TW	0.99	CTS-SF	+13.67		C09
11	29	5/92	OD	13 % TW	0.59	C1	- 0.71		61A
27	33	5/92	OD	18 % TW	0.54	H5	+37.69		C14
		5/92	OD	S/N	1.02	H5	+37.69		C14
20	34	5/92	OD	9 % TW	1.07	HTS-SF	+31.53		C14
96	34	5/92	OD	18 % TW	1.31	C7	+ 1.41		C14
		5/92	OD	15 % TW	1.26	C6	+22.78		C14
		5/92	OD	S/N	1.15	C6	+22.78		C14
41	39	5/92	OD	8 % TW	1.07	H6	+ 2.02		H02
105	39	5/92	OD	11 % TW	1.11	H1	+ 3.18		C17
		5/92	OD	S/N	1.47	H1	+ 3.18		C17
100	40	5/92	OD	S/N	2.29	C5	+ 1.46		C17
97	41	5/92	OD	1 % TW	0.81	C5	+ 2.45		C18
2	44	5/92	OD	16 % TW	1.01	CTS-SF	+ 0.50		69A
37	45	5/92	OD	13 % TW	1.07	HTS-SF	+ 0.31		C20
73	45	5/92	OD	5 % TW	0.93	H3	+11.79		C20
21	47	5/92	OD	15 % TW	0.54	C3	+14.82		C21
		5/92	OD	S/N	0.79	C3	+14.82		C21
39	47	5/92	OD	16 % TW	0.57	C3	+11.05		C21
		5/92	OD	S/N	0.47	C3	+11.05		C21
45	47	5/92	OD	14 % TW	0.91	C3	+26.28		H03
		5/92	OD	S/N	1.18	C3	+26.28		H03
55	49	5/92	OD	11 % TW	0.72	DC	+ 6.18		H3M
		5/92	OD	S/N	0.65	DC	+ 6.18		H3M
47	51	5/92	OD	12 % TW	2.32	VM	+ 5.74		H04
96	52	5/92	OD	14 % TW	1.52	C5	+13.16		C24
79	53	5/92	OD	S/N	0.43	C4	+25.30		C24
37	55	5/92	OD	19 % TW	0.58	HTS-SF	+ 1.91		C26
53	55	5/92	OD	10 % TW	0.80	H3	+32.64		H05
		5/92	OD	S/N	0.65	H3	+32.64		H05
111	55	5/92	OD	17 % TW	0.52	H8	- 0.31		C26
123	55	5/92	OD	13 % TW	1.00	H1	+33.28		C26
		5/92	OD	S/N	1.07	H1	+33.28		C26
3	56	5/92	OD	14 % TW	0.47	C5	+ 3.00		69A
		5/92	OD	S/N	0.85	C5	+ 3.00		69A
36	56	5/92	OD	4 % TW	0.76	H3	+25.59		C26
100	56	5/92	OD	15 % TW	0.56	VH	- 0.81		C26
		5/92	OD	15 % TW	0.56	VH	- 0.81		C26
63	57	5/92	OD	3 % TW	1.14	C3	+37.72		H05
		5/92	OD	16 % TW	2.07	C4	+ 6.86		H05
79	57	5/92	OD	S/N	1.67	C5	+22.65		H05
69	61	5/92	OD	19 % TW	1.09	DH	+25.85		H06
79	61	5/92	OD	S/N	1.46	H8	+13.26		H06
95	61	5/92	OD	18 % TW	1.92	H7	+ 9.45		C29

Plant: CALVERT CLIFFS UNIT 1  
Outage: 5/92

Steam Generator: 12

QUERY: < 20% EDDY CURRENT INDICATIONS - ALL ELEVATIONS

ROW	LINE	OUTAGE	INDICATION	VALUE	VOLTS	LOCATION	INCHES	COMMENTS	REF
90	62	5/92	OD	15 % TW	0.78	C4	+24.33		H07
		5/92	OD	S/N	1.00	C4	+24.33		H07
17	63	5/92	OD	2 % TW	1.34	C7	+24.67		C64
61	63	5/92	OD	15 % TW	0.53	HTS-SF	+11.46		H07
		5/92	OD	S/N	0.84	HTS-SF	+11.46		H07
30	64	5/92	OD	4 % TW	0.95	C2	+23.17		C80
78	64	5/92	OD	14 % TW	0.95	C7	+ 1.01		H08
118	64	5/92	OD	S/N	0.27	H9	+20.69		C30
97	65	5/92	OD	18 % TW	0.53	DN	+12.14		H08
68	66	5/92	OD	13 % TW	0.63	HTS-SF	+ 0.74		H09
106	66	5/92	OD	18 % TW	0.66	H4	+18.88		C30
		5/92	OD	S/N	0.92	H4	+18.88		C30
65	67	5/92	OD	13 % TW	0.54	HTS-SF	+ 1.29		H11
64	68	5/92	OD	13 % TW	0.52	HTS-SF	+ 1.44		H08
29	69	5/92	OD	S/N	0.94	H5	+ 4.12		C84
55	69	5/92	OD	13 % TW	0.78	HTS-SF	+ 1.35		H10
125	69	5/92	OD	15 % TW	2.82	VC	+ 7.45		C32
		5/92	OD	S/N	4.41	VC	+ 7.45		C32
57	71	5/92	OD	13 % TW	0.53	HTS-SF	+ 1.58		H11
61	71	5/92	OD	19 % TW	0.48	HTS-SF	+ 2.25		H11
65	71	5/92	OD	13 % TW	0.70	HTS-SF	+ 2.35		H11
54	72	5/92	OD	15 % TW	0.40	HTS-SF	+ 0.63		H31
56	72	5/92	OD	15 % TW	0.66	HTS-SF	+ 1.50		H11
55	73	5/92	OD	15 % TW	0.45	HTS-SF	+ 0.76		H28
60	74	5/92	OD	15 % TW	0.57	HTS-SF	+ 1.96		H28
70	74	5/92	OD	18 % TW	0.50	HTS-SF	+ 2.15		H28
72	74	5/92	OD	11 % TW	1.20	HTS-SF	+ 1.27		H28
84	74	5/92	OD	1 % TW	1.10	VH	+20.77		H28
78	78	5/92	OD	19 % TW	1.22	H4	+11.74		H34
51	79	5/92	OD	14 % TW	1.37	C4	+ 6.68		H15
75	79	5/92	OD	10 % TW	0.52	HTS-SF	+ 2.11		H15
77	79	5/92	OD	16 % TW	0.68	HTS-SF	+ 1.65		H15
79	79	5/92	OD	14 % TW	1.06	C2	+16.33		H15
		5/92	OD	16 % TW	0.65	HTS-SF	+ 1.29		H15
36	80	5/92	OD	11 % TW	0.56	H3	+14.40		C53
78	80	5/92	OD	18 % TW	1.01	C5	+26.01		H18
		5/92	OD	S/N	1.04	C5	+26.01		H18
84	80	5/92	OD	S/N	1.45	H3	+34.68		H18
43	81	5/92	OD	13 % TW	0.68	HTS-SF	+27.11		H16
		5/92	OD	S/N	0.48	HTS-SF	+27.11		H16
71	81	5/92	OD	13 % TW	2.06	HTS-SF	+ 0.94		H16
77	81	5/92	OD	10 % TW	0.71	HTS-SF	+ 1.20		H16
78	82	5/92	OD	S/N	0.63	HTS-SF	+ 2.53		H16
80	82	5/92	OD	14 % TW	0.51	HTS-SF	+ 1.13		H16
		5/92	OD	S/N	1.55	HTS-SF	+ 1.13		H16
67	83	5/92	OD	11 % TW	0.75	HTS-SF	+ 2.58		H17
79	83	5/92	OD	15 % TW	0.49	HTS-SF	+ 2.57		H17
81	83	5/92	OD	16 % TW	0.51	HTS-SF	+ 1.35		H17
72	84	5/92	OD	13 % TW	0.84	HTS-SF	+ 1.51		H17
82	84	5/92	OD	10 % TW	1.36	HTS-SF	+ 1.19		H17
79	85	5/92	OD	16 % TW	0.66	HTS-SF	+ 2.17		H17
48	86	5/92	OD	3 % TW	1.01	C3	+26.41		H18
84	86	5/92	OD	25 % TW	0.55	HTS-SF	+ 0.21		H18
136	86	5/92	OD	14 % TW	0.53	H7	+18.54		C37
		5/92	OD	S/N	1.00	H7	+16.54		C37
51	87	5/92	OD	11 % TW	0.58	C1	+18.68		H19
		5/92	OD	S/N	0.64	C1	+18.65		H19
		5/92	OD	S/N	1.02	C1	+27.94		H19
81	87	5/92	OD	13 % TW	1.10	HTS-SF	+ 1.94		H18
		5/92	OD	15 % TW	1.46	HTS-SF	+ 0.66		H18
78	88	5/92	OD	14 % TW	1.96	HTS-SF	+ 2.87		H18
132	88	5/92	OD	18 % TW	0.53	H5	+ 0.47		C83
41	89	5/92	OD	2 % TW	0.88	H1	+20.76		H18
74	90	5/92	OD	14 % TW	0.63	HTS-SF	+ 1.79		H20
		5/92	OD	19 % TW	1.01	HTS-SF	+ 1.48		H20
67	91	5/92	OD	S/N	0.20	H3	+ 4.13		H20
73	91	5/92	OD	18 % TW	1.28	HTS-SF	+ 1.92		H20

Plant: CALVERT CLIFFS UNIT 1  
Outage: 5/92

Steam Generator: 12

QUERY: ( 204 EDDY CURRENT INDICATIONS - ALL ELEVATIONS

ROW	LINE	OUTAGE	INDICATION	VALUE	VOLTS	LOCATION	INCHES	COMMENTS	HEEL
79	91	5/92	OD						
83	91	5/92	OD	15 % TW	1.23	HTS-SF	+ 0.76		
		5/92	OD	9 % TW	1.73	H7	+13.73		
70	92	5/92	OD	S/N	1.35	H6	+21.95		H20
78	94	5/92	OD	19 % TW	0.45	HTS-SF	+ 1.31		H20
61	95	5/92	OD	11 % TW	0.84	HTS-SF	+ 1.79		H20
77	95	5/92	OD	1 % TW	2.65	H5	+32.62		H21
85	95	5/92	OD	19 % TW	0.76	HTS-SF	+ 1.95		H21
72	96	5/92	OD	12 % TW	0.14	VH	+19.56		H22
69	97	5/92	OD	11 % TW	1.57	HTS-SF	+ 0.59		H22
77	97	5/92	OD	16 % TW	1.72	HTS-SF	+ 0.58		H22
137	97	5/92	OD	11 % TW	1.12	HTS-SF	+ 1.38		H22
48	98	5/92	OD	S/N	1.74	C10	+10.32		H23
68	98	5/92	OD	18 % TW	0.78	CTS-SF	+ 1.04		H23
72	98	5/92	OD	13 % TW	4.12	HTS-SF	+ 0.56		H23
100	98	5/92	OD	14 % TW	1.02	HTS-SF	+ 1.51		H23
		5/92	OD	13 % TW	0.65	C8	+11.86		H23
172	98	5/92	OD	S/N	0.81	C8	+11.86		H23
		5/92	OD	14 % TW	2.05	H6	+13.38		H23
35	99	5/92	OD	S/N	2.72	H6	+13.38		H23
		5/92	OD	10 % TW	0.80	C4	+ 9.38		H23
64	100	5/92	OD	S/N	0.42	C4	+ 5.38		H23
66	100	5/92	OD	13 % TW	0.40	HTS-SF	+ 0.89		H23
86	100	5/92	OD	3 % TW	0.96	C3	+23.27		H24
		5/92	OD	13 % TW	1.34	H2	+11.78		H24
118	100	5/92	OD	S/N	0.34	H2	+11.78		H24
130	100	5/92	OD	14 % TW	0.76	VH	+ 7.89		H24
29	101	5/92	OD	19 % TW	1.00	HTS-SF	+12.44		H24
		5/92	OD	15 % TW	0.55	HTS-SF	+24.72		H24
43	101	5/92	OD	S/N	0.68	HTS-SF	+24.72		H24
61	101	5/92	OD	18 % TW	0.61	HTS-SF	+ 1.75		H24
63	101	5/92	OD	15 % TW	0.98	HTS-SF	+ 0.74		H24
67	101	5/92	OD	15 % TW	1.06	HTS-SF	+ 1.45		H24
97	101	5/92	OD	18 % TW	0.42	HTS-SF	+ 1.42		H24
54	102	5/92	OD	S/N	0.13	H1	+ 5.40		H24
64	102	5/92	OD	11 % TW	0.59	HTS-SF	+ 0.74		H24
68	102	5/92	OD	18 % TW	0.70	HTS-SF	+ 1.18		H25
70	102	5/92	OD	11 % TW	0.60	HTS-SF	+ 2.91		H25
135	103	5/92	OD	14 % TW	0.58	HTS-SF	+ 0.14		H25
57	105	5/92	OD	19 % TW	0.43	CTS-SF	+ 2.67		H25
58	106	5/92	OD	19 % TW	0.85	HTS-SF	+ 0.80		H25
62	106	5/92	OD	11 % TW	0.75	HTS-SF	+ 0.41		H25
110	106	5/92	OD	19 % TW	0.92	HTS-SF	+ 1.58		H25
8	108	5/92	OD	3 % TW	1.30	H7	+17.15		H27
14	108	5/92	OD	10 % TW	0.98	HTS-SF	+ 0.95		H27
16	108	5/92	OD	15 % TW	0.56	HTS-SF	+ 0.90		H27
17	109	5/92	OD	11 % TW	0.51	HTS-SF	+ 1.09		H27
42	110	5/92	OD	13 % TW	0.44	HTS-SF	+ 1.17		H27
		5/92	OD	15 % TW	0.82	HTS-SF	+ 7.85		H27
64	110	5/92	OD	S/N	1.26	HTS-SF	+ 7.85		H27
66	110	5/92	OD	10 % TW	0.73	HTS-SF	+ 2.27		H27
10	110	5/92	OD	15 % TW	0.55	HTS-SF	+ 0.51		H27
15	111	5/92	OD	2 % TW	1.29	C8	+19.06		H27
1	111	5/92	OD	13 % TW	0.51	CTS-SF	+20.77		H27
17	111	5/92	OD	18 % TW	0.41	HTS-SF	+ 1.19		H27
5	111	5/92	OD	10 % TW	0.55	HTS-SF	+ 1.53		H27
		5/92	OD	10 % TW	0.74	HTS-SF	+ 0.93		H27
111	111	5/92	OD	1 % TW	2.19	HTS-SF	+36.86		H27
113	113	5/92	OD	S/N	0.92	C8	+14.77		H27
114	113	5/92	OD	7 % TW	1.05	H1	+20.36		H27
115	113	5/92	OD	11 % TW	1.49	H1	+ 8.87		H27
117	113	5/92	OD	18 % TW	0.65	VH			H27
120	113	5/92	OD	15 % TW	0.50	HTS-SF	+ 2.48		H27
124	113	5/92	OD	18 % TW	1.14	H2	+17.88		H27
125	113	5/92	OD	10 % TW	0.63	H5			H27
127	113	5/92	OD	18 % TW	0.89	HTS-SF	+ 1.02		H27
128	113	5/92	OD	S/N	0.19	C3	+12.06		H27
		5/92	OD	S/N	2.11	C4	+30.47		H27

Plant: CALVERT CLIFFS UNIT 1  
Outage: 5/92

Steam Generator: 12

QUERY: ( 20% EDDY CURRENT INDICATIONS - ALL ELEVATIONS

ROW	JINE	OUTAGE	INDICATION	VALUE	VOLTS	LOCATION	INCHES	COMMENTS	REEL
94	130	5/92	OD	19 % TW	1.81	HTS-SF	+29.88		C59
59	131	5/92	OD	S/N	0.95	H3	+28.62		H27
42	134	5/92	OD	16 % TW	0.55	H1	+30.20		C57
		5/92	OD	S/N	0.71	H1	+30.30		C59
100	134	5/92	OD	6 % TW	0.76	H4	+13.13		C57
13	135	5/92	OD	14 % TW	1.90	C5	+11.77		C66
31	137	5/92	OD	11 % TW	1.02	H1	+ 2.12		C60
5	139	5/92	OD	13 % TW	0.71	C4	+15.75		C71
		5/92	OD	S/N	0.97	C4	+15.76		C71
69	143	5/92	OD	15 % TW	1.20	C4	+ 3.04		C80
		5/92	OD	S/N	1.32	C4	+ 3.04		C80
21	145	5/92	OD	7 % TW	0.95	HTS-SF	+22.18		C80
48	146	5/92	OD	S/N	1.13	H2	+25.21		C79
22	148	5/92	OD	18 % TW	0.71	CTS-SF	+36.00		C78
		5/92	OD	S/N	0.80	CTS-SF	+36.00		C78
32	148	5/92	OD	8 % TW	1.52	C6	+15.12		C78
6	150	5/92	OD	1 % TW	0.83	C2	+ 5.05		72A
70	150	5/92	OD	11 % TW	1.29	C3	+22.61		C77
8	152	5/92	OD	16 % TW	1.38	VM	- 0.28	PLG	72A
64	152	5/92	OD	4 % TW	1.41	DH	+26.97		C77
77	153	5/92	OD	S/N	1.13	H4	+30.87		C76
26	154	5/92	OD	S/N	0.65	H1	+17.45		C76
52	154	5/92	OD	11 % TW	0.84	H2	+35.66		C76
		5/92	OD	S/N	0.93	H2	+35.66		C76
		5/92	OD	4 % TW	1.14	C5	+26.59		C76
68	154	5/92	OD	16 % TW	0.56	C5	+ 4.58		C76
		5/92	OD	S/N	0.93	C5	+ 4.58		C76
		5/92	OD	16 % TW	0.61	C4	+35.32		C76
		5/92	OD	S/N	0.73	C4	+35.32		C76
12	156	5/92	OD	18 % TW	0.81	C2	+25.70		C73
		5/92	OD	S/N	1.13	C2	+25.70		C73
47	157	5/92	OD	6 % TW	1.35	H7	+10.04		C75
53	159	5/92	OD	11 % TW	0.86	C3	+23.90		C74
29	161	5/92	OD	10 % TW	1.19	C4	+17.01		C74
		5/92	OD	S/N	0.35	C4	+17.01		C74

TOTAL TUBES FOUND = 181

TOTAL INDICATIONS FOUND = 236

TOTAL TUBES IN INPUT FILE = 8519

TOTAL TUBES INSPECTED = 8450

STEAM GENERATOR #12

C. Plot with List of 20% - 39% Indications April/May 1992



# 20% - 39% EDDY CURRENT INDICATIONS - ALL ELEVATIONS

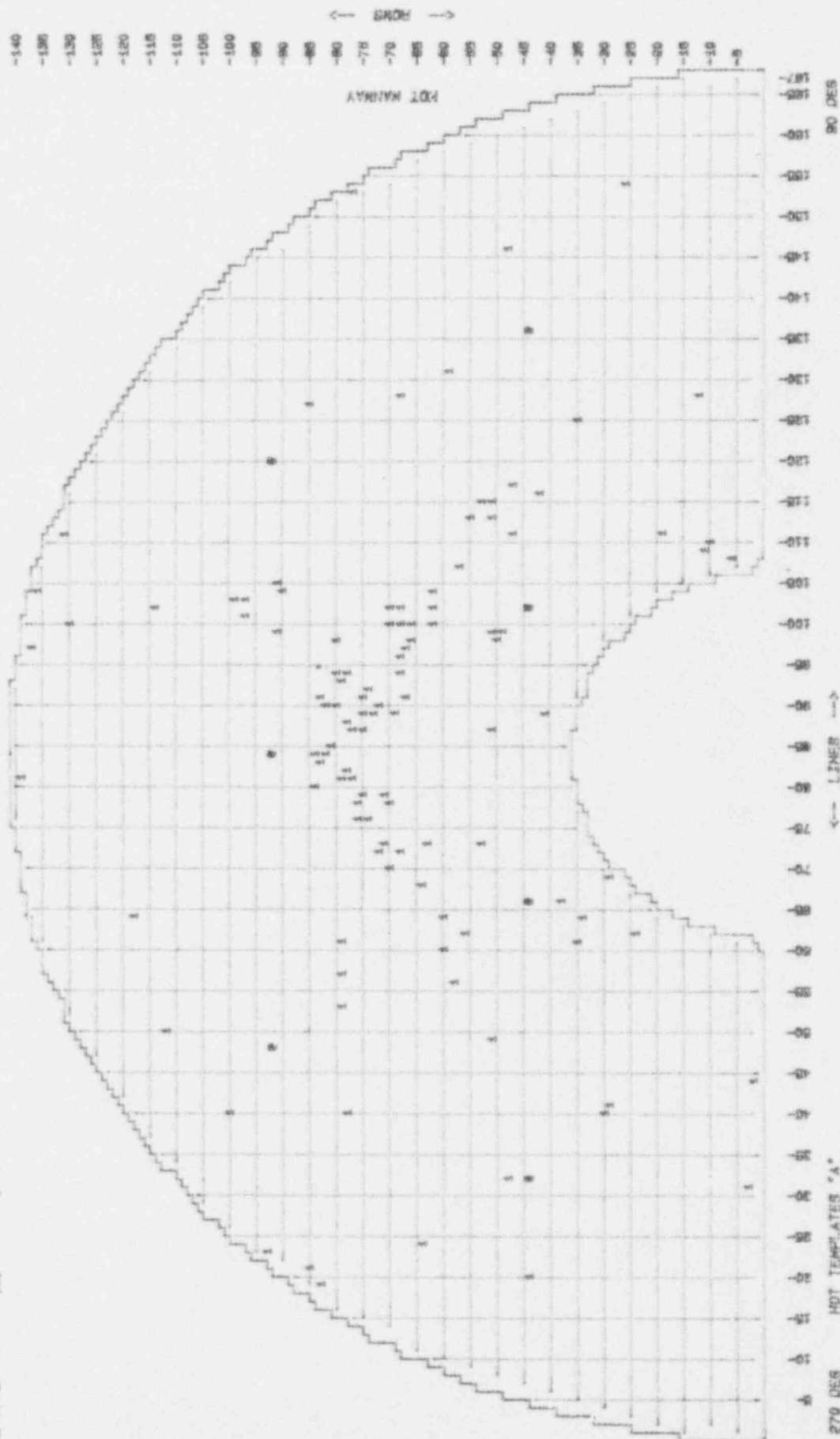
PLANT: CALVERT CLIFFS UNIT 1  
OUTAGE: 5/92

GENERATOR 12

1 = 20-39 (114)

TOTAL TUBES : 8519  
STAYS : 7

TOTAL TUBES ASSIGNED : 114





Plant: CALVERT CLIFFS UNIT 1  
Outage: 5/92

Steam Generator: 12

QUERY: 20% - 39% EDDY CURRENT INDICATIONS - ALL ELEVATIONS

ROW	LINE	OUTAGE	INDICATION	VALUE	VOLTS	LOCATION	INCHES	COMMENTS	REEL
68	94	5/92	OD	28 % TW	1.94	HTS-SF	+ 0.82		H21
78	94	5/92	OD	32 % TW	2.18	HTS-SF	+ 0.79		H21
80	94	5/92	OD	25 % TW	0.64	HTS-SF	+ 1.11		H23
48	96	5/92	OD	39 % TW	0.69	HTS-SF	+ 2.16		Z2A
		5/92	OD	26 % TW	0.45	HTS-SF	+ 0.62		Z2A
67	97	5/92	OD	27 % TW	0.87	HTS-SF	+ 0.86		H23
137	97	5/92	OD	21 % TW	0.98	C10	+10.32		C40
50	98	5/92	OD	30 % TW	0.53	CTS-SF	+ 1.77		H23
66	98	5/92	OD	20 % TW	0.64	HTS-SF	+ 0.64		H23
80	98	5/92	OD	37 % TW	0.58	CTS-SF	+ 1.33		H23
49	99	5/92	OD	36 % TW	0.51	HTS-SF	+ 1.36		H23
51	99	5/92	OD	30 % TW	0.81	HTS-SF	+ 1.01		H23
91	99	5/92	OD	33 % TW	0.50	HTS-SF	+ 2.65		H24
62	100	5/92	OD	27 % TW	0.82	HTS-SF	+ 1.03		H24
66	100	5/92	OD	23 % TW	1.03	HTS-SF	+ 1.43		H24
68	100	5/92	OD	34 % TW	1.01	HTS-SF	+ 1.56		H24
70	100	5/92	OD	27 % TW	1.16	HTS-SF	+ 0.56		H24
		5/92	OD	36 % TW	0.81	HTS-SF	+ 1.34		H24
130	100	5/92	OD	25 % TW	0.48	HTS-SF	+12.44		C41
97	101	5/92	OD	24 % TW	0.62	H1	+ 5.48		H25
62	102	5/92	OD	26 % TW	1.03	HTS-SF	+ 0.82		H25
		5/92	OD	28 % TW	1.14	HTS-SF	+ 1.16		H25
68	102	5/92	OD	27 % TW	0.40	HTS-SF	+ 0.66		H25
70	102	5/92	OD	20 % TW	0.78	HTS-SF	+ 0.84		H25
114	102	5/92	OD	32 % TW	0.54	H7	+ 3.84		C41
97	103	5/92	OD	21 % TW	0.59	VM			H26
99	103	5/92	OD	37 % TW	0.35	CTS-SF	+ 3.35		H26
62	104	5/92	OD	28 % TW	1.70	HTS-SF	+ 1.37		H26
90	104	5/92	OD	35 % TW	0.70	H2	+11.58		H26
136	104	5/92	OD	36 % TW	0.55	CTS-SF	+ 1.23		C42
91	105	5/92	OD	28 % TW	0.67	C9	- 1.17		36M
57	107	5/92	OD	26 % TW	2.76	HTS-SF	+ 0.67		29M
6	108	5/92	OD	30 % TW	0.50	HTS-SF	+ 0.93		C65
11	109	5/92	OD	33 % TW	0.41	HTS-SF	+ 1.66		C65
10	110	5/92	OD	25 % TW	0.86	HTS-SF	+ 0.80		C65
19	111	5/92	OD	23 % TW	0.49	HTS-SF	+ 1.56		C65
47	111	5/92	OD	31 % TW	0.44	HTS-SF	+ 0.75		H32
131	111	5/92	OD	28 % TW	0.70	C6	+14.77		C43
51	113	5/92	OD	26 % TW	0.42	HTS-SF	+ 2.58		H32
55	113	5/92	OD	36 % TW	1.00	HTS-SF	+ 0.93		H32
51	115	5/92	OD	25 % TW	0.62	VM	+10.30		H32
53	115	5/92	OD	33 % TW	0.39	HTS-SF	+ 0.18		H32
42	116	5/92	OD	26 % TW	1.08	HTS-SF	+ 0.67		H31
47	117	5/92	OD	22 % TW	2.09	HTS-SF	+ 0.82		H31
35	125	5/92	OD	31 % TW	1.25	CTS-SF	+33.05		H29
85	127	5/92	OD	38 % TW	0.24	C3	+11.35		C50
		5/92	OD	22 % TW	0.77	C3	+12.06		C50
12	128	5/92	OD	38 % TW	1.90	HTS-SF	+29.85		C64
68	128	5/92	OD	22 % TW	1.16	C4	+38.47		C51
59	131	5/92	OD	20 % TW	0.60	H3	+24.52		H27
48	146	5/92	OD	21 % TW	0.61	H2	+25.21		C79
77	153	5/92	OD	22 % TW	0.66	H4	+38.87		C76
26	154	5/92	OD	23 % TW	0.57	H1	+17.45		C76

TOTAL TUBES FOUND = 114

TOTAL INDICATIONS FOUND = 120

TOTAL TUBES IN INPUT FILE = 6519

TOTAL TUBES INSPECTED = 8450

STEAM GENERATOR #12

D. Plot with List of >39% Indications April/May 1992

# > 39% EDDY CURRENT INDICATIONS - ALL ELEVATIONS

PLANT: CALVERT CLIFFS UNIT 1

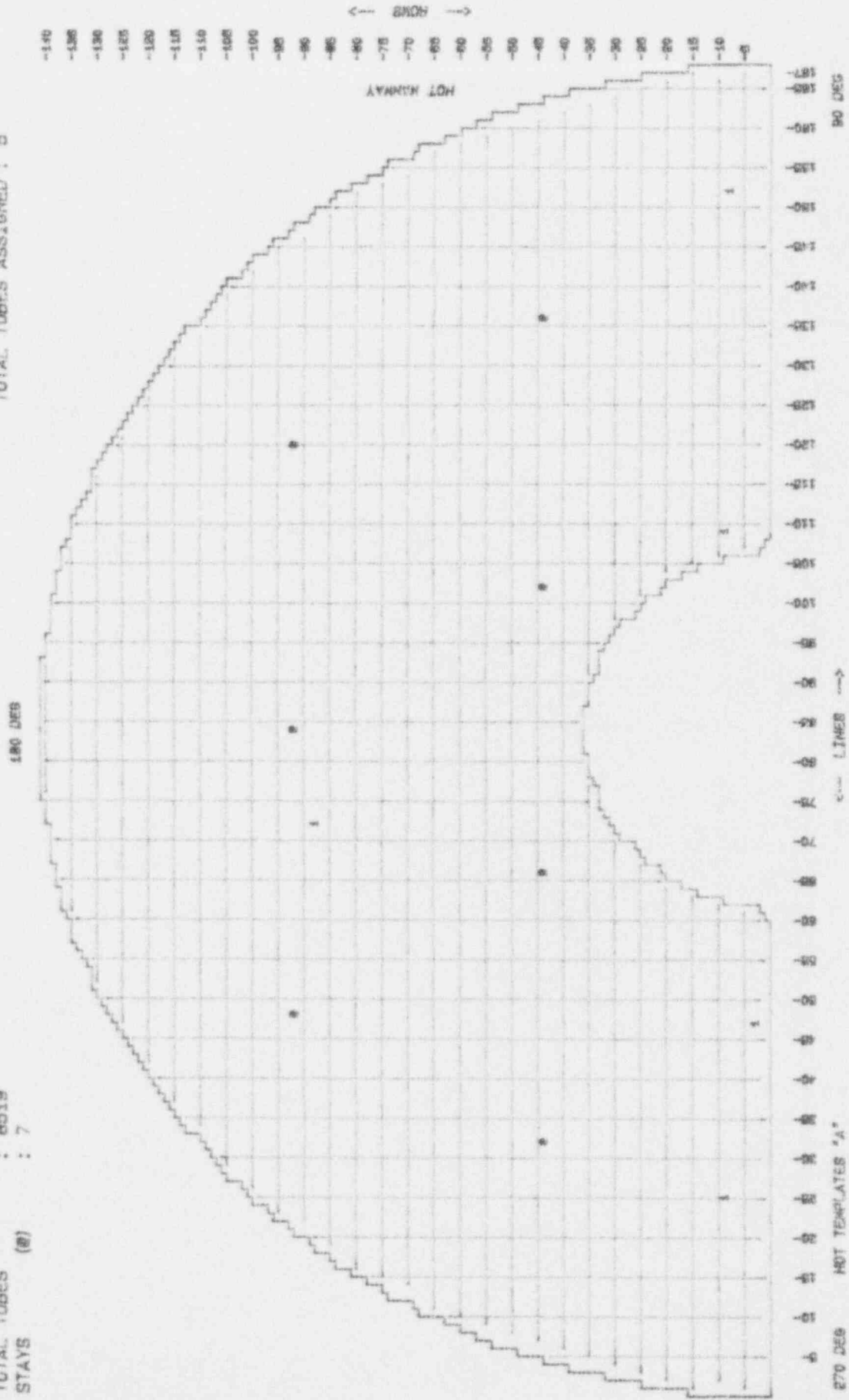
GENERATOR 12

OUTAGE: 5/92

1 - >39 (6)

TOTAL TUBES : 8519  
STAYS : 7

TOTAL TUBES ASSIGNED : 5



Plant: CALVERT CLIFFS UNIT 1  
Outage: 5/92

Steam Generator: 12

QUERY: > 3% EDDY CURRENT INDICATIONS - ALL ELEVATIONS

ROW	LINE	OUTAGE	INDICATION	VALUE	VOLTS	LOCATION	INCHES	COMMENTS	REEL
9	25	5/92	OD	55 % TW	0.78	VM		PLG	61A
3	47	5/92	OD	65 % TW	0.45	HTS-SF	+ 5.55	PLG	C49
88	72	5/92	OD	65 % TW	0.42	CTS-SF	+ 1.22	PLG	H12
9	109	5/92	OD	48 % TW	0.52	HTS-SF	+ 0.97	PLG	C65
8	152	5/92	OD	61 % TW	0.95	VM		PLG	72A
TOTAL TUBES FOUND			=	5					
TOTAL INDICATIONS FOUND			=	5					
TOTAL TUBES IN INPUT FILE			=	8519					
TOTAL TUBES INSPECTED			=	8450					

STEAM GENERATOR #12

E. Plot with List of Dented Tubes April/May 1992



# ALL DENT INDICATIONS - ALL LOCATIONS

PLANT: CALVERT CLIFFS UN  
OUTAGE: 5/92

GENERATOR: 12

1 = >49.99 (536)  
4 = 20.00-29.99 (59)  
5 = 5.00-9.99 (0)

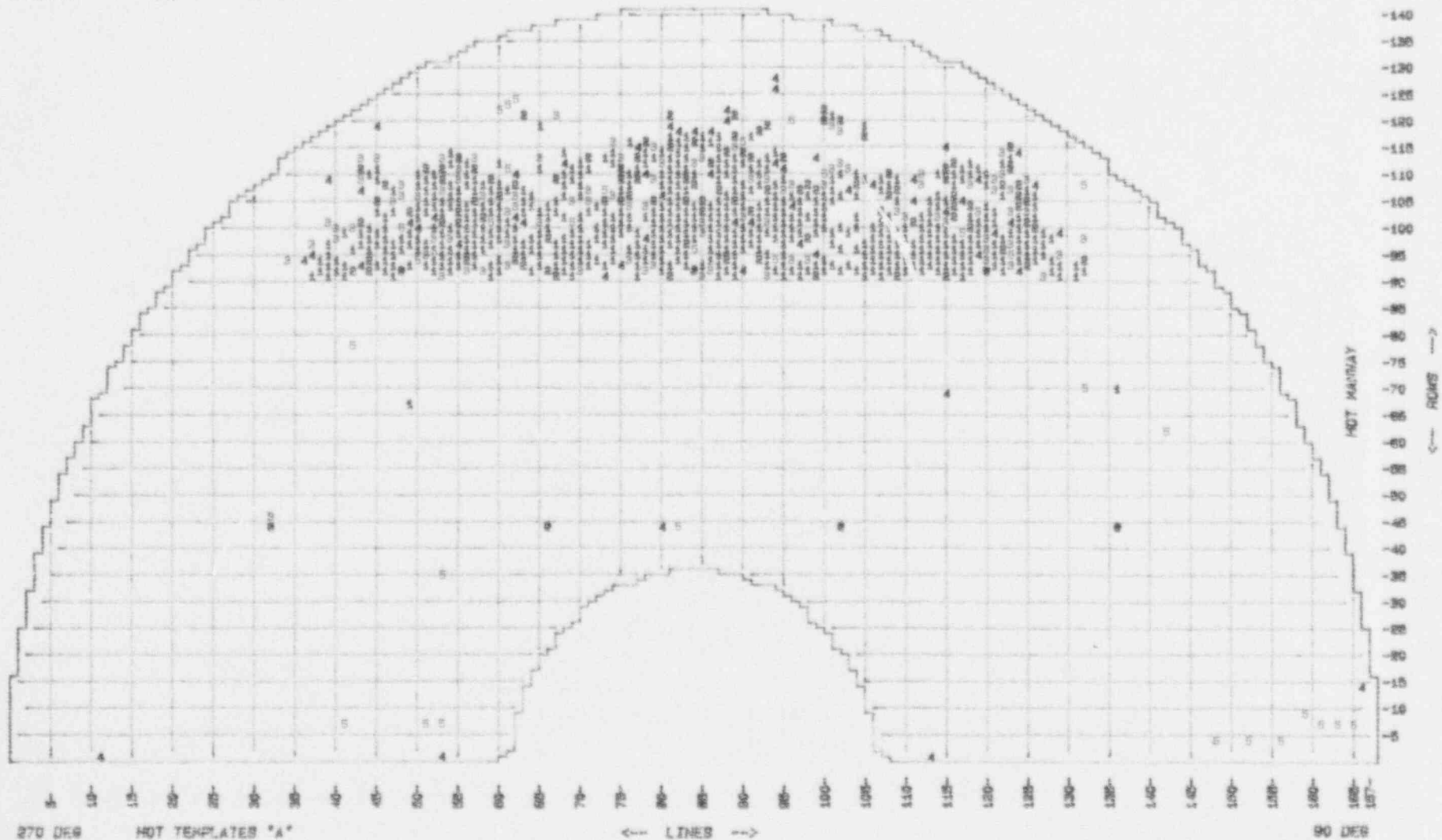
2 = 40.00-49.99 (101)  
5 = 15.00-19.99 (32)  
8 = <5.00 (0)

3 = 30.00-39.99 (98)  
6 = 10.00-14.99 (0)

TOTAL TUBES : 8519  
STAYS (8) : 7

TOTAL TUBES ASSIGNED : 823

180 DEG



Plant: CALVERT CLIFFS UNIT 1  
Outage: 5/92

Steam Generator: 12

QUERY: ALL DENT INDICATIONS - ALL LOCATIONS

ROW	LINE	OUTAGE	INDICATION	VALUE	VOLTS	LOCATION	INCHES	COMMENTS	REEL
1	11	5/92	DENT		28.04	C6	+ 3.29		89A
46	32	5/92	DENT		30.09	H6	+21.43		68A
94	34	5/92	DENT		30.23	H9	- 0.12		C14
94	36	5/92	DENT		22.39	H9	- 0.19		C15
91	37	5/92	DENT		70.68	H9	- 0.06		C16
95	37	5/92	DENT		37.88	H9	- 0.19		C16
97	37	5/92	DENT		32.30	H9	- 0.14		C16
92	38	5/92	DENT		85.11	H9	- 0.06		C16
94	38	5/92	DENT		69.93	H9	- 0.03		C16
91	39	5/92	DENT		58.26	H9	- 0.09		C17
93	39	5/92	DENT		145.10	H9	- 0.11		C17
95	39	5/92	DENT		173.30	H9	- 0.14		C17
97	39	5/92	DENT		54.41	H9	- 0.17		C17
101	39	5/92	DENT		34.70	H9	- 0.11		C17
109	39	5/92	DENT		24.87	H9	- 0.06		C17
92	40	5/92	DENT		113.60	H9			C17
94	40	5/92	DENT		65.30	H9	- 0.08		C17
98	40	5/92	DENT		35.60	H9	- 0.17		C17
		5/92	DENT		33.83	H9	- 0.25		C17
100	40	5/92	DENT		39.05	H9	- 0.11		C17
7	41	5/92	DENT		17.03	C6	+ 5.48		C63
81	41	5/92	DENT		111.60	H9	- 0.14		C18
93	41	5/92	DENT		69.74	H9			C18
99	41	5/92	DENT		71.75	H9	- 0.14		C18
78	42	5/92	DENT		15.21	C6	+ 3.16		C18
92	42	5/92	DENT		49.40	H9	- 0.03		C18
96	42	5/92	DENT		73.94	H9	- 0.37		C18
100	42	5/92	DENT		31.86	H9	- 0.31		C18
93	43	5/92	DENT		28.68	H9	- 0.15		C19
97	43	5/92	DENT		97.48	H9	- 0.03		C19
99	43	5/92	DENT		109.90	H9	- 0.09		C19
101	43	5/92	DENT		41.72	H9	- 0.29		C19
107	43	5/92	DENT		29.77	H9	- 0.27		C19
109	43	5/92	DENT		34.84	H9	- 0.03		C19
111	43	5/92	DENT		43.59	H9	- 0.24		C19
113	43	5/92	DENT		39.59	H9	- 0.29		C19
92	44	5/92	DENT		41.32	H9	- 0.06		C19
94	44	5/92	DENT		43.14	H9	- 0.03		C19
96	44	5/92	DENT		62.38	H9	- 0.29		C19
98	44	5/92	DENT		172.50	H9	- 0.12		C19
100	44	5/92	DENT		67.65	H9			C19
110	44	5/92	DENT		65.77	H9	- 0.68		C20
99	45	5/92	DENT		97.29	H9	- 0.08		C20
97	45	5/92	DENT		65.72	H9	- 0.09		C20
99	45	5/92	DENT		83.66	H9	- 0.23		C20
103	45	5/92	DENT		61.28	H9	- 0.14		C20
105	45	5/92	DENT		49.53	H9	- 0.09		C20
109	45	5/92	DENT		62.44	H9			C20
111	45	5/92	DENT		63.32	H9	- 0.12		C20
113	45	5/92	DENT		31.55	H9	- 0.15		C20
119	45	5/92	DENT		21.17	H9	- 0.23		C20
92	46	5/92	DENT		50.50	H9	- 0.29		C20
94	46	5/92	DENT		108.30	H9			C20
96	46	5/92	DENT		60.90	H9	- 0.14		C20
98	46	5/92	DENT		98.05	H9			C20
100	46	5/92	DENT		88.36	H9	- 0.12		C20
102	46	5/92	DENT		69.33	H9	- 0.17		C20
108	46	5/92	DENT		40.59	H9			C21
91	47	5/92	DENT		52.66	H9	- 0.20		C21
93	47	5/92	DENT		99.63	H9	- 0.21		C21
95	47	5/92	DENT		105.00	H9	- 0.08		C21
97	47	5/92	DENT		67.00	H9	- 0.03		C21
103	47	5/92	DENT		65.75	H9			C21
105	47	5/92	DENT		37.14	H9			C21
107	47	5/92	DENT		79.00	H9	- 0.23		C21
96	48	5/92	DENT		85.20	H9	- 0.03		C21
98	48	5/92	DENT		90.87	H9			C21

Plant: CALVERT CLIFFS UNIT 1  
Outage: 5/92

Steam Generator: 12

QUERY: ALL DENT INDICATIONS - ALL LOCATIONS

ROW	LINE	OUTAGE	INDICATION	VALUE	VOLTS	LOCATION	INCHES	COMMENTS	REEL
100	48	5/92	DENT	15.20	H9		- 1.13		C22
106	48	5/92	DENT	34.73	H9		- 0.31		C22
108	48	5/92	DENT	32.26	H9		- 0.17		C22
87	49	5/92	DENT	50.30	H8		+ 2.12		H3M
93	49	5/92	DENT	90.81	H9		- 0.31		C22
97	49	5/92	DENT	68.19	H9		- 0.06		C2A
		5/92	DENT	88.19	H9		- 0.06		C2A
99	49	5/92	DENT	81.99	H9		- 0.06		C2A
		5/92	DENT	81.99	H9		- 0.06		C2A
101	49	5/92	DENT	29.97	H9		- 0.09		C2A
		5/92	DENT	29.97	H9		- 0.29		C2A
103	49	5/92	DENT	44.75	H9		- 2.09		C2A
		5/92	DENT	44.75	H9		- 0.09		C2A
94	50	5/92	DENT	15.70	C8		+ 8.88		C23
96	50	5/92	DENT	91.93	H9				C23
98	50	5/92	DENT	136.00	H9		- 0.05		C23
100	50	5/92	DENT	15.11	H8		+21.31		C23
		5/92	DENT	22.99	H9		- 0.36		C23
		5/92	DENT	21.36	H9		- 0.08		C23
		5/92	DENT	19.14	H9		- 0.68		C23
102	50	5/92	DENT	77.84	H9		- 0.05		C23
104	50	5/92	DENT	65.85	H9		- 0.03		C23
106	50	5/92	DENT	34.46	H9		- 0.17		C23
108	50	5/92	DENT	55.04	H9		- 0.20		C23
110	50	5/92	DENT	91.48	H9		- 0.26		C23
7	51	5/92	DENT	17.27	C6		+21.44		C63
93	51	5/92	DENT	73.74	H9		- 0.17		C23
95	51	5/92	DENT	37.33	H9		- 0.06		C23
97	51	5/92	DENT	74.14	H9				C23
103	51	5/92	DENT	75.12	H9		- 0.06		C23
105	51	5/92	DENT	68.98	H9		- 0.06		C23
107	51	5/92	DENT	64.53	H9		- 0.20		C23
109	51	5/92	DENT	118.90	H9		- 0.17		C23
111	51	5/92	DENT	43.57	H9		- 0.23		C23
92	52	5/92	DENT	62.08	H9		- 0.03		C24
94	52	5/92	DENT	148.90	H9		- 0.03		C24
96	52	5/92	DENT	130.50	H9		- 0.06		C24
98	52	5/92	DENT	38.31	H9		- 0.06		C24
		5/92	DENT	18.76	C8		+20.93		C24
		5/92	DENT	20.99	C8		+19.36		C24
		5/92	DENT	15.32	C8		+17.63		C24
100	52	5/92	DENT	90.04	H9		- 0.22		C24
102	52	5/92	DENT	27.57	H9		- 0.03		C24
104	52	5/92	DENT	111.60	H9				C24
106	52	5/92	DENT	119.70	H9		- 0.03		C24
108	52	5/92	DENT	73.04	H9		- 0.22		C24
110	52	5/92	DENT	101.50	H9		- 0.03		C24
1	53	5/92	DENT	28.65	C6		+ 4.84		C6A
7	53	5/92	DENT	17.48	C6		+21.38		C63
35	53	5/92	DENT	16.48	C6		+13.35		C24
91	53	5/92	DENT	37.41	H9		- 0.08		C24
93	53	5/92	DENT	140.40	H9		- 0.06		C24
95	53	5/92	DENT	173.80	H9		- 0.19		C24
97	53	5/92	DENT	94.66	H9				C24
99	53	5/92	DENT	67.53	H9		- 0.17		C24
101	53	5/92	DENT	48.34	H9		- 0.23		C24
103	53	5/92	DENT	52.52	H9		- 0.08		C24
105	53	5/92	DENT	142.90	H9		- 0.06		C24
107	53	5/92	DENT	37.41	H9		- 0.06		C24
109	53	5/92	DENT	45.83	H9		- 0.31		C24
111	53	5/92	DENT	48.81	H9		- 0.17		C24
113	53	5/92	DENT	36.66	H9		- 0.06		C24
52	54	5/92	DENT	55.78	H9		- 0.08		C25
94	54	5/92	DENT	121.70	H9		- 0.06		C25
96	54	5/92	DENT	69.37	H9		- 0.25		C25
98	54	5/92	DENT	32.86	H9		- 0.34		C25
100	54	5/92	DENT	52.78	H9		- 0.08		C25

Plant: CALVERT CLIFFS UNIT 1  
Outage: 5/92

Steam Generator: 12

QUERY: ALL DENT INDICATIONS - ALL LOCATIONS

ROW	LINE	OUTAGE	INDICATION	VALUE	VOLTS	LOCATION	INCHES	COMMENTS	REEL
104	54	5/92	DENT	120.30	H9	-	0.03		C25
106	54	5/92	DENT	57.71	H9	-	0.08		C25
108	54	5/92	DENT	60.56	H9	-	0.11		C25
112	54	5/92	DENT	78.43	H9	-	0.25		C25
114	54	5/92	DENT	74.02	H9	-	0.22		C25
93	55	5/92	DENT	63.70	H9	-	0.17		C25
95	55	5/92	DENT	125.80	H9	-	0.03		C25
97	55	5/92	DENT	22.44	H9	-	0.34		C25
99	55	5/92	DENT	65.70	H9	-	0.11		C25
101	55	5/92	DENT	47.74	H9	-	0.11		C25
103	55	5/92	DENT	48.65	H9	-	0.06		C25
105	55	5/92	DENT	117.90	H9	-	0.03		C25
107	55	5/92	DENT	94.55	H9				C25
109	55	5/92	DENT	38.17	H9	-	0.20		C25
111	55	5/92	DENT	35.40	H9	-	0.08		C25
113	55	5/92	DENT	44.70	H9	-	0.06		C25
92	56	5/92	DENT	36.45	H9				C26
94	56	5/92	DENT	43.67	H9	-	0.19		C26
96	56	5/92	DENT	85.00	H9	-	0.06		C26
98	56	5/92	DENT	94.46	H9	-	0.06		C26
100	56	5/92	DENT	95.64	H9	-	0.06		C26
102	56	5/92	DENT	90.30	H9	-	0.06		C26
104	56	5/92	DENT	126.60	H9	-	0.06		C26
108	56	5/92	DENT	66.55	H9	-	0.23		C26
110	56	5/92	DENT	95.86	H9				C26
112	56	5/92	DENT	63.38	H9	-	0.08		C26
93	57	5/92	DENT	65.30	H9	-	0.19		26A
95	57	5/92	DENT	65.36	H9	-	0.22		26A
97	57	5/92	DENT	72.03	H9	-	0.17		26A
99	57	5/92	DENT	109.80	H9	-	0.03		26A
101	57	5/92	DENT	52.21	H9	-	0.19		26A
103	57	5/92	DENT	60.17	H9	-	0.31		26A
105	57	5/92	DENT	47.39	H9	-	0.06		26A
107	57	5/92	DENT	59.49	H9	-	0.25		26A
109	57	5/92	DENT	137.60	H9	-	0.06		26A
111	57	5/92	DENT	48.46	H9	-	0.17		26A
113	57	5/92	DENT	39.21	H9	-	0.20		26A
92	58	5/92	DENT	32.20	H9	-	0.18		C27
96	58	5/92	DENT	121.70	H9	-	0.06		C27
98	58	5/92	DENT	74.62	H9			NRH HTS-P1 : 10.84	C27
100	58	5/92	DENT	87.91	H9	-	0.03		C27
102	58	5/92	DENT	46.48	H9	-	0.09		C27
104	58	5/92	DENT	62.64	H9	-	0.03		C27
106	58	5/92	DENT	33.04	H9	-	0.06		C27
108	58	5/92	DENT	84.35	H9	-	0.26		C27
91	59	5/92	DENT	69.27	H9	-	0.12		C28
93	59	5/92	DENT	130.00	H9				C28
97	59	5/92	DENT	106.30	H9	-	0.11		C27
99	59	5/92	DENT	123.50	H9	-	0.06		C27
101	59	5/92	DENT	19.92	H9	-	0.03		C27
103	59	5/92	DENT	103.30	H9	-	0.03		C27
105	59	5/92	DENT	53.72	H9	-	0.03		C27
107	59	5/92	DENT	87.57	H9				C27
109	59	5/92	DENT	42.47	H9	-	0.29		C27
92	60	5/92	DENT	93.41	H9				C28
94	60	5/92	DENT	104.30	H9	-	0.09		C28
96	60	5/92	DENT	110.70	H9	-	0.99		C28
100	60	5/92	DENT	116.60	H9	-	0.09		C28
102	60	5/92	DENT	96.79	H9	-	0.17		C28
104	60	5/92	DENT	56.75	H9	-	0.06		C28
106	60	5/92	DENT	48.99	H9	-	0.20		C28
108	60	5/92	DENT	74.27	H9				C28
112	60	5/92	DENT	53.08	H9	-	0.06		C28
122	60	5/92	DENT	19.00	H9	-	0.29		C28
93	61	5/92	DENT	39.47	H9	-	0.12		C29
97	61	5/92	DENT	31.15	H9	-	0.14		C29
99	61	5/92	DENT	69.81	H9	-	0.03		C29



Plant: CALVERT CLIFFS UNIT 1  
Outage: 5/92

Steam Generator: 12

QUERY: ALL DENT INDICATIONS - ALL LOCATIONS

ROW	LINE	OUTAGE	INDICATION	VALUE	VOLTS	LOCATION	INCHES	COMMENTS	REF
109	69	5/92	DENT		93.15	H9	- 0.03		C32
111	69	5/92	DENT		72.39	H9			C32
92	70	5/92	DENT		39.10	H9	+ 0.31		H9H
94	70	5/92	DENT		45.63	H9	- 0.06		H9H
96	70	5/92	DENT		238.00	H9	- 0.12		H9H
98	70	5/92	DENT		121.86	H9	- 0.08		H9H
100	70	5/92	DENT		55.32	H9	+ 0.17		H9H
102	70	5/92	DENT		51.32	H9	- 0.25		H9H
106	70	5/92	DENT		50.49	H9	- 0.17		C32
108	70	5/92	DENT		72.55	H9	- 0.29		C32
110	70	5/92	DENT		123.70	H9	- 0.06		C32
112	70	5/92	DENT		66.59	H9	- 0.20		C32
93	71	5/92	DENT		73.67	H9	- 0.17		H11
95	71	5/92	DENT		101.30	H9	+ 0.03		H11
97	71	5/92	DENT		144.70	H9	+ 0.17		H11
103	71	5/92	DENT		101.10	H9	+ 0.11		H11
105	71	5/92	DENT		30.08	H9	- 0.06		H11
107	71	5/92	DENT		37.98	H9	- 0.06	nrh hts-sf - 1.36	C33
111	71	5/92	DENT		87.15	H9	- 0.06		C33
113	71	5/92	DENT		44.87	H9	+ 0.20		C33
94	72	5/92	DENT		81.07	H9	+ 0.15		H12
98	72	5/92	DENT		145.80	H9	- 0.17	NRH HTS-PF + 20.4	H12
100	72	5/92	DENT		134.40	H9	- 0.29		H12
104	72	5/92	DENT		73.56	H9			H12
91	73	5/92	DENT		22.16	H9			H12
93	73	5/92	DENT		98.77	H9	+ 0.14		H12
97	73	5/92	DENT		67.75	H9	- 0.11		H12
99	73	5/92	DENT		165.70	H9	- 0.11		H12
101	73	5/92	DENT		94.62	H9			H12
103	73	5/92	DENT		96.31	H9	- 0.11		H12
105	73	5/92	DENT		46.50	H9			H12
107	73	5/92	DENT		18.50	H9	- 0.22		C33
113	73	5/92	DENT		71.77	H9	- 0.03		C33
94	74	5/92	DENT		65.76	H9	+ 0.14		12N
96	74	5/92	DENT		129.30	H9	+ 0.14		12N
98	74	5/92	DENT		94.22	H9	+ 0.14		12N
100	74	5/92	DENT		118.30	H9	+ 0.09		12N
102	74	5/92	DENT		96.36	H9	+ 0.11		H13
106	74	5/92	DENT		31.32	H9	- 0.17		C33
112	74	5/92	DENT		71.71	H9	- 0.06		C33
114	74	5/92	DENT		77.18	H9	- 0.06		C33
116	74	5/92	DENT		32.97	H9	- 0.06		C33
93	75	5/92	DENT		26.27	H9	+ 0.08		H13
94	75	5/92	DENT		111.70	H9	+ 0.06		H13
101	75	5/92	DENT		80.69	H9			H13
103	75	5/92	DENT		98.13	H9	+ 0.17		H13
105	75	5/92	DENT		45.72	H9	+ 0.14		H13
107	75	5/92	DENT		74.23	H9	- 0.12		C34
109	75	5/92	DENT		45.29	H9	- 0.03		C34
111	75	5/92	DENT		47.46	H9	- 0.06		C34
113	75	5/92	DENT		38.06	H9	- 0.11		C34
94	76	5/92	DENT		37.66	H9			13N
96	76	5/92	DENT		84.97	H9			13N
100	76	5/92	DENT		107.00	H9	- 0.17		13N
102	76	5/92	DENT		55.44	H9	- 0.06		13N
104	76	5/92	DENT		33.37	H9	- 0.06		H14
106	76	5/92	DENT		41.67	H9	- 0.03		C34
108	76	5/92	DENT		43.61	H9	- 0.63		C34
110	76	5/92	DENT		93.04	H9			C34
116	76	5/92	DENT		50.47	H9	- 0.14		C34
91	77	5/92	DENT		52.01	H9	- 0.28		H14
93	77	5/92	DENT		16.88	C9	- 0.05		H14
		5/92	DENT		50.37	H9	- 0.03		H14
95	77	5/92	DENT		104.50	H9	- 0.11		H14
97	77	5/92	DENT		88.97	H9	- 0.08		H14
99	77	5/92	DENT		61.11	H9	+ 0.03		H14
109	77	5/92	DENT		44.19	H9	- 0.26		C34

Plant: CALVERT CLIFFS UNIT 1  
Outage: 5/92

Steam Generator: 12

QUERY: ALL DENT INDICATIONS - ALL LOCATIONS

ROW	LINE	OUTAGE	INDICATION	VALUE	VOLTS	LOCATION	INCHES	COMMENTS	REEL
111	77	5/92	DENT	91.61	H9		- 0.03		C34
113	77	5/92	DENT	46.72	H9		- 0.03		C34
115	77	5/92	DENT	27.01	H9		- 0.14		C34
92	78	5/92	DENT	30.73	H9		+ 0.08		H34
94	78	5/92	DENT	73.02	H9		- 0.25		H34
96	78	5/92	DENT	94.17	H9		+ 0.03		H34
98	78	5/92	DENT	29.30	H9		+ 0.11		H34
102	78	5/92	DENT	72.39	H9		+ 0.17		H34
104	78	5/92	DENT	37.53	H9		+ 0.06		H34
110	78	5/92	DENT	25.79	H9		- 0.05		C83
		5/92	DENT	27.03	H9				C83
112	78	5/92	DENT	50.37	H9		- 0.17		C34
114	78	5/92	DENT	64.07	H9		- 0.03		C34
116	78	5/92	DENT	46.68	H9		- 0.23		C34
93	79	5/92	DENT	39.15	H9		+ 0.08		H15
95	79	5/92	DENT	59.42	H9		+ 0.11		H34
97	79	5/92	DENT	105.30	H9		- 0.11		H34
99	79	5/92	DENT	70.73	H9		- 0.09		H34
101	79	5/92	DENT	51.12	H9		- 0.11		H34
103	79	5/92	DENT	77.53	H9		- 0.11		H34
105	79	5/92	DENT	43.98	H9		- 0.17		H34
109	79	5/92	DENT	36.37	H9		- 0.26		C35
113	79	5/92	DENT	103.60	H9		- 0.08		C35
115	79	5/92	DENT	31.99	H9		+ 0.31		C35
44	80	5/92	DENT	20.94	H7		+13.32		15M
92	80	5/92	DENT	110.40	H8		+19.11		15M
94	80	5/92	DENT	236.70	H9		+ 0.58		15M
96	80	5/92	DENT	167.90	H9		+ 0.31		15M
98	80	5/92	DENT	176.90	H9		- 0.14		15M
100	80	5/92	DENT	144.50	H9				15M
102	80	5/92	DENT	120.30	H9		+ 0.22		15M
104	80	5/92	DENT	195.20	H9		+ 0.35		15M
106	80	5/92	DENT	21.48	H9		- 0.11		C35
108	80	5/92	DENT	91.67	H9		- 0.03	NRH HTS-SF -1.39"	C35
110	80	5/92	DENT	53.45	H9		- 0.14		C35
		5/92	DENT	35.74	H9		- 0.25		C35
112	80	5/92	DENT	34.80	H9		- 0.14		C35
114	80	5/92	DENT	75.03	H9		- 0.20		C35
91	81	5/92	DENT	44.09	H9		+ 0.06		H16
93	81	5/92	DENT	50.02	H9		+ 0.20		H16
97	81	5/92	DENT	82.76	H9		+ 0.17		15M
99	81	5/92	DENT	88.73	H9		+ 0.06		15M
101	81	5/92	DENT	63.01	H9				15M
103	81	5/92	DENT	87.31	H9		- 0.03		15M
105	81	5/92	DENT	95.12	H9		+ 0.17		15M
107	81	5/92	DENT	95.70	H9		- 0.14		C35
109	81	5/92	DENT	152.30	H9		- 0.26		C35
111	81	5/92	DENT	116.30	H9		- 0.03		C35
113	81	5/92	DENT	83.87	H9		- 0.17		C35
115	81	5/92	DENT	40.29	H9		- 0.26		C35
117	81	5/92	DENT	74.52	H9		+ 0.03		C35
119	81	5/92	DENT	22.65	H10		+ 0.14		C35
121	81	5/92	DENT	40.30	H10		+ 0.26		C35
44	82	5/92	DENT	18.89	H6		+22.26		H16
94	82	5/92	DENT	80.18	H9		+ 0.06		H16
96	82	5/92	DENT	83.25	H9		- 0.13		H16
98	82	5/92	DENT	101.80	H9		+ 0.03		H16
100	82	5/92	DENT	139.00	H9		- 0.20		H16
102	82	5/92	DENT	95.36	H9		+ 0.06		H16
104	82	5/92	DENT	126.30	H9		- 0.17		H16
106	82	5/92	DENT	76.74	H9		- 0.09		C35
		5/92	DENT	77.79	H9		- 0.20		C35
108	82	5/92	DENT	93.50	H9		- 0.03	NRH HTS-SF -1.41"	C35
110	82	5/92	DENT	97.76	H9		- 0.03		C35
112	82	5/92	DENT	87.74	H9		- 0.06		C35
114	82	5/92	DENT	129.90	H9		- 0.11		C36
116	82	5/92	DENT	81.69	H9		- 0.03		C36



Plant: CALVERT CLIFFS UNIT 1  
Outage: 5/92

Steam Generator: 12

QUERY: ALL DENT INDICATIONS - ALL LOCATIONS

ROW	LINE	OUTAGE	INDICATION	VALUE	VOLTS	LOCATION	INCHES	COMMENTS	DEFL
118	82	5/92	DENT		28.26	H9	+ 0.27		C83
93	83	5/92	DENT		112.30	H9	- 0.03		H16
95	83	5/92	DENT		94.62	H9	- 0.11		H16
97	83	5/92	DENT		46.10	H9	- 0.09		H16
99	83	5/92	DENT		135.47	H9	+ 0.03		H16
101	83	5/92	DENT		93.93	H9	+ 0.04		H16
103	83	5/92	DENT		64.80	H9	- 0.11		H16
105	83	5/92	DENT		48.88	H9	+ 0.23		H16
107	83	5/92	DENT		91.29	H9	- 0.31		C36
109	83	5/92	DENT		49.92	H9	- 0.23		C36
111	83	5/92	DENT		62.17	H9	- 0.37		C36
113	83	5/92	DENT		93.07	H9	- 0.03		C36
115	83	5/92	DENT		78.07	H9	- 0.17		C36
117	83	5/92	DENT		58.79	H9	+ 0.23		C36
96	84	5/92	DENT		16.85	H9	- 0.23		H17
98	84	5/92	DENT		62.61	H9	- 0.11	NRH HTS-PF +21.42	H17
100	84	5/92	DENT		128.50	H9	- 0.17		H17
102	84	5/92	DENT		155.90	H9	- 0.03		H17
104	84	5/92	DENT		51.97	H9	+ 0.11		H17
108	84	5/92	DENT		43.86	H9	- 0.17	NRH HTS-SF -2.00"	C36
110	84	5/92	DENT		66.17	H9	- 0.09		C36
112	84	5/92	DENT		30.82	H9	+ 0.20		C36
114	84	5/92	DENT		41.07	H9	- 0.23		C36
118	84	5/92	DENT		20.54	H9	+ 0.27	NRH HTS-SF -1.35"	C36
91	85	5/92	DENT		35.28	H9	- 0.06		H17
93	85	5/92	DENT		56.05	H9	+ 0.11		H17
95	85	5/92	DENT		30.75	H9	+ 0.03		H17
101	85	5/92	DENT		32.92	H9	- 0.03		H17
103	85	5/92	DENT		45.22	H9	+ 0.17		H17
105	85	5/92	DENT		40.16	H9	+ 0.17		H17
113	85	5/92	DENT		35.95	H9	- 0.26		C36
115	85	5/92	DENT		60.77	H9	- 0.17		C36
117	85	5/92	DENT		60.18	H9	+ 0.03		C36
92	86	5/92	DENT		39.14	H9	- 0.09		H18
94	86	5/92	DENT		85.81	H9	- 0.09		H34
96	86	5/92	DENT		114.30	H9	+ 0.12		H18
98	86	5/92	DENT		113.20	H9	+ 0.20	NRH HTS-SF - 1.40"	H18
100	86	5/92	DENT		92.08	H9	- 0.03		H18
102	86	5/92	DENT		60.36	H9			H18
104	86	5/92	DENT		110.00	H9	- 0.17		H18
110	86	5/92	DENT		28.15	H9	- 0.03		C37
112	86	5/92	DENT		46.87	H9	- 0.15		C37
114	86	5/92	DENT		69.95	H9	- 0.27		C37
118	86	5/92	DENT		24.97	H9	+ 0.26		C37
91	87	5/92	DENT		107.60	H9	- 0.12		H18
93	87	5/92	DENT		146.50	H9	- 0.06		H18
95	87	5/92	DENT		192.90	H9	+ 0.33		H18
97	87	5/92	DENT		108.50	H9	+ 0.12		H18
99	87	5/92	DENT		117.50	H9	+ 0.17		H18
101	87	5/92	DENT		85.17	H9	+ 0.06		H18
103	87	5/92	DENT		84.29	H9			H18
105	87	5/92	DENT		71.05	H9	+ 0.14		H18
107	87	5/92	DENT		44.78	H9	- 0.15		C37
109	87	5/92	DENT		74.65	H9	- 0.12		C37
111	87	5/92	DENT		74.19	H9	- 0.14		C37
113	87	5/92	DENT		54.03	H9	- 0.21		C37
115	87	5/92	DENT		83.16	H9			C37
117	87	5/92	DENT		84.03	H9			C37
92	88	5/92	DENT		118.10	H9	+ 0.52		19H
94	88	5/92	DENT		43.98	H9	+ 0.20		19H
96	88	5/92	DENT		147.90	H9	+ 0.06		19H
98	88	5/92	DENT		191.00	H9	+ 0.44		19H
100	88	5/92	DENT		137.50	H9			19H
102	88	5/92	DENT		116.70	H9	+ 0.31		19H
104	88	5/92	DENT		101.90	H9	+ 0.20		19H
106	88	5/92	DENT		71.39	H9	- 0.32		C37
110	88	5/92	DENT		85.18	H9	- 0.09		C37

Plant: CALVERT CLIFFS UNIT 1  
Outage: 5/92

Steam Generator: 12

QUERY: ALL DENT INDICATIONS - ALL LOCATIONS

ROW	LINE	OUTAGE	INDICATION	VALUE	VOLTS	LOCATION	INCHES	COMMENTS	REEL
112	88	5/92	DENT	59.05	H9		- 0.09		C37
114	88	5/92	DENT	40.72	H9		- 0.23		C37
120	88	5/92	DENT	27.27	H9		+ 0.15		C37
122	88	5/92	DENT	23.76	H9		+ 0.12		C37
91	89	5/92	DENT	69.42	H9				19M
93	89	5/92	DENT	70.23	H9		+ 0.17		19M
95	89	5/92	DENT	113.40	H9		+ 0.08		19M
97	89	5/92	DENT	139.50	H9				19M
99	89	5/92	DENT	143.40	H9		- 0.08		19M
101	89	5/92	DENT	26.74	H9		- 0.11		19M
103	89	5/92	DENT	81.81	H9				19M
105	89	5/92	DENT	40.01	H9		+ 0.17		19M
107	89	5/92	DENT	64.90	H9		- 0.11		C38
109	89	5/92	DENT	76.29	H9		- 0.06		C38
111	89	5/92	DENT	62.58	H9		- 0.12		C37
113	89	5/92	DENT	72.99	H9				C37
115	89	5/92	DENT	33.65	H9		- 0.35		C37
117	89	5/92	DENT	42.76	H9		+ 0.17		C37
121	89	5/92	DENT	43.68	H9		+ 0.06		C37
92	90	5/92	DENT	21.88	H9		- 0.06		H20
96	90	5/92	DENT	96.83	H9		- 0.14		H20
98	90	5/92	DENT	88.80	H9		+ 0.14		H20
100	90	5/92	DENT	56.92	H9		+ 0.05		H20
102	90	5/92	DENT	38.86	H9		+ 0.13		H20
104	90	5/92	DENT	63.09	H9		- 0.08		H20
106	90	5/92	DENT	146.30	H9		- 0.03		C38
108	90	5/92	DENT	149.20	H9		- 0.83		C38
112	90	5/92	DENT	77.90	H9				C38
114	90	5/92	DENT	47.87	H9		- 0.20		C38
116	90	5/92	DENT	19.29	H9		- 0.18		C38
97	91	5/92	DENT	63.57	H9		+ 0.14		H20
99	91	5/92	DENT	107.30	H9		- 0.14		H20
101	91	5/92	DENT	22.86	H9		+ 0.06		H20
103	91	5/92	DENT	42.49	H9		+ 0.06		H20
107	91	5/92	DENT	117.90	H9		- 0.17		C39
109	91	5/92	DENT	35.80	H9				C39
111	91	5/92	DENT	56.18	H9		- 0.06		C38
113	91	5/92	DENT	49.69	H9		- 0.12		C38
117	91	5/92	DENT	63.81	H9		+ 0.24		C38
94	92	5/92	DENT	44.21	H9		- 0.14		H21
96	92	5/92	DENT	51.24	H9		- 0.03		H21
98	92	5/92	DENT	74.36	H9		- 0.20	NRH WTS-PF +20.06	H21
100	92	5/92	DENT	106.80	H9		+ 0.17		H21
102	92	5/92	DENT	119.50	H9		+ 0.03		H21
104	92	5/92	DENT	73.97	H9		- 0.08		H21
108	92	5/92	DENT	51.06	H9		- 0.26	NRH WTS-SF -1.50	C39
110	92	5/92	DENT	76.49	H9		- 0.26		C39
112	92	5/92	DENT	96.18	H9		- 0.09		C39
118	92	5/92	DENT	42.29	H9		- 0.09	NRH WTS-SF -1.42"	C39
91	93	5/92	DENT	37.61	H9		- 0.03		H21
93	93	5/92	DENT	58.03	H9				H21
95	93	5/92	DENT	58.66	H9				H21
99	93	5/92	DENT	149.50	H9		- 0.11		H21
101	93	5/92	DENT	39.32	H9		- 0.14		H21
103	93	5/92	DENT	84.20	H9		+ 0.03		H21
105	93	5/92	DENT	78.93	H9		- 0.24		H21
107	93	5/92	DENT	46.55	H9		- 0.03		39A
109	93	5/92	DENT	30.19	H9		- 0.20		39A
111	93	5/92	DENT	73.15	H9		- 0.11		39A
113	93	5/92	DENT	81.81	H9		- 0.06		39A
119	93	5/92	DENT	49.52	H10		+36.66		39A
92	94	5/92	DENT	57.24	H9		+ 0.03		H22
94	94	5/92	DENT	18.91	H9		- 0.19		H22
98	94	5/92	DENT	127.80	H9		- 0.09	NRH WTS-PF +20.29	H22
100	94	5/92	DENT	146.40	H9		+ 0.17		H22
102	94	5/92	DENT	182.00	H9		- 0.16		H22
104	94	5/92	DENT	74.96	H9		- 0.17		H22

Plant: CALVERT CLIFFS UNIT 1  
Outage: 5/92

Steam Generator: 12

QUERY: ALL DENT INDICATIONS - ALL LOCATIONS

ROW	LINE	OUTAGE	INDICATION	VALUE	VOLTS	LOCATION	INCHES	COMMENTS	REEL
106	94	5/92	DENT	57.11	H9		- 0.03		39A
108	94	5/92	DENT	65.83	H9		- 0.09	NRH HTS-SF - 1.40"	39A
112	94	5/92	DENT	24.03	H9		- 0.14		39A
		5/92	DENT	18.35	VH				39A
114	94	5/92	DENT	74.16	H9		- 0.09		39A
126	94	5/92	DENT	20.80	VH				39A
128	94	5/92	DENT	25.92	VH				39A
91	95	5/92	DENT	115.40	H9		- 0.12		H22
93	95	5/92	DENT	74.73	H9				H22
95	95	5/92	DENT	50.22	H9		+ 0.06		H22
97	95	5/92	DENT	72.41	H9		+ 0.20		H22
99	95	5/92	DENT	141.70	H9		- 0.03		H22
101	95	5/92	DENT	125.00	H9		- 0.14		H22
103	95	5/92	DENT	98.61	H9				H22
105	95	5/92	DENT	63.75	H9		- 0.11		H22
107	95	5/92	DENT	38.33	H9		- 0.40		C40
109	95	5/92	DENT	50.92	H9		- 0.31		C40
111	95	5/92	DENT	22.40	H9		- 0.09		C40
113	95	5/92	DENT	48.98	H9		- 0.03		C40
92	96	5/92	DENT	145.90	H9		- 0.23		22A
94	96	5/92	DENT	32.77	H9		- 0.17		22A
98	96	5/92	DENT	136.20	H9		- 0.14		22A
100	96	5/92	DENT	186.90	H9		- 0.14		22A
102	96	5/92	DENT	82.28	H9		- 0.03		22A
104	96	5/92	DENT	29.63	H9		+ 0.06		22A
106	96	5/92	DENT	80.97	H9		- 0.31		C40
108	96	5/92	DENT	32.45	H9		- 0.28	NRH HTS-SF - 1.88"	C40
120	96	5/92	DENT	17.87	H10		+ 0.12		C40
91	97	5/92	DENT	21.80	C9		- 0.08		H23
		5/92	DENT	96.61	H9		- 0.08		H23
93	97	5/92	DENT	111.30	H9		- 0.03		H23
97	97	5/92	DENT	37.62	H9		- 0.28		H23
99	97	5/92	DENT	83.51	H9		+ 0.03		H23
101	97	5/92	DENT	88.15	H9				H23
103	97	5/92	DENT	117.70	H9		- 0.17		H23
105	97	5/92	DENT	71.37	H9		+ 0.14		H23
107	97	5/92	DENT	40.28	H9		- 0.31		C40
92	98	5/92	DENT	98.13	H9		- 0.23		H23
94	98	5/92	DENT	34.67	H9		- 0.11		H23
98	98	5/92	DENT	47.59	H9		- 0.17		H23
102	98	5/92	DENT	96.66	H9		- 0.08		H23
106	98	5/92	DENT	92.01	H9		- 0.03		C40
108	98	5/92	DENT	40.23	H9		- 0.03		C40
91	99	5/92	DENT	42.02	H9		- 0.11		H24
93	99	5/92	DENT	128.50	H9		- 0.06		H24
95	99	5/92	DENT	23.52	H9		+ 0.06		H24
99	99	5/92	DENT	69.05	H9		+ 0.11		H24
101	99	5/92	DENT	69.56	H9		+ 0.11		H24
103	99	5/92	DENT	61.09	H9		+ 0.08		H24
105	99	5/92	DENT	67.38	H9		+ 0.14		H24
107	99	5/92	DENT	40.23	H9		- 0.44		C41
111	99	5/92	DENT	29.77	H9				C41
92	100	5/92	DENT	66.33	H9		- 0.20		H24
94	100	5/92	DENT	156.20	H9		- 0.09		H24
100	100	5/92	DENT	74.70	H9		- 0.03		H24
102	100	5/92	DENT	83.20	H9		+ 0.06		H24
104	100	5/92	DENT	58.44	H9		- 0.11		H24
106	100	5/92	DENT	145.40	H9		- 0.03		C41
108	100	5/92	DENT	32.26	H9		- 0.23		C41
110	100	5/92	DENT	17.79	H9		- 0.37		C41
120	100	5/92	DENT	41.11	H10		+ 0.03		C41
122	100	5/92	DENT	44.25	H10		+ 0.29		C41
93	101	5/92	DENT	75.04	H9		- 0.03		H25
97	101	5/92	DENT	64.08	H9		- 0.17		H25
99	101	5/92	DENT	74.84	H9		- 0.03		H25
105	101	5/92	DENT	72.57	H9		- 0.03		H25
107	101	5/92	DENT	70.92	H9		- 0.06		C41

Plant: CALVERT CLIFFS UNIT 1  
Outage: 5/92

Steam Generator: 12

QUERY: ALL DENT INDICATIONS - ALL LOCATIONS

ROW	LINE	OUTAGE	INDICATION	VALUE	VOLTS	LOCATION	INCHES	COMMENTS	REEL
109	101	5/92	DENT		43.30	H9			C41
111	101	5/92	DENT		38.25	H9	- 0.17		C41
119	101	5/92	DENT		38.44	H10	+ 0.03		C41
121	101	5/92	DENT		79.47	H10			C41
92	102	5/92	DENT		53.82	H9	- 0.11		H25
96	102	5/92	DENT		66.48	H9	- 0.31		H25
100	102	5/92	DENT		88.66	H9	- 0.11		H25
106	102	5/92	DENT		61.90	H9	- 0.37		C41
110	102	5/92	DENT		59.85	H9	- 0.23		C41
112	102	5/92	DENT		34.81	H9	- 0.23		C41
118	102	5/92	DENT		37.43	H10	+ 0.26		C41
120	102	5/92	DENT		48.52	H10	+ 0.12		C41
93	103	5/92	DENT		79.09	H9			H26
99	103	5/92	DENT		79.98	H9	- 0.66		H26
107	103	5/92	DENT		22.97	H9	- 0.03		C42
111	103	5/92	DENT		36.92	H9	- 0.37		C42
92	104	5/92	DENT		59.39	H9	- 0.17		H26
96	104	5/92	DENT		86.65	H9	- 0.25		H26
100	104	5/92	DENT		122.90	H9	- 0.09		H26
102	104	5/92	DENT		80.18	H9	+ 0.11		H26
106	104	5/92	DENT		108.00	H9	- 0.20		C42
108	104	5/92	DENT		40.77	H9	- 0.31		C42
110	104	5/92	DENT		80.79	H9	- 0.23		C42
91	105	5/92	DENT		104.00	H9	- 0.12		26M
93	105	5/92	DENT		75.85	H9			26M
95	105	5/92	DENT		113.70	H9	- 0.03		26M
97	105	5/92	DENT		103.50	H9	- 0.12		26M
109	105	5/92	DENT		61.74	H9	- 0.26		C42
117	105	5/92	DENT		46.27	H10	+ 0.03		C42
119	105	5/92	DENT		55.70	H10	+ 0.18		C42
92	106	5/92	DENT		77.11	H9			H27
94	106	5/92	DENT		124.80	H9	+ 0.62		H27
96	106	5/92	DENT		117.30	H9	- 0.23		H27
98	106	5/92	DENT		104.20	H9	- 0.11		H27
100	106	5/92	DENT		161.10	H9	- 0.14		H27
108	106	5/92	DENT		27.44	H9	- 0.09		C42
91	107	5/92	DENT		59.94	H9	- 0.20		29M
93	107	5/92	DENT		97.93	H9	- 0.20		29M
95	107	5/92	DENT		58.14	H9	- 0.14		29M
97	107	5/92	DENT		125.50	H9	- 0.12		29M
99	107	5/92	DENT		100.60	H9	- 0.06		29M
101	107	5/92	DENT		109.80	H9	- 0.20		29M
103	107	5/92	DENT		40.34	H9	- 0.17		29M
107	107	5/92	DENT		70.35	H9	- 0.03		C43
109	107	5/92	DENT		66.02	H9	- 0.26		C43
92	108	5/92	DENT		79.09	H9	- 0.20		H33
94	108	5/92	DENT		78.33	H9	+ 0.06		H33
96	108	5/92	DENT		83.64	H9	- 0.23		H33
98	108	5/92	DENT		66.17	H9	+ 0.09		H33
100	108	5/92	DENT		89.47	H9	- 0.06		H33
102	108	5/92	DENT		114.30	H9	- 0.14		H33
106	108	5/92	DENT		45.70	H9			C43
108	108	5/92	DENT		60.65	H9	- 0.06		C43
110	108	5/92	DENT		43.45	H9	- 0.06		C42
91	109	5/92	DENT		49.52	H9	- 0.23		H33
93	109	5/92	DENT		81.53	H9	- 0.03		H33
95	109	5/92	DENT		132.80	H9	- 0.12		H33
97	109	5/92	DENT		106.80	H9	- 0.15		H33
99	109	5/92	DENT		98.55	H9	- 0.12		H33
103	109	5/92	DENT		30.85	H9	- 0.29		H33
105	109	5/92	DENT		69.78	H9	+ 0.34		29M
107	109	5/92	DENT		47.72	H9	- 0.26		C83
		5/92	DENT		48.19	YC			C83
109	109	5/92	DENT		63.45	H9	- 0.20		C43
92	110	5/92	DENT		76.03	H9	- 0.23		C43
94	110	5/92	DENT		144.10	H9	- 0.01		C43
98	110	5/92	DENT		119.50	H9			C43

Plant: CALVERT CLIFFS UNIT 1  
Outage: 5/92

Steam Generator: 12

QUERY: ALL DENT INDICATIONS - ALL LOCATIONS

ROW	LINE	OUTAGE	INDICATION	VALUE	VOLTS	LOCATION	INCHES	COMMENTS	REEL
100	110	5/92	DENT	104.90	H9		- 0.26		C43
102	110	5/92	DENT	27.91	H9		- 0.17		C43
91	111	5/92	DENT	61.07	H9		- 0.09		C44
93	111	5/92	DENT	110.40	H9		- 0.06		C44
95	111	5/92	DENT	87.26	H9		- 0.11		C44
97	111	5/92	DENT	81.75	H9		- 0.03		C44
101	111	5/92	DENT	48.22	H9		- 0.06		C44
105	111	5/92	DENT	23.05	H9		- 0.06		C44
109	111	5/92	DENT	27.63	H9		- 0.03		C44
92	112	5/92	DENT	74.10	H9		- 0.12		C44
94	112	5/92	DENT	84.87	H9		- 0.06		C44
96	112	5/92	DENT	108.50	H9		- 0.03		C44
98	112	5/92	DENT	58.15	H9		- 0.20		C44
100	112	5/92	DENT	96.68	H9		- 0.26		C44
102	112	5/92	DENT	57.08	H9		- 0.03		C44
108	112	5/92	DENT	33.14	H9		- 0.17		C44
110	112	5/92	DENT	33.11	H9		- 0.14		C44
1	113	5/92	DENT	21.06	C6		- 3.80		C44
93	113	5/92	DENT	110.00	H9		- 0.06		C45
95	113	5/92	DENT	92.53	H9		- 0.03		C45
97	113	5/92	DENT	95.94	H9		- 0.09		C45
99	113	5/92	DENT	91.03	H9				C45
101	113	5/92	DENT	52.08	H9		- 0.06		C45
103	113	5/92	DENT	52.65	H9		- 0.03		C45
105	113	5/92	DENT	76.20	H9				C45
92	114	5/92	DENT	78.73	H9				C45
94	114	5/92	DENT	84.90	H9		- 0.09		C45
96	114	5/92	DENT	127.20	H9		- 0.26		C45
98	114	5/92	DENT	59.80	H9		- 0.18		C45
100	114	5/92	DENT	105.70	H9		- 0.27		C45
102	114	5/92	DENT	34.96	H9		- 0.35		C45
104	114	5/92	DENT	70.40	H9				C45
106	114	5/92	DENT	65.51	H9		- 0.17		C45
110	114	5/92	DENT	52.16	H9		- 0.17		C45
69	115	5/92	DENT	27.21	H8		+ 1.30		H32
	5/92		DENT	15.25	H7		+16.70		H32
91	115	5/92	DENT	43.72	H9		- 0.03		C45
93	115	5/92	DENT	135.90	H9		- 0.06		C45
95	115	5/92	DENT	88.36	H9		- 0.12		C45
97	115	5/92	DENT	76.91	H9		- 0.23		C45
99	115	5/92	DENT	58.42	H9		- 0.03		C45
101	115	5/92	DENT	32.79	H9		- 0.24		C45
103	115	5/92	DENT	26.82	H9		- 0.06		C45
105	115	5/92	DENT	63.61	H9		- 0.06		C45
109	115	5/92	DENT	49.61	H9		- 0.06		C45
111	115	5/92	DENT	42.68	H9		- 0.14		C45
115	115	5/92	DENT	28.15	H9		- 0.03		C45
92	116	5/92	DENT	86.02	H9		- 0.03		C46
94	116	5/92	DENT	102.40	H9				C46
96	116	5/92	DENT	53.72	H9		- 0.06		C46
98	116	5/92	DENT	66.23	H9		- 0.09		C46
102	116	5/92	DENT	49.14	H9		- 0.09		C46
104	116	5/92	DENT	47.50	H9		- 0.26		C46
106	116	5/92	DENT	43.25	H9		- 0.09		C46
108	116	5/92	DENT	66.52	H9		- 0.09		C46
110	116	5/92	DENT	52.68	H9		- 0.11		C46
112	116	5/92	DENT	41.43	H9		- 0.35		C46
91	117	5/92	DENT	54.34	H9		- 0.06		C46
93	117	5/92	DENT	70.41	H9		- 0.03		C46
95	117	5/92	DENT	52.92	H9		- 0.11		C46
97	117	5/92	DENT	104.70	H9		- 0.11		C46
99	117	5/92	DENT	19.74	H9		- 0.11		C46
105	117	5/92	DENT	23.90	H9		- 0.06		C46
109	117	5/92	DENT	142.10	H9		- 0.14		C46
111	117	5/92	DENT	67.26	H9		- 0.11		C46
92	118	5/92	DENT	57.77	H9		- 0.17		C47
94	118	5/92	DENT	54.72	H9		- 0.09		C47

Plant: CALVERT CLIFFS UNIT 1  
Outage: 5/92

Steam Generator: 12

QUERY: ALL DENT INDICATIONS - ALL LOCATIONS

ROW	LINE	OUTAGE	INDICATION	VALUE	VOLTS	LOCATION	INCHES	COMMENTS	REEL
96	118	5/92	DENT		99.08	H9	- 0.09		C47
98	118	5/92	DENT		64.44	H9	- 0.03		C47
100	118	5/92	DENT		46.36	H9	- 0.12		C47
102	118	5/92	DENT		68.85	H9	- 0.06		C47
104	118	5/92	DENT		41.53	H9	- 0.20		C47
108	118	5/92	DENT		37.47	H9	- 0.03		C47
110	118	5/92	DENT		86.67	H9	- 0.09		C47
112	118	5/92	DENT		111.26	H9	- 0.09		47A
95	119	5/92	DENT		27.50	H9	- 0.35		47A
97	119	5/92	DENT		60.51	H9	- 0.03		47A
99	119	5/92	DENT		81.73	H9	- 0.09		47A
101	119	5/92	DENT		66.28	H9	- 0.06		47A
103	119	5/92	DENT		33.83	H9	- 0.09		47A
109	119	5/92	DENT		27.02	H9	- 0.14		47A
111	119	5/92	DENT		92.54	H9	- 0.14		47A
94	120	5/92	DENT		32.54	H9			C48
96	120	5/92	DENT		36.64	H9	- 0.06		C48
98	120	5/92	DENT		38.40	H9	- 0.17		C48
100	120	5/92	DENT		100.40	H9	- 0.09		C48
102	120	5/92	DENT		105.60	H9			C48
104	120	5/92	DENT		102.90	H9	- 0.03		C48
108	120	5/92	DENT		64.11	H9			C48
110	120	5/92	DENT		59.66	H9	- 0.14		C48
93	121	5/92	DENT		76.87	H9	- 0.17		C48
95	121	5/92	DENT		80.54	H9			C48
97	121	5/92	DENT		63.68	H9	- 0.17		C48
99	121	5/92	DENT		27.05	H9	- 0.09		C48
101	121	5/92	DENT		71.56	H9	- 0.03		C48
103	121	5/92	DENT		84.11	H9	- 0.17		C48
107	121	5/92	DENT		33.64	H9	- 0.14		C48
109	121	5/92	DENT		31.98	H9	- 0.26		C48
92	122	5/92	DENT		80.58	H9	- 0.14		C48
94	122	5/92	DENT		63.12	H9	- 0.03		C48
96	122	5/92	DENT		48.36	H9	- 0.09		C48
98	122	5/92	DENT		53.43	H9	- 0.06		C48
106	122	5/92	DENT		74.94	H9	- 0.17		C48
108	122	5/92	DENT		40.09	H9	- 0.09		C48
110	122	5/92	DENT		39.80	H9	- 0.06		C48
112	122	5/92	DENT		50.45	H9	- 0.40		C49
114	122	5/92	DENT		36.04	H9	- 0.06		C49
93	123	5/92	DENT		38.10	H9	- 0.06		C49
95	123	5/92	DENT		19.18	H8	+ 2.36		C49
97	123	5/92	DENT		32.78	H9	- 0.23		C49
99	123	5/92	DENT		115.20	H9	- 0.26		C49
101	123	5/92	DENT		26.54	H9	- 0.06		C49
103	123	5/92	DENT		30.15	H9	- 0.26		C49
107	123	5/92	DENT		31.38	H9	- 0.14		C49
111	123	5/92	DENT		45.64	H9	- 0.23		C49
113	123	5/92	DENT		80.20	H9	- 0.03		C49
115	123	5/92	DENT		46.27	H9	- 0.14		C49
92	124	5/92	DENT		34.22	H9	- 0.09		C49
94	124	5/92	DENT		57.56	H9			C49
96	124	5/92	DENT		94.83	H9	- 0.35		C49
98	124	5/92	DENT		50.63	H9	- 0.06		C49
100	124	5/92	DENT		82.21	H9	- 0.03		C49
102	124	5/92	DENT		56.69	H9	- 0.12		C49
104	124	5/92	DENT		44.69	H9	- 0.20		C49
106	124	5/92	DENT		44.17	H9	- 0.06		C49
108	124	5/92	DENT		48.66	H9	- 0.29		C49
114	124	5/92	DENT		25.75	H9	- 0.06		C49
93	125	5/92	DENT		43.47	H9			C50
95	125	5/92	DENT		51.90	H9	- 0.23		C50
97	125	5/92	DENT		95.82	H9	- 0.20		C50
99	125	5/92	DENT		119.00	H9	- 0.12		C50
101	125	5/92	DENT		47.76	H9	- 0.12		C50
103	125	5/92	DENT		38.89	H9	- 0.09		C50
105	125	5/92	DENT		47.68	H9	- 0.20		C50

Plant: CALVERT CLIFFS UNIT 1  
Outage: 5/92

Steam Generator: 12

QUERY: ALL DENT INDICATIONS - ALL LOCATIONS

ROW	LINE	OUTAGE	INDICATION	VALUE	VOLTS	LOCATION	INCHES	COMMENTS	REEL
107	125	5/92	DENT		58.40	H9	- 0.32		C50
109	125	5/92	DENT		38.30	H9	- 0.29		C50
94	126	5/92	DENT		102.30	H9			C50
96	126	5/92	DENT		72.29	H9	- 0.15		C50
98	126	5/92	DENT		61.23	H9	- 0.12		C50
100	126	5/92	DENT		45.35	H9	- 0.03		C50
102	126	5/92	DENT		114.30	H9	- 0.12		C50
104	126	5/92	DENT		121.00	H9	- 0.03		C50
106	126	5/92	DENT		77.22	H9	- 0.20		C50
108	126	5/92	DENT		23.48	H9	- 0.29		C50
91	127	5/92	DENT		35.32	H9	- 0.06		C50
95	127	5/92	DENT		75.71	H9	- 0.03		C50
97	127	5/92	DENT		60.96	H9	- 0.06		C50
99	127	5/92	DENT		97.10	H9	- 0.03		C50
92	128	5/92	DENT		168.80	H9	- 0.06		C51
94	128	5/92	DENT		61.71	H9	- 0.14		C51
96	128	5/92	DENT		91.48	H9	- 0.23		C51
91	129	5/92	DENT		111.00	H9	- 0.06		C51
		5/92	DENT		23.54	C9	+ 1.75		C51
93	129	5/92	DENT		131.60	H9	- 0.09		C51
95	129	5/92	DENT		39.61	H9	- 0.23		C51
99	129	5/92	DENT		26.87	H9	- 0.03		C51
91	131	5/92	DENT		131.40	H9	- 0.12		C53
93	131	5/92	DENT		55.97	H9	- 0.15		C53
70	132	5/92	DENT		16.52	H7	+18.52		C56
92	132	5/92	DENT		77.63	H9	- 0.06		C56
94	132	5/92	DP'T		45.30	H9	- 0.20		C56
98	132	5/92	DENT		33.27	H9	- 0.06		C56
108	132	5/92	DENT		15.89	H9	- 0.23		C56
70	136	5/92	DENT		56.97	C8	+61.57		C58
		5/92	DENT		40.97	C8	+77.52		C58
		5/92	DENT		22.62	C8	+74.94		C58
		5/92	DENT		16.23	C8	+50.15		C58
63	142	5/92	DENT		19.63	VM			C81
4	148	5/92	DENT		15.81	C6	+ 1.16		C71
4	152	5/92	DENT		16.11	C6	+16.01		C71
4	156	5/92	DENT		16.08	C6	+ 1.18		C71
9	159	5/92	DENT		17.70	C6	+ 6.93		C73
7	161	5/92	DENT		15.15	C6	+21.34		C73
7	163	5/92	DENT		16.12	C6	+ 5.86		C73
7	165	5/92	DENT		15.13	C6	+ 5.79		C73
14	166	5/92	DENT		21.27	C6	+19.56		C73

TOTAL TUBES FOUND = 823  
TOTAL INDICATIONS FOUND = 846

TOTAL TUBES IN INPUT FILE = 8519  
TOTAL TUBES INSPECTED = 8450



STEAM GENERATOR #12

F. Plot with List of Tubes Plugged April/May 1992

# TUBES PLUGGED IN 5/92 OUTAGE]

OUTAGE: 5/92 PLANT: CALVERT CLIFFS UNIT 1

GENERATOR 12

1 = MECH-W (8)  
4 = WELD-CE (0)

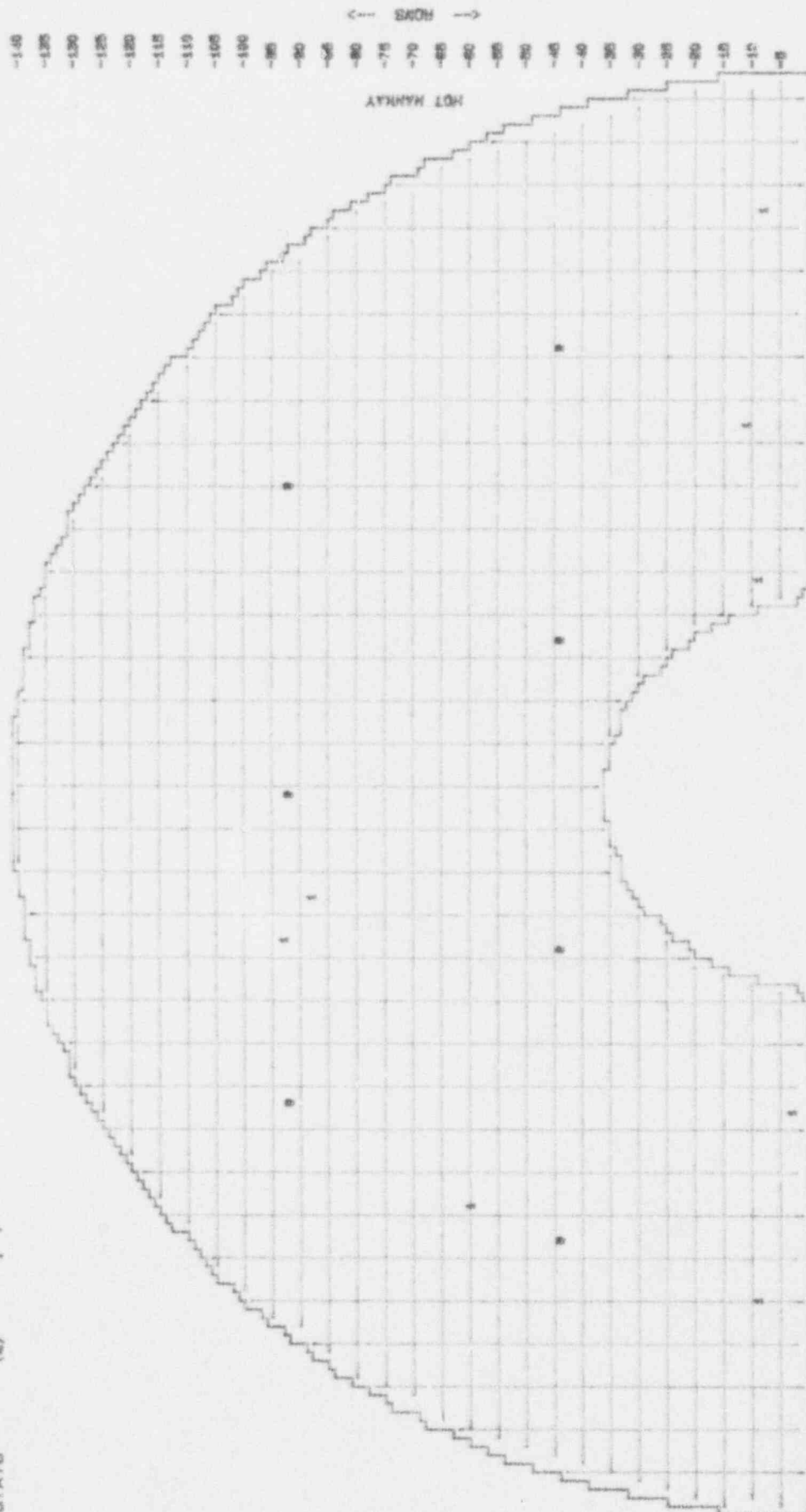
2 = WELD-W (0)

3 = WELD-CE (0)

TOTAL TUBES : 8519  
STAYS : 7

TOTAL TUBES ASSIGNED : 8

180 DEG





STEAM GENERATOR #12

G. Plot with List of All Tubes Plugged All Outages

ALL PLUGGED TUBES - ALL OUTAGES

PLANT: CALVERT CLIFFS UNIT 1

GENERATOR: 12

OUTAGES: 01/79 06/82 10/83 04/85 10/86 04/88 5/90 5/92

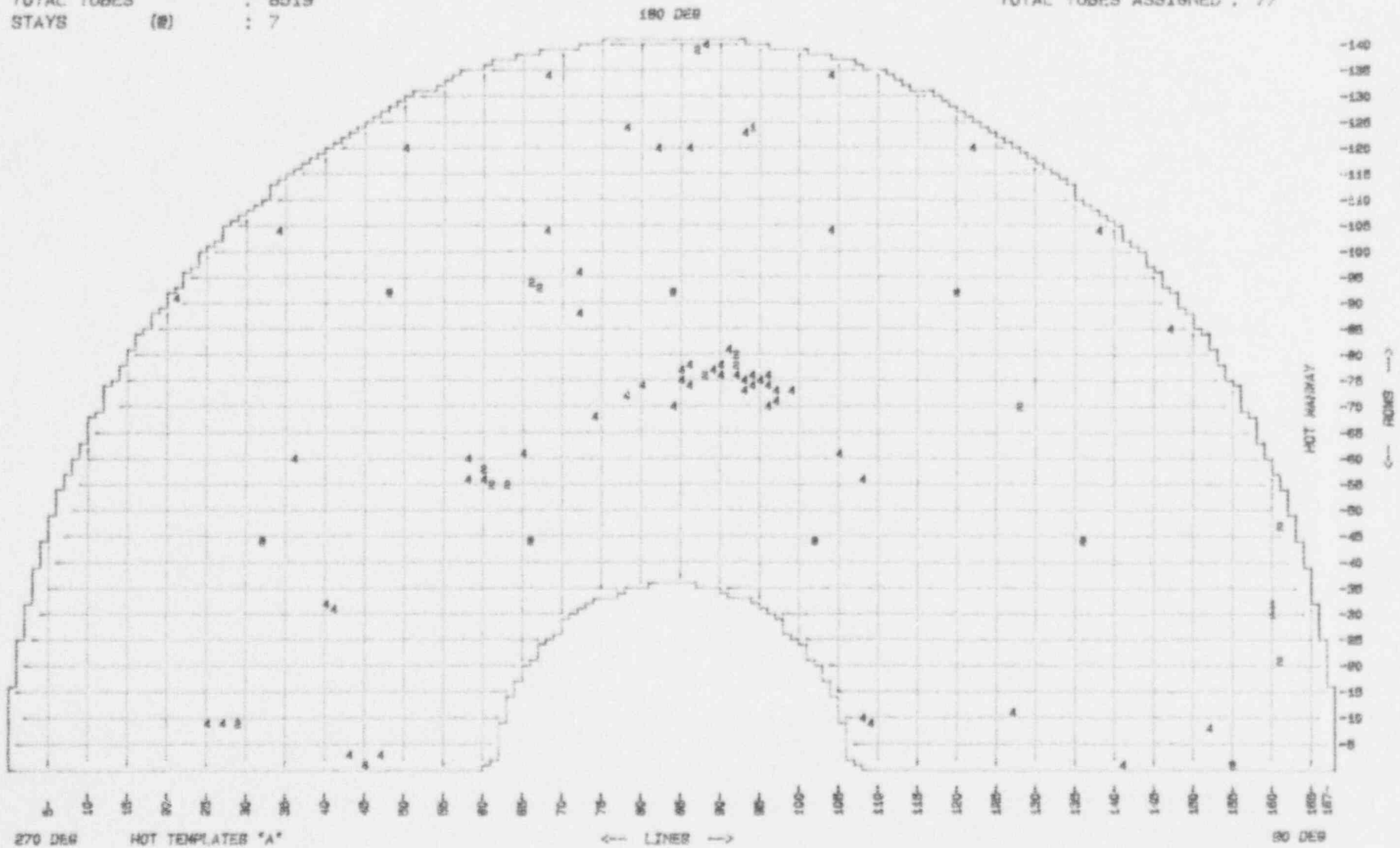
1 = CONST (3)  
4 = MECH-W (50)

2 = MECH-CE (1-4)  
5 = WELD-N (0)

S = MELD-CE (10)

TOTAL TUBES	:	8519
STAYS (2)	:	7

TOTAL TUBES ASSIGNED : 77



NO BONE TUMORS (71) 1959, 3, 0 Wednesday November 21, 1960 02:10 AM AM

Plant: CALVERT CLIFFS UNIT 1 Steam Generator: 12  
Outages: 01/79 06/82 10/83 04/85 10/86 04/88 5/90 5/92

QUERY: ALL PLUGGED TUBES - ALL OUTAGES

ROW	LINE	OUTAGE	INDICATION	VALUE	VOLTS	LOCATION	INCHES	COMMENTS	REEL
91	21	06/82	PLUGGED	MECH-W		CTS-PF		BURN HOLE RIM CUT	3
		06/82	PLUGGED	MECH-W		HTS-PF			
9	25	5/92	PLUGGED	MECH-W		HTS-PF		PLG	61A
		5/92	PLUGGED	MECH-W		CTS-PF			
9	27	04/85	PLUGGED	MECH-W		CTS-PF		C6+17.8 U/B APEX	69
		04/85	PLUGGED	MECH-W		HTS-PF			
9	29	10/86	PLUGGED	MECH-CE		HTS-PF			C1
		10/86	PLUGGED	MECH-CE		CTS-PF			
104	34	06/82	PLUGGED	MECH-W		CTS-PF		RIM CUT STAKING LOC.	6
		06/82	PLUGGED	MECH-W		HTS-PF			
60	36	5/92	PLUGGED	MECH-W		HTS-PF		SAI FROM NPC RETEST	C15
		5/92	PLUGGED	MECH-W		CTS-PF			
32	40	04/88	PLUGGED	MECH-W		HTS-PF			C38
		04/88	PLUGGED	MECH-W		CTS-PF			
31	43	04/88	PLUGGED	MECH-W		HTS-PF			C3A
		04/88	PLUGGED	MECH-W		CTS-PF			
3	43	04/85	PLUGGED	MECH-W		CTS-PF		HTS+1.2	63
		04/85	PLUGGED	MECH-W		HTS-PF			
1	45	04/88	PLUGGED	MECH-W		HTS-PF			C56
		04/88	PLUGGED	MECH-W		CTS-PF			
8	47	5/92	PLUGGED	MECH-W		HTS-PF		PLG	C69
		5/92	PLUGGED	MECH-W		CTS-PF			
120	50	06/82	PLUGGED	MECH-W		CTS-PF		RIM CUT STAKING LOC.	2
		06/82	PLUGGED	MECH-W		HTS-PF			
56	58	04/85	PLUGGED	MECH-W		CTS-PF		DCTS,DHTS,HTS+0.7"	9A
		04/85	PLUGGED	MECH-W		HTS-PF			
60	58	04/88	PLUGGED	MECH-W		HTS-PF			C50
		04/88	PLUGGED	MECH-W		CTS-PF			
56	60	04/85	PLUGGED	MECH-W		CTS-PF		DHTS,HTS+0.6"	9A
		04/85	PLUGGED	MECH-W		HTS-PF			
58	60	10/86	PLUGGED	MECH-CE		HTS-PF			C1
		10/86	PLUGGED	MECH-CE		CTS-PF			
55	61	10/86	PLUGGED	MECH-CE		HTS-PF			C4
		10/86	PLUGGED	MECH-CE		CTS-PF			
55	63	10/86	PLUGGED	MECH-CE		HTS-PF			C35
		10/86	PLUGGED	MECH-CE		CTS-PF			
61	65	04/88	PLUGGED	MECH-W		HTS-PF			C2
		04/88	PLUGGED	MECH-W		CTS-PF			
94	66	10/86	PLUGGED	MECH-CE		HTS-PF		IN 4/88 VERIFIED HL PLG IN R931A7	C103
		04/88	PLUGGED	MECH-W		CTS-PF		CL NOT PLUGGED, DATA MATCHES NOV 86	C19,62
93	67	10/86	PLUGGED	MECH-CE		CTS-PF		4/88 FOUND CTS-PF MISPLUGGED BY CE	C69
		5/92	PLUGGED	MECH-W		HTS-PF		HOT LEG PLUGGED; C/L PLG IN 1986	H34
104	68	06/82	PLUGGED	MECH-W		CTS-PF		RIM CUT STAKING LOC.	11
		06/82	PLUGGED	MECH-W		HTS-PF			
134	68	06/82	PLUGGED	MECH-W		CTS-PF		RIM CUT STAKING LOC.	1
		06/82	PLUGGED	MECH-W		HTS-PF			
88	72	5/92	PLUGGED	MECH-W		HTS-PF		PLG	H12
		5/92	PLUGGED	MECH-W		CTS-PF			
96	72	10/83	PLUGGED	MECH-W		CTS-PF		30"A C1 PLUGGED TI-1874347	9,17
		10/83	PLUGGED	MECH-W		HTS-PF			
68	74	04/88	PLUGGED	MECH-W		HTS-PF			C8
		04/88	PLUGGED	MECH-W		CTS-PF			
72	76	5/90	PLUGGED	MECH-W		HTS-PF			C48
		5/90	PLUGGED	MECH-W		CTS-PF			
124	78	10/83	PLUGGED	MECH-W		CTS-PF		12"A C8 PLUGGED TI-1317,9264RL17,91	7,16
		10/83	PLUGGED	MECH-W		HTS-PF			
74	80	5/90	PLUGGED	MECH-W		HTS-PF			C49
		5/90	PLUGGED	MECH-W		CTS-PF			
120	82	06/82	PLUGGED	MECH-W		CTS-PF		RIM CUT STAKING LOC.	11
		06/82	PLUGGED	MECH-W		HTS-PF			
70	84	04/88	PLUGGED	MECH-W		HTS-PF			C8
		04/88	PLUGGED	MECH-W		CTS-PF			
75	85	04/85	PLUGGED	MECH-W		CTS-PF		HTS+1.3	52
		04/85	PLUGGED	MECH-W		HTS-PF			
77	85	04/88	PLUGGED	MECH-W		HTS-PF		DI CHANGED TO OD IND ON TAPE H55	C7,H56
		04/88	PLUGGED	MECH-W		CTS-PF			
74	86	04/88	PLUGGED	MECH-W		HTS-PF		INF AT HTS-SF+0.80	C7

Plant: CALVERT CLIFFS UNIT 1  
 Outages: 01/79 06/82 10/83 04/85 10/86 04/88 5/90 5/92 Steam Generator: 12

QUERY: ALL PLUGGED TUBES - ALL OUTAGES

ROW	LINE	OUTAGE	INDICATION	VALUE	VOLTS	LOCATION	INCHES	COMMENTS	FEEL
78	86	04/88	PLUGGED	MECH-W		CTS-PF			
		04/88	PLUGGED	MECH-W		HTS-PF			C7
		04/88	PLUGGED	MECH-W		CTS-PF			
120	86	06/82	PLUGGED	MECH-W		CTS-PF		RIM CUT STAKING LOC.	10
		06/82	PLUGGED	MECH-W		HTS-PF			
139	87	10/86	PLUGGED	MECH-CE		HTS-PF			C12
		10/86	PLUGGED	MECH-CE		CTS-PF			
76	88	10/86	PLUGGED	MECH-CE		HTS-PF			C3
		10/86	PLUGGED	MECH-CE		CTS-PF			
140	88	04/85	PLUGGED	MECH-W		CTS-PF		HTS+20.3	22
		04/85	PLUGGED	MECH-W		HTS-PF			
77	89	04/88	PLUGGED	MECH-W		HTS-PF			C7
		04/88	PLUGGED	MECH-W		CTS-PF			
76	90	04/88	PLUGGED	MECH-W		HTS-PF		INF AT HTS-SP+0.00	C7
		04/88	PLUGGED	MECH-W		CTS-PF			
78	90	04/88	PLUGGED	MECH-W		HTS-PF			C7
		04/88	PLUGGED	MECH-W		CTS-PF			
81	91	04/88	PLUGGED	MECH-W		HTS-PF			C6
		04/88	PLUGGED	MECH-W		CTS-PF			
76	92	04/88	PLUGGED	MECH-W		HTS-PF			C7
		04/88	PLUGGED	MECH-W		CTS-PF			
78	92	10/86	PLUGGED	MECH-CE		HTS-PF			C3
		10/86	PLUGGED	MECH-CE		CTS-PF			
80	92	10/86	PLUGGED	MECH-CE		HTS-PF			C3
		10/86	PLUGGED	MECH-CE		CTS-PF			
73	93	04/88	PLUGGED	MECH-W		HTS-PF		VER AT HTS-SF + 0.3	C7
		04/88	PLUGGED	MECH-W		CTS-PF			
75	93	04/88	PLUGGED	MECH-W		HTS-PF		NDD H56, REEVAL 55% 8/89, PLUGGED 9/22	C7, H56
		04/88	PLUGGED	MECH-W		CTS-PF			
123	93	5/90	PLUGGED	MECH-W		HTS-PF			H51
		5/90	PLUGGED	MECH-W		CTS-PF			
74	94	04/88	PLUGGED	MECH-W		HTS-PF			C7
		04/88	PLUGGED	MECH-W		CTS-PF			
76	94	04/85	PLUGGED	MECH-W		CTS-PF		HTS+0.5; HTS+1.0	50
		04/85	PLUGGED	MECH-W		HTS-PF			
124	94	04/85	PLUGGED	CONST		CTS-PF		CONST PLOG VERIFIED IN 4/88 OUTAGE	24
		04/85	PLUGGED	CONST		HTS-PF		CONSTRUCTION PLOG	
75	95	04/88	PLUGGED	MECH-W		HTS-PF			C7, H52
		04/88	PLUGGED	MECH-W		CTS-PF			
70	96	04/88	PLUGGED	MECH-W		HTS-PF			C8
		04/88	PLUGGED	MECH-W		CTS-PF			
74	96	04/88	PLUGGED	MECH-W		HTS-PF			C7
		04/88	PLUGGED	MECH-W		CTS-PF			
76	96	04/85	PLUGGED	MECH-W		CTS-PF		HTS+0.4	50
		04/85	PLUGGED	MECH-W		HTS-PF			
71	97	04/88	PLUGGED	MECH-W		HTS-PF			C8
		04/88	PLUGGED	MECH-W		CTS-PF			
73	97	04/88	PLUGGED	MECH-W		HTS-PF			C7
		04/88	PLUGGED	MECH-W		CTS-PF			
75	99	04/88	PLUGGED	MECH-W		HTS-PF		DI CONFIRMED ON TAPE H56	C7, H56
		04/88	PLUGGED	MECH-W		CTS-PF			
104	104	06/82	PLUGGED	MECH-W		CTS-PF		RIM CUT STAKING LOC.	9
		06/82	PLUGGED	MECH-W		HTS-PF			
134	104	06/82	PLUGGED	MECH-W		CTS-PF		RIM CUT STAKING LOC.	7
		06/82	PLUGGED	MECH-W		HTS-PF			
61	105	04/88	PLUGGED	MECH-W		HTS-PF			H8
		04/88	PLUGGED	MECH-W		CTS-PF			
10	106	04/88	PLUGGED	MECH-W		HTS-PF			C56
		04/88	PLUGGED	MECH-W		CTS-PF			
56	106	04/88	PLUGGED	MECH-W		HTS-PF		PROB GOOD TUBE, TS FINGERPRINT	H10, 99
		04/88	PLUGGED	MECH-W		CTS-PF			
9	109	5/92	PLUGGED	MECH-W		HTS-PF		PLG	C65
		5/92	PLUGGED	MECH-W		CTS-PF			
120	122	06/82	PLUGGED	MECH-W		CTS-PF		RIM CUT STAKING LOC.	7
		06/82	PLUGGED	MECH-W		HTS-PF			
11	127	5/92	PLUGGED	MECH-W		HTS-PF		APT AT VM STEAM BLANKET REGION	H28
		5/92	PLUGGED	MECH-W		CTS-PF			



Plant: CALVERT CLIFFS UNIT 1  
 Outages: 01/79 06/82 10/83 04/85 10/86 04/88 5/90 5/92 Steam Generator: 12

QUERY: ALL PLUGGED TUBES - ALL OUTAGES

ROW	LINE	OUTAGE	INDICATION	VALVE	VOLTS	LOCATION	INCHES	COMMENTS	HEEL
70	128	10/86	PLUGGED	MECH-CE	HTS-PF			2 EXP	C105
		10/86	PLUGGED	MECH-CE	CTS-PF				
104	138	06/82	PLUGGED	MECH-W	CTS-PF			RIM CUT STAKING LOC.	8
		06/82	PLUGGED	MECH-W	HTS-PF				
1	141	04/88	PLUGGED	MECH-W	HTS-PF			7/89 30-60DPM LEAK, PLUGGED 7/17/89	H3
		04/88	PLUGGED	MECH-W	CTS-PF				
86	147	04/85	PLUGGED	MECH-W	CTS-PF			H7+21.7	44
		04/85	PLUGGED	MECH-W	HTS-PF				
8	152	5/92	PLUGGED	MECH-W	HTS-PF			PLG	72A
		5/92	PLUGGED	MECH-W	CTS-PF				
1	155	10/86	PLUGGED	MECH-CE	HTS-PF				H18
		10/86	PLUGGED	MECH-CE	CTS-PF				
90	160	04/85	PLUGGED	MECH-W	CTS-PF			DUMMY TUBE IN C/L-W/L NOT DRILLED	25a
		04/85	PLUGGED	CONST	HTS-PF			DUMMY TUBE CL SIDE, CONST PLG HL SDE	
32	160	04/85	PLUGGED	MECH-W	CTS-PF			DUMMY TUBE C/L-W/L NOT DRILLED	25a
		04/85	PLUGGED	CONST	HTS-PF			DUMMY TUBE CL SIDE, CONST PLG HL SDE	
21	161	10/86	PLUGGED	MECH-CE	HTS-PF				C4
		10/86	PLUGGED	MECH-CE	CTS-PF				
47	161	10/86	PLUGGED	MECH-CE	HTS-PF				H14
		10/86	PLUGGED	MECH-CE	CTS-PF				

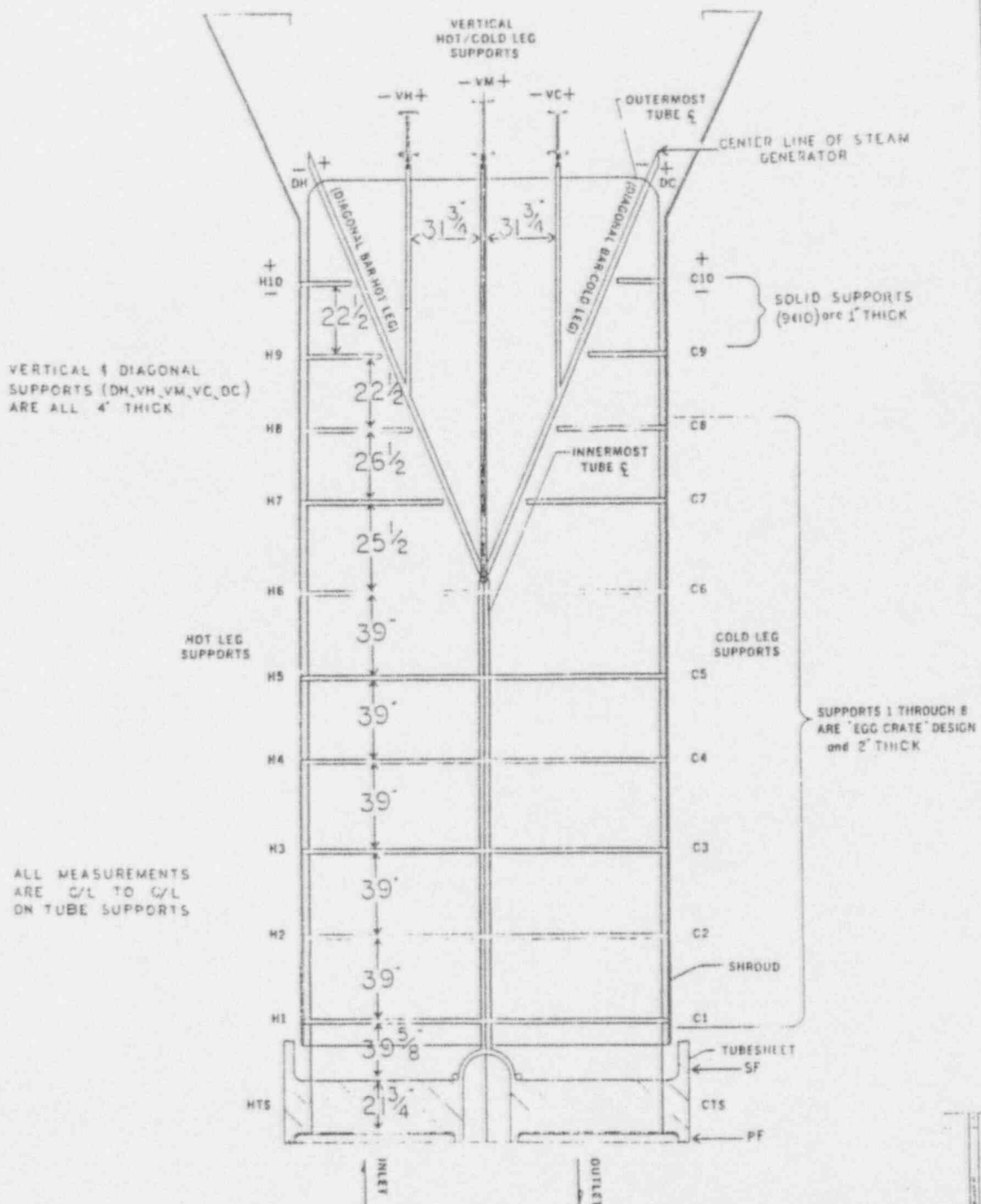
TOTAL TUBES FOUND = 77  
 TOTAL INDICATIONS FOUND = 154

### **APPENDIX III**

#### **Steam Generator Inspection Information**

- A. Steam Generator Support Locations and Nomenclature
- B. Eddy Current Inspection Acronyms

# STEAM GENERATORS CCNPP 1 & 2



Rows Contacting Supports Above 6th TS

ROWS	NO. OF SUPPORTS	SUPPORT DESIGNATIONS
1-9	1	VM
10-35	3	DH, VM, DC
36-65	5	H7, DH, VM, DC, C7
66-73	7	H8, H7, DH, VM, DC, C7, C8
74-89	9	VH, H8, H7, DH, VM, DC, C7, C8, VC
90-115	11	H9, VH, H8, H7, DH, VM, DC, C7, C8, VC, C9
116-140	13	H10, H9, VH, H8, H7, DH, VM, DC, C7, C8, VC, C9, C10

### ACCEPTABLE 3-LETTER CODES

DNT	-	Dent	NT	-	No Test
PLG	-	Plug	CU	-	Copper
FV	-	Permeability Variation	FIX	-	Fixture
INC	-	Incomplete	TP	-	Template Plug
RT	-	Retest	BLG	-	Bulge
RES	-	Restricted	IDI	-	ID Indication
RBD	-	Retest Bad Data	ADS	-	Absolute Drift Signal
SLV	-	Sleeve	SLG	-	Sludge
INR	-	Indication Not Reportable	RTI	-	Retest Incomplete
INF	-	Indication Not Found	APT	-	Absolute Positive Trace
SQR	-	Squirrel	NRH	-	No Roll Hot
PID	-	Positive ID	NRC	-	No Roll Cold
DI	-	Distorted			