



**Florida
Power**
CORPORATION

March 21, 1988
3F0388-02

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

Subject: Crystal River Unit 3
Docket No. 50-302
Operating License No. DPR-72
Special Report 87-05-01

Dear Sir:

Enclosed is Special Report 87-05-01 which is submitted in accordance with Technical Specification G.9.2.g.

Should there be any questions, please contact this office.

Sincerely,

Ken Wilson

K. R. Wilson
Manager, Nuclear Licensing

WLR:mgg

Enclosure

xc: Dr. J. Nelson Grace
Regional Administrator, Region II

Mr. T. V. Stetka
Senior Resident Inspector

IR22
11

Subject: Special Report 87-005-01

Steam generator eddy current testing was performed during the Refuel VI outage. Pre-outage planning developed a 6% random sampling inspection plan that would be completed on the "A" steam generator [AB,SG] to meet Technical Specification requirements. In addition a special interest group would also be inspected which would bring the total number of inspected tubes to 9.7%. This report of that inspection is being submitted in accordance with Technical Specification 6.9.2.g.

During the 6% random sample inspection two tubes were identified as defective, having indications greater than 40% through wall. Tube 70-28 had an indication of 55% through wall and tube 72-5 had one indication 52% through wall. A third tube, 32-107, was identified as degraded with an indication that was 38% through wall. These three tubes were removed from service by plugging.

An additional 12% of surrounding and random sample tubes were eddy current tested, which brought the total number of tubes inspected to 3370, or 21.7%. In this expanded sample inspection no additional defective tubes were found.

Information available on these plugged tubes show the indications to be small volume defects located at the 12th tube support plate.

The three tubes which were plugged are identified above as required by Technical Specification 4.4.5.5.b. In addition, there were 3370 tubes full length inspected. The location and percent of wall thickness penetration for each indication of an imperfection is identified on the following four sheets. The attached four sheets describe: 1) signal/noise indications; 2) indications < 2% through wall; 3) indications 20-39% through wall; and 4) indications 40% through wall or greater.

Plant: Crystal River 3
Outage: 10/87 RFO

Steam Generator: A

QUERY: S/N INDICATIONS

ROW	COL	IND	%TW	VOLTS	LOCATION	EXTENT	ANAL	TAFE	TEST	
4	18	ODI	S/N	2.65	3RD TSP +	9.70	F/L	G7134	13	BOBBIN
5	46	ODI	S/N	0.86	9TH TSP -	0.70	F/L	G7134	39	BOBBIN
		ODI	S/N	0.58	11TH TSP -	0.60	F/L	G7134	39	BOBBIN
8	53	ODI	S/N	0.90	9TH TSP -	0.70	F/L	G7134	39	BOBBIN
10	8	ODI	S/N	0.89	7TH TSP -	0.60	F/L	G7134	13	BOBBIN
12	57	ODI	S/N	0.60	7TH TSP -	0.70	F/L	G7134	14	BOBBIN
12	62	ODI	S/N	1.43	7TH TSP -	0.70	F/L	G7134	39	BOBBIN
		ODI	S/N	0.58	8TH TSP -	0.70	F/L	G7134	39	BOBBIN
15	68	ODI	S/N	0.72	8TH TSP -	0.70	F/L	G7134	39	BOBBIN
16	73	ODI	S/N	0.72	9TH TSP -	0.60	F/L	G7134	40	BOBBIN
17	79	ODI	S/N	0.85	8TH TSP -	0.70	F/L	G7134	40	BOBBIN
19	3	ODI	S/N	1.67	12TH TSP +	0.00	F/L	G7134	19	BOBBIN
20	83	ODI	S/N	0.76	8TH TSP -	0.60	F/L	G7134	40	BOBBIN
21	87	ODI	S/N	0.76	8TH TSP -	0.60	F/L	G7134	15	BOBBIN
22	91	ODI	S/N	1.54	8TH TSP -	0.70	F/L	G7134	40	BOBBIN
23	91	ODI	S/N	0.68	8TH TSP -	0.70	F/L	G7134	40	BOBBIN
26	91	ODI	S/N	1.15	7TH TSP -	0.60	F/L	G7134	40	BOBBIN
		ODI	S/N	1.32	8TH TSP -	0.70	F/L	G7134	40	BOBBIN
		ODI	S/N	1.08	9TH TSP -	0.60	F/L	G7134	40	BOBBIN
27	92	ODI	S/N	1.21	7TH TSP -	0.60	F/L	G7134	44	BOBBIN
		ODI	S/N	0.49	8TH TSP -	0.70	F/L	G7134	44	BOBBIN
27	93	ODI	S/N	0.77	8TH TSP -	0.70	F/L	G7134	40	BOBBIN
37	113	ODI	S/N	1.74	11TH TSP +	0.70	F/L	G7134	17	BOBBIN
39	81	ODI	S/N	0.98	10TH TSP +	28.70	F/L	G7134	40	BOBBIN
43	6	ODI	S/N	0.78	9TH TSP -	0.60	F/L	G7134	12	BOBBIN
43	118	ODI	S/N	0.40	12TH TSP +	0.70	F/L	G7134	17	BOBBIN
54	84	ODI	S/N	1.01	13TH TSP +	8.30	F/L	G7134	41	BOBBIN
58	6	ODI	S/N	0.57	7TH TSP -	0.70	F/L	G7134	33	BOBBIN
60	103	ODI	S/N	0.60	7TH TSP -	0.70	F/L	G7134	33	BOBBIN
60	103	ODI	S/N	0.80	4TH TSP +	0.70	F/L	G7134	17	BOBBIN
61	88	ODI	S/N	1.39	4TH TSP +	9.70	F/L	G7134	20	BOBBIN
61	125	ODI	S/N	0.67	8TH TSP -	0.70	F/L	G7134	42	BOBBIN
63	129	WAR	S/N	0.99	8TH TSP -	0.70	F/L	G7134	43	BOBBIN
		WAR	S/N	0.46	9TH TSP -	0.60	F/L	G7134	43	BOBBIN
		WAR	S/N	0.85	9TH TSP +	0.60	F/L	G7134	43	BOBBIN
		WAR	S/N	1.40	10TH TSP +	0.70	F/L	G7134	43	BOBBIN
72	23	ODI	S/N	0.58	7TH TSP +	0.60	F/L	G7134	32	BOBBIN
77	11	ODI	S/N	0.77	15TH TSP +	0.20	F/L	G7134	33	BOBBIN
80	33	ODI	S/N	0.77	10TH TSP -	0.60	F/L	G7134	32	BOBBIN
82	40	ODI	S/N	0.82	8TH TSP -	0.70	F/L	G7134	32	BOBBIN
82	130	ODI	S/N	1.28	LTSP +	24.80	F/L	G7134	32	BOBBIN
		ODI	S/N	0.54	11TH TSP -	0.70	F/L	G7134	33	BOBBIN
90	9	ODI	S/N	1.02	8TH TSP -	0.70	F/L	G7134	33	BOBBIN
94	17	ODI	S/N	0.48	12TH TSP +	0.60	F/L	G7134	32	BOBBIN
101	88	ODI	S/N	0.98	9TH TSP +	25.70	F/L	G7134	32	BOBBIN
111	100	ODI	S/N	1.29	7TH TSP +	14.80	F/L	G7134	23	BOBBIN
115	39	ODI	S/N	0.56	7TH TSP -	0.70	F/L	G7134	18	BOBBIN
138	8	ODI	S/N	0.40	9TH TSP -	0.70	F/L	G7134	9	BOBBIN
142	48	ODI	S/N	0.65	7TH TSP -	0.70	F/L	G7134	18	BOBBIN
148	3	ODI	S/N	0.94	11TH TSP +	0.70	F/L	G7134	28	BOBBIN

TOTAL TUBES FOUND = 41
TOTAL INDICATION FOUND = 50

Plant: Crystal River 3
 Outage: 10/87 RFO

Steam Generator: A-1

QUERY: INDICATIONS <20% TW

ROW	COL	IND	%TW	VOLTS	LOCATION	EXTENT	ANAL	TAPE	TEST	
5	27	ODI	19	0.76	8TH TSP -	0.60	F/L	G7134	14	BOBBIN
19	84	ODI	19	0.93	8TH TSP -	0.70	F/L	G7134	15	BOBBIN
24	89	ODI	19	1.92	14TH TSP+	5.70	F/L	G7134	15	BOBBIN
25	91	ODI	19	1.90	9TH TSP -	0.70	F/L	G7134	40	BOBBIN
29	73	ODI	19	2.02	8TH TSP +	17.30	F/L	G7134	40	BOBBIN
58	120	ODI	19	2.45	3RD TSP +	11.90	F/L	G7134	15	BOBBIN
58	125	IDI	16	7.52	11TH TSP+	25.30	F/L	05305	11	BOBBIN
63	129	ODI	19	3.70	13TH TSP+	25.40	F/L	G7134	17	BOBBIN
63	129	ODI	19	4.79	LTSP +	18.20	F/L	G7134	43	BOBBIN
		ODI	19	8.81	LTSP +	19.20	F/L	G7134	43	BOBBIN
		ODI	19	1.87	LTSP +	20.00	F/L	G7134	43	BOBBIN
		ODI	19	2.50	LTSP +	21.00	F/L	G7134	43	BOBBIN
64	24	ODI	19	1.05	15TH TSP+	15.80	F/L	G7134	33	BOBBIN
64	127	ODI	19	0.60	8TH TSP -	0.70	F/L	G7134	18	BOBBIN
71	47	ODI	18	3.32	11TH TSP+	25.80	F/L	05305	11	BOBBIN
72	68	ODI	19	1.80	5TH TSP +	31.40	F/L	G7134	15	BOBBIN
77	3	WAR	19	3.77	15TH TSP+	0.10	F/L	05305	3	BOBBIN
77	4	WAR	19	2.92	15TH TSP+	0.70	F/L	05305	3	BOBBIN
77	5	WAR	19	2.06	15TH TSP+	0.60	F/L	05305	3	BOBBIN
96	83	ODI	19	1.29	3RD TSP +	35.60	F/L	G7134	24	BOBBIN
108	86	ODI	19	1.37	10TH TSP+	27.60	F/L	G7134	7	BOBBIN
		ODI	19	1.62	10TH TSP+	28.10	F/L	G7134	7	BOBBIN
113	112	ODI	19	1.99	14TH TSP+	9.90	F/L	G7134	23	BOBBIN
119	75	ODI	19	1.25	7TH TSP +	31.90	F/L	G7134	18	BOBBIN
121	66	ODI	19	1.63	13TH TSP+	3.10	F/L	G7134	25	BOBBIN
124	63	ODI	19	1.82	15TH TSP+	39.90	F/L	G7134	7	BOBBIN
131	89	ODI	19	1.63	15TH TSP+	5.50	F/L	G7134	7	BOBBIN
144	52	ODI	19	1.63	11TH TSP+	26.50	F/L	G7134	25	BOBBIN
150	24	ODI	19	1.03	2ND TSP +	10.20	F/L	G7134	27	BOBBIN
151	16	ODI	19	3.07	8TH TSP +	33.10	F/L	G7134	8	BOBBIN

TOTAL TUBES FOUND = 25
 TOTAL INDICATION FOUND = 30

Plant: Crystal River 3
Outage: 10/87 RFO

Steam Generator: A

QUERY: INDICATIONS 20-39% TW

ROW	COL	IND	%TW	VOLTS	LOCATION	EXTENT	ANAL	TAPE	TEST
23	33	IDI	25	22.15	6TH TSP +	24.30	F/L	13	BOBBIN
25	91	ODI	25	1.83	8TH TSP +	8.50	F/L	40	BOBBIN
32	107	ODI	38	2.61	8TH TSP -	0.70	F/L	15	BOBBIN
56	3	ODI	28	1.36	10TH TSP+	0.70	F/L	33	BOBBIN
61	1	ODI	32	1.88	9TH TSP +	0.70	F/L	11	BOBBIN
64	127	WAR	32	3.16	10TH TSP+	0.00	F/L	18	BOBBIN
77	124	WAR	38	3.90	9TH TSP +	0.70	F/L	21	BOBBIN
		WAR	36	1.64	10TH TSP-	0.60	F/L	21	BOBBIN
78	123	ODI	32	1.38	8TH TSP -	0.60	F/L	21	BOBBIN

TOTAL TUBES FOUND = 8
TOTAL INDICATION FOUND = 9

Plant: Crystal River 3
Outage: 10/87 RFD

Steam Generator: A

QUERY: INDICATIONS 40% TW OR GREATER

ROW	COL	IND	%TW	VOLTS	LOCATION	EXTENT	ANAL	TAPE	TEST
70	28	ODI	55	1.11	12TH TSP+	0.70	F/L	05305	11 BOBBIN
72	5	ODI	52	2.06	12TH TSP+	0.70	F/L	05305	11 BOBBIN
TOTAL TUBES FOUND						=	2		
TOTAL INDICATION FOUND						=	2		