EIGHTH REFUELING OUTAGE INSERVICE INSPECTION SUMMARY REPORT

DAVIS-BESSE NUCLEAR POWER STATION
UNIT 1

CENTERIOR ENERGY

DAVIS-BESSE NUCLEAR POWER STATION

ISI SUMMARY REPORT

REFUELING OUTAGE NO.: 8RFO

OUTAGE START DATE: March 1, 1993

OUTAGE COMPLETION DATE: April 30, 1993

REPORTING DATE: June 16, 1993

DAVIS-BESSE NUCLEAR POWER STATION UNIT No.1

5501 North State Route #2
Oak Harbor
Ottawa County, Ohio 43449

OWNER: CENTERIOR SERVICE COMPANY
6200 Oaktree Boulevard
Independence, Ohio 44131

TOLEDO EDISON COMPANY
300 Madison Avenue
Toledo, Ohio 43652

THE CLEVELAND ELECTRIC ILLUMINATING COMPANY
55 Public Square
Cleveland, Ohio 44101

NRC DOCKET NUMBER: 50-346
OPERATION LICENSE: NPF-3
COMMERCIAL OPERATION: November 21, 1977

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ABSTRACT

This report provides a summary of the nondestructive examinations and pressure tests performed during the 8th Refueling Outage at the Davis Besse Nuclear Power Station.

The nondestructive examination and pressure test program was performed by Toledo Edison and B&W Nuclear Technologies personnel from March, 1993 through April, 1993. This program is in compliance with the requirements of the 1986 Edition of the ASME Boiler and Pressure Vessel Code and the Davis Besse Unit #1 Technical Specifications as described in the Second Ten Year Inservice Inspection Program Plan. These nondestructive examinations and tests complete the examinations required to be performed in the first period of the second ten year interval.

The NDE examinations consisted of Ultrasonic (UT), Liquid Penetrant (PT), Magnetic Particle (MT), and Visual (VT-1, VT-2, VT-3). There were a total of 201 ASME Class 1 and 2 examinations performed. Two indications requiring further evaluation were identified. Each were found acceptable.

Pressure tests consisted of functional, inservice, and hydrostatic tests. In addition to tests conducted in accordance with the Pressure Test Program Plan, tests were also conducted following repairs/replacements. In total, 100 pressure tests were successfully conducted.

One Hundred (100) percent of the tubing in both Once Through Steam Generators was eddy current examined. All tubes exhibiting indications 20% through wall or greater were plugged. Forty three (43) tubes in Steam Generator 1-1 and 321 tubes in Steam Generator 1-2 were plugged. In addition, 213 tubes in Steam Generator 1-1 were sleeved.

All repairs/replacements performed at Davis Besse are controlled via Toledo Edison's Maintenance Work Order system. Copies of Toledo Edison's Repair/Replacement forms for ASME Class 1 and 2 repairs/replacements are included in this report. All other records including testing and examination records are available in Toledo Edison's Records Management System for review.

FORM NIS-1 OWNERS' DATA REPORT FOR INSERVICE INSPECTIONS

As required by the Provisions of the ASME Code Rules

1. Owner Toledo Edison Company, 300 Madison Ave., Toledo, Ohio 43652
(Name and Address of Owner)

2. Plant Davis-Besse Nuclear Power Station, Oak Harbor, Ohio 43449
(Name and Address of Plant)

3. Plant Unit #1 4. Owner Certificate of Authorization (if required) N/A

5. Commercial Service Date 11/21/77 6. National Board Number for Unit N/A

7. Components Inspected Steam Generator Tubing

Component or Appurtenance	Manufacturer or Installer	Manufacturer or Installer Serial No.	State or Province No.	National Board No.
Steam Generator 1-1	Babcock & Wilcox	620-0014-55-11	N/A	158
Steam Generator 1-2	Babcock & Wilcox	620-0014-55-12	N/A	159

Note: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size is 8½ in. x 11 in., (2) information in items 1 through 6 on this data report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

This form (E00029) may be obtained from the Order Dept., ASME, 345 E. 47th St., New York, N.Y. 10017

FORM NIS-1 (back)

8. Examination Dates March 1993 to N/A 9. Inspection Interval from Sept 1990 to Sept 2000

10. Abstract of Examinations. Include a list of examinations and a statement concerning status of work required for current interval. See attached

11. Abstract of Conditions Noted.
See attached

12. Abstract of Corrective Measures Recommended and Taken

See attached

We certify that the statements made in this report are correct and the examinations and corrective measures taken conform to the rules of the ASME Code, Section XI.

Date 6-9 19 93 Signed Toledo Edison Co. By Enrl Cole
Owner

Certificate of Authorization No. (if applicable) N/A Expiration Date N/A

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of OHIO and employed by HSB I & E Co. of HARTFORD, CT have inspected the components described in this Owners' Data Report during the period NOV 1991 to MAY 1993, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners' Data Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owners' Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 6-16 19 93

Robert E. Cook Commissions NB10992 (ANI) Ohio Comm
Inspector's Signature National Board, State, Province and No.

Steam Generator Eddy Current Examination Results

The tubing in the Once Through Steam Generators (OTSG's) at the Davis Besse Nuclear Power Station Unit #1 was examined in March 1993 during the 8th Refueling Outage. The examinations were conducted by B&W Nuclear Technologies to meet the requirements of the Second Ten Year Inservice Inspection Plan and the Davis-Besse Unit #1 Technical Specifications.

The eddy current examinations were performed utilizing a Bobbin Coil, a Motorized Rotating Pancake Coil (MRPC), and a Crosswound/Bobbin Coil. The Bobbin Coil was used to perform the standard ASME Code examination for defect detection and sizing, the auxiliary feedwater header gap measurement, and profilometry of sleeve candidate tubes prior to sleeving. The MRPC technique was used to perform defect detection in tubes within the lane/wedge region and for sleeve candidate tubes at the location of the lower sleeve roll joints. The crosswound/bobbin technique was used to perform defect detection after tube sleeving.

All tubes in Steam Generator 1-1 were examined using the bobbin coil. All tubes were examined full length with the exception of 6 tubes for which examination was restricted by the data acquisition system's positioning pins. The loss of examination coverage was limited for only a few inches near the tube end. Tubes with indications 20% or greater are identified in Attachment 1. Forty three tubes with indications having a through wall dimension 20% or greater, nonquantifiable indications, or absolute drift signals were plugged. These tubes are identified on Attachment 2. Four hundred forty nine tubes were examined to determine their proximity to the internal auxiliary feedwater header. All tubes were determined to have a gap greater than 0.250". Two hundred thirteen tubes identified on Attachment 3 were also sleeved. Crosswound/Bobbin Eddy Current examination following sleeving revealed 39 sleeves with geometric discontinuities. It was determined that these discontinuities were anomalies introduced by a link in the roll tool slinky. Each of these discontinuities was determined acceptable for service. Tubes exhibiting these discontinuities are identified in Attachment 3.

All tubes in Steam Generator 1-2 were examined using the bobbin coil. All tubes were examined full length with the exception of 12 tubes for which examination was restricted by the data acquisition system's positioning pins and plate. The loss of examination coverage was limited for only a few inches near the tube end. One tube was internally obstructed in the Upper Tube Sheet and subsequently plugged. Tubes with indications 20% or greater are identified in Attachment 4. Three hundred twenty one tubes were plugged. Three hundred seventeen tubes had indications with a through wall dimension 20% or greater, nonquantifiable indications, absolute drift signals, or were obstructed. Four tubes with dents in the area of the auxiliary feedwater header were also plugged. These tubes are identified on Attachment 5. Four hundred forty five tubes were examined to determine their proximity to the internal auxiliary feedwater header. One tube

was determined to have a gap greater than the minimum 0.125" but less than 0.250". All other tubes were determined to have a gap greater than 0.250". No tubes were sleeved in Steam Generator 1-2.

Detailed examination results are contained in the 8th Refueling Outage Steam Generator Eddy Current Inspection Report which is available for review at the Davis Besse site.

The legend for the abbreviations used in Attachments 1 through 5 is as follows.

ADS	Absolute Drift Signal
CHN	Channel
COL	Column
DEG	Degrees
FL	Full Length
IND	Indication
LTSF	Lower Tube Sheet Secondary Face
NQI	Non-quantifiable Indication
OBS	Obstruction
ODI	Outside Diameter Indication
%TW	Percent Through Wall
P	Primary Mix
TSP	Tube Support Plate
UTSF	Upper Tube Sheet Secondary Face

STEAM GENERATOR 1-1

Plant: Davis Besse 1
Outage: 03/93 RFO

QUERY: INDICATIONS 20-29% TWD

TEST	ROW	COL	IND	%TW	VOLTS	CHN	DEG	LOCATION	EXTENT
BOBBIN	15	69	ODI	20	0.39	P 1	128	9TH TSP - 0.80	FL
BOBBIN	24	54	ODI	27	0.79	1	129	6TH TSP + 2.05	FL
BOBBIN	29	69	ODI	21	0.59	1	137	4TH TSP + 20.26	FL
BOBBIN	49	124	ODI	21	0.45	1	138	12TH TSP+ 18.21	FL
BOBBIN			ODI	27	0.43	1	132	9TH TSP + 11.62	FL
BOBBIN	74	60	ODI	22	0.75	1	134	4TH TSP + 7.23	FL
BOBBIN	109	103	ODI	28	0.43	1	125	UTSF + 4.23	FL
BOBBIN	110	6	ODI	27	0.38	P 1	105	8TH TSP - 0.44	FL
BOBBIN	120	64	ODI	22	0.24	1	137	LTSF + 6.94	FL
BOBBIN	126	75	ODI	25	0.41	1	133	5TH TSP + 0.21	FL
BOBBIN	136	62	ODI	28	0.39	P 1	115	3RD TSP + 0.13	FL
BOBBIN	145	3	ODI	20	0.33	P 1	120	3RD TSP - 0.16	FL
BOBBIN	147	11	ODI	23	0.37	1	130	9TH TSP - 0.11	FL
BOBBIN	148	12	ODI	20	0.16	1	138	3RD TSP + 0.00	FL

TOTAL TUBES FOUND = 13
TOTAL INDICATIONS FOUND = 14
TOTAL TUBES IN INPUT FILE = 15457

STEAM GENERATOR 1-1

Plant: Davis Besse 1
Outage: 03/93 RFO

QUERY: INDICATIONS 30-39% TWD

TEST	ROW	COL	IND	%TW	VOLTS	CHN	DEG	LOCATION	EXTENT
BOBBIN	20	70	ODI	30	0.43	P 1	114	5TH TSP - 0.46	FL
BOBBIN	72	61	ODI	37	0.30	1	124	6TH TSP + 4.67	FL
BOBBIN	74	60	ODI	37	0.49	1	124	4TH TSP + 4.39	FL
BOBBIN			ODI	38	0.35	1	123	4TH TSP + 5.90	FL
BOBBIN	74	62	ODI	38	0.31	1	123	4TH TSP + 14.06	FL
BOBBIN	74	63	ODI	37	0.30	P 1	100	9TH TSP + 0.11	FL
BOBBIN	75	61	ODI	38	0.38	1	123	9TH TSP + 10.23	FL
BOBBIN	77	67	ODI	34	0.32	1	126	3RD TSP + 28.20	FL
BOBBIN	135	23	ODI	30	0.25	P 1	105	8TH TSP + 0.00	FL

TOTAL TUBES FOUND = 8
TOTAL INDICATIONS FOUND = 9
TOTAL TUBES IN INPUT FILE = 15457

STEAM GENERATOR 1-1

Plant: Davis Besse 1
Outage: 03/93 RFO

QUERY: INDICATIONS 40-100% TWD

TEST	ROW	COL	IND	%TW	VOLTS	CHN	DEG	LOCATION	EXTENT
BOBBIN	18	17	ODI	48	0.29	1	110	5TH TSP + 17.71	FL
BOBBIN	38	1	ODI	47	1.27	P 1	95	8TH TSP - 0.39	FL
BOBBIN	67	84	ODI	56	0.32	1	108	LTSF + 7.49	FL
BOBBIN	70	82	ODI	64	0.76	1	99	8TH TSP + 30.46	FL
BOBBIN	71	62	ODI	45	0.43	1	119	3RD TSP + 22.50	FL
BOBBIN	71	63	ODI	78	0.34	1	83	5TH TSP + 19.56	FL
BOBBIN	74	60	ODI	68	0.37	1	95	4TH TSP + 3.58	FL
BOBBIN	74	61	ODI	79	0.34	1	82	6TH TSP + 2.80	FL
BOBBIN	96	72	ODI	56	0.34	1	102	8TH TSP + 2.96	FL
BOBBIN	133	78	ODI	46	0.29	P 1	100	3RD TSP + 0.40	FL

TOTAL TUBES FOUND = 10
TOTAL INDICATIONS FOUND = 10
TOTAL TUBES IN INPUT FILE = 15457

TUBES PLUGGED STEAM GENERATOR 1-1

Plant: Davis Besse 1
Outage: 03/93 RFO

QUERY: DEFECT INDICATIONS 20-100% TW, MBI, ADS, & SSA

TEST	ROW	COL	IND	%TW	VOLTS	CHN	DEG	LOCATION		EXTENT
BOBBIN	2	7	MBI		0.42	P 1	96	10TH TSP	- 0.68	FL
BOBBIN	15	69	CDI	20	0.39	P 1	128	9TH TSP	- 0.80	FL
BOBBIN	18	17	CDI	48	0.29	1	110	5TH TSP	+ 17.71	FL
BOBBIN	20	70	CDI	30	0.43	P 1	114	5TH TSP	- 0.46	FL
BOBBIN	24	54	CDI	27	0.79	1	129	6TH TSP	+ 2.05	FL
BOBBIN	29	69	CDI	21	0.59	1	137	4TH TSP	+ 20.26	FL
BOBBIN	38	1	CDI	47	1.27	P 1	95	8TH TSP	- 0.39	FL
BOBBIN	49	124	CDI	21	0.45	1	138	12TH TSP	+ 18.21	FL
BOBBIN			CDI	27	0.43	1	132	9TH TSP	+ 11.62	FL
~~BOBBIN~~	~~64~~	~~126~~	~~MBI~~		~~1.96~~	~~P 1~~	~~124~~	~~15TH TSP~~	~~+ 0.78~~	~~FL~~
BOBBIN	67	84	CDI	56	0.32	1	108	LTSF	+ 7.49	FL
BOBBIN	69	64	MBI		0.32	1	104	4TH TSP	+ 1.52	FL
BOBBIN			MBI		0.60	1	106	4TH TSP	+ 3.34	FL
BOBBIN			MBI		0.43	1	111	4TH TSP	+ 3.58	FL
BOBBIN	70	63	MBI		0.41	1	92	4TH TSP	+ 4.18	FL
BOBBIN	70	82	CDI	64	0.76	1	99	8TH TSP	+ 30.46	FL
BOBBIN	71	62	CDI	45	0.43	1	119	3RD TSP	+ 22.50	FL
BOBBIN	71	63	CDI	78	0.34	1	83	5TH TSP	+ 19.56	FL
BOBBIN	72	21	MBI		0.23	P 1	86	UTSF	+ 0.41	FL
BOBBIN	72	61	CDI	37	0.30	1	124	6TH TSP	+ 4.67	FL
BOBBIN	72	107	ADS		2.75	6	97	4TH TSP	+ 26.29	FL
BOBBIN	74	60	CDI	68	0.37	1	95	4TH TSP	+ 3.58	FL
BOBBIN			CDI	37	0.49	1	124	4TH TSP	+ 4.39	FL
BOBBIN			CDI	38	0.35	1	123	4TH TSP	+ 5.90	FL
BOBBIN			CDI	22	0.75	1	134	4TH TSP	+ 7.23	FL
BOBBIN	74	61	CDI	79	0.34	1	82	6TH TSP	+ 2.80	FL
BOBBIN			MBI		0.33	1	87	4TH TSP	+ 12.44	FL
BOBBIN	74	62	CDI	38	0.31	1	123	4TH TSP	+ 14.06	FL
BOBBIN			MBI		0.49	1	91	4TH TSP	+ 16.85	FL
BOBBIN	74	63	CDI	37	0.30	P 1	100	9TH TSP	+ 0.11	FL
BOBBIN	75	61	MBI		0.38	1	95	9TH TSP	+ 3.16	FL
BOBBIN			CDI	38	0.38	1	123	9TH TSP	+ 10.23	FL
BOBBIN	75	63	MBI		0.32	1	95	8TH TSP	+ 33.56	FL
BOBBIN	77	59	MBI		0.43	P 1	70	10TH TSP	- 0.66	FL
BOBBIN	77	67	CDI	34	0.32	1	126	3RD TSP	+ 28.20	FL
BOBBIN	79	72	ADS		1.25	6	93	1ST TSP	+ 10.55	FL
BOBBIN	83	45	MBI		0.34	1	63	15TH TSP	+ 33.89	FL
BOBBIN	85	86	MBI		0.25	1	75	1ST TSP	+ 9.94	FL
BOBBIN	95	84	ADS		3.71	6	104	4TH TSP	+ 28.60	FL
BOBBIN	96	72	CDI	56	0.34	1	102	8TH TSP	+ 2.96	FL
BOBBIN	99	126	MBI		0.70	P 1	105	14TH TSP	+ 0.62	FL
BOBBIN	109	103	CDI	28	0.43	1	125	UTSF	+ 4.23	FL
BOBBIN	110	6	CDI	27	0.38	P 1	105	8TH TSP	- 0.44	FL
BOBBIN	120	64	CDI	22	0.24	1	137	LTSF	+ 6.94	FL
BOBBIN	126	75	CDI	25	0.41	1	133	5TH TSP	+ 0.21	FL
BOBBIN	129	38	ADS		2.26	1	78	4TH TSP	+ 11.14	FL
BOBBIN	133	78	CDI	46	0.29	P 1	100	3RD TSP	+ 0.40	FL
BOBBIN	134	7	MBI		0.25	1	95	LTSF	+ 36.14	FL
BOBBIN	135	23	CDI	30	0.25	P 1	105	8TH TSP	+ 0.00	FL
BOBBIN	136	62	CDI	28	0.39	P 1	115	3RD TSP	+ 0.13	FL
BOBBIN	145	3	CDI	20	0.33	P 1	120	3RD TSP	- 0.16	FL
BOBBIN	147	11	CDI	23	0.37	1	130	9TH TSP	- 0.11	FL
BOBBIN	148	12	CDI	20	0.16	1	138	3RD TSP	+ 0.00	FL

Tube Row 64 Column 126 was sleeved instead of plugged.

STEAM GENERATOR 1-1

Sleeved Tubes

Row - Column	Total Tubes
48-123	1
49-124	1
64-126	1
67-1	1
68-1 thru 2	2
69-1 thru 4	4
70-1 thru 5	5
71-1 thru 7	7
72-1 thru 8	8
73-1 thru 12	12
74-1 thru 29	29
75-1 thru 35	35
77-1 thru 35	35
78-1 thru 29	29
79-1 thru 12	12
80-1 thru 8	8
81-1 thru 7	7
82-1 thru 5	5
83-1 thru 4	4
84-1 thru 2	2
85-1	1
88-126	1
104-123	1
146-1	1
146-51	1
Total Tubes Sleeved	213

STEAM GENERATOR 1-1

Tubes with Geometric Discontinuities

Row	Column
74	24
74	25
74	29
75	4
75	5
75	6
75	7
75	8
75	9
75	10
75	11
75	12
75	13
75	14
75	15
75	16
75	17
75	18
75	19
75	20
75	21
75	22
75	23
75	24
75	25
75	26
75	27
75	28
75	29
78	1
80	1
82	1
83	1
83	2
83	3
83	4
84	1
84	2
85	1

S6 1-8 PLUGGED AND SLEEVED TUBES

PLANT: DAVIS BESSE UNIT 1

GENERATOR: B

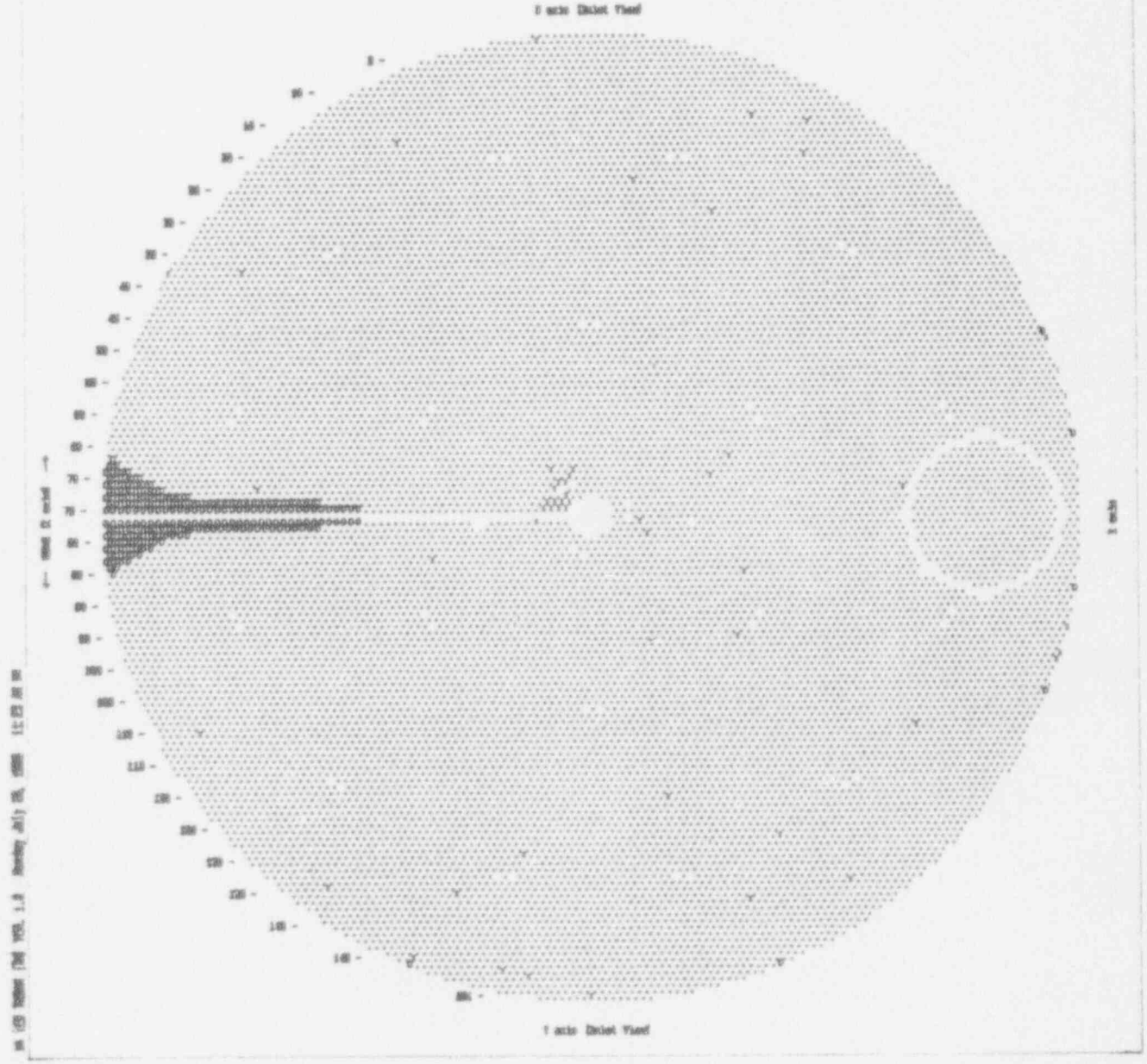
1 = S6 1-8 PLUGGED TUBES (52)

0 = S6 1-8 SLEEVED TUBES (212)

! = S6 1-8 PLUGGED TUBES (11)

TOTAL TUBES : 15457
SUPPORT RODS ( ) : 42

TOTAL TUBES ASSIGNED : 275



STEAM GENERATOR 1-2

Plant: Davis Besse 1
Outage: 03/93 RFO

QUERY: INDICATIONS 20-29% TWD

TEST	ROW	COL	IND	%TW	VOLTS	CHN	DEG	LOCATION	EXTENT
BOBBIN	4	23	ODI	29	0.91	1	132	5TH TSP + 9.04	FL
BOBBIN	12	71	ODI	22	0.64	1	136	14TH TSP+ 31.61	FL
BOBBIN	15	78	ODI	21	0.57	1	137	14TH TSP+ 31.06	FL
BOBBIN	18	27	ODI	28	0.33	1	135	5TH TSP + 19.44	FL
BOBBIN	18	28	ODI	23	0.48	1	139	5TH TSP + 23.10	FL
BOBBIN	18	31	ODI	25	0.21	1	138	5TH TSP + 13.84	FL
BOBBIN	23	34	ODI	22	0.29	1	136	5TH TSP + 11.84	FL
BOBBIN	26	55	ODI	27	0.60	1	134	4TH TSP + 32.60	FL
BOBBIN	29	23	ODI	26	0.37	1	136	5TH TSP + 12.26	FL
BOBBIN	33	65	ODI	29	0.32	1	127	LTPF + 21.68	FL
BOBBIN	45	63	ODI	29	0.36	1	131	10TH TSP+ 2.09	FL
BOBBIN	49	31	ODI	22	0.39	1	136	4TH TSP + 30.95	FL
BOBBIN	56	1	ODI	29	1.16	P 1	125	12TH TSP+ 0.52	FL
BOBBIN	60	1	ODI	24	0.32	P 1	127	12TH TSP+ 0.12	FL
BOBBIN	61	49	ODI	21	0.25	1	138	4TH TSP + 17.08	FL
BOBBIN	63	52	ODI	24	0.71	1	136	4TH TSP + 17.25	FL
BOBBIN	63	68	ODI	21	0.41	1	138	4TH TSP + 9.09	FL
BOBBIN	64	1	ODI	20	0.37	1	138	14TH TSP+ 32.94	FL
BOBBIN	65	15	ODI	26	0.29	1	135	5TH TSP + 1 2.75	FL
BOBBIN	66	66	ODI	22	0.32	1	137	4TH TSP + 8.09	FL
BOBBIN	66	72	ODI	23	0.41	1	136	4TH TSP + 6.93	FL
BOBBIN	67	60	ODI	29	0.40	1	133	4TH TSP + 12.36	FL
BOBBIN	67	68	ODI	22	0.31	1	137	3RD TSP + 20.10	FL
BOBBIN	68	66	ODI	35	0.40	1	136	3RD TSP + 38.00	FL
BOBBIN	68	68	ODI	27	0.51	1	135	4TH TSP + 11.16	FL
BOBBIN	68	70	ODI	27	0.37	1	133	4TH TSP + 9.13	FL
BOBBIN	68	73	ODI	29	0.62	1	133	4TH TSP + 6.42	FL
BOBBIN	69	65	ODI	29	0.61	1	133	4TH TSP + 14.15	FL
BOBBIN			ODI	27	0.26	1	135	3RD TSP + 28.19	FL
BOBBIN	69	68	ODI	25	0.49	1	136	3RD TSP + 30.50	FL
BOBBIN	69	70	ODI	29	0.36	1	133	4TH TSP + 17.43	FL
BOBBIN			ODI	25	0.65	1	136	4TH TSP + 14.98	FL
BOBBIN	69	72	ODI	23	0.49	P 1	124	3RD TSP + 38.55	FL
BOBBIN	69	74	ODI	27	0.48	1	135	4TH TSP + 4.88	FL
BOBBIN	69	75	ODI	27	0.40	1	135	4TH TSP + 1.28	FL
BOBBIN	70	62	ODI	29	0.26	1	132	5TH TSP + 11.18	FL
BOBBIN			ODI	25	0.22	1	135	5TH TSP + 9.94	FL
BOBBIN			ODI	25	0.38	1	135	5TH TSP + 7.81	FL
BOBBIN			ODI	29	0.49	1	132	4TH TSP + 6.44	FL
BOBBIN	70	65	ODI	27	0.48	1	135	5TH TSP + 9.58	FL
BOBBIN	70	66	ODI	27	0.24	1	135	5TH TSP + 16.38	FL
BOBBIN	70	71	ODI	24	0.43	1	136	4TH TSP + 6.17	FL
BOBBIN			ODI	24	0.26	1	137	4TH TSP + 17.03	FL
BOBBIN			ODI	25	0.77	1	138	4TH TSP + 8.79	FL
BOBBIN			ODI	25	0.52	1	136	4TH TSP + 7.65	FL
BOBBIN	70	72	ODI	21	0.36	1	140	4TH TSP + 5.30	FL
BOBBIN	71	67	ODI	27	0.37	1	135	7TH TSP + 18.78	FL
BOBBIN	71	68	ODI	23	0.22	1	138	2ND TSP + 15.74	FL
BOBBIN			ODI	20	0.24	1	140	2ND TSP + 14.97	FL
BOBBIN	71	69	ODI	24	0.26	1	137	5TH TSP + 3.54	FL
BOBBIN			ODI	26	0.47	1	136	4TH TSP + 35.90	FL
BOBBIN			ODI	21	0.46	1	139	4TH TSP + 34.82	FL
BOBBIN	72	72	ODI	24	0.34	1	137	4TH TSP + 9.38	FL
BOBBIN	73	62	ODI	26	0.83	1	133	6TH TSP + 8.03	LTSF
BOBBIN	77	65	ODI	21	0.29	1	132	7TH TSP + 6.52	FL
BOBBIN			ODI	23	0.58	1	131	7TH TSP + 16.32	FL
BOBBIN	77	67	ODI	26	0.35	1	137	6TH TSP + 4.71	FL
BOBBIN	78	64	ODI	27	0.56	1	131	7TH TSP + 34.04	FL
BOBBIN	79	105	ODI	29	0.37	1	133	5TH TSP + 14.92	FL
BOBBIN	80	65	ODI	23	0.36	1	131	6TH TSP + 25.36	FL
BOBBIN			ODI	29	0.42	1	127	6TH TSP + 28.96	FL
BOBBIN	80	66	ODI	24	0.81	1	130	6TH TSP + 25.25	FL
BOBBIN	80	68	ODI	21	0.87	1	132	7TH TSP + 15.61	FL
BOBBIN	80	69	ODI	23	0.65	1	131	3RD TSP + 26.00	FL
BOBBIN	80	70	ODI	29	0.49	1	127	3RD TSP + 31.97	FL
BOBBIN	81	64	ODI	23	0.69	1	131	6TH TSP + 7.62	FL
BOBBIN			ODI	23	0.75	1	131	6TH TSP + 11.24	FL
BOBBIN	81	65	ODI	22	0.61	1	131	6TH TSP + 12.64	FL
BOBBIN			ODI	25	0.37	1	129	6TH TSP + 12.88	FL
BOBBIN			CDI	27	0.96	1	128	6TH TSP + 17.72	FL

STEAM GENERATOR 1-2

Plant: Davis Besse 1
Outage: 03/93 RFO

QUERY: INDICATIONS 20-29% TWD

TEST	ROW	COL	IND	%TW	VOLTS	CHN	DEG	LOCATION	EXTENT
BOBBIN			ODI	29	0.81	1	126	6TH TSP + 24.95	FL
BOBBIN	81	68	ODI	29	0.64	P 1	123	7TH TSP + 0.15	FL
BOBBIN	81	69	ODI	29	1.35	1	127	5TH TSP + 8.58	FL
BOBBIN			ODI	27	0.49	1	128	5TH TSP + 11.59	FL
BOBBIN	81	70	ODI	29	0.38	1	133	3RD TSP + 23.46	LTSF
BOBBIN			ODI	28	0.42	1	135	3RD TSP + 34.87	LTSF
BOBBIN	82	31	ODI	28	0.37	1	131	UTSF + 2.85	FL
BOBBIN	82	63	ODI	29	0.30	1	127	5TH TSP + 17.21	FL
BOBBIN	82	65	ODI	27	0.41	1	128	5TH TSP + 10.48	FL
BOBBIN			ODI	27	0.45	1	128	5TH TSP + 10.96	FL
BOBBIN	82	67	ODI	29	0.86	1	127	5TH TSP + 8.29	FL
BOBBIN			ODI	23	0.80	1	131	4TH TSP + 3.70	FL
BOBBIN	82	71	ODI	27	0.60	1	135	4TH TSP + 6.28	FL
BOBBIN	83	11	ODI	20	0.23	1	137	5TH TSP + 13.79	FL
BOBBIN	83	66	ODI	21	0.69	1	137	4TH TSP + 14.16	FL
BOBBIN	83	69	ODI	28	0.48	1	135	3RD TSP + 26.31	LTSF
BOBBIN			ODI	26	0.57	1	136	4TH TSP + 27.81	LTSF
BOBBIN	84	7	ODI	21	0.51	1	136	UTSF + 5.15	FL
BOBBIN	84	65	ODI	27	0.24	1	131	3RD TSP + 14.95	FL
BOBBIN	84	69	ODI	20	0.68	1	138	4TH TSP + 12.05	FL
BOBBIN			ODI	23	0.59	1	135	5TH TSP + 1.83	FL
BOBBIN	84	72	ODI	28	0.27	1	135	4TH TSP + 13.40	FL
BOBBIN			ODI	25	0.38	1	138	4TH TSP + 31.86	FL
BOBBIN			ODI	26	0.81	1	137	4TH TSP + 12.30	FL
BOBBIN	85	4	ODI	22	0.52	1	135	2ND TSP + 10.19	FL
BOBBIN	85	66	ODI	28	0.52	1	135	3RD TSP + 36.94	FL
BOBBIN			ODI	29	0.47	1	135	3RD TSP + 21.22	FL
BOBBIN			ODI	29	0.83	1	135	3RD TSP + 17.73	FL
BOBBIN			ODI	23	0.60	1	138	4TH TSP + 15.81	FL
BOBBIN	85	67	ODI	23	0.74	1	138	4TH TSP + 10.94	FL
BOBBIN			ODI	27	0.58	1	135	4TH TSP + 8.72	FL
BOBBIN	86	65	ODI	27	0.38	1	132	3RD TSP + 19.73	FL
BOBBIN	86	66	ODI	26	0.22	1	135	4TH TSP + 13.01	FL
BOBBIN			ODI	22	0.39	1	138	4TH TSP + 11.06	FL
BOBBIN	86	67	ODI	25	0.65	1	136	3RD TSP + 38.74	FL
BOBBIN			ODI	24	0.40	1	135	4TH TSP + 7.16	FL
BOBBIN			ODI	21	0.77	1	136	3RD TSP + 38.79	FL
BOBBIN	86	68	ODI	22	0.74	1	138	4TH TSP + 11.73	FL
BOBBIN	87	67	ODI	27	0.78	1	134	4TH TSP + 11.67	FL
BOBBIN			ODI	21	0.42	1	138	4TH TSP + 12.37	FL
BOBBIN	88	68	ODI	29	0.33	1	133	4TH TSP + 14.21	FL
BOBBIN	88	126	ODI	24	0.74	1	133	15TH TSP+ 33.08	FL
BOBBIN	89	67	ODI	29	0.38	1	130	4TH TSP + 8.06	FL
BOBBIN	102	40	ODI	23	0.23	1	137	5TH TSP + 2.71	FL
BOBBIN	106	6	ODI	25	0.32	P 1	104	13TH TSP- 0.51	FL
BOBBIN	106	15	ODI	26	0.29	1	133	5TH TSP + 14.78	FL
BOBBIN	108	36	ODI	26	0.28	1	138	5TH TSP + 4.29	FL
BOBBIN	109	1	ODI	25	1.06	1	135	6TH TSP + 31.31	FL
BOBBIN	109	104	ODI	24	0.24	1	135	2ND TSP + 25.19	FL
BOBBIN	110	97	ODI	25	0.50	1	135	LTPF + 21.48	FL
BOBBIN	111	1	ODI	27	0.71	P 1	122	8TH TSP - 0.27	FL
BOBBIN			ODI	24	2.23	1	136	8TH TSP + 1.86	FL
BOBBIN	112	3	ODI	26	0.40	P 1	123	9TH TSP + 0.27	FL
BOBBIN	112	49	ODI	22	1.36	1	135	14TH TSP+ 18.40	FL
BOBBIN	113	1	ODI	25	0.49	1	135	15TH TSP+ 14.86	FL
BOBBIN	116	113	ODI	24	3.38	1	133	15TH TSP+ 19.77	FL
BOBBIN	123	13	ODI	23	0.27	1	132	6TH TSP + 26.33	FL
BOBBIN			ODI	23	0.20	1	132	5TH TSP + 19.08	FL
BOBBIN	123	80	ODI	22	0.44	1	138	5TH TSP + 23.92	FL
BOBBIN	124	14	ODI	29	0.40	1	131	5TH TSP + 14.05	FL
BOBBIN	125	17	ODI	28	0.58	1	131	5TH TSP + 12.50	FL
BOBBIN	129	6	ODI	23	0.61	P 1	125	10TH TSP+ 0.48	FL
BOBBIN	129	28	ODI	28	0.25	1	129	5TH TSP + 11.22	FL
BOBBIN	132	66	ODI	28	0.38	1	135	5TH TSP + 10.80	FL
BOBBIN	133	29	ODI	22	2.77	1	135	4TH TSP + 12.38	FL
BOBBIN	149	33	ODI	21	0.39	P 1	123	14TH TSP+ 0.47	FL
BOBBIN	150	24	ODI	23	1.49	P 1	122	14TH TSP+ 0.57	FL
BOBBIN	151	8	ODI	23	0.79	P 1	122	13TH TSP+ 0.55	FL

TOTAL TUBES FOUND = 103
TOTAL INDICATIONS FOUND = 138
TOTAL TUBES IN INPUT FILE = 15457

STEAM GENERATOR 1-2

Plant: Davis Besse 1
Outage: 03/93 RFO

QUERY: INDICATIONS 30-39% TWD

TEST	ROW	COL	IND	%TW	VOLTS	CHN	DEG	LOCATION	EXTENT
BOBBIN	15	24	ODI	31	0.47	1	132	5TH TSP + 17.59	FL
BOBBIN	16	26	ODI	34	0.78	1	129	5TH TSP + 18.05	FL
BOBBIN	17	13	ODI	32	0.40	1	130	5TH TSP + 12.55	FL
BOBBIN	17	27	ODI	38	0.44	1	126	5TH TSP + 15.25	FL
BOBBIN	18	26	ODI	33	0.32	1	129	5TH TSP + 13.45	FL
BOBBIN	18	28	ODI	38	0.40	1	124	5TH TSP + 23.36	FL
BOBBIN			ODI	31	0.24	1	132	5TH TSP + 22.81	FL
BOBBIN	19	13	ODI	34	0.37	1	128	7TH TSP + 9.14	FL
BOBBIN	19	29	ODI	31	0.35	1	131	5TH TSP + 15.33	FL
BOBBIN	22	33	ODI	34	0.43	1	125	5TH TSP + 11.61	FL
BOBBIN	22	56	ODI	33	0.27	1	128	4TH TSP + 34.40	FL
BOBBIN	23	33	ODI	32	0.31	1	128	5TH TSP + 11.32	FL
BOBBIN	23	57	ODI	37	0.37	1	125	4TH TSP + 33.32	FL
BOBBIN			ODI	34	0.20	1	128	4TH TSP + 33.92	FL
BOBBIN			ODI	37	0.43	1	125	4TH TSP + 34.35	FL
BOBBIN	24	14	ODI	32	0.32	1	128	5TH TSP + 12.85	FL
BOBBIN	24	56	ODI	31	0.46	1	130	4TH TSP + 34.07	FL
BOBBIN	24	57	ODI	35	0.30	1	127	4TH TSP + 32.81	FL
BOBBIN	25	16	ODI	32	0.26	1	128	5TH TSP + 14.31	FL
BOBBIN	25	57	ODI	37	0.51	1	125	4TH TSP + 34.18	FL
BOBBIN	26	20	ODI	30	0.47	1	132	5TH TSP + 16.23	FL
BOBBIN	26	32	ODI	38	0.27	1	124	5TH TSP + 9.29	FL
BOBBIN	28	20	ODI	37	0.34	1	125	5TH TSP + 12.92	FL
BOBBIN	28	21	ODI	35	0.56	1	127	LTPF + 21.60	FL
BOBBIN	36	88	ODI	31	0.29 P	1	113	5TH TSP - 0.13	FL
BOBBIN	36	95	ODI	34	0.35 P	1	111	5TH TSP - 0.13	FL
BOBBIN	42	28	ODI	30	0.25	1	138	4TH TSP + 35.80	FL
BOBBIN	46	31	ODI	36	0.37	1	126	LTPF + 22.21	FL
BOBBIN	52	70	ODI	30	0.21	1	126	6TH TSP + 11.37	FL
BOBBIN	53	28	ODI	33	0.26	1	126	4TH TSP + 35.69	FL
BOBBIN	56	10	ODI	38	0.66	1	124	LTPF + 7.06	FL
BOBBIN	57	60	ODI	34	0.26	1	127	4TH TSP + 13.91	FL
BOBBIN	59	5	ODI	36	0.38 P	1	118	14TH TSP+ 0.12	FL
BOBBIN	63	4	ODI	33	0.46	1	126	6TH TSP + 30.90	FL
BOBBIN	63	68	ODI	34	0.67	1	127	4TH TSP + 7.89	FL
BOBBIN	64	11	ODI	31	0.37	1	129	5TH TSP + 15.80	FL
BOBBIN	65	3	ODI	36	0.24	1	127	7TH TSP + 4.94	FL
BOBBIN	65	4	ODI	38	0.16 P	1	113	14TH TSP+ 0.25	FL
BOBBIN	65	15	ODI	37	0.38	1	127	5TH TSP + 12.55	FL
BOBBIN	65	51	ODI	39	0.74	1	125	4TH TSP + 14.98	FL
BOBBIN	65	63	ODI	30	0.54	1	131	4TH TSP + 4.93	FL
BOBBIN	65	69	ODI	39	0.34	1	123	4TH TSP + 9.88	FL
BOBBIN	65	79	ODI	33	0.21	1	128	10TH TSP+ 27.75	FL
BOBBIN	66	11	ODI	37	0.30	1	126	5TH TSP + 14.51	FL
BOBBIN	66	70	ODI	36	0.53	1	126	4TH TSP + 6.90	FL
BOBBIN	67	65	ODI	38	0.41	1	124	4TH TSP + 10.58	FL
BOBBIN			ODI	39	0.37	1	124	3RD TSP + 37.70	FL
BOBBIN	67	69	ODI	36	0.34	1	126	4TH TSP + 7.70	FL
BOBBIN	68	65	ODI	31	0.49	1	130	4TH TSP + 14.34	FL
BOBBIN			ODI	31	0.34	1	130	4TH TSP + 7.73	FL
BOBBIN	68	69	ODI	33	0.86	1	129	4TH TSP + 8.11	FL
BOBBIN	68	71	ODI	37	0.45	1	126	3RD TSP + 28.11	FL
BOBBIN	68	73	ODI	39	0.40	1	124	4TH TSP + 6.13	FL
BOBBIN	69	52	ODI	32	0.49	1	133	4TH TSP + 14.22	FL
BOBBIN	69	66	ODI	38	0.35	1	125	4TH TSP + 12.86	FL
BOBBIN			ODI	38	0.47	1	125	4TH TSP + 11.12	FL
BOBBIN	69	68	ODI	34	0.25	1	128	4TH TSP + 20.09	FL
BOBBIN	69	69	ODI	36	0.46	1	127	4TH TSP + 20.56	FL
BOBBIN			ODI	37	0.34	1	126	3RD TSP + 28.90	FL
BOBBIN			ODI	30	0.33	1	132	3RD TSP + 27.89	FL
BOBBIN	69	70	ODI	32	0.56	1	130	4TH TSP + 14.69	FL
BOBBIN			ODI	33	0.58	1	129	3RD TSP + 21.24	FL
BOBBIN			ODI	34	0.16	1	128	3RD TSP + 20.66	FL
BOBBIN	69	75	ODI	37	0.27	1	126	4TH TSP + 3.08	FL
BOBBIN	70	52	ODI	36	0.41	1	129	4TH TSP + 16.72	FL
BOBBIN	70	62	ODI	30	0.43 P	1	124	11TH TSP- 0.87	FL
BOBBIN	70	65	ODI	30	0.24	1	132	5TH TSP + 15.41	FL
BOBBIN			ODI	32	0.48	1	130	5TH TSP + 13.51	FL
BOBBIN	70	71	ODI	39	0.50	1	124	4TH TSP + 5.94	FL
BOBBIN	70	72	ODI	38	0.30	1	125	4TH TSP + 3.55	FL

STEAM GENERATOR 1-2

Plant: Davis Besse 1
Outage: 03/93 RFO

QUERY: INDICATIONS 30-39% TWD

TEST	ROW	COL	IND	%TW	VOLTS	CHN	DEG	LOCATION	EXTENT
BOBBIN	71	68	ODI	34	0.31	1	130	6TH TSP + 29.95	FL
BOBBIN			ODI	31	0.22	1	132	3RD TSP + 33.27	FL
BOBBIN	72	52	ODI	37	1.06	1	128	4TH TSP + 36.78	FL
BOBBIN	72	60	ODI	37	0.25	1	126	5TH TSP + 11.50	FL
BOBBIN	72	69	ODI	34	0.62	1	123	6TH TSP + 25.31	FL
BOBBIN	75	68	ODI	35	0.23	1	128	4TH TSP + 18.03	FL
BOBBIN	76	65	ODI	39	1.33	1	120	7TH TSP + 27.25	FL
BOBBIN	77	62	ODI	30	0.29	1	126	5TH TSP + 11.25	FL
BOBBIN	77	64	ODI	39	0.60	1	120	7TH TSP + 19.73	FL
BOBBIN	77	65	ODI	35	0.49	1	123	7TH TSP + 9.19	FL
BOBBIN	78	2	ODI	31	0.37	1	130	UTSF + 6.50	FL
BOBBIN	78	41	ODI	39	0.64	1	125	8TH TSP + 35.10	FL
BOBBIN	78	63	ODI	36	0.51	1	122	7TH TSP + 16.65	FL
BOBBIN	79	64	ODI	35	0.64	1	122	6TH TSP + 14.68	FL
BOBBIN	79	66	ODI	32	0.27	1	131	4TH TSP + 12.64	LTSF
BOBBIN	79	67	ODI	33	0.36	1	131	7TH TSP + 16.84	LTSF
BOBBIN	79	68	ODI	33	0.65	1	124	8TH TSP + 12.04	FL
BOBBIN	80	65	ODI	37	0.67	1	121	6TH TSP + 17.11	FL
BOBBIN			ODI	35	0.67	1	123	6TH TSP + 29.48	FL
BOBBIN	80	69	ODI	39	0.74	1	120	3RD TSP + 30.75	FL
BOBBIN	80	74	ODI	34	0.47	1	130	4TH TSP + 12.72	FL
BOBBIN	81	64	ODI	30	0.80	1	126	6TH TSP + 5.62	FL
BOBBIN	81	65	ODI	35	0.32	1	122	6TH TSP + 8.89	FL
BOBBIN			ODI	36	1.40	1	121	6TH TSP + 15.44	FL
BOBBIN			ODI	34	1.03	1	123	6TH TSP + 19.30	FL
BOBBIN			ODI	34	0.48	1	123	6TH TSP + 23.71	FL
BOBBIN			ODI	39	0.89	1	119	6TH TSP + 24.18	FL
BOBBIN	81	67	ODI	33	0.86	1	124	7TH TSP + 18.21	FL
BOBBIN	81	69	ODI	39	0.36	1	120	5TH TSP + 3.36	FL
BOBBIN	81	70	ODI	31	0.45	1	132	5TH TSP + 2.29	LTSF
BOBBIN	82	32	ODI	33	0.60	1	130	5TH TSP + 9.20	FL
BOBBIN	82	41	ODI	39	0.46	1	125	5TH TSP + 4.88	FL
BOBBIN	82	63	ODI	30	0.33	1	126	5TH TSP + 25.48	FL
BOBBIN			ODI	33	0.53	1	124	6TH TSP + 4.40	FL
BOBBIN	82	67	ODI	34	0.49	1	123	4TH TSP + 2.69	FL
BOBBIN			ODI	37	0.66	1	120	5TH TSP + 7.18	FL
BOBBIN	83	1	ODI	38	0.47	1	123	15TH TSP+ 0.11	FL
BOBBIN	83	2	ODI	38	0.23	1	128	13TH TSP- 0.19	FL
BOBBIN	83	49	ODI	36	0.47	1	128	4TH TSP + 17.67	FL
BOBBIN	83	64	ODI	33	0.36	1	127	4TH TSP + 5.36	FL
BOBBIN			ODI	32	0.39	1	128	5TH TSP + 11.50	FL
BOBBIN	83	69	ODI	38	1.17	1	126	4TH TSP + 8.11	LTSF
BOBBIN			ODI	31	0.37	1	132	4TH TSP + 15.07	LTSF
BOBBIN			ODI	37	0.39	1	127	4TH TSP + 26.44	LTSF
BOBBIN			ODI	31	0.27	1	132	5TH TSP + 2.30	LTSF
BOBBIN			ODI	34	0.64	1	129	5TH TSP + 4.17	LTSF
BOBBIN	83	70	ODI	39	0.32	1	120	3RD TSP + 19.86	FL
BOBBIN			ODI	30	0.36	1	129	4TH TSP + 10.01	FL
BOBBIN			ODI	33	0.30	1	126	4TH TSP + 16.83	FL
BOBBIN	83	72	ODI	32	0.51	1	132	4TH TSP + 9.43	FL
BOBBIN	85	66	ODI	34	0.71	1	130	3RD TSP + 35.71	FL
BOBBIN			ODI	35	0.64	1	129	3RD TSP + 20.13	FL
BOBBIN			ODI	33	0.54	1	131	4TH TSP + 12.22	FL
BOBBIN	85	67	ODI	38	0.55	1	127	4TH TSP + 11.36	FL
BOBBIN			ODI	32	0.23	P 1	118	4TH TSP + 0.34	FL
BOBBIN	86	1	ODI	38	0.53	1	123	13TH TSP+ 0.24	FL
BOBBIN	86	63	ODI	38	0.42	1	123	4TH TSP + 17.46	FL
BOBBIN	86	66	ODI	38	0.48	1	126	4TH TSP + 14.31	FL
BOBBIN			ODI	38	0.27	1	126	4TH TSP + 11.88	FL
BOBBIN	86	67	ODI	39	0.62	1	125	4TH TSP + 10.82	FL
BOBBIN	86	68	ODI	30	0.89	P 1	112	4TH TSP - 0.54	FL
BOBBIN			ODI	32	0.51	1	131	4TH TSP + 10.68	FL
BOBBIN			ODI	36	0.52	1	128	4TH TSP + 8.04	FL
BOBBIN	86	69	ODI	36	0.37	1	128	4TH TSP + 11.30	FL
BOBBIN	86	110	ODI	38	0.28	1	123	4TH TSP + 33.19	FL
BOBBIN	87	61	ODI	34	0.34	1	129	4TH TSP + 16.53	FL
BOBBIN	87	67	ODI	36	0.68	1	127	4TH TSP + 13.73	FL
BOBBIN	88	36	ODI	37	0.43	1	126	5TH TSP + 3.42	FL
BOBBIN	89	65	ODI	37	0.69	1	127	3RD TSP + 36.63	FL
BOBBIN	96	24	ODI	30	0.35	1	133	5TH TSP + 10.27	FL

STEAM GENERATOR 1-2

Plant: Davis Besse 1
Outage: 03/93 RFO

QUERY: INDICATIONS 30-39% TWD

TEST	ROW	COL	IND	%TW	VOLTS	CHN	DEG	LOCATION	EXTENT
BOBBIN	98	24	ODI	30	0.38	1	130	5TH TSP + 10.04	FL
BOBBIN	102	16	ODI	35	0.26	1	128	5TH TSP + 12.75	FL
BOBBIN	102	38	ODI	31	0.62	1	131	5TH TSP + 3.44	FL
BOBBIN	104	17	ODI	31	0.43	1	129	5TH TSP + 14.10	FL
BOBBIN	105	16	ODI	33	0.35	1	126	5TH TSP + 15.46	FL
BOBBIN			ODI	37	0.37	1	122	5TH TSP + 14.30	FL
BOBBIN	114	97	ODI	38	0.23	P 1	115	7TH TSP - 0.48	FL
BOBBIN	120	21	ODI	35	0.52	1	126	5TH TSP + 11.31	FL
BOBBIN	121	62	ODI	35	0.42	1	128	5TH TSP + 4.44	FL
BOBBIN	121	64	ODI	35	0.38	1	128	4TH TSP + 26.49	FL
BOBBIN	122	76	ODI	37	0.24	1	126	4TH TSP + 30.69	FL
BOBBIN	124	18	ODI	35	0.26	1	126	5TH TSP + 13.06	FL
BOBBIN	129	29	ODI	37	0.52	1	124	5TH TSP + 11.64	FL
BOBBIN	130	6	ODI	34	0.78	P 1	119	10TH TSP+ 0.48	FL
BOBBIN	141	68	ODI	38	0.69	P 1	111	8TH TSP - 0.82	FL
BOBBIN	144	54	ODI	38	0.88	1	125	7TH TSP + 8.90	FL

TOTAL TUBES FOUND = 123
TOTAL INDICATIONS FOUND = 156
TOTAL TUBES IN INPUT FILE = 15457

STEAM GENERATOR 1-2

Plant: Davis Besse 1
Outage: 03/93 RFO

QUERY: INDICATIONS 40-100% TWD

TEST	ROW	COL	IND	%TW	VOLTS	CHN	DEG	LOCATION	EXTENT
BOBBIN	12	44	ODI	44	0.41	1	120	5TH TSP + 14.37	FL
BOBBIN	14	7	ODI	41	0.51	1	121	6TH TSP + 22.30	FL
BOBBIN	16	17	ODI	41	0.37	1	123	9TH TSP + 31.41	FL
BOBBIN	17	27	ODI	40	0.27	1	122	5TH TSP + 15.56	FL
BOBBIN	21	17	ODI	42	0.46	1	121	5TH TSP + 16.74	FL
BOBBIN	22	56	ODI	41	0.50	1	121	4TH TSP + 34.00	FL
BOBBIN			ODI	43	0.50	1	119	4TH TSP + 34.99	FL
BOBBIN			ODI	42	0.68	1	120	4TH TSP + 35.25	FL
BOBBIN	39	1	ODI	44	0.82	1	120	15TH TSP+ 14.36	FL
BOBBIN	40	42	ODI	41	0.48	1	122	LTPF + 19.81	FL
BOBBIN	41	16	ODI	41	0.23	1	122	5TH TSP + 13.27	FL
BOBBIN	45	119	ODI	56	0.47	1	106	6TH TSP + 31.59	FL
BOBBIN	48	91	ODI	49	0.85	1	111	5TH TSP + 1.11	FL
BOBBIN	60	5	ODI	58	0.31	P 1	97	14TH TSP+ 0.09	FL
BOBBIN			ODI	51	0.32	P 1	104	14TH TSP+ 0.38	FL
BOBBIN	62	9	ODI	52	1.07	1	112	5TH TSP + 14.90	FL
BOBBIN			ODI	69	0.80	1	94	5TH TSP + 15.30	FL
BOBBIN	65	52	ODI	60	0.30	1	100	4TH TSP + 16.80	UTSF
BOBBIN	66	2	ODI	40	0.81	P 1	112	7TH TSP + 0.14	FL
BOBBIN	66	11	ODI	59	0.48	1	107	5TH TSP + 15.08	FL
BOBBIN	67	62	ODI	52	0.57	1	111	3RD TSP + 38.17	FL
BOBBIN	67	63	ODI	51	0.54	1	112	3RD TSP + 38.11	FL
BOBBIN	68	11	ODI	63	0.35	1	100	5TH TSP + 15.64	FL
BOBBIN	68	12	ODI	54	0.38	1	109	5TH TSP + 14.36	FL
BOBBIN			ODI	55	0.31	1	108	5TH TSP + 13.40	FL
BOBBIN	68	66	ODI	59	0.28	1	102	4TH TSP + 11.68	FL
BOBBIN			ODI	52	0.68	1	110	3RD TSP + 38.23	FL
BOBBIN	68	69	ODI	46	0.48	1	117	4TH TSP + 11.82	FL
BOBBIN			ODI	42	0.58	1	121	4TH TSP + 8.61	FL
BOBBIN			ODI	58	0.68	1	104	4TH TSP + 7.75	FL
BOBBIN	68	73	ODI	46	0.45	1	117	4TH TSP + 6.74	FL
BOBBIN			ODI	52	0.27	1	111	4TH TSP + 5.69	FL
BOBBIN	69	11	ODI	61	0.25	1	101	5TH TSP + 15.65	FL
BOBBIN	69	63	ODI	58	0.30	1	106	3RD TSP + 31.65	FL
BOBBIN			ODI	49	0.36	1	115	3RD TSP + 27.53	FL
BOBBIN	69	65	ODI	47	0.35	P 1	106	2ND TSP - 0.26	FL
BOBBIN			ODI	45	0.41	1	118	4TH TSP + 18.74	FL
BOBBIN	69	66	ODI	41	0.37	1	122	3RD TSP + 37.10	FL
BOBBIN	69	67	ODI	45	0.48	1	118	4TH TSP + 26.56	FL
BOBBIN			ODI	51	0.39	1	112	3RD TSP + 30.86	FL
BOBBIN	69	68	ODI	57	0.51	1	105	4TH TSP + 26.32	FL
BOBBIN	69	70	ODI	52	0.29	1	111	4TH TSP + 16.48	FL
BOBBIN	69	74	ODI	50	0.97	P 1	104	4TH TSP + 0.70	FL
BOBBIN	70	62	ODI	52	0.42	1	112	5TH TSP + 18.54	FL
BOBBIN			ODI	67	0.28	1	95	4TH TSP + 7.86	FL
BOBBIN			ODI	65	0.30	1	98	4TH TSP + 5.94	FL
BOBBIN			ODI	55	0.33	1	109	4TH TSP + 4.42	FL
BOBBIN			ODI	51	0.46	1	113	4TH TSP + 3.99	FL
BOBBIN	70	65	ODI	48	0.32	1	115	5TH TSP + 11.80	FL
BOBBIN			ODI	47	0.32	1	116	5TH TSP + 11.37	FL
BOBBIN	70	66	ODI	63	0.28	1	98	4TH TSP + 36.02	FL
BOBBIN	70	67	ODI	56	0.36	1	107	5TH TSP + 7.57	FL
BOBBIN	70	72	ODI	47	0.37	1	116	4TH TSP + 4.79	FL
BOBBIN			ODI	43	0.30	1	120	4TH TSP + 4.24	FL
BOBBIN	70	75	ODI	44	0.53	1	119	4TH TSP + 8.53	FL
BOBBIN	71	11	ODI	62	0.66	1	102	5TH TSP + 35.54	FL
BOBBIN	71	14	ODI	54	0.44	1	110	5TH TSP + 35.26	FL
BOBBIN			ODI	43	0.41	1	119	5TH TSP + 35.03	FL
BOBBIN	71	68	ODI	61	0.50	1	105	6TH TSP + 29.12	FL
BOBBIN	71	70	ODI	42	0.45	1	123	3RD TSP + 21.90	FL
BOBBIN	71	73	ODI	51	0.31	1	112	4TH TSP + 1.35	FL
BOBBIN	72	68	ODI	87	0.83	1	66	7TH TSP + 12.25	FL
BOBBIN	72	71	ODI	48	0.63	1	118	4TH TSP + 5.29	FL
BOBBIN	74	62	ODI	63	0.37	1	98	7TH TSP + 6.73	FL
BOBBIN	75	8	ODI	46	0.46	1	117	10TH TSP+ 33.81	FL
BOBBIN	76	65	ODI	77	0.37	1	81	7TH TSP + 26.84	FL
BOBBIN	77	51	ODI	52	0.34	1	114	4TH TSP + 19.71	FL
BOBBIN	77	64	ODI	65	0.62	1	95	7TH TSP + 18.91	FL
BOBBIN			ODI	60	0.81	1	101	7TH TSP + 21.17	FL
BOBBIN	77	65	ODI	53	0.97	1	108	7TH TSP + 16.81	FL

STEAM GENERATOR 1-2

Plant: Davis Besse 1
Outage: 03/93 RFO

QUERY: INDICATIONS 40-100% TWD

TEST	ROW	COL	IND	%TW	VOLTS	CHN	DEG	LOCATION			EXTENT
BOBBIN	77	67	ODI	54	0.81	1	113	6TH TSP	+	3.55	FL
BOBBIN	78	41	ODI	58	0.35	1	108	8TH TSP	+ +	35.52	FL
BOBBIN			ODI	45	0.36	1	120	8TH TSP	+ +	33.76	FL
BOBBIN	79	18	ODI	68	0.32	1	93	12TH TSP	+	9.06	FL
BOBBIN	79	63	ODI	55	0.74	1	106	6TH TSP	+ +	11.39	FL
BOBBIN	79	67	ODI	42	0.94	1	122	7TH TSP	+ +	19.42	LTSF
BOBBIN	79	68	ODI	79	0.75	1	78	6TH TSP	+ +	27.03	FL
BOBBIN			ODI	63	0.31	1	98	7TH TSP	+ +	11.32	FL
BOBBIN			ODI	42	0.52	1	117	7TH TSP	+ +	17.49	FL
BOBBIN	79	69	ODI	62	0.50	1	99	6TH TSP	+ +	12.78	FL
BOBBIN			ODI	63	0.75	1	98	6TH TSP	+ +	21.63	FL
BOBBIN	80	62	ODI	65	0.75	1	96	6TH TSP	+ +	6.39	FL
BOBBIN	80	63	ODI	73	0.57	1	86	6TH TSP	+ +	9.36	FL
BOBBIN	80	65	ODI	42	0.34	1	117	6TH TSP	+ +	21.21	FL
BOBBIN			ODI	70	0.45	1	90	6TH TSP	+ +	29.90	FL
BOBBIN	80	66	ODI	42	0.59	1	117	6TH TSP	+ +	20.16	FL
BOBBIN			ODI	66	1.12	1	94	6TH TSP	+ +	21.58	FL
BOBBIN			ODI	67	0.50	1	93	6TH TSP	+ +	22.29	FL
BOBBIN			ODI	65	1.06	1	96	6TH TSP	+ +	22.46	FL
BOBBIN			ODI	52	0.42	1	109	6TH TSP	+ +	23.04	FL
BOBBIN			ODI	64	0.72	1	97	6TH TSP	+ +	23.71	FL
BOBBIN			ODI	77	0.61	1	81	6TH TSP	+ +	24.69	FL
BOBBIN			ODI	64	0.47	1	97	6TH TSP	+ +	26.74	FL
BOBBIN			ODI	75	0.53	1	83	6TH TSP	+ +	27.09	FL
BOBBIN	80	67	ODI	46	0.52	1	113	6TH TSP	+ +	24.79	FL
BOBBIN			ODI	58	0.79	1	101	7TH TSP	+ +	16.04	FL
BOBBIN	80	68	ODI	74	0.32	1	84	7TH TSP	+ +	10.65	FL
BOBBIN			ODI	79	0.52	1	77	7TH TSP	+ +	13.82	FL
BOBBIN	80	69	ODI	70	0.60	1	90	7TH TSP	+ +	8.33	FL
BOBBIN			ODI	66	0.42	1	94	7TH TSP	+ +	10.44	FL
BOBBIN	80	74	ODI	51	0.38	1	115	4TH TSP	+ +	11.88	FL
BOBBIN	81	64	ODI	47	0.72	1	113	6TH TSP	+ +	6.61	FL
BOBBIN			ODI	50	0.43	1	111	6TH TSP	+ +	8.14	FL
BOBBIN			ODI	65	0.40	1	96	6TH TSP	+ +	8.46	FL
BOBBIN			ODI	40	0.66	1	119	6TH TSP	+ +	8.85	FL
BOBBIN			ODI	62	0.39	1	99	6TH TSP	+ +	15.88	FL
BOBBIN			ODI	40	0.60	1	119	6TH TSP	+ +	16.45	FL
BOBBIN	81	65	ODI	48	0.92	1	111	6TH TSP	+ +	9.17	FL
BOBBIN			ODI	46	0.82	1	113	6TH TSP	+ +	9.86	FL
BOBBIN			ODI	61	2.31	1	98	6TH TSP	+ +	16.48	FL
BOBBIN			ODI	50	1.43	1	109	6TH TSP	+ +	17.22	FL
BOBBIN			ODI	56	1.38	1	103	6TH TSP	+ +	17.94	FL
BOBBIN			ODI	52	1.38	1	107	6TH TSP	+ +	18.73	FL
BOBBIN			ODI	40	1.34	1	118	6TH TSP	+ +	19.82	FL
BOBBIN			ODI	71	1.35	1	87	6TH TSP	+ +	20.51	FL
BOBBIN			ODI	49	1.14	1	110	6TH TSP	+ +	21.04	FL
BOBBIN			ODI	67	0.70	1	91	6TH TSP	+ +	25.94	FL
BOBBIN			ODI	61	1.14	1	98	6TH TSP	+ +	31.34	FL
BOBBIN	81	66	ODI	71	0.62	1	88	5TH TSP	+ +	7.00	FL
BOBBIN			ODI	81	0.51	1	74	6TH TSP	+ +	24.50	FL
BOBBIN			ODI	67	0.73	1	93	6TH TSP	+ +	31.68	FL
BOBBIN			ODI	77	0.78	1	80	6TH TSP	+ +	33.79	FL
BOBBIN	81	68	ODI	53	0.69	1	108	6TH TSP	+ +	25.98	FL
BOBBIN			ODI	95	0.78	1	51	6TH TSP	+ +	31.21	FL
BOBBIN	81	69	ODI	40	0.45	1	119	5TH TSP	+ +	3.85	FL
BOBBIN	81	70	ODI	41	0.48	1	123	4TH TSP	+ +	19.37	LTSF
BOBBIN			ODI	40	0.51	1	124	4TH TSP	+ +	24.45	LTSF
BOBBIN			ODI	44	0.41 P	1	115	5TH TSP	- -	0.45	LTSF
BOBBIN			ODI	47	0.60	1	117	5TH TSP	- -	0.05	LTSF
BOBBIN	82	31	ODI	47	0.66	1	116	5TH TSP	+ +	9.90	FL
BOBBIN	82	33	ODI	41	0.50	1	124	5TH TSP	+ +	8.73	FL
BOBBIN	82	63	ODI	84	0.56	1	70	5TH TSP	+ +	24.12	FL
BOBBIN	82	67	ODI	41	0.65	1	117	4TH TSP	+ +	2.87	FL
BOBBIN			ODI	51	0.43	1	108	4TH TSP	+ +	4.85	FL
BOBBIN			ODI	48	0.56	1	110	5TH TSP	+ +	6.82	FL
BOBBIN			ODI	48	0.49	1	110	5TH TSP	+ +	8.53	FL
BOBBIN			ODI	46	1.12	1	114	4TH TSP	+ +	5.04	FL
BOBBIN			ODI	81	0.45	1	75	6TH TSP	+ +	4.79	FL
BOBBIN			ODI	62	0.84	1	99	5TH TSP	+ +	6.58	FL
BOBBIN	83	10	ODI	49	0.74	1	116	5TH TSP	+ +	18.47	FL

STEAM GENERATOR 1-2

Plant: Davis Besse 1
Outage: 03/93 RFO

QUERY: INDICATIONS 40-100% TWD

TEST	ROW	COL	IND	%TW	VOLTS	CHN	DEG	LOCATION	EXTENT
BOBBIN	83	11	ODI	46	0.30	1	117	5TH TSP + 14.37	FL
BOBBIN	83	64	ODI	56	0.46	1	104	4TH TSP + 2.73	FL
BOBBIN			ODI	65	0.48	1	93	5TH TSP + 9.05	FL
BOBBIN			ODI	53	0.32	1	107	5TH TSP + 14.07	FL
BOBBIN	83	66	ODI	47	0.54	1	114	4TH TSP + 7.82	FL
BOBBIN			ODI	44	1.03	1	117	4TH TSP + 9.48	FL
BOBBIN			ODI	83	0.70	1	69	4TH TSP + 33.41	FL
BOBBIN			ODI	50	0.60	1	111	5TH TSP + 6.33	FL
BOBBIN			ODI	49	0.59	1	112	5TH TSP + 11.99	FL
BOBBIN	83	69	ODI	41	0.65	1	123	3RD TSP + 25.51	LTSF
BOBBIN			ODI	44	0.56	1	120	4TH TSP + 10.89	LTSF
BOBBIN			ODI	45	0.53	1	119	4TH TSP + 17.52	LTSF
BOBBIN			ODI	51	0.40	1	113	4TH TSP + 18.02	LTSF
BOBBIN			ODI	40	0.51	1	124	4TH TSP + 18.42	LTSF
BOBBIN			ODI	50	0.50	1	114	4TH TSP + 19.20	LTSF
BOBBIN			ODI	53	1.06	1	111	4TH TSP + 26.74	LTSF
BOBBIN			ODI	43	0.37	1	121	5TH TSP + 4.59	LTSF
BOBBIN	84	64	ODI	55	0.53	1	105	4TH TSP + 20.38	FL
BOBBIN			ODI	71	0.86	1	86	4TH TSP + 20.84	FL
BOBBIN			ODI	71	0.53	1	86	4TH TSP + 22.59	FL
BOBBIN	84	65	ODI	84	0.45	1	66	3RD TSP + 33.34	FL
BOBBIN			ODI	82	0.46	1	68	4TH TSP + 10.44	FL
BOBBIN			ODI	62	0.37	1	96	4TH TSP + 13.13	FL
BOBBIN	84	69	ODI	54	0.33	1	106	4TH TSP + 6.61	FL
BOBBIN			ODI	47	0.35	1	114	4TH TSP + 9.25	FL
BOBBIN			ODI	68	0.34	1	90	4TH TSP + 9.85	FL
BOBBIN			ODI	78	0.44	1	77	5TH TSP + 1.47	FL
BOBBIN	84	70	ODI	44	0.34	1	115	4TH TSP + 17.54	FL
BOBBIN	85	66	ODI	65	0.31	1	100	3RD TSP + 13.90	FL
BOBBIN			ODI	60	0.75	1	107	4TH TSP + 19.49	FL
BOBBIN	85	67	ODI	58	0.45	1	108	4TH TSP + 10.11	FL
BOBBIN	85	68	ODI	51	0.64	1	116	4TH TSP + 14.73	FL
BOBBIN	86	65	ODI	60	0.37	1	105	4TH TSP + 13.19	FL
BOBBIN	86	66	ODI	40	0.74	P 1	105	4TH TSP - 0.42	FL
BOBBIN	86	67	ODI	61	0.39	1	104	4TH TSP + 11.58	FL
BOBBIN			ODI	45	0.59	1	117	3RD TSP + 36.07	FL
BOBBIN			ODI	46	0.30	1	116	3RD TSP + 14.07	FL
BOBBIN	86	68	ODI	46	0.76	1	119	4TH TSP + 11.11	FL
BOBBIN			ODI	43	0.89	1	122	4TH TSP + 10.14	FL
BOBBIN			ODI	48	1.66	1	117	4TH TSP + 9.15	FL
BOBBIN			ODI	46	1.00	1	119	4TH TSP + 8.66	FL
BOBBIN	87	7	ODI	41	0.91	1	121	UTSF + 6.73	FL
BOBBIN	87	63	ODI	55	0.47	1	110	4TH TSP + 16.05	FL
BOBBIN	87	67	ODI	40	0.44	1	124	4TH TSP + 11.26	FL
BOBBIN			ODI	46	0.47	1	119	4TH TSP + 12.68	FL
BOBBIN	87	68	ODI	40	0.58	1	124	4TH TSP + 12.81	FL
BOBBIN	88	63	ODI	40	0.46	1	124	4TH TSP + 13.85	FL
BOBBIN	88	65	ODI	46	0.39	1	119	4TH TSP + 15.43	FL
BOBBIN	88	66	ODI	69	0.26	1	94	4TH TSP + 14.20	FL
BOBBIN			ODI	67	0.25	1	96	4TH TSP + 12.78	FL
BOBBIN	91	1	ODI	61	0.43	P 1	99	13TH TSP - 0.54	FL
BOBBIN	95	79	ODI	54	0.64	P 1	104	3RD TSP - 0.64	FL
BOBBIN	98	41	ODI	75	0.41	1	83	5TH TSP + 3.40	FL
BOBBIN	100	19	ODI	45	0.39	1	120	5TH TSP + 11.33	FL
BOBBIN	102	22	ODI	56	0.25	1	109	5TH TSP + 12.29	FL
BOBBIN	108	51	ODI	69	0.61	1	92	LTSF + 20.73	FL
BOBBIN	131	29	ODI	54	0.39	1	109	5TH TSP + 11.28	FL
BOBBIN	133	59	ODI	44	0.48	1	120	5TH TSP + 8.84	FL
BOBBIN	134	1	ODI	44	0.57	P 1	106	9TH TSP + 0.19	FL
BOBBIN	150	10	ODI	81	0.42	1	74	LTPF + 6.74	FL
BOBBIN	151	8	ODI	45	0.64	P 1	105	13TH TSP - 0.11	FL

TOTAL TUBES FOUND = 109
TOTAL INDICATIONS FOUND = 201
TOTAL TUBES IN INPUT FILE = 15457

Plant: Davis Besse 1
Outage: 03/93 RFO

QUERY: DEFECT INDICATIONS 20-100% TW, NQI, ADS, & OBS

TEST	ROW	COL	IND	%TW	VOLTS	CHN	DEG	LOCATION	EXTENT
BOBBIN	2	5	NQI		0.26	P 1	122	11TH TSP+ 0.37	FL
BOBBIN	4	23	ODI	29	0.91	1	132	5TH TSP + 9.04	FL
BOBBIN	12	44	ODI	44	0.61	1	120	5TH TSP + 14.37	FL
BOBBIN	12	71	ODI	22	0.64	1	136	14TH TSP+ 31.61	FL
BOBBIN	14	7	ODI	41	0.51	1	121	6TH TSP + 22.30	FL
BOBBIN	14	13	NQI		0.21	1	108	10TH TSP+ 10.65	FL
BOBBIN	15	1	NQI		0.18	P 1	122	14TH TSP+ 0.27	FL
BOBBIN	15	24	ODI	31	0.47	1	132	5TH TSP + 17.59	FL
BOBBIN	15	78	ODI	21	0.57	1	137	14TH TSP+ 31.06	FL
BOBBIN	16	17	ODI	41	0.37	1	123	9TH TSP + 31.41	FL
BOBBIN	16	26	ODI	34	0.78	1	129	5TH TSP + 18.05	FL
BOBBIN	17	13	ODI	32	0.40	1	130	5TH TSP + 12.55	FL
BOBBIN	17	27	NQI		0.79	P 1	102	5TH TSP - 0.63	FL
BOBBIN			ODI	40	0.27	1	122	5TH TSP + 15.56	FL
BOBBIN			ODI	38	0.44	1	126	5TH TSP + 15.25	FL
BOBBIN					0.24	1	115	5TH TSP + 14.26	FL
BOBBIN	17	28	NQI		0.32	1	129	5TH TSP + 13.45	FL
BOBBIN	18	26	ODI	33	0.33	1	135	5TH TSP + 19.44	FL
BOBBIN	18	27	ODI	28	0.40	1	124	5TH TSP + 23.36	FL
BOBBIN	18	28	ODI	38	0.24	1	132	5TH TSP + 22.81	FL
BOBBIN			ODI	31	0.48	1	139	5TH TSP + 23.10	FL
BOBBIN			ODI	23	0.21	1	138	5TH TSP + 13.84	FL
BOBBIN	18	31	ODI	25	0.37	1	128	7TH TSP + 9.14	FL
BOBBIN	19	13	ODI	36	0.35	1	131	5TH TSP + 15.33	FL
BOBBIN	19	29	ODI	31	0.46	1	121	5TH TSP + 16.74	FL
BOBBIN	21	17	ODI	42	0.43	1	125	5TH TSP + 11.61	FL
BOBBIN	22	33	ODI	34	0.50	1	121	4TH TSP + 34.00	FL
BOBBIN	22	56	ODI	41	0.27	1	128	4TH TSP + 34.40	FL
BOBBIN			ODI	33	0.50	1	119	4TH TSP + 34.99	FL
BOBBIN			ODI	43	0.68	1	120	4TH TSP + 35.25	FL
BOBBIN			ODI	42	0.31	1	128	5TH TSP + 11.32	FL
BOBBIN	23	33	ODI	32	0.29	1	136	5TH TSP + 11.84	FL
BOBBIN	23	34	ODI	22	0.37	1	125	4TH TSP + 33.32	FL
BOBBIN	23	57	ODI	37	0.20	1	128	4TH TSP + 33.92	FL
BOBBIN			ODI	34	0.43	1	125	4TH TSP + 34.35	FL
BOBBIN			ODI	37	0.32	1	128	5TH TSP + 12.85	FL
BOBBIN	24	14	ODI	32	0.46	1	130	4TH TSP + 34.07	FL
BOBBIN	24	56	ODI	31	0.30	1	127	4TH TSP + 32.81	FL
BOBBIN	24	57	ODI	35	0.26	1	128	5TH TSP + 14.31	FL
BOBBIN	25	16	ODI	32	0.51	1	125	4TH TSP + 34.18	FL
BOBBIN	25	57	ODI	37	0.47	1	132	5TH TSP + 16.23	FL
BOBBIN	26	20	ODI	30	0.27	1	124	5TH TSP + 9.29	FL
BOBBIN	26	32	ODI	38	0.60	1	134	4TH TSP + 32.60	FL
BOBBIN	26	55	ODI	27	0.34	1	125	5TH TSP + 12.92	FL
BOBBIN	28	20	ODI	37	0.56	1	127	LTPF + 21.60	FL
BOBBIN	28	21	ODI	35	0.37	1	136	5TH TSP + 12.26	FL
BOBBIN	29	23	ODI	26	0.29	P 1	80	4TH TSP + 0.48	FL
BOBBIN	29	33	NQI		0.32	1	127	LTPF + 21.68	FL
BOBBIN	33	65	ODI	29	0.45	1	73	5TH TSP + 14.39	FL
BOBBIN	33	106	NQI		0.28	P 1	104	5TH TSP - 0.23	FL
BOBBIN	34	24	NQI		0.29	P 1	113	5TH TSP - 0.13	FL
BOBBIN	36	88	ODI	31	0.35	P 1	111	5TH TSP - 0.13	FL
BOBBIN	36	95	ODI	34	0.25	P 1	81	5TH TSP - 0.07	FL
BOBBIN	37	95	NQI		0.82	1	120	15TH TSP+ 14.36	FL
BOBBIN	39	1	ODI	44	0.48	1	122	LTPF + 19.81	FL
BOBBIN	40	42	ODI	41	0.23	1	122	5TH TSP + 13.27	FL
BOBBIN	41	16	ODI	41	0.25	1	138	4TH TSP + 35.80	FL
BOBBIN	42	28	ODI	30	0.36	1	131	10TH TSP+ 2.09	FL
BOBBIN	45	63	ODI	29	0.47	1	106	6TH TSP + 31.59	FL
BOBBIN	45	119	ODI	56	0.37	1	126	LTPF + 22.21	FL
BOBBIN	46	31	ODI	36	0.85	1	111	5TH TSP + 1.11	FL
BOBBIN	48	91	ODI	49	0.39	1	136	4TH TSP + 30.95	FL
BOBBIN	49	31	ODI	22	0.26	1	116	LTPF + 21.53	FL
BOBBIN	52	30	NQI		1.48	5	104	LTSF + 22.48TO+ 30.17	FL
BOBBIN	52	59	ADS		0.21	1	126	6TH TSP + 11.37	FL
BOBBIN	52	70	ODI	30	0.26	1	126	4TH TSP + 35.69	FL
BOBBIN	53	28	ODI	33	1.16	P 1	125	12TH TSP+ 0.52	FL
BOBBIN	56	1	ODI	29	0.66	1	124	LTPF + 7.06	FL
BOBBIN	56	10	ODI	38	0.13	P 1	68	4TH TSP + 0.07	FL
BOBBIN	56	98	NQI		0.26	1	127	4TH TSP + 13.91	FL
BOBBIN	57	60	ODI	34					

TUBES PLUGGED STEAM GENERATOR 1-2

Plant: Davis Besse 1
Outage: 03/93 RFO

QUERY: DEFECT INDICATIONS 20-100% TW, MQI, ADS, & OBS

TEST	ROW	COL	IND	%TW	VOLTS	CHN	DEG	LOCATION			EXTENT
BOBBIN	57	126	MQI		3.24	P 1	82	LTSP	+	0.00	FL
BOBBIN	58	112	MQI		0.57	P 1	68	15TH TSP	+	0.90	FL
BOBBIN	59	5	ODI	36	0.38	P 1	118	14TH TSP	+	0.12	FL
BOBBIN	60	1	ODI	24	0.32	P 1	127	12TH TSP	+	0.12	FL
BOBBIN	60	5	ODI	58	0.31	P 1	97	14TH TSP	+	0.09	FL
BOBBIN			ODI	51	0.32	P 1	104	14TH TSP	+	0.38	FL
BOBBIN	60	79	OBS						+	22.19	UTSP
BOBBIN	61	49	ODI	21	0.25	1	138	4TH TSP	+	17.08	FL
BOBBIN	62	9	ODI	52	1.07	1	112	5TH TSP	+	14.90	FL
BOBBIN			ODI	69	0.80	1	94	5TH TSP	+	15.30	FL
BOBBIN	63	4	ODI	33	0.66	1	126	6TH TSP	+	30.90	FL
BOBBIN	63	10	MQI		0.48	1	103	5TH TSP	+	14.34	FL
BOBBIN	63	52	ODI	24	0.71	1	136	4TH TSP	+	17.25	FL
BOBBIN	63	68	ODI	21	0.41	1	138	4TH TSP	+	9.09	FL
BOBBIN			ODI	34	0.67	1	127	4TH TSP	+	7.89	FL
BOBBIN	64	1	ODI	20	0.37	1	138	14TH TSP	+	32.94	FL
BOBBIN	64	11	ODI	31	0.37	1	129	5TH TSP	+	15.80	FL
BOBBIN	65	3	ODI	36	0.24	1	127	7TH TSP	+	4.94	FL
BOBBIN	65	4	ODI	38	0.16	P 1	113	14TH TSP	+	0.25	FL
BOBBIN	65	15	ODI	26	0.29	1	135	5TH TSP	+	12.75	FL
BOBBIN			ODI	37	0.38	1	127	5TH TSP	+	12.55	FL
BOBBIN	65	51	ODI	39	0.74	1	125	4TH TSP	+	14.98	FL
BOBBIN	65	52	ODI	60	0.30	1	100	4TH TSP	+	16.80	UTSP
BOBBIN	65	63	ODI	30	0.54	1	131	4TH TSP	+	4.53	FL
BOBBIN	65	69	ODI	39	0.34	1	123	4TH TSP	+	9.88	FL
BOBBIN	65	79	ODI	33	0.21	1	128	10TH TSP	+	27.75	FL
BOBBIN	66	2	ODI	40	0.81	P 1	112	7TH TSP	+	0.14	FL
BOBBIN	66	4	MQI		0.21	P 1	85	14TH TSP	-	0.06	FL
BOBBIN	66	11	ODI	59	0.48	1	107	5TH TSP	+	15.08	FL
BOBBIN			ODI	37	0.30	1	126	5TH TSP	+	14.51	FL
BOBBIN	66	63	MQI		0.25	1	116	4TH TSP	+	10.31	FL
BOBBIN	66	66	ODI	22	0.32	1	137	4TH TSP	+	8.09	FL
BOBBIN	66	70	ODI	36	0.53	1	126	4TH TSP	+	6.90	FL
BOBBIN	66	72	ODI	23	0.41	1	136	4TH TSP	+	6.93	FL
BOBBIN	67	19	ADS		2.68	6	93	7TH TSP	+	33.55	FL
BOBBIN	67	60	ODI	29	0.40	1	133	4TH TSP	+	12.36	FL
BOBBIN	67	62	ODI	52	0.57	1	111	3RD TSP	+	38.17	FL
BOBBIN	67	63	ODI	51	0.54	1	112	3RD TSP	+	38.11	FL
BOBBIN	67	65	ODI	38	0.41	1	124	4TH TSP	+	10.58	FL
BOBBIN			ODI	39	0.37	1	124	3RD TSP	+	37.70	FL
BOBBIN	67	68	ODI	22	0.31	1	137	3RD TSP	+	20.10	FL
BOBBIN	67	69	ODI	36	0.34	1	126	4TH TSP	+	7.70	FL
BOBBIN	68	11	ODI	63	0.35	1	100	5TH TSP	+	15.64	FL
BOBBIN	68	12	ODI	56	0.38	1	109	5TH TSP	+	14.36	FL
BOBBIN			ODI	55	0.31	1	108	5TH TSP	+	13.40	FL
BOBBIN	68	65	ODI	31	0.69	1	130	4TH TSP	+	14.34	FL
BOBBIN			ODI	31	0.34	1	130	4TH TSP	+	7.73	FL
BOBBIN	68	66	ODI	59	0.28	1	102	4TH TSP	+	11.68	FL
BOBBIN			ODI	52	0.68	1	110	3RD TSP	+	38.23	FL
BOBBIN			ODI	25	0.40	1	136	3RD TSP	+	38.00	FL
BOBBIN	68	68	ODI	27	0.51	1	135	4TH TSP	+	11.16	FL
BOBBIN	68	69	ODI	46	0.48	1	117	4TH TSP	+	11.82	FL
BOBBIN			ODI	42	0.58	1	121	4TH TSP	+	8.61	FL
BOBBIN			ODI	33	0.86	1	129	4TH TSP	+	8.11	FL
BOBBIN			ODI	58	0.68	1	104	4TH TSP	+	7.75	FL
BOBBIN	68	70	ODI	27	0.37	1	133	4TH TSP	+	9.13	FL
BOBBIN	68	71	ODI	37	0.45	1	126	3RD TSP	+	28.11	FL
BOBBIN	68	73	ODI	46	0.45	1	117	4TH TSP	+	6.74	FL
BOBBIN			ODI	29	0.62	1	133	4TH TSP	+	6.42	FL
BOBBIN			ODI	39	0.40	1	124	4TH TSP	+	6.13	FL
BOBBIN			ODI	52	0.27	1	111	4TH TSP	+	5.69	FL
BOBBIN	69	11	ODI	61	0.25	1	101	5TH TSP	+	15.65	FL
BOBBIN	69	52	ODI	32	0.69	1	133	4TH TSP	+	14.22	FL
BOBBIN	69	63	ODI	58	0.30	1	106	3RD TSP	+	31.65	FL
BOBBIN			ODI	49	0.36	1	115	3RD TSP	+	27.53	FL
BOBBIN	69	65	ODI	47	0.35	P 1	106	2ND TSP	-	0.26	FL
BOBBIN			ODI	45	0.41	1	118	4TH TSP	+	18.74	FL
BOBBIN			ODI	29	0.61	1	133	4TH TSP	+	14.15	FL
BOBBIN			ODI	27	0.26	1	135	3RD TSP	+	28.19	FL
BOBBIN	69	66	ODI	38	0.35	1	125	4TH TSP	+	12.86	FL

TUBES PLUGGED STEAM GENERATOR 1-2

Plant: Davis Besse 1
Outage: 03/93 RFO

QUERY: DEFECT INDICATIONS 20-100% TW, MQI, ADS, & OBS

TEST	ROW	COL	IND	%TW	VOLTS	CHN	DEG	LOCATION	EXTENT
BOBBIN			ODI	38	0.47		1 125	4TH TSP + 11.12	FL
BOBBIN			ODI	41	0.37		1 122	3RD TSP + 37.10	FL
BOBBIN	69	67	ODI	45	0.48		1 118	4TH TSP + 26.56	FL
BOBBIN			ODI	51	0.39		1 112	3RD TSP + 30.86	FL
BOBBIN	69	68	ODI	57	0.51		1 105	4TH TSP + 26.32	FL
BOBBIN			ODI	34	0.25		1 128	4TH TSP + 20.09	FL
BOBBIN			ODI	25	0.49		1 136	3RD TSP + 30.50	FL
BOBBIN	69	69	ODI	36	0.46		1 127	4TH TSP + 20.56	FL
BOBBIN			ODI	37	0.34		1 126	3RD TSP + 28.90	FL
BOBBIN			ODI	30	0.33		1 132	3RD TSP + 27.89	FL
BOBBIN	69	70	ODI	29	0.36		1 133	4TH TSP + 17.43	FL
BOBBIN			ODI	52	0.29		1 111	4TH TSP + 16.48	FL
BOBBIN			ODI	25	0.65		1 136	4TH TSP + 14.98	FL
BOBBIN			ODI	32	0.56		1 130	4TH TSP + 14.69	FL
BOBBIN			ODI	33	0.58		1 129	3RD TSP + 21.24	FL
BOBBIN			ODI	34	0.16		1 128	3RD TSP + 20.66	FL
BOBBIN	69	72	ODI	23	0.49	P 1	124	3RD TSP + 38.55	FL
BOBBIN	69	73	MQI		0.72	P 1	109	4TH TSP + 0.65	FL
BOBBIN			MQI		0.32		1 116	4TH TSP + 4.93	FL
BOBBIN	69	74	ODI	50	0.97	P 1	104	4TH TSP + 0.70	FL
BOBBIN			ODI	27	0.48		1 135	4TH TSP + 4.88	FL
BOBBIN	69	75	ODI	37	0.27		1 126	4TH TSP + 3.08	FL
BOBBIN			ODI	27	0.40		1 135	4TH TSP + 1.28	FL
BOBBIN	70	52	ODI	36	0.41		1 129	4TH TSP + 16.72	FL
BOBBIN			MQI		0.45		1 124	4TH TSP + 15.77	FL
BOBBIN	70	62	ODI	30	0.43	P 1	124	11TH TSP- 0.87	FL
BOBBIN			ODI	52	0.42		1 112	5TH TSP + 18.54	FL
BOBBIN			ODI	29	0.26		1 132	5TH TSP + 11.18	FL
BOBBIN			ODI	25	0.22		1 135	5TH TSP + 9.94	FL
BOBBIN			ODI	25	0.38		1 135	5TH TSP + 7.81	FL
BOBBIN			ODI	67	0.28		1 95	4TH TSP + 7.86	FL
BOBBIN			ODI	29	0.49		1 132	4TH TSP + 6.44	FL
BOBBIN			ODI	65	0.30		1 98	4TH TSP + 5.94	FL
BOBBIN			ODI	55	0.33		1 109	4TH TSP + 4.42	FL
BOBBIN			ODI	51	0.46		1 113	4TH TSP + 3.99	FL
BOBBIN	70	65	ODI	30	0.24		1 132	5TH TSP + 15.41	FL
BOBBIN			ODI	32	0.48		1 130	5TH TSP + 13.51	FL
BOBBIN			ODI	48	0.32		1 115	5TH TSP + 11.80	FL
BOBBIN			ODI	47	0.32		1 116	5TH TSP + 11.37	FL
BOBBIN			ODI	27	0.48		1 135	5TH TSP + 9.58	FL
BOBBIN	70	66	ODI	27	0.24		1 135	5TH TSP + 16.38	FL
BOBBIN			ODI	63	0.28		1 98	4TH TSP + 36.02	FL
BOBBIN	70	67	ODI	56	0.36		1 107	5TH TSP + 7.57	FL
BOBBIN	70	71	ODI	24	0.43		1 136	4TH TSP + 6.17	FL
BOBBIN			ODI	24	0.26		1 137	4TH TSP + 17.03	FL
BOBBIN			ODI	23	0.77		1 138	4TH TSP + 8.79	FL
BOBBIN			ODI	25	0.52		1 136	4TH TSP + 7.65	FL
BOBBIN			ODI	39	0.50		1 124	4TH TSP + 5.94	FL
BOBBIN	70	72	ODI	21	0.36		1 140	4TH TSP + 5.30	FL
BOBBIN			ODI	47	0.37		1 116	4TH TSP + 4.79	FL
BOBBIN			ODI	43	0.30		1 120	4TH TSP + 4.24	FL
BOBBIN			ODI	38	0.30		1 125	4TH TSP + 3.55	FL
BOBBIN	70	73	MQI		0.49	P 1	116	4TH TSP + 0.65	FL
BOBBIN			MQI		0.69	P 1	102	4TH TSP + 0.62	FL
BOBBIN	70	75	ODI	44	0.53		1 119	4TH TSP + 8.53	FL
BOBBIN	71	11	ODI	67	0.66		1 102	5TH TSP + 35.54	FL
BOBBIN	71	14	ODI	54	0.44		1 110	5TH TSP + 35.26	FL
BOBBIN			ODI	43	0.41		1 119	5TH TSP + 35.03	FL
BOBBIN	71	67	ODI	27	0.37		1 135	7TH TSP + 18.78	FL
BOBBIN	71	68	ODI	34	0.31		1 130	6TH TSP + 29.95	FL
BOBBIN			ODI	61	0.50		1 105	6TH TSP + 29.12	FL
BOBBIN			ODI	31	0.22		1 132	3RD TSP + 33.27	FL
BOBBIN			ODI	23	0.22		1 138	2ND TSP + 15.74	FL
BOBBIN			ODI	20	0.24		1 140	2ND TSP + 14.97	FL
BOBBIN	71	69	ODI	24	0.26		1 137	5TH TSP + 3.54	FL
BOBBIN			ODI	26	0.47		1 136	4TH TSP + 35.90	FL
BOBBIN			ODI	21	0.46		1 139	4TH TSP + 34.82	FL
BOBBIN	71	70	ODI	42	0.45		1 123	3RD TSP + 21.98	FL
BOBBIN	71	73	ODI	51	0.31		1 112	4TH TSP + 1.35	FL
BOBBIN	72	52	ODI	37	1.06		1 128	4TH TSP + 36.78	FL

TUBES PLUGGED STEAM GENERATOR 1-2

Plant: Davis Besse 1
Outage: 03/93 RFO

QUERY: DEFECT INDICATIONS 20-100% TW, MQI, ADS, & OBS

TEST	ROW	COL	IND	%TW	VOLTS	CHN	DEG	LOCATION	EXTENT
BOBBIN	72	60	ODI	37	0.25	1	126	5TH TSP + 11.50	FL
BOBBIN	72	68	ODI	87	0.83	1	66	7TH TSP + 12.25	FL
BOBBIN	72	69	ODI	34	0.62	1	123	6TH TSP + 25.31	FL
BOBBIN	72	71	ODI	48	0.63	1	118	4TH TSP + 5.29	FL
BOBBIN			MQI		0.32	1	122	3RD TSP + 33.98	FL
BOBBIN	72	72	ODI	24	0.36	1	137	6TH TSP + 9.38	FL
BOBBIN	73	53	MQI		0.21 P	1	108	9TH TSP - 0.49	LTSP
BOBBIN	73	62	ODI	26	0.83	1	133	6TH TSP + 8.03	FL
BOBBIN	73	72	MQI		0.42	1	113	4TH TSP + 10.79	FL
BOBBIN	74	49	MQI		0.21 P	1	90	2ND TSP + 0.05	FL
BOBBIN	74	62	ODI	63	0.37	1	98	7TH TSP + 6.73	FL
BOBBIN	75	8	ODI	46	0.46	1	117	10TH TSP+ 33.81	FL
BOBBIN	75	51	MQI		0.50 P	1	90	10TH TSP- 0.93	FL
BOBBIN	75	52	MQI		0.25	1	90	9TH TSP + 37.43	FL
BOBBIN	75	53	MQI		0.91 P	1	22	UTSP - 0.18	FL
BOBBIN	75	68	ODI	35	0.23	1	128	4TH TSP + 18.03	FL
BOBBIN	76	65	ODI	77	0.37	1	81	7TH TSP + 26.84	FL
BOBBIN			ODI	39	1.33	1	120	7TH TSP + 27.25	FL
BOBBIN	76	85	MQI		0.63	1	120	LTPP + 2.57	FL
BOBBIN	77	51	ODI	52	0.36	1	114	4TH TSP + 19.71	FL
BOBBIN	77	62	ODI	30	0.29	1	126	5TH TSP + 11.25	FL
BOBBIN	77	64	ODI	65	0.62	1	95	7TH TSP + 18.91	FL
BOBBIN			ODI	39	0.60	1	120	7TH TSP + 19.73	FL
BOBBIN			ODI	60	0.81	1	101	7TH TSP + 21.17	FL
BOBBIN	77	65	ODI	21	0.29	1	132	7TH TSP + 6.52	FL
BOBBIN			ODI	35	0.49	1	123	7TH TSP + 9.19	FL
BOBBIN			ODI	23	0.58	1	131	7TH TSP + 16.32	FL
BOBBIN			ODI	53	0.97	1	108	7TH TSP + 16.81	FL
BOBBIN	77	67	ODI	26	0.35	1	137	6TH TSP + 4.71	FL
BOBBIN			ODI	54	0.81	1	113	6TH TSP + 3.55	FL
BOBBIN	78	2	ODI	31	0.37	1	130	UTSP + 6.50	FL
BOBBIN	78	39	ADS		0.65	6	81	3RD TSP + 7.94	FL
BOBBIN	78	41	ODI	58	0.35	1	108	8TH TSP + 35.52	FL
BOBBIN			ODI	39	0.64	1	125	8TH TSP + 35.10	FL
BOBBIN			ODI	45	0.36	1	120	8TH TSP + 33.76	FL
BOBBIN	78	63	ODI	36	0.51	1	122	7TH TSP + 16.65	FL
BOBBIN	78	64	ODI	23	0.56	1	131	7TH TSP + 34.04	FL
BOBBIN	78	66	MQI		0.34 P	1	76	7TH TSP - 0.23	FL
BOBBIN	79	18	ODI	68	0.32	1	93	12TH TSP+ 9.06	FL
BOBBIN	79	63	ODI	55	0.74	1	106	6TH TSP + 11.39	FL
BOBBIN	79	64	ODI	35	0.64	1	122	6TH TSP + 14.68	FL
BOBBIN	79	66	ODI	32	0.27	1	131	6TH TSP + 12.64	LTSP
BOBBIN	79	67	ODI	32	0.36	1	131	7TH TSP + 16.84	LTSP
BOBBIN			ODI	42	0.94	1	122	7TH TSP + 19.42	LTSP
BOBBIN	79	68	MQI		0.27	1	57	6TH TSP + 23.55	FL
BOBBIN			MQI		0.51	1	65	6TH TSP + 24.70	FL
BOBBIN			ODI	79	0.75	1	78	6TH TSP + 27.03	FL
BOBBIN			MQI		0.26	1	90	7TH TSP + 10.03	FL
BOBBIN			ODI	63	0.31	1	98	7TH TSP + 11.32	FL
BOBBIN			ODI	42	0.52	1	117	7TH TSP + 17.49	FL
BOBBIN			ODI	33	0.65	1	124	8TH TSP + 12.06	FL
BOBBIN	79	69	ODI	62	0.50	1	99	6TH TSP + 12.78	FL
BOBBIN			ODI	63	0.75	1	98	6TH TSP + 21.63	FL
BOBBIN	79	105	ODI	29	0.37	1	133	5TH TSP + 14.92	FL
BOBBIN	80	1	MQI		0.23	1	125	13TH TSP- 0.16	FL
BOBBIN	80	60	MQI		0.92 P	1	90	UTSP - 0.19	FL
BOBBIN	80	62	ODI	65	0.75	1	96	6TH TSP + 6.39	FL
BOBBIN	80	63	ODI	73	0.57	1	86	6TH TSP + 9.36	FL
BOBBIN	80	65	ODI	37	0.67	1	121	6TH TSP + 17.11	FL
BOBBIN			ODI	42	0.34	1	117	6TH TSP + 21.21	FL
BOBBIN			ODI	23	0.36	1	131	6TH TSP + 25.36	FL
BOBBIN			ODI	29	0.42	1	127	6TH TSP + 28.96	FL
BOBBIN			ODI	35	0.67	1	123	6TH TSP + 29.48	FL
BOBBIN			ODI	70	0.45	1	90	6TH TSP + 29.90	FL
BOBBIN	80	66	ODI	42	0.59	1	117	6TH TSP + 20.16	FL
BOBBIN			ODI	66	1.12	1	94	6TH TSP + 21.58	FL
BOBBIN			ODI	67	0.50	1	93	6TH TSP + 22.29	FL
BOBBIN			ODI	65	1.06	1	96	6TH TSP + 22.46	FL
BOBBIN			ODI	52	0.42	1	109	6TH TSP + 23.04	FL
BOBBIN			ODI	64	0.72	1	97	6TH TSP + 23.71	FL

TUBES PLUGGED STEAM GENERATOR 1-2

Plant: Davis Besse 1
Outage: 03/93 RFO

QUERY: DEFECT INDICATIONS 20-100% TW, HQI, ADS, & OBS

TEST	ROW	COL	IND	%TW	VOLTS	CHN	DEG	LOCATION	EXTENT
BOBBIN			ODI	77	0.61	1	81	6TH TSP + 24.69	FL
BOBBIN			ODI	24	0.81	1	130	6TH TSP + 25.25	FL
BOBBIN			ODI	64	0.47	1	97	6TH TSP + 26.74	FL
BOBBIN			ODI	75	0.53	1	83	6TH TSP + 27.09	FL
BOBBIN	80	67	ODI	46	0.52	1	113	6TH TSP + 24.79	FL
BOBBIN			ODI	58	0.79	1	101	7TH TSP + 16.04	FL
BOBBIN	80	68	ODI	74	0.32	1	84	7TH TSP + 10.65	FL
BOBBIN			ODI	79	0.52	1	77	7TH TSP + 13.82	FL
BOBBIN			ODI	31	0.87	1	132	7TH TSP + 15.01	FL
BOBBIN	80	69	ODI	23	0.65	1	131	3RD TSP + 26.00	FL
BOBBIN			ODI	38	0.74	1	120	3RD TSP + 30.75	FL
BOBBIN			ODI	70	0.60	1	5	7TH TSP + 8.33	FL
BOBBIN			ODI	66	0.42	1	96	7TH TSP + 10.64	FL
BOBBIN	80	70	ODI	29	0.49	1	127	3RD TSP + 31.97	FL
BOBBIN	80	74	ODI	51	0.38	1	115	4TH TSP + 11.88	FL
BOBBIN			ODI	34	0.47	1	130	4TH TSP + 12.72	FL
BOBBIN	81	64	ODI	30	0.80	1	126	6TH TSP + 5.62	FL
BOBBIN			ODI	47	0.72	1	113	6TH TSP + 6.61	FL
BOBBIN			ODI	23	0.69	1	131	6TH TSP + 7.62	FL
BOBBIN			ODI	50	0.43	1	111	6TH TSP + 8.14	FL
BOBBIN			ODI	65	0.40	1	96	6TH TSP + 8.46	FL
BOBBIN			ODI	40	0.66	1	119	6TH TSP + 8.85	FL
BOBBIN			ODI	23	0.75	1	131	6TH TSP + 11.26	FL
BOBBIN			ODI	62	0.39	1	99	6TH TSP + 15.88	FL
BOBBIN			ODI	40	0.60	1	119	6TH TSP + 16.45	FL
BOBBIN	81	65	ODI	35	0.32	1	122	6TH TSP + 8.89	FL
BOBBIN			ODI	48	0.92	1	111	6TH TSP + 9.17	FL
BOBBIN			ODI	46	0.82	1	113	6TH TSP + 9.86	FL
BOBBIN			ODI	22	0.61	1	131	6TH TSP + 12.64	FL
BOBBIN			ODI	25	0.37	1	129	6TH TSP + 12.88	FL
BOBBIN			ODI	36	1.40	1	121	6TH TSP + 15.44	FL
BOBBIN			ODI	61	2.31	1	98	6TH TSP + 16.48	FL
BOBBIN			ODI	50	1.43	1	109	6TH TSP + 17.22	FL
BOBBIN			ODI	27	0.96	1	128	6TH TSP + 17.72	FL
BOBBIN			ODI	56	1.35	1	103	6TH TSP + 17.94	FL
BOBBIN			ODI	52	1.38	1	107	6TH TSP + 18.73	FL
BOBBIN			ODI	34	2.03	1	123	6TH TSP + 19.30	FL
BOBBIN			ODI	40	1.34	1	118	6TH TSP + 19.82	FL
BOBBIN			ODI	71	1.35	1	87	6TH TSP + 20.51	FL
BOBBIN			ODI	49	1.14	1	110	6TH TSP + 21.04	FL
BOBBIN			ODI	36	0.48	1	123	6TH TSP + 23.71	FL
BOBBIN			ODI	39	0.89	1	119	6TH TSP + 24.18	FL
BOBBIN			ODI	29	0.81	1	126	6TH TSP + 24.85	FL
BOBBIN			ODI	67	0.70	1	91	6TH TSP + 25.94	FL
BOBBIN			ODI	61	1.14	1	98	6TH TSP + 31.34	FL
BOBBIN	81	66	ODI	71	0.62	1	88	5TH TSP + 7.00	FL
BOBBIN			ODI	81	0.51	1	74	6TH TSP + 24.50	FL
BOBBIN			ODI	67	0.73	1	93	6TH TSP + 31.68	FL
BOBBIN			ODI	77	0.78	1	80	6TH TSP + 33.79	FL
BOBBIN	81	67	ODI	33	0.86	1	124	7TH TSP + 18.21	FL
BOBBIN	81	68	ODI	53	0.69	1	108	6TH TSP + 25.98	FL
BOBBIN			ODI	95	0.78	1	51	6TH TSP + 31.21	FL
BOBBIN			ODI	29	0.64	P 1	123	7TH TSP + 0.15	FL
BOBBIN	81	69	ODI	39	0.36	1	120	5TH TSP + 3.36	FL
BOBBIN			ODI	40	0.45	1	119	5TH TSP + 3.85	FL
BOBBIN			ODI	29	1.35	1	127	5TH TSP + 8.58	FL
BOBBIN			ODI	27	0.49	1	128	5TH TSP + 11.59	FL
BOBBIN	81	70	ODI	29	0.38	1	133	3RD TSP + 23.46	LTSF
BOBBIN			ODI	28	0.42	1	135	3RD TSP + 34.87	LTSF
BOBBIN			ODI	41	0.48	1	123	4TH TSP + 19.37	LTSF
BOBBIN			ODI	40	0.51	1	124	4TH TSP + 24.45	LTSF
BOBBIN			ODI	44	0.41	P 1	115	5TH TSP - 0.45	LTSF
BOBBIN			ODI	47	0.60	1	117	5TH TSP - 0.05	LTSF
BOBBIN			ODI	31	0.45	1	132	5TH TSP + 2.29	LTSF
BOBBIN	82	31	ODI	28	0.37	1	131	UTSF + 3.85	FL
BOBBIN			ODI	47	0.66	1	116	5TH TSP + 9.90	FL
BOBBIN	82	32	ODI	33	0.60	1	130	5TH TSP + 9.20	FL
BOBBIN	82	33	ODI	41	0.50	1	124	5TH TSP + 8.73	FL
BOBBIN	82	41	ODI	39	0.46	1	125	5TH TSP + 4.88	FL
BOBBIN	82	63	ODI	29	0.30	1	127	5TH TSP + 17.21	FL

Plant: Davis Besse 1
Outage: 03/93 RFO

QUERY: DEFECT INDICATIONS 20-100% TW, BQI, ADS, & OBS

TEST	ROW	COL	IND	%TW	VOLTS	CHN	DEG	LOCATION	EXTENT
BOBBIN			ODI	84	0.56	1	70	5TH TSP + 24.12	FL
BOBBIN			ODI	30	0.33	1	126	5TH TSP + 25.48	FL
BOBBIN			ODI	33	0.53	1	124	6TH TSP + 4.40	FL
BOBBIN	82	65	ODI	27	0.41	1	128	5TH TSP + 10.48	FL
BOBBIN			ODI	27	0.45	1	128	5TH TSP + 10.96	FL
BOBBIN	82	67	ODI	34	0.69	1	123	4TH TSP + 2.69	FL
BOBBIN			ODI	41	0.65	1	117	4TH TSP + 2.87	FL
BOBBIN			ODI	51	0.63	1	108	4TH TSP + 4.85	FL
BOBBIN			ODI	48	0.56	1	110	5TH TSP + 6.82	FL
BOBBIN			ODI	37	0.66	1	120	5TH TSP + 7.18	FL
BOBBIN			ODI	29	0.86	1	127	5TH TSP + 8.29	FL
BOBBIN			ODI	48	0.69	1	110	5TH TSP + 8.53	FL
BOBBIN			ODI	23	0.80	1	131	4TH TSP + 3.70	FL
BOBBIN			ODI	46	1.12	1	114	4TH TSP + 5.04	FL
BOBBIN			ODI	81	0.45	1	75	6TH TSP + 4.79	FL
BOBBIN			ODI	62	0.84	1	99	5TH TSP + 6.58	FL
BOBBIN	82	71	ODI	27	0.60	1	135	4TH TSP + 6.28	FL
BOBBIN	83	1	ODI	38	0.47	1	123	15TH TSP+ 0.11	FL
BOBBIN	83	2	ODI	38	0.23	1	128	13TH TSP- 0.19	FL
BOBBIN	83	10	ODI	49	0.74	1	116	5TH TSP + 18.47	FL
BOBBIN	83	11	ODI	56	0.30	1	117	5TH TSP + 14.37	FL
BOBBIN			ODI	20	0.23	1	137	5TH TSP + 13.79	FL
BOBBIN	83	49	ODI	36	0.47	1	128	4TH TSP + 17.67	FL
BOBBIN	83	64	ODI	56	0.46	1	104	4TH TSP + 2.73	FL
BOBBIN			ODI	33	0.36	1	127	4TH TSP + 5.36	FL
BOBBIN			ODI	65	0.48	1	93	5TH TSP + 9.05	FL
BOBBIN			ODI	32	0.39	1	128	5TH TSP + 11.50	FL
BOBBIN			ODI	53	0.32	1	107	5TH TSP + 14.07	FL
BOBBIN	83	66	ODI	47	0.54	1	114	4TH TSP + 7.82	FL
BOBBIN			ODI	44	1.03	1	117	4TH TSP + 9.48	FL
BOBBIN			ODI	21	0.69	1	137	4TH TSP + 14.16	FL
BOBBIN			ODI	83	0.70	1	69	4TH TSP + 33.41	FL
BOBBIN			ODI	50	0.60	1	111	5TH TSP + 6.33	FL
BOBBIN			ODI	49	0.59	1	112	5TH TSP + 11.99	FL
BOBBIN	83	69	ODI	41	0.65	1	123	3RD TSP + 25.51	LTSP
BOBBIN			ODI	28	0.48	1	135	3RD TSP + 26.31	LTSP
BOBBIN			ODI	38	1.17	1	126	4TH TSP + 8.11	LTSP
BOBBIN			ODI	44	0.56	1	120	4TH TSP + 10.89	LTSP
BOBBIN			ODI	31	0.37	1	132	4TH TSP + 15.07	LTSP
BOBBIN			ODI	45	0.53	1	119	4TH TSP + 17.52	LTSP
BOBBIN			ODI	51	0.40	1	113	4TH TSP + 18.02	LTSP
BOBBIN			ODI	40	0.51	1	124	4TH TSP + 18.42	LTSP
BOBBIN			ODI	50	0.57	1	114	4TH TSP + 19.20	LTSP
BOBBIN			ODI	37	0.39	1	127	4TH TSP + 26.44	LTSP
BOBBIN			ODI	53	1.06	1	111	4TH TSP + 26.74	LTSP
BOBBIN			ODI	26	0.37	1	96	4TH TSP + 27.81	LTSP
BOBBIN			ODI	31	0.[illegible]	[illegible]	[illegible]	5TH TSP + 2.30	LTSP
BOBBIN			ODI	34	0.[illegible]	[illegible]	[illegible]	5TH TSP + 4.17	LTSP
BOBBIN			ODI	43	0.[illegible]	[illegible]	[illegible]	TSP + 4.59	LTSP
BOBBIN	83	70	ODI	39	0.32	[illegible]	[illegible]	[illegible] TSP + 19.86	FL
BOBBIN			ODI	30	0.36	1	129	4TH TSP + 10.01	FL
BOBBIN			ODI	33	0.30	1	126	4TH TSP + 16.83	FL
BOBBIN	83	72	ODI	32	0.51	1	132	4TH TSP + 9.43	FL
BOBBIN	84	1	BQI		0.29	1	121	13TH TSP- 0.22	FL
BOBBIN	84	7	ODI	21	0.51	1	136	UTSP + 5.15	FL
BOBBIN	84	16	ADS		2.31	6	95	11TH TSP+ 26.75	FL
BOBBIN	84	19	BQI		0.29	1	110	5TH TSP + 11.70	FL
BOBBIN	84	64	ODI	55	0.53	1	105	4TH TSP + 20.38	FL
BOBBIN			ODI	71	0.86	1	86	4TH TSP + 20.84	FL
BOBBIN			ODI	71	0.53	1	86	4TH TSP + 22.59	FL
BOBBIN	84	65	ODI	27	0.24	1	131	3RD TSP + 14.95	FL
BOBBIN			ODI	84	0.45	1	66	3RD TSP + 33.36	FL
BOBBIN			ODI	82	0.46	1	68	4TH TSP + 10.44	FL
BOBBIN			ODI	62	0.37	1	96	4TH TSP + 13.13	FL
BOBBIN	84	69	ODI	54	0.33	1	106	4TH TSP + 6.61	FL
BOBBIN			ODI	47	0.35	1	114	4TH TSP + 9.25	FL
BOBBIN			ODI	68	0.34	1	90	4TH TSP + 9.85	FL
BOBBIN			ODI	20	0.68	1	138	4TH TSP + 12.05	FL
BOBBIN			ODI	78	0.44	1	77	5TH TSP + 1.47	FL
BOBBIN			ODI	23	0.59	1	135	5TH TSP + 1.83	FL

TUBES PLUGGED STEAM GENERATOR 1-2

Plant: Davis Besse 1
Outage: 03/93 RFO

QUERY: DEFECT INDICATIONS 20-100% TW, MQI, ADS, & OBS

TEST	ROW	COL	IND	%TW	VOLTS	CHN	DEG	LOCATION	EXTENT
BOBBIN	84	70	ODI	44	0.34	1	115	4TH TSP + 17.54	FL
BOBBIN	84	72	ODI	28	0.27	1	135	4TH TSP + 13.40	FL
BOBBIN			ODI	25	0.38	1	138	4TH TSP + 31.86	FL
BOBBIN			ODI	26	0.81	1	137	4TH TSP + 12.30	FL
BOBBIN	85	4	ODI	22	0.52	1	135	2ND TSP + 10.19	FL
BOBBIN	85	66	ODI	28	0.52	1	135	3RD TSP + 36.94	FL
BOBBIN			ODI	65	0.31	1	100	3RD TSP + 13.90	FL
BOBBIN			ODI	34	0.71	1	130	3RD TSP + 35.71	FL
BOBBIN			ODI	29	0.47	1	135	3RD TSP + 21.22	FL
BOBBIN			ODI	35	0.64	1	129	3RD TSP + 20.13	FL
BOBBIN			ODI	29	0.83	1	135	3RD TSP + 17.73	FL
BOBBIN			ODI	60	0.75	1	107	4TH TSP + 19.49	FL
BOBBIN			ODI	23	0.60	1	138	4TH TSP + 15.81	FL
BOBBIN			ODI	33	0.54	1	131	4TH TSP + 12.22	FL
BOBBIN	85	67	ODI	38	0.55	1	127	4TH TSP + 11.36	FL
BOBBIN			ODI	23	0.74	1	138	4TH TSP + 10.94	FL
BOBBIN			ODI	27	0.58	1	135	4TH TSP + 8.72	FL
BOBBIN			ODI	58	0.45	1	108	4TH TSP + 10.11	FL
BOBBIN			ODI	32	0.23 P	1	118	4TH TSP + 0.34	FL
BOBBIN	85	68	ODI	51	0.64	1	116	4TH TSP + 14.73	FL
BOBBIN			MQI		0.28	1	113	4TH TSP + 7.95	FL
BOBBIN	86	1	ODI	38	0.53	1	123	13TH TSP+ 0.24	FL
BOBBIN	86	63	ODI	38	0.42	1	123	4TH TSP + 17.46	FL
BOBBIN	86	65	ODI	60	0.37	1	105	4TH TSP + 13.19	FL
BOBBIN			ODI	27	0.38	1	132	3RD TSP + 19.73	FL
BOBBIN	86	66	ODI	38	0.48	1	126	4TH TSP + 14.31	FL
BOBBIN			ODI	26	0.22	1	135	4TH TSP + 13.01	FL
BOBBIN			ODI	38	0.27	1	126	4TH TSP + 11.88	FL
BOBBIN			ODI	22	0.39	1	138	4TH TSP + 11.06	FL
BOBBIN			ODI	40	0.74 P	1	105	4TH TSP - 0.42	FL
BOBBIN	86	67	ODI	25	0.65	1	136	3RD TSP + 38.74	FL
BOBBIN			ODI	39	0.62	1	125	4TH TSP + 10.82	FL
BOBBIN			ODI	61	0.39	1	104	4TH TSP + 11.58	FL
BOBBIN			ODI	24	0.40	1	135	4TH TSP + 7.16	FL
BOBBIN			ODI	21	0.77	1	136	3RD TSP + 38.79	FL
BOBBIN			ODI	45	0.59	1	117	3RD TSP + 36.07	FL
BOBBIN			ODI	46	0.30	1	116	3RD TSP + 14.07	FL
BOBBIN	86	68	ODI	30	0.89 P	1	112	4TH TSP - 0.56	FL
BOBBIN			ODI	22	0.74	1	138	4TH TSP + 11.73	FL
BOBBIN			ODI	46	0.76	1	119	4TH TSP + 11.11	FL
BOBBIN			ODI	32	0.51	1	131	4TH TSP + 10.68	FL
BOBBIN			ODI	43	0.89	1	122	4TH TSP + 10.14	FL
BOBBIN			ODI	48	1.66	1	117	4TH TSP + 9.15	FL
BOBBIN			ODI	46	1.00	1	119	4TH TSP + 8.66	FL
BOBBIN			ODI	36	0.52	1	128	4TH TSP + 8.04	FL
BOBBIN	86	69	ODI	36	0.37	1	128	4TH TSP + 11.30	FL
BOBBIN			MQI		0.29	1	97	4TH TSP + 7.19	FL
BOBBIN	86	85	ADS		1.15	6	79	LTSP + 13.95	FL
BOBBIN	86	110	ODI	38	0.28	1	123	4TH TSP + 33.19	FL
BOBBIN	87	7	ODI	41	0.91	1	121	UTSP + 6.73	FL
BOBBIN	87	11	ADS		2.16	6	89	12TH TSP+ 26.84	FL
BOBBIN	87	61	ODI	34	0.34	1	129	4TH TSP + 16.53	FL
BOBBIN	87	63	ODI	55	0.47	1	110	4TH TSP + 16.05	FL
BOBBIN	87	67	ODI	36	0.68	1	127	4TH TSP + 13.73	FL
BOBBIN			ODI	27	0.78	1	134	4TH TSP + 11.67	FL
BOBBIN			ODI	40	0.44	1	124	4TH TSP + 11.26	FL
BOBBIN			ODI	46	0.47	1	119	4TH TSP + 12.68	FL
BOBBIN			ODI	21	0.42	1	138	4TH TSP + 12.37	FL
BOBBIN	87	68	ODI	40	0.58	1	124	4TH TSP + 12.81	FL
BOBBIN	87	70	MQI		0.46	1	118	4TH TSP + 15.00	FL
BOBBIN			MQI		0.43	1	124	4TH TSP + 15.55	FL
BOBBIN	88	9	MQI		0.32	1	126	5TH TSP + 12.29	FL
BOBBIN	88	36	ODI	37	0.43	1	126	5TH TSP + 3.42	FL
BOBBIN	88	63	ODI	40	0.46	1	124	4TH TSP + 13.85	FL
BOBBIN	88	65	ODI	46	0.39	1	119	4TH TSP + 15.43	FL
BOBBIN	88	66	MQI		0.28	1	119	4TH TSP + 14.77	FL
BOBBIN			ODI	69	0.26	1	94	4TH TSP + 14.20	FL
BOBBIN			ODI	67	0.25	1	96	4TH TSP + 12.78	FL
BOBBIN			MQI		0.33	1	103	4TH TSP + 11.76	FL
BOBBIN	88	68	ODI	29	0.33	1	133	4TH TSP + 14.21	FL

Plant: Davis Besse 1
Outage: 03/93 RFO

QUERY: DEFECT INDICATIONS 20-100% TW, MQI, ADS, & OBS

TEST	ROW	COL	IND	%TW	VOLTS	CHN	DEG	LOCATION	EXTENT
BOBBIN	88	126	ODI	24	0.74	1	133	15TH TSP+ 33.08	FL
BOBBIN	89	66	ODI	37	0.69	1	127	3RD TSP + 36.63	FL
BOBBIN	89	67	MQI		0.21	1	99	4TH TSP + 11.98	FL
BOBBIN			ODI	29	0.38	1	130	4TH TSP + 8.06	FL
BOBBIN	91	1	ODI	61	0.43 P	1	99	13TH TSP- 0.54	FL
BOBBIN	95	79	ODI	54	0.64 P	1	104	3RD TSP - 0.64	FL
BOBBIN	96	24	ODI	30	0.35	1	133	5TH TSP + 10.27	FL
BOBBIN	98	24	ODI	30	0.38	1	130	5TH TSP + 10.04	FL
BOBBIN	98	41	ODI	75	0.41	1	83	5TH TSP + 3.40	FL
BOBBIN	100	19	ODI	45	0.39	1	120	5TH TSP + 11.33	FL
BOBBIN	100	63	ADS		9.88	6	93	LTSP + 8.56TO+ 18.12	FL
BOBBIN	102	16	ODI	35	0.25	1	128	5TH TSP + 12.75	FL
BOBBIN	102	22	ODI	56	0.25	1	109	5TH TSP + 12.29	FL
BOBBIN	102	38	ODI	31	0.62	1	131	5TH TSP + 3.44	FL
BOBBIN	102	40	ODI	23	0.23	1	137	5TH TSP + 2.71	FL
BOBBIN	104	17	ODI	31	0.43	1	129	5TH TSP + 14.10	FL
BOBBIN	105	16	ODI	33	0.35	1	126	5TH TSP + 15.46	FL
BOBBIN			ODI	37	0.37	1	122	5TH TSP + 14.30	FL
BOBBIN	106	6	ODI	25	0.32 P	1	104	13TH TSP- 0.51	FL
BOBBIN	106	15	ODI	26	0.29	1	133	5TH TSP + 14.78	FL
BOBBIN	107	1	MQI		0.10	1	70	10TH TSP+ 16.96	FL
BOBBIN	108	36	ODI	26	0.28	1	138	5TH TSP + 4.29	FL
BOBBIN	108	51	ODI	69	0.61	1	92	LTSP + 20.73	FL
BOBBIN	109	1	ODI	25	1.06	1	135	6TH TSP + 31.31	FL
BOBBIN	109	104	ODI	24	0.24	1	135	2ND TSP + 25.19	FL
BOBBIN	110	97	ODI	25	0.50	1	135	LTSP + 21.48	FL
BOBBIN	111	1	ODI	27	0.71 P	1	122	8TH TSP - 0.27	FL
BOBBIN			ODI	24	2.23	1	136	8TH TSP + 1.86	FL
BOBBIN	112	3	ODI	26	0.40 P	1	123	9TH TSP + 0.27	FL
BOBBIN	112	49	ODI	22	1.36	1	135	16TH TSP+ 18.10	FL
BOBBIN	113	1	ODI	25	0.69	1	135	15TH TSP+ 14.86	FL
BOBBIN	113	116	MQI		3.23	1	145	15TH TSP+ 19.54	FL
BOBBIN	114	97	ODI	38	0.23 P	1	115	7TH TSP - 0.48	FL
BOBBIN	114	99	MQI		0.24	1	119	5TH TSP + 12.37	FL
BOBBIN	115	10	ADS		2.42	6	88	10TH TSP+ 11.65	FL
BOBBIN	115	49	ADS		10.67	6	83	LTSP + 24.03TO+ 32.29	FL
BOBBIN	116	113	ODI	24	3.38	1	133	15TH TSP+ 19.77	FL
BOBBIN	120	21	ODI	35	0.52	1	126	5TH TSP + 11.31	FL
BOBBIN	120	94	MQI		0.24	1	121	5TH TSP + 12.12	FL
BOBBIN	121	62	ODI	35	0.42	1	128	5TH TSP + 4.44	FL
BOBBIN	121	64	ODI	35	0.38	1	128	4TH TSP + 26.49	FL
BOBBIN	122	56	ADS		4.49	6	93	LTSP + 22.39TO+ 30.27	FL
BOBBIN	122	76	ODI	37	0.24	1	126	4TH TSP + 30.69	FL
BOBBIN	123	13	ODI	23	0.27	1	132	6TH TSP + 26.33	FL
BOBBIN			ODI	23	0.20	1	132	5TH TSP + 19.08	FL
BOBBIN	123	73	MQI		0.22	1	116	4TH TSP + 33.53	FL
BOBBIN	123	80	ODI	22	0.44	1	138	5TH TSP + 23.92	FL
BOBBIN	124	14	ODI	29	0.40	1	131	5TH TSP + 14.05	FL
BOBBIN	124	18	ODI	35	0.26	1	126	5TH TSP + 13.06	FL
BOBBIN	124	78	MQI		0.36	1	107	5TH TSP + 12.88	FL
BOBBIN	125	17	ODI	28	0.58	1	131	5TH TSP + 12.50	FL
BOBBIN	125	69	MQI		0.21	1	125	5TH TSP + 6.59	FL
BOBBIN	127	3	ADS		2.20	6	86	4TH TSP + 25.60	FL
BOBBIN	127	5	ADS		2.84	6	85	3RD TSP + 6.99	FL
BOBBIN	129	6	ODI	23	0.61 P	1	125	10TH TSP+ 0.48	FL
BOBBIN	129	28	ODI	28	0.25	1	129	5TH TSP + 11.22	FL
BOBBIN	129	29	ODI	37	0.52	1	124	5TH TSP + 11.64	FL
BOBBIN	130	6	ODI	34	0.78 P	1	119	10TH TSP+ 0.48	FL
BOBBIN	130	87	MQI		0.60 P	1	86	14TH TSP- 0.84	FL
BOBBIN	131	29	ODI	54	0.39	1	109	5TH TSP + 11.28	FL
BOBBIN	132	66	ODI	28	0.38	1	135	5TH TSP + 10.80	FL
BOBBIN	133	29	ODI	22	2.77	1	135	4TH TSP + 12.38	FL
BOBBIN	133	59	ODI	44	0.48	1	120	5TH TSP + 8.84	FL
BOBBIN	133	61	MQI		0.25	1	104	5TH TSP + 10.36	FL
BOBBIN	134	1	ODI	44	0.57 P	1	106	9TH TSP + 0.19	FL
BOBBIN	135	6	MQI		0.83 P	1	106	10TH TSP+ 0.54	FL
BOBBIN	135	67	MQI		0.21 P	1	113	5TH TSP + 0.12	FL
BOBBIN	141	68	ODI	38	0.69 P	1	111	8TH TSP - 0.82	FL
BOBBIN	144	54	ODI	38	0.88	1	125	7TH TSP + 8.90	FL
BOBBIN	148	20	MQI		0.99	1	108	LTSP + 2.75	FL

Plant: Davis Besse 1
Outage: 03/93 RFO

QUERY: DEFECT INDICATIONS 20-100% TW, MVI, ADS, & OBS

TEST	ROW	COL	IND	%TW	VOLTS	CHN	DEG	LOCATION		EXTENT
BOBBIN	145	33	ODI	21	0.39	P 1	123	14TH TSP+	0.47	FL
BOBBIN	150	10	ODI	81	0.42	1	74	LTPF +	6.74	FL
BOBBIN	150	22	MVI		1.00	P 1	99	10TH TSP+	0.65	FL
BOBBIN	150	23	MVI		0.35	1	74	13TH TSP+	1.20	FL
BOBBIN	150	24	ODI	23	1.49	P 1	122	14TH TSP+	0.57	FL
BOBBIN	150	26	MVI		0.63	P 1	92	10TH TSP+	0.63	FL
BOBBIN	151	8	ODI	45	0.64	P 1	105	13TH TSP-	0.11	FL
BOBBIN			ODI	23	0.79	P 1	122	13TH TSP+	0.55	FL
BOBBIN	151	14	MVI		1.12	P 1	43	10TH TSP+	0.63	FL

TOTAL TUBES FOUND = 317
TOTAL INDICATIONS FOUND = 569
TOTAL TUBES IN INPUT FILE = 15457

In addition, the following tubes with dents were plugged.

Row	Column
104	1
105	122
146	51
6	50

SG 2-A PLUGGED TUBES

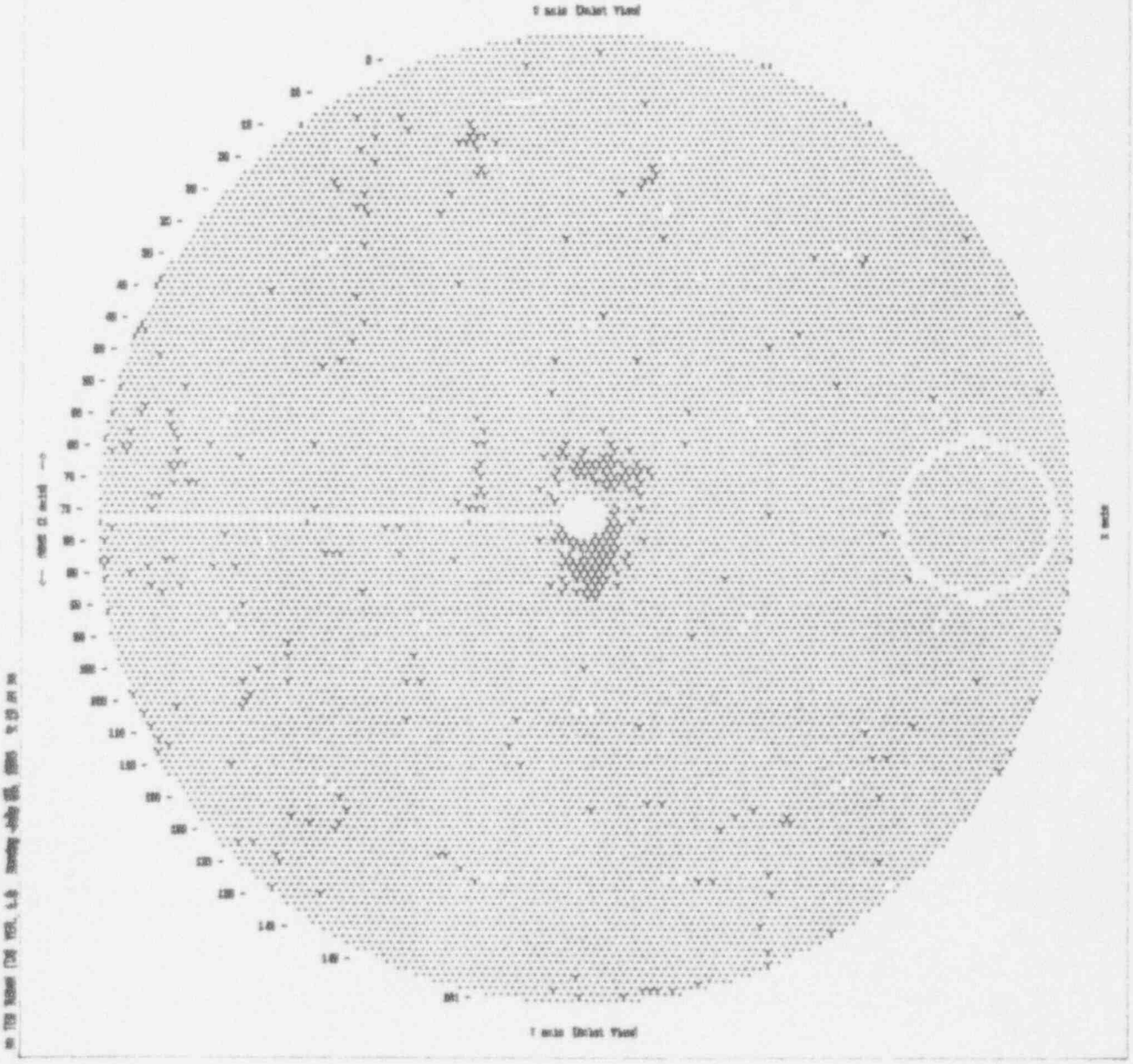
PLANT: DAVIS BESSE UNIT 1 GENERATOR: A

1 = SG 2-A PLUGGED TUBES (356)

1 = SG 2-A PLUGGED TUBES (19)

TOTAL TUBES : 15457
SUPPORT RODS ( ) : 42

TOTAL TUBES ASSIGNED : 375



FORM NIS-1 OWNERS' DATA REPORT FOR INSERVICE INSPECTIONS

As required by the Provisions of the ASME Code Rules

1. Owner Toledo Edison Company, 300 Madison Ave., Toledo, Ohio 43652
(Name and Address of Owner)

2. Plant Davis-Besse Nuclear Power Station, Oak Harbor, Ohio 43449
(Name and Address of Plant)

3. Plant Unit #1 4. Owner Certificate of Authorization (if required) N/A

5. Commercial Service Date 11/21/77 6. National Board Number for Unit N/A

7. Components Inspected Steam Generator Tubing

Component or Appurtenance	Manufacturer or Installer	Manufacturer or Installer Serial No.	State or Province No.	National Board No.
Steam Generator 1-1	Babcock & Wilcox	620-0014-55-11	N/A	158
Steam Generator 1-2	Babcock & Wilcox	620-0014-55-12	N/A	159

Note: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size is 8½ in. x 11 in., (2) information in items 1 through 6 on this data report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

This form (E00029) may be obtained from the Order Dept., ASME, 345 E. 47th St., New York, N.Y. 10017

FORM NIS-1 (back)

Rec 6/16/93
6/16/93 Nov 1991

8. Examination Dates ~~Feb 1993~~ to Apr 1993 9. Inspection Interval from Sept 1990 to Sept 2000

10. Abstract of Examinations. Include a list of examinations and a statement concerning status of work required for current interval. Sec 1993 Inservice Inspection Report

11. Abstract of Conditions Noted. Sec 1993 Inservice Inspection Report

12. Abstract of Corrective Measures Recommended and Taken
Sec 1993 Inservice Inspection Report

We certify that the statements made in this report are correct and the examinations and corrective measures taken conform to the rules of the ASME Code, Section XI.

Date 6-9 19 93 Signed Toledo Edison Co By [signature]
Owner

Certificate of Authorization No. (if applicable) _____ Expiration Date _____

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of Ohio and employed by H.S.B.I. & I. Co of Hartford, CT have inspected the components described in this Owners' Data Report during the period Feb. 1993 to Apr 1993, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners' Data Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owners' Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 6-16 1993

Robert E. Cook Commissions NB 10992 (ANI) Ohio Comm
Inspector's Signature National Board, State, Province and No.

Nondestructive Examinations

The Nondestructive Examinations were completed by Toledo Edison and B&W Nuclear Technologies personnel from February 1993 to April 1993 during the 8th Refueling Outage for the Davis Besse Nuclear Power Station Unit #1. These examinations complete the examinations required to be performed in the first period of the inspection interval.

The nondestructive examinations were conducted in accordance with the requirements of the 1986 Edition of the ASME Boiler and Pressure Vessel Code as described in the Second Ten Year Interval Inservice Inspection Program Plan.

The attached table summarizes the examination data for the ASME Class 1 and 2 components. All examination results were acceptable. An entry in the PCAQ Number column identifies the Potential Condition Adverse to Quality Report used to evaluate and disposition indications.

Detailed examination results are contained the 8th Refueling Outage Inservice Inspection Report which is available for review at the Davis Besse site.

Exam Category / Code Item	Mark Number	Component Description	NDE Method	Examination Acceptable	PCAQ Number	Exam Date	Comments
Code Class 1							
B-A	PRESSURE RETAINING WELDS IN REACTOR VESSEL						
B01.030	SHELL-TO-FLANGE WELD						
	RC-RPV-WR-19	SHELL TO FLANGE WELD MK 169 TO MK 7	UT	Yes		04-05-93	
B01.040	HEAD-TO-FLANGE WELD						
	RC-RPV-WH-7	CLOSURE HEAD TO FLANGE CIRCUMFERENTIAL WELD MK 24 TO MK 22	UT MT	Yes Yes		03-26-93	Relief Request RR-A2 is applicable.
B-B	PRESSURE RETAINING WELDS IN VESSELS OTHER THAN REACTOR VESSELS						
B02.031	STEAM GENERATORS (PRIMARY SIDE)-CIRCUMFERENTIAL HEAD WELDS						
	RC-SG-1-1-WG-172	TRANSITION RING TO LOWER HEAD WELD MK 9 TO MK 7	UT	Yes		04-06-93	
B-D	FULL PENETRATION WELDS OF NOZZLES IN VESSELS (INSPECTION PROGRAM B)						
B03.130	STEAM GENERATORS (PRIMARY SIDE)-NOZZLE-TO-VESSEL WELDS						
	RC-SG-1-1-WG-25	36 IN. INLET NOZZLE TO UPPER HEAD WELD MK 70 TO MK 8	UT	Yes		03-27-93	
	RC-SG-1-1-WG-50-Z/Y	28 IN. Y/Z AXIS OUTLET NOZZLE TO LOWER HEAD WELD MK 65 TO MK 7	UT	Yes		04-06-93	
B03.140	STEAM GENERATORS (PRIMARY SIDE)-NOZZLE INSIDE RADIUS SECTION						
	RC-SG-1-1-WG-25-IR	36 IN. INLET NOZZLE INSIDE RADIUS MK 70	UT	Yes		03-27-93	
	RC-SG-1-1-WG-50-Z/Y-IR	28 IN. Y/Z AXIS OUTLET NOZZLE INSIDE RADIUS MK 65	UT	Yes		04-06-93	
B-F	PRESSURE RETAINING DISSIMILAR METAL WELDS						
B05.130	PIPING-DISSIMILAR METAL BUTT WELDS >= 4 INCHES NOMINAL PIPE SIZE						
	RC-MK-A-67-1-FW105A	28 IN. ELBOW TO RC PUMP INLET NOZZLE WELD MK 62 TO P36-3	UT	Yes		03-20-93	

Exam Category Code	Item	Mark Number	Component Description	NDE Method	Examination Acceptable	PCAQ Number	Exam Date	Comments
	B05.130	PIPING-DISSIMILAR METAL BUTT WELDS >= 4 INCHES NOMINAL PIPE SIZE						
		RC-MK-B-44-1-SW69B	28 IN. PIPE TO ELBOW WELD MK 49 TO MK 39	UT PT	Yes Yes		03-19-93	
		RC-MK-B-59-1-SW143B	28 IN. PIPE TO ELBOW WELD MK 49 TO MK 39	UT PT	Yes Yes		03-19-93	
	B05.140	PIPING-DISSIMILAR METAL BUTT WELDS < 4 INCHES NOMINAL PIPE SIZE						
		RC-40-CCA-18-1-FW2	2.5 IN. BRANCH CONNECTION TO ELBOW WELD	PT	Yes		03-13-93	
		RC-40-CCA-18-3-FW9	2.5 IN. BRANCH CONNECTION TO ELBOW WELD MK 87	PT	Yes		03-13-93	
B-G-1		PRESSURE RETAINING BOLTING GREATER THAN 2 INCHES IN DIAMETER						
	B06.010	REACTOR VESSEL-CLOSURE HEAD NUTS						
		RC-RPV-NUT-001	CLOSURE HEAD NUT (HOLE NO. 1) MK 26	MT	Yes		03-21-93	
		RC-RPV-NUT-002	CLOSURE HEAD NUT (HOLE NO. 2) MK 26	MT	Yes		03-21-93	
		RC-RPV-NUT-003	CLOSURE HEAD NUT (HOLE NO. 3) MK 26	MT	Yes		03-21-93	
		RC-RPV-NUT-004	CLOSURE HEAD NUT (HOLE NO. 4) MK 26	MT	Yes		03-21-93	
		RC-RPV-NUT-005	CLOSURE HEAD NUT (HOLE NO. 5) MK 26	MT	Yes		03-21-93	
		RC-RPV-NUT-006	CLOSURE HEAD NUT (HOLE NO. 6) MK 26	MT	Yes		03-21-93	
		RC-RPV-NUT-007	CLOSURE HEAD NUT (HOLE NO. 7) MK 26	MT	Yes		03-21-93	

Exam Category Code Item	Mark Number	Component Description	NDE Method	Examination Acceptable	PCAQ Number	Exam Date	Comments
B06.010	REACTOR VESSEL-CLOSURE HEAD NUTS						
	RC-RPV-NUT-008	CLOSURE HEAD NUT (HOLE NO. 8) MK 26	MT	Yes		03-21-93	
	RC-RPV-NUT-009	CLOSURE HEAD NUT (HOLE NO. 9) MK 26	MT	Yes		03-21-93	
	RC-RPV-NUT-010	CLOSURE HEAD NUT (HOLE NO. 10) MK 26	MT	Yes		03-21-93	
	RC-RPV-NUT-011	CLOSURE HEAD NUT (HOLE NO. 11) MK 26	MT	Yes		03-21-93	
	RC-RPV-NUT-012	CLOSURE HEAD NUT (HOLE NO. 12) MK 26	MT	Yes		03-21-93	
	RC-RPV-NUT-013	CLOSURE HEAD NUT (HOLE NO. 13) MK 26	MT	Yes		03-21-93	
	RC-RPV-NUT-014	CLOSURE HEAD NUT (HOLE NO. 14) MK 26	MT	Yes		03-21-93	
	RC-RPV-NUT-015	CLOSURE HEAD NUT (HOLE NO. 15) MK 26	MT	Yes		03-21-93	
	RC-RPV-NUT-016	CLOSURE HEAD NUT (HOLE NO. 16) MK 26	MT	Yes		03-21-93	
	RC-RPV-NUT-017	CLOSURE HEAD NUT (HOLE NO. 17) MK 26	MT	Yes		03-21-93	
	RC-RPV-NUT-018	CLOSURE HEAD NUT (HOLE NO. 18) MK 26	MT	Yes		03-21-93	

Exam Category Code Item	Mark Number	Component Description	NDE Method	Examination Acceptable	PCAQ Number	Exam Date	Comments
B06.010	REACTOR VESSEL-CLOSURE HEAD NUTS						
	RC-RPV-NUT-020	CLOSURE HEAD NUT (HOLE NO. 20) MK 26	MT	Yes		03-21-93	
	RC-RPV-NUT-065	CLOSURE HEAD NUT (HOLE NO. 19) MK 26	MT	Yes		03-21-93	
B06.030	REACTOR VESSEL-CLOSURE STUDS, WHEN REMOVED						
	RC-RPV-STUD-001	CLOSURE HEAD STUD (HOLE NO. 1) MK 25	UT MT	Yes Yes		03-23-93	
	RC-RPV-STUD-002	CLOSURE HEAD STUD (HOLE NO. 2) MK 25	UT MT	Yes Yes		03-23-93	
	RC-RPV-STUD-003	CLOSURE HEAD STUD (HOLE NO. 3) MK 25	UT MT	Yes Yes		03-23-93	
	RC-RPV-STUD-004	CLOSURE HEAD STUD (HOLE NO. 4) MK 25	UT MT	Yes Yes		03-23-93	
	RC-RPV-STUD-005	CLOSURE HEAD STUD (HOLE NO. 5) MK 25	UT MT	Yes Yes		03-23-93	
	RC-RPV-STUD-006	CLOSURE HEAD STUD (HOLE NO. 6) MK 25	UT MT	Yes Yes		03-23-93	
	RC-RPV-STUD-007	CLOSURE HEAD STUD (HOLE NO. 7) MK 25	UT MT	Yes Yes		03-23-93	
	RC-RPV-STUD-008	CLOSURE HEAD STUD (HOLE NO. 8) MK 25	UT MT	Yes Yes		03-23-93	
	RC-RPV-STUD-009	CLOSURE HEAD STUD (HOLE NO. 9) MK 25	UT MT	Yes Yes		03-23-93	

Exam Category Code	Item	Mark Number	Component Description	NDE Method	Examination Acceptable	PCAQ Number	Exam Date	Comments
B06.030		REACTOR VESSEL-CLOSURE STUDS, WHEN REMOVED						
		RC-RPV-STUD-010	CLOSURE HEAD STUD (HOLE NO. 10) MK 25	UT MT	Yes Yes		03-23-93	
		RC-RPV-STUD-011	CLOSURE HEAD STUD (HOLE NO. 11) MK 25	UT MT	Yes Yes		03-22-93	
		RC-RPV-STUD-012	CLOSURE HEAD STUD (HOLE NO. 12) MK 25	UT MT	Yes Yes		03-22-93	
		RC-RPV-STUD-013	CLOSURE HEAD STUD (HOLE NO. 13) MK 25	UT MT	Yes Yes		03-22-93	
		RC-RPV-STUD-014	CLOSURE HEAD STUD (HOLE NO. 14) MK 25	UT MT	Yes Yes		03-22-93	
		RC-RPV-STUD-015	CLOSURE HEAD STUD (HOLE NO. 15) MK 25	UT MT	Yes Yes		03-22-93	
		RC-RPV-STUD-016	CLOSURE HEAD STUD (HOLE NO. 16) MK 25	UT MT	Yes Yes		03-22-93	
		RC-RPV-STUD-017	CLOSURE HEAD STUD (HOLE NO. 17) MK 25	UT MT	Yes Yes		03-22-93	
		RC-RPV-STUD-018	CLOSURE HEAD STUD (HOLE NO. 18) MK 25	UT MT	Yes Yes		03-22-93	
		RC-RPV-STUD-020	CLOSURE HEAD STUD (HOLE NO. 20) MK 25	UT MT	Yes Yes		03-22-93	
		RC-RPV-STUD-065	CLOSURE HEAD STUD (HOLE NO. 19) MK 25	UT MT	Yes Yes		03-22-93	

Exam Category Code	Item	Mark Number	Component Description	NDE Method	Examination Acceptable	PCAQ Number	Exam Date	Comments
B06.040		REACTOR VESSEL-THREADS IN FLANGE						
		RC-RPV-FLNG-THRD	VESSEL FLANGE THREADS MK 7 (QTY. 60)	UT	Yes		04-05-93	
B06.050		REACTOR VESSEL-CLOSURE WASHERS, BUSHINGS						
		RC-RPV-WASHERS-001	CLOSURE HEAD WASHERS (HOLE NO. 1) MK 14/MK 27	VT-1	Yes		03-19-93	
		RC-RPV-WASHERS-002	CLOSURE HEAD WASHERS (HOLE NO. 2) MK 14/MK 27	VT-1	Yes		03-19-93	
		RC-RPV-WASHERS-003	CLOSURE HEAD WASHERS (HOLE NO. 3) MK 14/MK 27	VT-1	Yes		03-19-93	
		RC-RPV-WASHERS-004	CLOSURE HEAD WASHERS (HOLE NO. 4) MK 14/MK 27	VT-1	Yes		03-19-93	
		RC-RPV-WASHERS-005	CLOSURE HEAD WASHERS (HOLE NO. 5) MK 14/MK 27	VT-1	Yes		03-21-93	
		RC-RPV-WASHERS-006	CLOSURE HEAD WASHERS (HOLE NO. 6) MK 14/MK 27	VT-1	Yes		03-19-93	
		RC-RPV-WASHERS-007	CLOSURE HEAD WASHERS (HOLE NO. 7) MK 14/MK 27	VT-1	Yes		03-19-93	
		RC-RPV-WASHERS-008	CLOSURE HEAD WASHERS (HOLE NO. 8) MK 14/MK 27	VT-1	Yes		03-19-93	
		RC-RPV-WASHERS-009	CLOSURE HEAD WASHERS (HOLE NO. 9) MK 14/MK 27	VT-1	Yes		03-19-93	
		RC-RPV-WASHERS-010	CLOSURE HEAD WASHERS (HOLE NO. 10) MK 14/MK 27	VT-1	Yes		03-19-93	

Exam Category Code	Item	Mark Number	Component Description	NDE Method	Examination Acceptable	PCAQ Number	Exam Date	Comments
B06.050		REACTOR VESSEL-CLOSURE WASHERS, BUSHINGS						
		RC-RPV-WASHERS-011	CLOSURE HEAD WASHERS (HOLE NO. 11) MK 14/MK 27	VT-1	Yes		03-21-93	
		RC-RPV-WASHERS-012	CLOSURE HEAD WASHERS (HOLE NO. 12) MK 14/MK 27	VT-1	Yes		03-21-93	
		RC-RPV-WASHERS-013	CLOSURE HEAD WASHERS (HOLE NO. 13) MK 14/MK 27	VT-1	Yes		03-21-93	
		RC-RPV-WASHERS-014	CLOSURE HEAD WASHERS (HOLE NO. 14) MK 14/MK 27	VT-1	Yes		03-21-93	
		RC-RPV-WASHERS-015	CLOSURE HEAD WASHERS (HOLE NO. 15) MK 14/MK 27	VT-1	Yes		03-21-93	
		RC-RPV-WASHERS-016	CLOSURE HEAD WASHERS (HOLE NO. 16) MK 14/MK 27	VT-1	Yes		03-21-93	
		RC-RPV-WASHERS-017	CLOSURE HEAD WASHERS (HOLE NO. 17) MK 14/MK 27	VT-1	Yes		03-21-93	
		RC-RPV-WASHERS-018	CLOSURE HEAD WASHERS (HOLE NO. 18) MK 14/MK 27	VT-1	Yes		03-21-93	
		RC-RPV-WASHERS-020	CLOSURE HEAD WASHERS (HOLE NO. 20) MK 14/MK 27	VT-1	Yes		03-21-93	
		RC-RPV-WASHERS-065	CLOSURE HEAD WASHERS (HOLE NO. 19) MK 14/MK 27	VT-1	Yes		03-21-93	
B06.180		PUMPS-BOLTS AND STUDS						
		RC-RCP-1-1-1-STUD-10	4.75 IN. DIA. PUMP COVER TO CASE STUD HOLE NO. 10	UT	Yes		03-08-93	

Exam Category Code	Item	Mark Number	Component Description	NDE Method	Examination Acceptable	PCAQ Number	Exam Date	Comments
	806.180	PUMPS-BOLTS AND STUDS						
		RC-RCP-1-1-1-STUD-11	4.75 IN. DIA. PUMP COVER TO CASE STUD HOLE NO. 11	UT	Yes		03-08-93	
		RC-RCP-1-1-1-STUD-12	4.75 IN. DIA. PUMP COVER TO CASE STUD HOLE NO. 12	UT	Yes		03-08-93	
		RC-RCP-1-1-1-STUD-7	4.75 IN. DIA. PUMP COVER TO CASE STUD HOLE NO. 7	UT	Yes		03-08-93	
		RC-RCP-1-1-1-STUD-8	4.75 IN. DIA. PUMP COVER TO CASE STUD HOLE NO. 8	UT	Yes		03-08-93	
		RC-RCP-1-1-1-STUD-9	4.75 IN. DIA. PUMP COVER TO CASE STUD HOLE NO. 9	UT	Yes		03-08-93	
	806.200	PUMPS-NUTS, BUSHINGS, AND WASHERS						
		RC-RCP-1-1-1-NUTS/WASHERS-10	PUMP COVER TO CASE NUTS/WASHERS	VT-1	Yes		03-08-93	
		RC-RCP-1-1-1-NUTS/WASHERS-11	PUMP COVER TO CASE NUTS/WASHERS	VT-1	Yes		03-08-93	
		RC-RCP-1-1-1-NUTS/WASHERS-12	PUMP COVER TO CASE NUTS/WASHERS	VT-1	Yes		03-08-93	
		RC-RCP-1-1-1-NUTS/WASHERS-7	PUMP COVER TO CASE NUTS/WASHERS	VT-1	Yes		03-08-93	
		RC-RCP-1-1-1-NUTS/WASHERS-8	PUMP COVER TO CASE NUTS/WASHERS	VT-1	Yes		03-08-93	
		RC-RCP-1-1-1-NUTS/WASHERS-9	PUMP COVER TO CASE NUTS/WASHERS	VT-1	Yes		03-08-93	
B-G-2		PRESSURE RETAINING BOLTING, 2 INCHES AND LESS IN DIAMETER						
	807.030	STEAM GENERATORS-BOLTS, STUDS, AND NUTS						
		RC-SG-1-1-LPIO-BLTG	12-1 IN. UNC-2A LOWER PRIMARY INSP. OPENING STUD MK 112M - 12 - 1 IN. NUTS MK 110	VT-1	Yes		04/05/93	

Exam Category Code	Item	Mark Number	Component Description	NDE Method	Examination Acceptable	PCAQ Number	Exam Date	Comments
B07.030		STEAM GENERATORS-BOLTS, STUDS, AND NUTS						
		RC-SG-1-1-LPM-BLTG	16-2 IN. UNR-2A LOWER PRIMARY MANWAY STUDS MK-111M 32 - 2 IN. NUTS MK 109	VT-1	Yes		04/05/93	
B07.050		PIPING-BOLTS, STUDS, AND NUTS						
		RC-HEAD VENT-FLANGE BOLTING-3	8 - 1.125 IN. STUDS AND NUTS (FLANGE CONNECTION NO. 3)	VT-1	Yes		04-13-93	
		RC-HEAD VENT-FLANGE BOLTING-4	8 - 1.125 IN. STUDS AND NUTS (FLANGE CONNECTION NO. 4)	VT-1	Yes		04-09-93	PRESERVICE EXAMINATION
		RC-HEAD VENT-FLANGE BOLTING-5	12 - 1 IN. STUDS AND NUTS (FLANGE CONNECTION NO. 5)	VT-1	Yes		04-09-93	PRESERVICE EXAMINATION
B07.080		CRD HOUSINGS-BOLTS, STUDS, AND NUTS						
		RC-RPV-CRD-B45-6-MOTUBE-BLTG	CRD MOTOR TUBE ASSEMBLY BOLTING (HOUSING ASSEMBLY B45-6)	VT-1	Yes		03-25-93	PRESERVICE EXAMINATION
B-H		INTEGRAL ATTACHMENTS FOR VESSELS						
B08.020		PRESSURIZER-INTEGRALLY WELDED ATTACHMENTS						
		RC-PZR-WP-118	INTEGRAL ATTACHMENT WELD - SUPPORT MK 126/MK 128 TO MK 3	MT PT	Yes Yes		03-16-93	AREAS NOT ACCEPTABLE FOR MT WERE PT EXAMINED.
B-J		PRESSURE RETAINING WELDS IN PIPING						
B09.011		CIRCUMFERENTIAL PIPE WELDS >= 4 IN. NOMINAL PIPE SIZE						
		CF-33B-CCA-6-3-FW29	14 IN. VALVE CF30 TO ELBOW WELD	UT	Yes		03-20-93	
		CF-33B-CCA-6-3-SWA	14 IN. ELBOW TO PIPE WELD	UT PT	Yes Yes		03-20-93	
		DH-33A-CCA-4-1-SWB	12 IN. PIPE TO ELBOW WELD	UT PT	Yes Yes		03-23-93	

Exam Category Code Item	Mark Number	Component Description	NDE Method	Examination Acceptable	PCAQ Number	Exam Date	Comments
B09.011	CIRCUMFERENTIAL PIPE WELDS >= 4 IN. NOMINAL PIPE SIZE						
	DH-33A-CCA-4-F6A-FW5	12 IN. VALVE DH12 TO PIPE WELD	UT	Yes		03-25-93	
	RC-MK-A-32-1-SW130B	36 IN. ELBOW TO PIPE WELD MK 31 TO MK 23	UT MT	Yes Yes		03-18-93	
	RC-MK-B-67-1-SW102B	28 IN. ELBOW TO PIPE WELD MK 45 TO MK 67	UT MT	Yes Yes		03-12-93	
B09.012	LONGITUDINAL PIPE WELDS >= 4 IN. NOMINAL PIPE SIZE						
	RC-MK-A-32-1-SW130B-LU-1	36 IN. ELBOW LONGSEAM WELD UPSTREAM - IN. RADIUS MK 31	UT MT	Yes Yes		03-18-93	
	RC-MK-A-32-1-SW130B-LU-2	36 IN. ELBOW LONGSEAM WELD UPSTREAM - OUT. RADIUS MK 31	UT MT	Yes Yes		03-18-93	
	RC-MK-B-44-1-SW69B-LD-1	28 IN. ELBOW LONGSEAM WELD DOWNSTREAM-IN. RADIUS MK 39	UT MT	Yes Yes		03-19-93	
	RC-MK-B-44-1-SW69B-LD-2	28 IN. ELBOW LONGSEAM WELD DOWNSTREAM-OUT. RADIUS MK 39	UT MT	Yes Yes		03-19-93	
	RC-MK-B-59-1-SW143B-LD-1	28 IN. ELBOW LONGSEAM WELD DOWNSTREAM-IN. RADIUS MK 39	UT MT	Yes Yes		03-19-93	
	RC-MK-B-59-1-SW143B-LD-2	28 IN. ELBOW LONGSEAM WELD DOWNSTREAM-OUT. RADIUS MK 39	UT MT	Yes Yes		03-19-93	
	RC-MK-B-67-1-SW102B-LU-1	28 IN. ELBOW LONGSEAM WELD UPSTREAM - OUT. RADIUS MK 45	UT MT	Yes Yes		03-12-93	
	RC-MK-B-67-1-SW102B-LU-2	28 IN. ELBOW LONGSEAM WELD UPSTREAM - IN. RADIUS MK 45	UT MT	Yes Yes		03-12-93	

Exam Category Code	Item	Mark Number	Component Description	NDE Method	Examination Acceptable	PCAQ Number	Exam Date	Comments
B09.021		CIRCUMFERENTIAL PIPE WELDS < 4 IN. NOMINAL PIPE SIZE						
		HP-33C-CCA-2-45-FW33	2.5 IN. VALVE HP51 TO ELBOW WELD	PT	Yes		03-20-93	
		MU-31-CCA-18-4-FW19A	2.5 IN. PIPE TO ELBOW WELD	PT	Yes		03-19-93	
		RC-30-CCA-8-2-FW8C	3 x 2.5 REDUCER TO FLANGE WELD	PT	Yes		03-16-93	
		RC-40-CCA-18-1-SWA	2.5 IN. ELBOW TO TEE WELD	PT	Yes		03-13-93	
		RC-MK-A-135-FW26	2.5 IN. PIPE TO VALVE HV-RC2 WELD MK 135	PT	Yes		03-11-93	
		RC-SK84-02-08-FW5	2.5 IN. PIPE TO ELBOW WELD	PT	Yes		04-10-93	PRESERVICE EXAMINATION
		RC-SK84-02-08-SW1	2.5 IN. FLANGE TO PIPE WELD	PT	Yes		04-04-93	PRESERVICE EXAMINATION
		RC-SK84-02-08-SW2	2.5 IN. PIPE TO ELBOW WELD	PT	Yes		04-04-93	PRESERVICE EXAMINATION
		RC-SK84-02-08-SW3	2.5 IN. ELBOW TO PIPE WELD	PT	Yes		04-04-93	PRESERVICE EXAMINATION
		RC-SK84-02-09-FW6	2.5 IN. ELBOW TO FLANGE WELD	PT	Yes		04-10-93	PRESERVICE EXAMINATION
		RC-SK84-02-09-SW5	2.5 IN. ELBOW TO ELBOW WELD	PT	Yes		04-04-93	PRESERVICE EXAMINATION
B09.040		SOCKET WELDS						
		RC-FSK-M-CCA-7-1-FW3	1.5 IN. PIPE TO VALVE RC51 WELD	PT	Yes		03-16-93	

Exam Category Code	Item	Mark Number	Component Description	NDE Method	Examination Acceptable	PCAQ Number	Exam Date	Comments
	B09.040	SOCKET WELDS						
		RC-FSK-M-CCA-7-1-FW39	1.5 IN. ELBOW TO PIPE WELD	PT	Yes		03-11-93	
B-K-1		INTEGRAL ATTACHMENTS FOR PIPING, PUMPS, AND VALVES						
	B10.010	PIPING-INTEGRALLY WELDED ATTACHMENTS						
		CF-33B-CCA-6-H5-AW	HYDRAULIC SNUBBER SUPPORT ATTACHMENT WELD	PT	Yes		03-24-93	
B-N-1		INTERIOR OF REACTOR VESSEL						
	B13.010	REACTOR VESSEL-VESSEL INTERIOR						
		RC-RPV-INTERIOR	VESSEL INTERIOR	VT-3	Yes		03-23-93	
B-O		PRESSURE RETAINING WELDS IN CONTROL ROD HOUSINGS						
	B14.010	REACTOR VESSEL-WELDS IN CONTROL ROD DRIVE HOUSINGS						
		RC-RPV-CRD-W60-B45-6	MOTOR TUBE EXTENSION TO MOTOR TUBE CENTER SECTION (HOUSING ASSEMBLY B45-6)	PT	Yes		03-24-93	PRESERVICE EXAMINATION
		RC-RPV-CRD-W61-B45-6	MOTOR TUBE CAP TO MOTOR TUBE EXTENSION (HOUSING ASSEMBLY B45-6)	PT	Yes		03-24-93	PRESERVICE EXAMINATION
		RC-RPV-CRD-W73-B45-6	MOTOR TUBE CENTER SECTION TO CRDM BASE (HOUSING ASSEMBLY B45-6)	PT	Yes		03-24-93	PRESERVICE EXAMINATION

Exam Category Code	Item	Mark Number	Component Description	NDE Method	Examination Acceptable	PCAQ Number	Exam Date	Comments
Code Class 2								
C-B		PRESSURE RETAINING NOZZLE WELDS IN VESSELS						
	C02.031	REINFORCING PLATE WELDS TO NOZZLE AND VESSEL > 1/2 IN. NOMINAL THICKNESS						
		DH-COOLER-1-1-WELD J	OUTLET NOZZLE REINFORCING PLATE TO SHELL WELD	PT	Yes		03-02-93	
C-C		INTEGRAL ATTACHMENTS FOR VESSELS, PIPING, PUMPS, AND VALVES						
	C03.010	PRESSURE VESSELS-INTEGRALLY WELDED ATTACHMENTS						
		SP-SG-1-2-SP-2	FEEDWATER HEADER SUPPORT PLATE TO SHELL WELD MK 152 TO MK 2	MT	Yes		04-09-93	
		SP-SG-1-2-SP-3	FEEDWATER HEADER SUPPORT PLATE TO SHELL WELD MK 152 TO MK 2	MT	Yes		04-09-93	
	C03.020	PIPING-INTEGRALLY WELDED ATTACHMENTS						
		FW-7-EBB-3-2-SR23-AW	18 IN. PIPE SUPPORT ATTACHMENT WELD	MT	Yes		03-18-93	
		FW-7-EBB-3-3-SR26D-AW	14 IN. PIPE SUPPORT ATTACHMENT WELD	MT	Yes		03-18-93	
		FW-7-EBB-3-7-SR24C-AW	MAIN FW HYDRAULIC SNUBBER SUPPORT ATTACHMENT WELD	MT	Yes		03-18-93	
		FW-7-EBB-3-8-SR24D-AW	FW LINE, HYDRAULIC SNUBBER SUPPORT	MT	Yes		03-18-93	
		FW-7-EBB-3-SG2-SP2-AW	14 IN. PIPE SUPPORT ATTACHMENT WELD MK 130 TO MK 122	MT	Yes		04-09-93	
		FW-7-EBB-3-SG2-SP3-AW	14 IN. PIPE SUPPORT ATTACHMENT WELD MK 130 TO MK 123	MT	Yes		04-09-93	
		HP-33C-CCB-2-H8-AW	4 IN. PIPE SUPPORT ATTACHMENT WELD	PT	Yes		03-07-93	

Exam Category Code	Item	Mark Number	Component Description	NDE Method	Examination Acceptable	PCAQ Number	Exam Date	Comments
	C03.020	PIPING-INTEGRALLY WELDED ATTACHMENTS						
		MS-3A-EBB-1-1-SR1-AW	26 IN. PIPE SUPPORT ATTACHMENT WELD	MT	Yes		03-29-93	
		MS-3A-EBB-1-28-C282-SEC-S1-AW	36 IN. PIPE SUPPORT ATTACHMENT WELD	MT	Yes		03-09-93	
		MS-3A-EBB-1-28-C282-SEC-S2-AW	36 IN. PIPE SUPPORT ATTACHMENT WELD	MT	Yes		03-09-93	
		MS-3A-EBB-1-3-SR6-AW	26 IN. PIPE SUPPORT ATTACHMENT WELD	MT	Yes		03-24-93	
C-F-1		PRESSURE RETAINING WELDS IN PIPING						
	C05.021	CIRCUMFERENTIAL PIPE WELDS > 1/2 IN. NOMINAL WALL THICKNESS						
		HP-33C-CCB-2-16-SWA	2.5 IN. ELBOW TO PIPE WELD	UT PT	Yes Yes		03-05-93	
		HP-33C-CCB-2-28-SWD	2.5 IN. ELBOW TO PIPE WELD	UT PT	Yes Yes		03-16-93	
		HP-33C-CCB-2-6A-SWA	4 IN. PIPE TO ELBOW WELD	UT PT	Yes Yes		03-04-93	
	C05.11A	CIRCUMFERENTIAL PIPING WELD < 3/8 IN. NOMINAL WALL THICKNESS FOR PIPING > NPS 4						
		CS-34-GCB-5-13B-FW5	8 IN. PIPE TO ELBOW WELD	PT	Yes		03-03-93	
		DH-33A-GCB-7-5-SWB	12 IN. ELBOW TO PIPE WELD	PT	Yes		03-03-93	
		DH-33A-HCB-1-1-FW2	18 IN. ELBOW TO VALVE DH2734 WELD	PT	Yes		03-02-93	
		DH-33A-HCB-2-12-FW16	14 IN. ELBOW TO PIPE WELD	PT	Yes		02-27-93	
		DH-33B-GCB-1-6-SWA	6 IN. ELBOW TO PIPE WELD	PT	Yes	93-0078	03-03-93	INDICATION OUTSIDE AREA OF INTEREST - ACCEPTABLE.

Exam Category Code	Item	Mark Number	Component Description	NDE Method	Examination Acceptable	PCAQ Number	Exam Date	Comments
C05.11A		CIRCUMFERENTIAL PIPING WELD < 3/8 IN. NOMINAL WALL THICKNESS FOR PIPING > NPS 4						
		DH-338-GCB-10-13-SWA	10 IN. PIPE TO TEE WELD	PT	Yes		02-27-93	
		HP-33A-GCB-4-6-SWE	6 IN. ELBOW TO ELBOW WELD	PT	Yes		03-03-93	
C05.21A		CIRCUMFERENTIAL PIPING WELD <= 1/5 IN. NOMINAL WALL THICKNESS FOR PIPING >= NPS 2 AND <= NPS 4						
		HP-33C-HCC-91-5-SWB	PIPE TO ELBOW WELD	PT	Yes		02-27-93	
		HP-4-GCB-11-FW52	4 IN. PIPE TO REDUCING TEE WELD	PT	Yes		03-01-93	
C05.41A		CIRCUMFERENTIAL WELD IN PIPE BRANCH CONNECTIONS OF THIN WALL BRANCH PIPING >= NPS 2						
		DH-338-GCB-10-5-SWB	10 IN. PIPE TO 4 IN. BRANCH CONNECTION WELD	PT	Yes		02-27-93	
C-F-2		PRESSURE RETAINING WELDS IN CARBON OR LOW ALLOY STEEL PIPING						
C05.051		CIRCUMFERENTIAL PIPING WELDS >= 3/8 IN. NOMINAL WALL THICKNESS FOR PIPING >NPS 4						
		AF-6D-EBB-4-A597-1-SWD	6 IN. TEE TO PIPE WELD	UT MT	Yes Yes		03-24-93	
		FW-7-EBB-3-12-FW37	14 IN. ELBOW TO PIPE WELD	UT MT	Yes Yes		03-17-93	
		MS-3A-EBB-1-9-SWC	36 X 26 CONCENTRIC REDUCER TO TEE WELD	UT MT	Yes Yes		03-23-93	
C05.052		LONGITUDNAL PIPING WELDS >= 3/8 IN. NOMINAL WALL THICKNESS FOR PIPING >4 NPS						
		MS-3A-EBB-1-9-SWC-LD	36 X 36 X 36 TEE LONGSEAM WELD DOWNSTREAM	UT MT	Yes Yes		03-23-93	
C05.51A		CIRCUMFERENTIAL PIPING WELDS < 3/8 IN. NOMINAL WALL THICKNESS FOR PIPING > NPS 4						
		MS-3A-EBB-2-16-FW23	6 IN. PIPE TO ELBOW WELD	MT	Yes		03-08-93	

Exam Category Code Item	Mark Number	Component Description	NDE Method	Examination Acceptable	PCAQ Number	Exam Date	Comments
Code Class 1							
F-A	SUPPORTS						
F01.010	CLASS 1 PIPING SUPPORTS						
	CF-33B-CCA-6-H5	HYDRAULIC SNUBBER SUPPORT	VT-3	Yes		03-24-93	Relief Request RR-A9 is applicable.
	RC-FSK-M-CCA-7-1-H2	RIGID SUPPORT	VT-3	Yes		03-19-93	Relief Request RR-A9 is applicable.
	RC-FSK-M-CCA-7-1-PS-H25	HYDRAULIC SNUBBER SUPPORT	VT-3	Yes		04-03-93	Relief Request RR-A9 is applicable. PRESERVICE EXAMINATION
	RC-FSK-M-CCA-7-1-PS-H26	HYDRAULIC SNUBBER SUPPORT	VT-3	Yes		04-03-93	Relief Request RR-A9 is applicable. PRESERVICE EXAMINATION
	RC-M1170-H14	DOUBLE HYDRAULIC SNUBBER SUPPORT	VT-3	Yes		04-14-93	Relief Request RR-A9 is applicable. PRESERVICE EXAMINATION
	RC-M1170-H4	RIGID SUPPORT/HYDRAULIC SNUBBER	VT-3	Yes		04-13-93	Relief Request RR-A9 is applicable. CODE CASE N-491-2220(B) POST HEATUP EXAMINATION.
	RC-MK-134-PS-H34	HYDRAULIC SNUBBER SUPPORT	VT-3	Yes		03-11-93	Relief Request RR-A9 is applicable. CODE CASE N-491-2220(B) POST HEATUP EXAMINATION.

Exam Category Code	Item	Mark Number	Component Description	NDE Method	Examination Acceptable	PCAQ Number	Exam Date	Comments
F01.010	CLASS 1 PIPING SUPPORTS							
		RC-MK-A-103-PS-H37	HYDRAULIC SNUBBER SUPPORT	VT-3	Yes		03-11-93	Relief Request RR-A9 is applicable. CODE CASE N-491-2220(B) POST HEATUP EXAMINATION.
		RC-MK-A-108-PS-H8	HYDRAULIC SNUBBER SUPPORT	VT-3	Yes		04-03-93	Relief Request RR-A9 is applicable. PRESERVICE EXAMINATION
		RC-MK-A-112-PS-H4	HYDRAULIC SNUBBER SUPPORT	VT-3	Yes		04-03-93	Relief Request RR-A9 is applicable. PRESERVICE EXAMINATION
		RC-MK-A-112-PS-H5	VARIABLE SPRING SUPPORT	VT-3	Yes		03-19-93	Relief Request RR-A9 is applicable. CODE CASE N-491-2220(B) POST HEATUP EXAMINATION.
		RC-MK-A-135-PS-H22	VARIABLE SPRING SUPPORT	VT-3 VT-3	No Yes	93-0116	03-12-93	Relief Request RR-A9 is applicable. CODE CASE N-491-2220(B) POST HEATUP EXAMINATION. SPRING CAN SETTING OUT OF TOLERANCE - ADJUSTED SETTING. PERFORMED PRESERVICE EXAMINATION.
		RC-MK-A-135-PS-H27	HYDRAULIC SNUBBER SUPPORT	VT-3	Yes		03-11-93	Relief Request RR-A9 is applicable. CODE CASE N-491-2220(B) POST HEATUP EXAMINATION.

Exam Category Code	Item	Mark Number	Component Description	NDE Method	Examination Acceptable	PCAQ Number	Exam Date	Comments
F01.010	CLASS 1 PIPING SUPPORTS							
		RC-MK-A-135-PS-H29	HYDRAULIC SNUBBER SUPPORT	VT-3	Yes		03-11-93	Relief Request RR-A9 is applicable. CODE CASE N-491-2220(B) POST HEATUP EXAMINATION.
		RC-MK-A-135-PS-H31	HYDRAULIC SNUBBER SUPPORT	VT-3	Yes		03-11-93	Relief Request RR-A9 is applicable. CODE CASE N-491-2220(B) POST HEATUP EXAMINATION.
		RC-MK-A-135-PS-H35	VARIABLE SPRING SUPPORT	VT-3	Yes		03-12-93	Relief Request RR-A9 is applicable. CODE CASE N-491-2220(B) POST HEATUP EXAMINATION.
		RC-MK-A-135-PS-H36	HYDRAULIC SNUBBER SUPPORT	VT-3	Yes		03-11-93	Relief Request RR-A9 is applicable. CODE CASE N-491-2220(B) POST HEATUP EXAMINATION.
		RC-MK-A-139-PS-H20	HYDRAULIC SNUBBER SUPPORT	VT-3	Yes		03-17-93	Relief Request RR-A9 is applicable. CODE CASE N-491-2220(B) POST HEATUP EXAMINATION.
		RC-MK-A-139-PS-H21	HYDRAULIC SNUBBER SUPPORT	VT-3	Yes		03-17-93	Relief Request RR-A9 is applicable. CODE CASE N-491-2220(B) POST HEATUP EXAMINATION.
		RC-MK-A-93-PS-H23	VARIABLE SPRING SUPPORT	VT-3	Yes		03-19-93	Relief Request RR-A9 is applicable. CODE

Exam Category Code	Item	Mark Number	Component Description	NDE Method	Examination Acceptable	PCAQ Number	Exam Date	Comments
								CASE N-491-2220(B) POST HEATUP EXAMINATION.
F01	010	CLASS 1 PIPING SUPPORTS						
		RC-MK-A-93-PS-H33	VARIABLE SPRING SUPPORT	VT-3	Yes		03-12-93	Relief Request RR-A9 is applicable. CODE CASE N-491-2220(B) POST HEATUP EXAMINATION.
		RC-MK-A-95-PS-H12	HYDRAULIC SNUBBER SUPPORT	VT-3	Yes		03-17-93	Relief Request RR-A9 is applicable. CODE CASE N-491-2220(B) POST HEATUP EXAMINATION.
		RC-MK-A-95-PS-H15	HYDRAULIC SNUBBER SUPPORT	VT-3	Yes		03-26-93	Relief Request RR-A9 is applicable. CODE CASE N-491-2220(B) POST HEATUP EXAMINATION.
		RC-MK-A-95-PS-H17	HYDRAULIC SNUBBER SUPPORT	VT-3	Yes		03-17-93	Relief Request RR-A9 is applicable. CODE CASE N-491-2220(B) POST HEATUP EXAMINATION.
		RC-MK-A-96-PS-H2	HYDRAULIC SNUBBER SUPPORT	VT-3	Yes		04-03-93	Relief Request RR-A9 is applicable. PRESERVICE EXAMINATION
		RC-MK-A-96-PS-H3	HYDRAULIC SNUBBER SUPPORT	VT-3	Yes		03-20-93	Relief Request RR-A9 is applicable. CODE CASE N-491-2220(B) POST HEATUP EXAMINATION.

Exam Category / Code Item	Mark Number	Component Description	NDE Method	Examination Acceptable	PCAQ Number	Exam Date	Comments
Code Class 2							
F-A	SUPPORTS						
F01.020	CLASS 2 PIPING SUPPORTS						
	FW-7-EBB-3-16-C285	SEISMIC ANCHOR SUPPORT	VT-3	Yes		02-27-93	Relief Request RR-A9 is applicable. CODE CASE N-491-2220(B) POST HEATUP EXAMINATION.
	HP-33C-CCB-2-H23	RIGID SUPPORT	VT-3	Yes		03-01-93	Relief Request RR-A9 is applicable.
	HP-ANCHOR-A053	3 IN. ANCHOR	VT-3	Yes		02-24-93	Relief Request RR-A9 is applicable.
	MS-3A-EBB-1-1-SR1	HYDRAULIC SNUBBER SUPPORT	VT-3	Yes		04/05/93	Relief Request RR-A9 is applicable.
	MS-3A-EBB-1-17-SR8	HYDRAULIC SNUBBER SUPPORT	VT-3	Yes		03-24-93	Relief Request RR-A9 is applicable. CODE CASE N-491-2220(B) POST HEATUP EXAMINATION.
F01.040	COMPONENT SUPPORTS						
	DH-PUMP-1-1-SUPPORTS	DECAY HEAT PUMP P42-1 SUPPORTS	VT-3	Yes		02-25-93	Relief Request RR-A9 is applicable.

Exam Category Code Item	Mark Number	Component Description	NDE Method	Examination Acceptable	PCAQ Number	Exam Date	Comments
Code Class 1							
F-A	SUPPORTS						
F01.040	COMPONENT SUPPORTS						
	RC-RCP-1-1-1-SNUBBERS	REACTOR COOLANT PUMP 1-1-1 SNUBBERS	VT-3	Yes		03-09-93	Relief Request RR-A9 is applicable.
	RC-RCP-1-1-1-SUPPORTS	REACTOR COOLANT PUMP 1-1-1 RIGID AND VARIABLE SPRING SUPPORTS	VT-3	Yes		03-09-93	Relief Request RR-A9 is applicable.
	RC-RPV-Y/Z AXIS SUPPORT	REACTOR VESSEL Y/Z AXIS SUPPORT	VT-3	Yes		03-08-93	Relief Request RR-A9 is applicable.

Exam Category Code Item	Mark Number	Component Description	NDE Method	Examination Acceptable	PCAQ Number	Exam Date	Comments
Code Class 2							
F-A	SUPPORTS						
F01.20A	THIN WALL PIPING SUPPORTS						
	CS-34-GCB-5-H9	SWAY STRUT SUPPORT	VT-3	Yes		03-01-93	Relief Request RR-A9 is applicable.
	DH-33A-GCB-8-H4	HYDRAULIC SNUBBER SUPPORT	VT-3	Yes	93-0070	02-24-93	Relief Request RR-A9 is applicable. LOOSE ANCHOR BOLT NUT - SUPPORT ACCEPTABLE FOR SERVICE BUT ANCHOR BOLT TO BE RETORQUED.
	DH-33A-HCB-2-H20	WELDED RIGID SUPPORT	VT-3	Yes		02-24-93	Relief Request RR-A9 is applicable.
	DH-33B-GCB-10-H24	VARIABLE SPRING SUPPORT	VT-3	Yes		03-29-93	Relief Request RR-A9 is applicable.
	DH-33C-GCB-10-H22	HYDRAULIC SNUBBER SUPPORT	VT-3	Yes		03-01-93	Relief Request RR-A9 is applicable.
	HP-33B-GCB-2-H4	SWAY STRUT SUPPORT	VT-3	Yes		02-24-93	Relief Request RR-A9 is applicable.
	HP-33C-HCC-91-H1	NONWELDED RIGID SUPPORT	VT-3	Yes		02-25-93	Relief Request RR-A9 is applicable.
	MS-3A-EBB-2-H11	SWAY STRUT SUPPORT	VT-3	Yes		03-08-93	Relief Request RR-A9 is applicable.
	MS-3A-EBB-2-H22	VARIABLE SPRING SUPPORT	VT-3	Yes		05-21-93	Relief Request RR-A9 is applicable. PRESERVICE

Exam Category Code	Item	Mark Number	Component Description	NDE Method	Examination Acceptable	PCAQ Number	Exam Date	Comments
								EXAMINATION
F01.20A		THIN WALL PIPING SUPPORTS						
		MS-3A-E88-2-H36	HYDRAULIC SNUBBER SUPPOR:	VT-3	Yes		10-24-90	Relief Request RR-A9 is applicable. PRESERVICE EXAMINATION

The total number of ASME Class 1 , Class 2 and Class 3 examinations completed in the 8R Refueling Outage was 245. This brings the total number of components for which all examinations have been completed in the Second Ten Year Inservice Inspection Interval to 303 or 29 percent of the required examinations.

FORM NIS-1 OWNERS' DATA REPORT FOR INSERVICE INSPECTIONS

As required by the Provisions of the ASME Code Rules

1. Owner Toledo Edison Company, 300 Madison Ave., Toledo, Ohio 43652
(Name and Address of Owner)

2. Plant Davis-Besse Nuclear Power Station, Oak Harbor, Ohio 43449
(Name and Address of Plant)

3. Plant Unit #1 4. Owner Certificate of Authorization (if required) N/A

5. Commercial Service Date 11/21/77 6. National Board Number for Unit N/A

7. Components Inspected System Pressure Tests

Component or Appurtenance	Manufacturer or Installer	Manufacturer or Installer Serial No.	State or Province No.	National Board No.
Class 1 Piping/Components	Babcock & Wilcox	Various	N/A	
Class 2 Piping/Components	ITT Grinnell	Various	N/A	
Class 3 Piping/Components	ITT Grinnell	Various	N/A	

Note: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size is 8½ in. x 11 in., (2) information in items 1 through 6 on this data report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

This form (E00029) may be obtained from the Order Dept., ASME, 345 E. 47th St., New York, N.Y. 10017

FORM NIS-1 (back)

8. Examination Dates Nov 1991 to May 1993 9. Inspection Interval from Sept 1990 to Sept 2000

10. Abstract of Examinations. Include a list of examinations and a statement concerning status of work required for current interval. Note 1

11. Abstract of Conditions Noted Note 2

12. Abstract of Corrective Measures Recommended and Taken

All Corrective Measures are identified in the specific test packages and are available for review at the plant site.

We certify that the statements made in this report are correct and the examinations and corrective measures taken conform to the rules of the ASME Code, Section XI.

Date 6-15 19 93 Signed Toledo Edison By [signature]
Owner

Certificate of Authorization No. (if applicable) N/A Expiration Date N/A

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of Ohio and employed by H.S.B.I. & I. Co. of Hartford, CT have inspected the components described in this Owners' Data Report during the period Nov 1991 to May 1993, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners' Data Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owners' Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 6-16 19 93

Robert E. Cook Commissions NB-10992, Ohio Comm. (ANI)
Inspector's Signature National Board, State, Province and No.

10. Note 1 This form is for the pressure testing performed during the above dates. The specific tests performed are incorporated in the ISI Summary Report (Section 4).

11. Note 2 All system pressure testing results are contained in the specific test packages and are available for review at the plant site.

SYSTEM PRESSURE TESTS

Below is a listing of the ASME Section XI System Pressure Testing completed from the start of Cycle 8 (November 5, 1991) through the Eighth Refueling Outage (May 1, 1993), as witnessed and/or verified by R. E. Cook, ANII. These tests were performed in accordance with ASME Section XI and the Inservice Testing Program.

Auxiliary Feedwater (AFW)

AFW Pumps 1 and 2 Discharge Hydrotest per DB-PF-03065 (AF002, AF006), March 6, 1993.

AFW Pump 2 Cooling Lines Hydrotest per DB-PF-03065 (AF008), March 5, 1993.

Component Cooling Water (CCW)

CCW Containment Header Inservice Test per DB-PF-03065 (CC003, CC004, CC005, CC006, CC007, CC008, CC009, CC010, CC011, CC012, and CC013), April 21, 1993.

CCW Pump 1-1 and Heat Exchanger Hydrotest per DB-PF-03065 (CC014), March 15, 1993.

CCW Line 1 Hydrotest per DB-PF-03065 (CC015A), March 17, 1993.

CCW Line 1 to EDG Jacket Heat Exchanger Hydrotest per DB-PF-03065 (CC015B), March 17, 1993.

CCW Line 1 to CTMT Gas Analyzer Heat Exchanger Hydrotest per DB-PF-03065 (CC015C), March 17, 1993.

CCW to ECCS Cooling Line Train 1 Inservice Test per DB-PF-03065 (CC016), March 13, 1993.

CCW to ECCS Cooling Line Train 2 Inservice Test per DB-PF-03065 (CC019), May 22, 1992.

CCW Pump 1-3 and Heat Exchanger Hydrotest per DB-PF-03065 (CC020), October 14, 1991.

CCW to Non-Essential Header Hydrotest per DB-PF-03065 (CC021), March 8, 1993, and March 16, 1993.

Repair and Replacement Hydrotests for MWO 7-93-0094-01, CC283 Replacement, per DB-PF-03065, April 8, 1993.

Repair and Replacement Hydrotests for MWO 7-93-0099-02, CC483 Replacement, per DB-PF-03065, April 8, 1993.

Repair and Replacement Hydrotest for MWO 1-91-1535-24, CC380 Spoolpiece, per DB-PF-03065, April 2, 1993.

Repair and Replacement Hydrotest for MWOs 2-92-0038-01 and 1-92-0492-00, Letdown Cooler Replacement, per DB-PF-03065, April 7, 1993.

Containment Spray (CS)

CS Train 2 Functional Test per DB-PF-03065 (CS004 and CS005), January 22, 1993.

Containment Ventilation

Containment Hydrogen and Airborne Radiation Sample Lines - CTMT P42B - Functional Test per DB-PF-03065 (CV006), March 16, 1993.

Containment Hydrogen and Airborne Radiation Sample Lines - CTMT P43B - Functional Test per DB-PF-03065 (CV007), March 16, 1993.

Containment Purge Exhaust - CTMT P34 - Functional Test per DB-PF-03065 (CV008), April 21, 1993.

Containment Purge Supply - CTMT P33 - Functional Test per DB-PF-03065 (CV009), April 21, 1993.

Containment Hydrogen Dilution System Exhaust - CTMT P51 - Functional Test per DB-PF-03065 (CV010), March 8, 1993.

Containment Hydrogen Dilution Supply Train 1 - CTMT P67 - Functional Test per DB-PF-03065 (CV011), March 13, 1993.

Hydrogen Dilution Supply Train 2 - CTMT P69 - Functional Test per DB-PF-03065 (CV012), March 13, 1993.

Containment Hydrogen Dilution Blower 1 Suction and Discharge Functional Test per DB-PF-03065 (CV013 and CV014), March 4, 1992.

Containment Hydrogen Dilution Blower 2 Suction and Discharge Functional Test per DB-PF-03065 (CV015 and CV016), April 13, 1992.

Emergency Vent System Fan and Filler Units Functional Test per DB-PF-03065 (CV017), October 11, 1991.

Post Accident Sampling Lines Inservice Test per DB-PF-03065 (CV019, CV020, and CV021), March 29, 1993.

Containment Vacuum Breaker - CTMT P8B - Functional Test per DB-PF-03065 (CV023), March 19, 1993.

Containment Vacuum Breaker - CTMT P8C - Functional Test per DB-PF-03065 (CV024), March 19, 1993.

Containment Vacuum Breaker - CTMT P8D - Functional Test per DB-PF-03065 (CV025), March 19, 1993.

Containment Vacuum Breaker - CTMT P8F - Functional Test per DB-PF-03065 (CV027), March 18, 1993.

Containment Vacuum Breaker - CTMT P8G - Functional Test per DB-PF-03065 (CV028), March 18, 1993.

Core Flood (CF)

CF Tank 1 Inservice Test per DB-PF-03065 (CF001), April 18, 1993.

Common CF Tank Bleed Line - CTMT P47A - Functional Test per DB-PF-03065 (CF005), April 16, 1993.

CF Tank 1 Fill Line - CTMT P71C - Functional Test per DB-PF-03065 (CF006), April 11, 1993.

CF Tank 1 Discharge to RCS Inservice Test per DB-PF-03065 (CF007), April 27, 1993.

CF Tank 2 Discharge to RCS Inservice Test per DB-PF-03065 (CF008), April 27, 1993.

Decay Heat (DH)

BWST Supply to Train 1 and 2 ECCS Suction Inservice Test per DB-PF-03065 (DH001, DH002, and DH007), February 12, 1993.

DH Pump 1-1 Discharge Hydrostatic Test per DB-PF-03065 (DH005), September 27, 1991.

DH Pump 1 Sample Source Line Functional Test per DB-PF-03065 (DH006), June 5, 1992.

DH Pump 2 Sample Source Line Functional Test per DB-PF-03065 (DH010), April 24, 1992.

DH Pressurizer Spray Line - CTMT P74C - Functional Test per DB-PF-03065 (DH011), April 17, 1993.

Refuel Canal Fill Line - CTMT P49 - Functional Test per DB-PF-03065 (DH012), April 1, 1993.

BWST Recirculation Lines From DH Functional Test per DB-PF-03065 (DH013), April 1, 1993.

RCS to DH Pump Suction Functional Test per DB-PF-03065 (DH014), March 23, 1993.

RCS to DH Pump 1 and 2 Suction Hydrotest per DB-PF-03065 (DH004 partial), March 23, 1993.

RCS to DH Pump 2 Suction Hydrotest per DB-PF-03065 (DH008), March 24, 1993.

Diesel Air Start

Emergency Diesel Generator Starting Air Receiver Tank 1-2 per DB-PF-03065 (DA002), July 10, 1992.

Emergency Diesel Generator Starting Air Receiver Tank 2-2 per DB-PF-03065 (DA004), July 30, 1992.

Diesel Fuel Oil

Fuel Oil Storage Tank 1-2 Functional Test per DB-PF-03065 (D0003), March 27, 1993.

Fuel Oil Day Tank 1-1 Inservice Test per DB-PF-03065 (D0004), January 20, 1993.

High Pressure Injection (HPI)

HPI Pump 1 Discharge and Return to BWST Functional Test per DB-PF-03065 (HP001A and HP002), July 28, 1993.

HPI and MU to RCS - CTMT P50 - Functional Test per DB-PF-03065 (HP003), March 8, 1993.

HPI Line 1-1 to RCS (P22) Functional Test per DB-PF-03065 (HP004), September 6, 1991.

HPI Pump 2 Return to BWST Functional Test per DB-PF-03065 (HP005A), June 19, 1992.

HPI Pump 2 to RCS - CTMT P19 - Functional Test per DB-PF-03065 (HP007), March 22, 1993.

HPI Pump 2 Suction Hydrotest per DB-PF-03065 (HP005), March 26, 1993.

HPI Pump 2 Discharge Hydrotest per DB-PF-03065 (HP006), March 24, 1993.

Normal Makeup Injection - CTMT P20 - Inservice Test per DB-PF-03065 (HP008), April 27, 1993.

Makeup (MU)

Repair and Replacement Hydrotest for MWOs 1-92-0492-00 and 2-92-0038-01, Letdown Cooler Replacement, per DB-PF-03065, April 3, 1993.

Makeup From Letdown Coolers - CTMT P14 - Inservice Test per DB-PF-03065 (MU001), April 27, 1993.

Makeup Seal Injection to RCPs - CTMT P54, P55, P52, and P53 - Inservice Test per DB-PF-03065 (MU002, MU003, MU004, and MU005), April 27, 1993.

Makeup Seal Return From RCPs - CTMT P56 - Inservice Test per DB-PF-03065 (MU006), April 27, 1993.

Mainsteam (MS)

MS Line 1 and 2 (Auxiliary Building) Inservice Test per DB-PF-03065 (MS001 and MS002), May 1, 1992.

MS Line 1 (Annulus/CTMT) Inservice Test per DB-PF-03065 (MS001), April 27, 1993.
(Note: Code Case N-416 for MWO 2-90-0066-01 Main Feedwater Spray Nozzle Replacement.)

Mainsteam (MS) (continued)

MS Line 2 (Annulus/CTMT) Inservice Test per DB-PF-03065 (MS002), April 27, 1993.
(Note: Code Case N-416 for MWOs 2-90-0066-02 Main Feedwater Spray Nozzle Replacement and 1-91-0602-00 MS883 replacement.)

Repair and Replacement Hydrotest for MWOs 2-91-0044-01 (MS734) and 2-87-1273-04 (MS5889A) per DB-PF-03065, April 11, 1993.

Repair and Replacement Hydrotests for MWOs 2-91-0044-02 (MS735) and 2-87-1273-05 (MS5889B) per DB-PF-03065, April 10, 1993.

Reactor Coolant (RCS)

RCS Leakage Test (Class 1 Piping) Leakage Test per DB-PF-03065 (RC001L, RC002, DH015, DH016, CF009, and CF010), April 27, 1993.

RCS Sample Line (P1) Functional Test per DB-PF-03065 (RC003), March 29, 1993.

Quench Tank Sample Line (P68A) Functional Test per DB-PF-03065 (RC008), April 1, 1993.

RCP 1-1, 1-2, 2-1, and 2-2 Gasket Drain Lines Inservice Test per DB-PF-03065 (RC009, RC010, RC011, and RC012), April 27, 1993.

RCP Seal Cavity to Gaseous Rad Waste - CTMT P16 - per DB-PF-03065 (RC004), April 27, 1993.

Service Water (SW)

Repair and Replacement Hydrotest for MWO 2-90-0045-03 per DB-PF-03065, December 8, 1992.

Repair and Replacement Hydrotest for MWOs 7-92-0275-01, 7-92-0275-04, and 7-92-0275-07 per DB-PF-03065, January 25, 1993.

Repair and Replacement Hydrotest for MWO 2-91-0004-01 per DB-PF-03065, December 13, 1991.

Repair and Replacement Hydrotest for MWO 1-91-1666-00 per DB-PF-03065, April 20, 1992.

Repair and Replacement Functional Test for MWO 3-92-0924-01, April 20, 1992.

Repair and Replacement Hydrotest for MWO 2-91-0052-02 per DB-PF-03065, January 5, 1993.

SW to Train 1 Return from CCW Heat Exchangers Hydrotest (Repair and Replacement: MWO 2-91-0052-23) per DB-PF-03065 (SW004C), March 15, 1993.

SW to CAC 1 Hydrotest (Repair and Replacement: MWOs 2-91-0052-25, -26, -27, -28, and -29) per DB-PF-03065 (SW005), April 14, 1993.

SW Pump 2 Discharge Inservice Test per DB-PF-03065 (SW008), October 27, 1992.

Service Water (SW) (continued)

SW Train 2 Return from CCW Heat Exchangers (Repair and Replacement: MWO 2-91-0052-06) per DB-PF-03065 (SW011C), April 8, 1993.

SW to CAC 2 Hydrotest (Repair and Replacement: MWOs 2-91-0052-08, -09, -10, -11, and -12) per DB-PF-03065 (SW012), March 27, 1993.

SW Supply to AFW Hydrotest per DB-PF-03065 (SW013), March 4, 1993.

SW to Hydrogen Dilution Blower 2 Hydrotest per DB-PF-03065 (SW014), February 16, 1993.

SW Pump 3 Discharge Inservice Test per DB-PF-03065 (SW015), January 19, 1993.

SW to CCW Heat Exchanger 3 Hydrotest per DB-PF-03065 (SW017), March 1, 1993.

SW to CAC 3 Hydrotest (Repair and Replacement: MWOs 2-91-0052-13, -14, -15, -16, and -17) per DB-PF-03065 (SW018), April 13, 1993.

SW to CACs Hydrotest per DB-PF-03065 (SW019), April 1, 1993.

SW to ECCS Room Cooler 1-4 Hydrotest per DB-PF-03065 (SW023), January 25, 1993.

SW to ECCS Room Cooler 1-5 Hydrotest per DB-PF-03065 (SW024), January 28, 1993.

Repair and Replacement Hydrotest for MWOs 2-91-0052-18 and 2-91-0052-19 per DB-PF-03065, March 20, 1993.

Repair and Replacement Hydrotest for MWOs 2-91-0052-30 and 2-91-0052-31 per DB-PF-03065, March 25, 1993.

SW Return from CACs Hydrotest per DB-PF-03065 (SW028), March 27, 1993.

SW Return Header Hydrotest per DB-PF-03065 (Repair and Replacement: MWO 2-91-0052-20) (SW029), March 15, 1993, and March 18, 1993.

Spent Fuel Pool (SFP)

SFP Return Line Functional Flow Test per DB-PF-03065 (SF006), March 19, 1993.

Station Air (SA)

SA Supply to CS Lower Ring Header Functional Test per DB-PF-03065 (SA002), March 26, 1993.

SA Supply to CS Upper Ring Header Functional Test per DB-PF-03065 (SA003), March 26, 1993.

Station Drainage

Station Drainage - CTMT P13 - Functional Test per DB-PF-03065 (DR001), April 2, 1993.

Repairs and Replacements

The following repairs and replacements on ASME Class 1 and 2 components were performed on the Davis Besse Nuclear Power Station Unit #1 since November, 1991, which marked the completion of the Seventh Refueling Outage and the completion of the 8th Refueling outage in April, 1993.

Documentation for these repairs and replacements is available for review.

Maintenance Work Order #	System	Description
1-90-2020-01	Main Steam	Replaced hanger pipe clamp and nuts
1-91-0119-01	Decay Heat	Replaced flange stud and nuts for relief valve DH 1550
1-91-0121-00	High Pressure Injection	Replaced inlet and outlet flange studs and nuts for safety valve HP 1510
1-91-0250-00	Decay Heat	Replaced relief valve DH 4849 and inlet and outlet flange studs and nuts
1-91-0602-00	Main Steam	Replaced drain valve MS 883
1-91-1116-00	N/A	Rebuilt spare Pressurizer Code Safety Valve S/N 56264-00-0005
1-91-1535-01	Reactor Coolant System	Rebuilt, tested and reinstalled hydraulic snubbers on Reactor Coolant Pump 1-2-1.
1-91-1616-00	Containment Spray	Replaced flange studs and nuts on spools 33A-HCB-3-6 and 33A-HCB-3-7 and flange downstream of valve CS 3
1-92-0170-00	Reactor Coolant System	Replaced Code Safety Valve RC 13A
1-92-0171-00	Reactor Coolant System	Replaced Code Safety Valve RC 13B

Maintenance Work Order #	System	Description
1-92-0338-00	Containment Spray	Rebuilt and tested hydraulic snubbers for pipe hanger 34-HCB-4-H32
1-92-0338-04	Steam Generator Drain	Replaced hydraulic snubber for pipe hanger 7-EBB-5-H11
1-92-0447-01	Pressurizer Surge	Rebuilt, tested, and reinstalled hydraulic snubber for pipe hanger PSU-1-R1
1-92-0447-02	Pressurizer Surge	Rebuilt, tested, and reinstalled hydraulic snubbers for pipe hangers PSU-1-R2 and PSU-1-R3
1-92-0469-00	Auxiliary Feedwater	Rebuilt, tested, and reinstalled hydraulic snubber for pipe hanger 6C-EBB-4-H15
1-92-0473-00	Decay Heat	Rebuilt, tested, and reinstalled hydraulic snubber for pipe hanger 33B-CCB-6-H2
1-92-0484-00	Main Steam	Rebuilt, tested, and reinstalled hydraulic snubber for seismic restraint 3A-EBB1-SR1
1-92-0717-01	Main Steam	Rebuilt, tested, and reinstalled hydraulic snubber for pipe hanger 3A-EBB-1-H1
1-92-0845-00	Spent Fuel	Replaced a nut and bolt on the Fuel Transfer Tube Flanges
1-92-0950-00	Main Feedwater	Rebuilt, tested, and reinstalled hydraulic snubbers for seismic restraints 7-EBB-3-SR25A, 7-EBB3-SR24A, and 7-EBB-3-SR20

Maintenance Work Order #	System	Description
1-92-1006-00	Containment Spray	Replaced hydraulic snubbers on pipe hanger 34-GCB-5-H32
1-93-0227-00	Main Steam	Replaced plug assembly and one nut on Atmospheric Vent Valve ICS 11A
1-93-0227-01	Main Steam	Replaced plug assembly on Atmospheric Vent Valve ICS 11B
1-93-0326-00	Main Steam	Replaced hydraulic snubber on seismic restraint 3A-EBB-1-SR4
1-93-0371-00	Main Steam	Rebuilt snubber and reinstalled
1-93-0503-01	Main Steam	Replaced and machined wedge for valve MS 106
2-90-0079-04	Reactor Coolant System	Replaced Grinnell hydraulic snubbers with Lisega hydraulic snubbers
2-91-0047-01	Reactor Coolant System	Modified pipe hanger M1170-H14
Mod 91-0052-00	Service Water	Added fire suppression connections and access spools to the Service Water System. Modified pipe hangers
2-92-0004-02	Reactor Coolant System	Installed pipe spools and replaced bolting on Reactor Vessel High Point Vent piping
7-93-0059-01	Reactor Coolant System	Replaced and machined wedge for Makeup Valve MU1A
7-93-0123-01	Service Water	Replaced flange bolting on Containment Air Cooler 1-1 headers

Maintenance Work Order #	System	Description
7-93-0174-01	Makeup and Purification	Modified pipe hangers between valves MU66A, MU66B, MU66C, MU66D, and the shield building
7-93-0187-01	Service Water	Replaced flange bolting on Containment Air Cooler 1-3 return header
7-93-0228-02	Decay Heat	Replaced bolting on relief valve DH 1529 inlet flange
7-93-0228-03	High Pressure Injection	Replace bolting on relief valve HP 1511 inlet flange
B&W Nuclear Service Co.		
Task 1.0	Reactor Coolant System	Replaced nuts on Reactor Vessel Head Vent Line piping flange
Task 2.0	Reactor Coolant System	Replaced two Steam Generator Upper Manway studs
Task 3.0	Reactor Coolant System	Replaced one Control Rod Drive Mechanism and bolting at fifteen locations
Task 5.0	Main Feedwater	Added a field weld to each main feewater riser and replaced bolting at two locations on Steam Generator 1-1
Task 5.0	Main Feedwater	Added a field weld to each main feewater riser and replaced bolting at four locations on Steam Generator 1-2
Task 5.2A	Reactor Coolant System	Performed tube plugging and stabilization in Steam Generator 1-1

Maintenance Work Order #	System	Description
Task 5.2A	Reactor Coolant System	Performed tube plugging and stabilization in Steam Generator 1-2
Task 428	Reactor Coolant System	Repaired valve NU1A
Welding Services Inc.	Reactor Coolant System	Repaired cladding on Steam Generator 1-2 Upper Hand Hole Flange Face

FORM NIS-2/NR-1/NVR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

Pg. 1 of 2

1. Owner Toledo Edison Company (Name) Date 10/15/90

300 Madison Ave., Toledo, OH. 43652 (Address) Sheet 1 of 1

2. Plant Davis Besse Nuclear Power Plant (Name) Unit 1

5501 N. SR. 2, Oak Harbor, OH. 43449 (Address) 1-90-2020-01 (Repair Organization P.O. No., Job No., etc.)

3. Work Performed by Toledo Edison Co. (Name) Type Code Symbol Stamp NR

300 Madison Ave., Toledo, OH. 43652 (Address) Authorization No. 20

Expiration Date 7-17-92

4. Identification of Systems Main Steam

MSS-SP58

5. (a) Applicable Construction Code ANSI B31.1 1967 Edition N/A Addenda None Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 86

(c) Design Responsibilities ITT Grinnell

6. Identification of Components Repaired or Replaced and Replacement Components

NAME OF COMPONENT	NAME OF MANUFACTURER	MANUFACTURER'S SERIAL NO.	NATIONAL BOARD NO.	OTHER IDENTIFICATION/ JURISDICTIONAL NO.	YEAR BUILT	REPAIRED REPLACED OR REPLACEMENT	ASME CODE STAMPED (YES OR NO)
HYD SNUBBER	ITT GRINNELL	16829	N/A	A-53 EBB 2-H36	N/A	Replaced Clamp Stud and Nuts	No

7. Description of Work Replaced load stud and nuts @ pipe clamp end of snubber.

( ) Continued

8. Tests Conducted: Hydrostatic ( ) Pneumatic ( ) Nominal Operating Pressure ( ) Other (*) *N/A

Pressure N/A psi Test Temp. N/A °F

Pressure Relief Valve: Service N/A Size N/A

Opening Pressure N/A Blowdown (if applicable) N/A

Set Pressure and Blowdown Adjustments made at N/A (location)

N/A using N/A (Test Medium)

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8½ in. x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2/NB-1/NVB-1 (BACK)

9. Remarks: N/A Pg. 2 of 2
Applicable Manufacturers Data Reports to be attached

[ ] CONTINUED

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this Replacement repair or replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp National Board NR Stamp

Certificate of Authorization No. 20 Expiration Date 7-17-92

Signed Robert T. Donaldson, Quality Control Manager Date 18 OCT 19 90
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board or Boiler and Pressure Vessel Inspectors and the State or Province of Ohio and employed by H.S.B.I.& I. Company of Hartford, CT. have inspected the components described in this Owner's Report during the period 10-2-90 to 10-19-90, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Mark L. Ferguson / 10-19-90 Commissions NB-9800, Ohio Comm., (B,N,I)
Inspector's Signature Date National Board, State, Province and Endorsements

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and the repair, modification or replacement of the pressure relief device described above conforms to Section XI and Section III of the ASME Code and the National Board rules as defined in the publications NB-65 and NB-012, current editions.

Certificate of Authorization No. _____ to use the "VR" stamp expires _____, 19 ____.

Certificate of Authorization No. _____ to use the "NR" stamp expires _____, 19 ____.

Date _____, 19 ____. Signed _____ _____ _____
Repair Organization Authorized Representative Title

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the State or Province of _____ and employed by _____ of _____ have inspected the repair, modification or replacement described in this report on _____, 19 ____ and state that to the best of my knowledge and belief, this repair, modification, or replacement has been made or constructed in accordance with Section XI and Section III of the ASME Code and the National Board rules as defined in the publication NB-65 and NB-102, current editions. By signing this certificate, neither the inspector nor his employer makes any warranty expressed or implied, concerning the repair, modification or replacement described in this report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

_____ / Commissions NB-9800, Ohio Comm., (B,N,I)

FORM NIS-2 / NR-1 / ~~NVR~~-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

1. Owner Toledo Edison Company (Name) — Date 3/31/93
   300 Madison Ave., Toledo, OH 43652 (Address) — Sheet 1 of 2
2. Plant Davis-Besse Nuclear Power Station (Name) — Unit # 1
   5501 N. SR 2, Oak Harbor, OH 43449 (Address) — MWO# 1-91-0119-01 (Repair Organization P.O. No., Job No., etc.)
3. Work Performed By Toledo Edison Company (Name) — Type Code Stamp NR
   5501 N. SR 2, Oak Harbor, OH 43449 (Address) — Authorization No. 20
   Expiration Date 7-17-95
4. Identification of Systems DH PUMP 1-2 INJECTION LINE RELIEF VALVE SUS# 049-02
5. (a) Applicable Construction Code ASME III CL2 Edition 19 71 Addendum N/A Code Case N/A
   (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 86
   (c) Design Responsibilities NOVA MACHINE PRODUCTS

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer's Serial NO.	National Board NO.	Other Identification/ Jurisdictional NO.	Year Built	Repaired Replaced or Replacement	ASME Code Stamped
4 STUDS	NOVA	HT# 15906	N/A	3/4" X 4" LONG	1992	REPLACEMENT	N/A
8 NUTS	NOVA	SCRIPT# 66H	N/A	3/4"	1992	REPLACEMENT	N/A

7. Description of Work

REPLACED THE INLET FLANGE STUDS AND NUTS OF RELIEF VALVE DH-1505. STUDS ARE ASME SA564 TY630 MATERIAL AND BUILT TO CODE ASME III CLASS 1, 1986 EDITION. NUTS ARE ASME SA-194 GR8M MATERIAL AND BUILT TO CODE ASME III CLASS 1, 1977 EDITION THRU SUM 1984 ADDENDA.

8. Tests Conducted: Hydrostatic (NO) Pneumatic (NO) Nominal Operating Pressure (NO) Other (NO)
   Pressure N/A psi Test Temperature N/A °F

Pressure Relief Valves:

Service N/A Size N/A

Opening Pressure N/A Blowdown (if applicable) N/A

Set Pressure and Blowdown Adjustments Made Using N/A (Test Medium)

at N/A (Location)

NOTE: Supplemental sheets in the form of lists, sketches, or drawings may be used, provided (1) size is 8½ x 11 in. (2) Information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 /NR-1 / ~~NVR~~-1

9. REMARKS — Applicable Manufacturers Data Reports to be Attached

NONE

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code Section XI.

Type Code Symbol NR Certificate of Authorization No. 20 Expiration Date 7-17-95

Signed Robert E Donnelly — Owner or Owner's Designee, Title: Quality Control Manager Date 1 APRIL 1993

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors in the State or Province of Ohio and employed by H.S.B.I. & I. CO. of Hartford, CT have inspected the components described in this Owner's Report during the period 2-19-93 to 4-2-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Robert E Cook — Inspector's Signature — Date 4-2-93

Commissions NB10992 (A,N,I), Ohio Comm. — National Board, State, Province and Endorsements

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and the repair, modification, or replacement of the pressure relief device described above conforms to Section XI and Section III of the ASME Code and the National Board rules as defined in publications NB-65 and NB-102, current editions.

Certificate of Authorization No. 316 to use the "VR" stamp expires Dec. 13, 1995.

Certificate of Authorization No. 20 to use the "NR" stamp expires July 17, 1995.

Date ____________, 19____, Signed Toledo Edison (Repair Organization) ____________ (Authorized Representative) Quality Control Mgr. (Title)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors, and certificate of competency issued by the State or Province of Ohio and employed by H. S. B. I. & I. CO. of Hartford, CT have inspected the repair, modification, or replacement described in this report on ____________, 19____ and state that to the best of my knowledge and belief, this repair, modification, or replacement has been made or constructed in accordance with Section XI and Section III of the ASME Code and the National Board rules as defined in the publication NB-65 and NB-102, current editions.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair, modification or replacement described in this report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

____________ Authorized Inspector's Signature ____ Date

Commissions ____________ National Board, State, Province and Endorsements

FORM NIS-2 / NR-1 / NVR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

1. Owner Toledo Edison Company (Name) — Date 4/5/93

300 Madison Ave., Toledo, OH 43652 (Address) — Sheet 1 of 2

2. Plant Davis-Besse Nuclear Power Station (Name) — Unit #1

5501 N. SR 2, Oak Harbor, OH 43449 (Address) — MWO# 1-91-0121-00 (Repair Organization P.O. No., Job No., etc.)

3. Work Performed By Toledo Edison Company (Name) — Type Code Stamp NR

5501 N. SR 2, Oak Harbor, OH 43449 (Address) — Authorization No. 20

Expiration Date 7-17-95

4. Identification of Systems HIGH PRESSURE INJECTION SUS# 052-01

5. (a) Applicable Construction Code ASME III CL2 Edition 19 71 Addendum N/A Code Case N/A

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 86

(c) Design Responsibilities VITCO NUCLEAR PRODUCTS

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer's Serial No.	National Board No.	Other Identification/ Jurisdictional No.	Year Built	Repaired Replaced or Replacement	ASME Code Stamped
4 STUDS	VITCO	HT# 45916	N/A	3/4"-10 X 4-3/4"	1988	REPLACEMENT	N/A
8 NUTS	VITCO	HT# 844833	N/A	3/4"-10	1988	REPLACEMENT	N/A

7. Description of Work

EXISTING INLET STUDS OF SAFETY VALVE HP1510 WERE REPLACED WITH SA 564 GRADE 630 TYPE MATERIAL, BUILT TO ASME SECT. III, DIV. I, 1977 EDITION THRU SUM.84 ADDENDA, CL. I. EXISTING INLET NUTS WERE REPLACED WITH SA-194 GRADE 8M TYPE MATERIAL BUILT TO SAME CODE AS STUDS. EXISTING OUTLET STUDS AND NUTS WERE REPLACED WITH LIKE-FOR-LIKE MATERIALS AND SIZE.

8. Tests Conducted: Hydrostatic (NO) Pneumatic (NO) Nominal Operating Pressure (NO) Other (NO)

Pressure N/A psi Test Temperature N/A °F

Pressure Relief Valves:

Service N/A Size N/A

Opening Pressure N/A Blowdown (if applicable) N/A

Set Pressure and Blowdown Adjustments Made Using N/A (Test Medium)

at N/A (Location)

NOTE: Supplemental sheets in the form of lists, sketches, or drawings may be used, provided (1) size is 8½ x 11 in. (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 /NR-1 / ~~NVR~~-1

9. REMARKS Applicable Manufacturers Data Reports to be Attached

NONE

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code Section XI.

Type Code Symbol NR Certificate of Authorization No. 20 Expiration Date 7-17-95

Signed Robert E Donnelly Quality Control Manager Date 6 APRIL 19 93
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors in the State or Province of Ohio and employed by H.S.B.I. & I. CO. of Hartford, CT have inspected the components described in this Owner's Report during the period 2-22-92 to 4-6-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Robert E Cook 4-6-93 Commissions NB10992(HE) Ohio Commercial
Inspector's Signature Date National Board, State, Province and Endorsements

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and the repair, modification, or replacement of the pressure relief device described above conforms to Section XI and Section III of the ASME Code and the National Board rules as defined in publications NB-65 and NB-102, current editions.

Ceritficate of Authorization No. 316 to use the "VR" stamp expires Dec. 13, 1995.

Certificate of Authorization No. 20 to use the "NR" stamp expires July 17, 1995.

Date _____, 19____, Signed Toledo Edison _____ Quality Control Mgr.
Repair Organization Authorized Representative Title

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors, and certificate of competency issued by the State or Province of Ohio and employed by H. S. B. I. & I. CO. of Hartford. CT have inspected the repair, modification, or replacement described in this report on _____, 19____ and state that to the best of my knowledge and belief, this repair, modification, or replacement has been made or constructed in accordance with Section XI and Section III of the ASME Code and the National Board rules as defined in the publication NB-65 and NB-102, current editions.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair, modification or replacement described in this report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

_____ Commissions _____
Authorized Inspector's Signature Date National Board, State, Province and Endorsements

FORM NIS-2 / NR-1 / NVR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

1. Owner Toledo Edison Company (Name) — Date 4/5/93

300 Madison Ave., Toledo, OH 43652 (Address) — Sheet 1 of 4

2. Plant Davis-Besse Nuclear Power Station (Name) — Unit # 1

5501 N. SR 2, Oak Harbor, OH 43449 (Address) — MWO# 1-91-0250-00 (Repair Organization P.O. No., Job No., etc.)

3. Work Performed By Toledo Edison Company (Name) — Type Code Stamp NR

5501 N. SR 2, Oak Harbor, OH 43449 (Address) — Authorization NO. 20

Expiration Date 7-17-95

4. Identification of Systems DH COOLDOWN LINE RELIEF TO EMERG. SUMP DH 4849 SUS# 049-02

5. (a) Applicable Construction Code ASME III CL2 Edition 19 71 Addendum N/A Code Case N/A

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 86

(c) Design Responsibilities NOVA MACHINE PRODUCTS , J.E. LONERGAN CO. AND VITCO

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer's Serial NO.	National Board NO.	Other Identification/ Jurisdictional NO.	Year Built	Repaired Replaced or Replacement	ASME Code Stamped
DH 4849	LONERGAN	#7704435-104	N/A	RELIEF VALVE	1982	REPLACEMENT	Yes
DH 4849	LONERGAN	#304400-104-1	N/A	RELIEF VALVE	1976	REPLACED	Yes
8 STUDS	NOVA	HT# 23305	N/A	3/4"-10 X 6"	1990	REPLACEMENT	N/A
8 STUDS	NOVA	HT# 35249	N/A	3/4"-10 X 5"	1992	REPLACEMENT	N/A
32 NUTS	VITCO	HT# 844833	N/A	3/4"-10	1988	REPLACEMENT	N/A

7. Description of Work

DH-4849 WAS REPLACED BY A LIKE-FOR-LIKE SPARE ,OF WHICH WAS PRESSURE TESTED PRIOR TO INSTALLATION. ALL INLET AND OUTLET STUDS WERE REPLACED WITH ASME SA564 TYPE 630 MATERIAL. ALL INLET AND OUTLET NUTS WERE REPLACED WITH ASME SA194 GR 8M MATERIAL. (NOTE: INLET STUDS ARE 6" LONG AND OUTLET STUDS ARE 5" LONG).

8. Tests Conducted: Hydrostatic (NO) Pneumatic (NO) Nominal Operating Pressure (NO) Other (NO)

Pressure N/A psi Test Temperature N/A °F

Pressure Relief Valves:

Service WATER Size 4 X 6"

Opening Pressure 320 PSI Blowdown (if applicable) N/A

Set Pressure and Blowdown Adjustments Made Using N/A (Test Medium)

at N/A (Location)

NOTE: Supplemental sheets in the form of lists, sketches, or drawings may be used, provided (1) size is 8½ x 11 in. (2) Information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 /NR-1 / ~~NVR-1~~

9. REMARKS Applicable Manufacturers Data Reports to be Attached

FORM NV-1 FOR REPLACEMENT RELIEF VALVE IS ATTACHED.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code Section XI.

Type Code Symbol NR Certificate of Authorization No. 20 Expiration Date 7-17-95

Signed Robert E Donnelly Quality Control Manager Date 7 APRIL 1993
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors in the State or Province of Ohio and employed by H.S.B.I. & I. CO. of Hartford, CT have inspected the components described in this Owner's Report during the period 2-19-93 to 4-6-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Raymond N. Arnold Commissions NB-9557-N I, OHIO
Inspector's Signature Date National Board, State, Province and Endorsements

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and the repair, modification, or replacement of the pressure relief device described above conforms to Section XI and Section III of the ASME Code and the National Board rules as defined in publications NB-65 and NB-102, current editions.

Ceritficate of Authorization No. 316 to use the "VR" stamp expires Dec. 13, 1995

Certificate of Authorization No. 20 to use the "NR" stamp expires July 17, 1995

Date _____, 19____, Signed Toledo Edison _____ Quality Control Mgr.
Repair Organization Authorized Representative Title

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors, and certificate of competency issued by the State or Province of Ohio and employed by H. S. B. I. & I. CO. of Hartford. CT have inspected the repair, modification, or replacement described in this report on _____, 19____ and state that to the best of my knowledge and belief, this repair, modification, or replacement has been made or constructed in accordance with Section XI and Section III of the ASME Code and the National Board rules as defined in the publication NB-65 and NB-102, current editions.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair, modification or replacement described in this report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

_____ Commissions _____
Authorized Inspector's Signature Date National Board, State, Province and Endorsements

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PAGE 3 of 4

FORM NV-1 N CERTIFICATE HOLDERS' DATA REPORT FOR SAFETY AND SAFETY RELIEF VALVES*

As Required by the Provisions of the ASME Code, Section III, Div. I

1. Manufactured by J.Z.Lonergan Co., 10050 Sandmeyer Lane, Philadelphia, PA 19115
(Name and Address of N Certificate Holder)
2. Manufactured for Toledo Edison Co., 300 Madison Ave. Toledo, Ohio 43652
(Name and Address of Purchaser or Owner)
3. Location of Installation Toledo Edison Co. Davis Besse Station 5501 N. State Rt. 2 Oak Harbor Ohio 43449
(Name and Address)
4. Q24360 (CRN) A2616 Rev. 0 (Drawing No.) N/A (Nat'l. Bd. No.) 1982 (Year Built)
5. Valve DB-30P/S4 (Model No., Series No.) Identifying Nos. 7704435-104 Spare - TAG #PSV-4849 (N Certificate Holder's Serial No.)

Type Safety Relief Valve Class 2
(Safety, Safety Relief, Pilot, Power Actuated)

Orifice Size 6.38 sq. inch Nominal Inlet Size 4 inch Outlet Size 6 inch

6. Set Pressure (PSIG) 320 Rated Temperature 450 °F

Stamped Capacity 1862 GPM @ 10 % Overpressure Blowdown (PSIG) **

Hydrostatic Test (PSIG) Inlet 480 Outlet 425 (Applicable to valves for closed systems only)

7. Pressure Retaining Pieces

	Serial No. or Identification	Material Specification Incl. Type or Grade
Body	F4529-4	ASME SA-351 Gr. CF8M
Bonnet	F4676-19	ASME SA-351 Gr. CF8M
Support Rods	N/A	N/A
Nozzle	E2948-3	ASME SA-351 Gr. CF8M
Disc	1 G18T5	ASME SA-479 Type 316
Spring Washers	386473	ASME SA-479 Type 316
Adjusting Screw	05013	ASME SA-479 Type 316
Spindle	A16546	ASME SA-479 Type 316
Spring	825966	ASTM A-276 Type 316
Bolting Cap Bolts	Certificate of Conformance	ASME SA-182
Other Pieces Body Studs	Certificate of Conformance	ASME SA-320 Gr. B8
Body Nuts	Certificate of Conformance	ASME SA-194 Gr. 8
Gag Screw	03443	ASME SA-479 Type 316
Ring Pin Screw	03592	ASME SA-479 Type 316
Cap	E7284 -1	ASME SA-351 Gr. CF8M
Body Plug	Certificate of Conformance	ASME SA-182

TOLEDO EDISON

** Blowdown not specified by Code

SEP 28 1982

Line #4 (CRN) denotes customer purchase order number

QUALITY ENGINEERING

Toledo Edison
QA Document Review
1. [ ] APPROVED
2. [X] APPROVED WITH COMMENTS
3. [ ] NOT APPROVED - DO NOT USE
Approval of this document does not relieve supplier from full compliance with contract specification
By: Date: 10/1/82

* Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is 8½" x 11", (2) information in items 1-2 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded at top of this form.

0301,0014

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FORM NV-1 (Back)

PAGE 4 of 4

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this valve conforms to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Div. 1., 1971 Edition, Addenda 12/31/71 (Date)

Code Case No. 1555 & 1574

Date 9.16.82 Signed J. E. Lonergan Co. (N Certificate Holder) by T. A. Nicley

Our ASME Certificate of Authorization No. N-2359 to use the NV (NV) symbol expires Sept. 10, 1983 (Date)

CERTIFICATION OF DESIGN

Design information on file at J.E.Lonergan Co. 10050 Sandmeyer Lane, Phila., Pa. 19115

Stress analysis report (Class 1 only) on file at N/A

Design specifications certified by[1] Anthony W. Wilk

PE State Maryland Reg. No. 8090

Stress report certified by[1] N/A

PE State N/A Reg No. N/A

[1] Signature not required—list name only.

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Penna. and employed by H.S.B.I.&I. Co. of Hartford, Conn. have inspected the pump, or valve, described in this Data Report on 9-16 19 82 and state that to the best of my knowledge and belief, the N Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code for Nuclear Power Plant Components.

By signing this certificate, neither the Inspector nor his employer makes any warrant, expressed or implied, concerning the equipment described in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 9-16 19 82 Signed (Inspector) Commissions A2546 (Nat'l. Bd., State, Prov. and No.)

TOLEDO EDISON

SEP 28 1982

QUALITY ENGINEERING

FORM NIS-2 / NR-1 / NVR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

1. Owner Toledo Edison Company (Name) — Date 4/28/93

300 Madison Ave., Toledo, OH 43652 (Address) — Sheet 1 of 3

2. Plant Davis-Besse Nuclear Power Station (Name) — Unit # 1

5501 N. SR 2, Oak Harbor, OH 43449 (Address) — MWO # 1-91-0602-00 (Repair Organization P.O. No., Job No., etc.)

3. Work Performed By Toledo Edison Company (Name) — Type Code Stamp NR

5501 N. SR 2, Oak Harbor, OH 43449 (Address) — Authorization NO. 20

Expiration Date 7-17-95

4. Identification of Systems STEAM GENERATOR 1-2 STEAM ANNULUS DRAIN VALVE (MS 883)

5. (a) Applicable Construction Code ASME III CL2 Edition 19 71 Addendum W72 Code Case No

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 86

(c) Design Responsibilities VELAN ENGINEERING

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer's Serial NO.	National Board NO.	Other Identification/ Jurisdictional NO.	Year Built	Repaired Replaced or Replacement	ASME Code Stamped
VALVE	VELAN	4-4	No	MS 883	1974	REPLACED	Yes
VALVE	VELAN	522-7	No	MS 883	1975	REPLACEMENT	Yes

7. Description of Work

REPLACED EXISTING 1 1/2" W.B. GATE VALVE WITH A NEW 1 1/2" W.B. GATE VALVE.

8. Tests Conducted: Hydrostatic (NO) Pneumatic (NO) Nominal Operating Pressure (NO) Other (YES)

Pressure 870 psi Test Temperature NOT °F

Pressure Relief Valves:

Service N/A Size N/A

Opening Pressure N/A Blowdown (if applicable) N/A

Set Pressure and Blowdown Adjustments Made Using N/A (Test Medium)

at N/A (Location)

NOTE: Supplemental sheets in the form of lists, sketches, or drawings may be used, provided (1) size is 8½ x 11 in. (2) Information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 /NR-1 / NVR-1

9. REMARKS Applicable Manufacturers Data Reports to be Attached

* TESTS CONDUCTED: AN INSERVICE PRESSURE TEST/ VT-2 (PER CODE CASE N-416)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code Section XI.

Type Code Symbol NR Certificate of Authorization No. 20 Expiration Date 7-17-95

Signed Robert C Donnellon Quality Control Manager Date 25 APRIL 19 93
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors in the State or Province of Ohio and employed by H.S.B.I. & I. CO. of Hartford, CT have inspected the components described in this Owner's Report during the period 4/22/92 to 4/25/93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Raymond N. Acomb Commissions NB-9557-N, I, OHIO
Inspector's Signature Date National Board, State, Province and Endorsements

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and the repair, modification, or replacement of the pressure relief device described above conforms to Section XI and Section III of the ASME Code and the National Board rules as defined in publications NB-65 and NB-102, current editions.

Certificate of Authorization No. 316 to use the "VR" stamp expires Dec. 13, 1992

Certificate of Authorization No. 20 to use the "NR" stamp expires July 17, 1995

Date _____, 19____ Signed Toledo Edison _____ Quality Control Mgr.
Repair Organization Authorized Representative Title

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors, and certificate of competency issued by the State or Province of Ohio and employed by H. S. B. I. & I. CO. of Hartford, CT have inspected the repair, modification, or replacement described in this report on _____, 19____ and state that to the best of my knowledge and belief, this repair, modification, or replacement has been made or constructed in accordance with Section XI and Section III of the ASME Code and the National Board rules as defined in the publication NB-65 and NB-102, current editions.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair, modification or replacement described in this report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

_____ Commissions _____
Authorized Inspector's Signature Date National Board, State, Province and Endorsements

PG. 3 of 3

VELAN ENGINEERING COMPANIES 1097

FORM NV-1 MANUFACTURERS' DATA REPORT FOR NUCLEAR VALVES 750522

As required by the provisions of the ASME Code Rules

1. Manufactured by VELAN ENGINEERING [illegible] P1-1164 W. ITEM 3
2. Manufactured for TOLEDO EDISON CO Contract No. G1425
3. Owner TOLEDO EDISON CO
4. Location of Plant DAVIS-BESSE UNIT 1 CONSTRUCTION
5. Valve Identification 1½" WB GATE VALVE 600 CLASS S/W QTY 16
   P1-1164-W-2 REV 0
6. 1440 100

1971 WINTER 1972 2

PACK NB 6111

VA5092	SA-351 CF8	[illegible]			
BODY	SA-105 C/S	[illegible]	522-1	TC	GP	U4	V915
BONNET	SA-105 C/S	[illegible]	522-16			
STEM	A479 [illegible]	[illegible]			

2175

Reviewed Before Fill On 8/27/72 By [illegible]

D. W. [illegible]

16 - June 75

CERTIFICATE OF SHOP INSPECTION

[illegible]

FORM NIS-2 / NR-1 / NVR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

1. Owner Toledo Edison Company (Name) — Date September 4, 1992
   300 Madison Ave., Toledo, OH 43652 (Address) — Sheet 1 of 5
2. Plant Davis-Besse Nuclear Power Station (Name) — Unit # 1
   5501 N. SR 2, Oak Harbor, OH 43449 (Address) — MWO# 1-91-1116-00 (Repair Organization P.O. No., Job No., etc.)
3. Work Performed By Toledo Edison Company (Name) — Type Code Stamp NR / VR
   5501 N. SR 2, Oak Harbor, OH 43449 (Address) — Authorization No. 20 / 316
   Expiration Date 7-17-95 / 12-13-92
4. Identification of Systems PRESSURIZER CODE SAFETY VALVE S/N 56264-00-0005 SUS# 064-04
5. (a) Applicable Construction Code ASME III CL1 Edition 19 71 Addendum WINT. 72 Code Case N/A
   (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 86
   (c) Design Responsibilities CROSBY VALVE AND GAGE COMPANY

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer's Serial No.	National Board No.	Other Identification/ Jurisdictional No.	Year Built	Repaired Replaced or Replacement	ASME Code Stamped
DISC INSERT	CROSBY	N94214-36-0006	N/A	HT# 90596	1992	REPLACEMENT	No
NOZZLE	CROSBY	N94212-32-0003	N/A	N/A	1992	REPLACEMENT	No

7. Description of Work

REPLACED FOLLOWING PARTS DURING REBUILD OF PRESSURIZER CODE SAFETY VALVE S/N 56264-00-0005:

1.) DISC INSERT 2.) NOZZLE 3.) DISC PIN AND 4.) NOZZLE RING.

8. Tests Conducted: Hydrostatic (NO) Pneumatic (NO) Nominal Operating Pressure (NO) Other (NO)
   Pressure N/A psi Test Temperature N/A °F

Pressure Relief Valves:

Service STEAM Size 4 x 6

Opening Pressure 2500 psig Blowdown (If applicable) N/A

Set Pressure and Blowdown Adjustments Made Using STEAM (Steam Medium)

at WYLE LAB, HUNTSVILLE ALABAMA (Location)

NOTE: Supplemental sheets in the form of lists, sketches, or drawings may be used, provided (1) size is 8½ x 11 in. (2) Information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 /NR-1 / NVR-1

8. REMARKS Applicable Manufacturers Data Reports to be Attached

FOLLOWING DATA REPORTS ARE ATTACHED : 1.) FORM N-2 FOR NOZZLE AND 2.) CERTIFICATE OF COMPLIANCE FOR DISC INSERT.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this conforms to the rules of the ASME Code Section XI.

Type Code Symbol NR Certificate of Authorization No. 20 Expiration Date 7-17-95

Signed Quality Control Manager (Owner or Owner's Designee, Title) Date _____ 19____

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors in the State or Province of Ohio and employed by H.S.B.I. & I. CO. of Hartford, CT have inspected the components described in this Owner's Report during the period _____ to _____, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Inspector's Signature Date Commissions National Board, State, Province and Endorsements

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and the repair, modification, or replacement of the pressure relief device described above conforms to Section XI and Section III of the ASME Code and the National Board rules as defined in publications NB-65 and NB-102, current editions.

Ceritficate of Authorization No. 316 to use the "VR" stamp expires Dec. 13, 1992.

Certificate of Authorization No. 20 to use the "NR" stamp expires July 17, 1995.

Date 4 SEPT, 1992, Signed Toledo Edison (Repair Organization) Robert E Donnelly (Authorized Representative) Quality Control Mgr. (Title)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors, and certificate of competency issued by the State or Province of Ohio and employed by H. S. B. I. & I. CO. of Hartford, CT have inspected the repair, modification, or replacement described in this report on 9-4, 1992 and state that to the best of my knowledge and belief, this repair, modification, or replacement has been made or constructed in accordance with Section XI and Section III of the ASME Code and the National Board rules as defined in the publication NB-65 and NB-102, current editions.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair, modification or replacement described in this report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Robert E. Coal 9/4/92

Authorized Inspector's Signature Date

Commissions NB 10992 OhioCommn (ANI)

National Board, State, Province and Endorsements

CROSBY

CROSBY VALVE & GAGE COMPANY
WRENTHAM, MASS

Q.C.-392
Form N-2

FORM N-2 N OR NPT CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES*
As Required by the Provisions of the ASME Code, Section III, Division 1
Not to Exceed One Day's Production

Pg 1 of 1

1. Manufactured and certified by Crosby Valve & Gage Company 43 Kendrick St. Wrentham,MA 02093
(name and address of certificate holder)

2. Manufactured for CENTERIOR SERVICES COMPANY CLEVELAND, OH 44101-4608
(name and address of purchaser)

3. Location of installation THE TOLEDO EDISON CO. DAVIS-BESSE POWER STA. OAK HARBOR, OH43449
(name and address)

4. Type DS-C-56264-1 REV.0 (drawing no.) ASME SA182 GR F316 (mat'l spec no.) 80,120 PSI (tensile strength) -- (CRN) 1992 (year built)

5. ASME Code, Section III 1971 (edition) WINTER 1972 (addenda) 1 (class) -- (Code Case no.)

6. Fabricated in accordance with Const. Spec. (Div. 2 only) — (No.) Revision — Date —

7. Remarks:

8. Nom. thickness (in.) — Min. design thickness (in.) — Dia. ID (ft. & in.) — Length overall (ft. & in.) —

9. When applicable, Certificate Holders' data reports are attached for each item of this report:

Part or Appurtenance Serial Number	National Board No. In Numerical Order	Part or Apurtenance Serial Number	National Board No. In Numerical Order
(1) N94212-32-0003		(11)	
(2)		(12)	
(3)		(13)	
(4)		(14)	
(5)		(15)	
(6)		(16)	
(7)		(17)	
(8)		(18)	
(9)		(19)	
(10)		(20)	

10. Design pressure -- psi Temp -- °F Hydro. test pressure -- at temp. °F
(when applicable)

PO 5037061892
PG 9 OF 9

Form N-2

FORM N-2 (back)

Mfr. Serial No. N94212-32-0003

CERTIFICATION OF DESIGN

Design specification certified by JOHN W. MERCHANT P.E. state VA Reg. No. 4418
(when applicable)

Design report* certified by -- P.E. state -- Reg. No. --
(when applicable)

CERTIFICATE OF SHOP COMPLIANCE

We certify that the statements made in this report are correct and that this ~~CONNECTOR~~ NOZZLE conform to the rules of construction of the ASME Code, Section III.

NPT Certificate of Authorization no. N-1877 Expires 9-30-92

Date 5/15/92 Name Crosby Valve & Gage Company Signed [signature]
(NPT Certificate Holder) (Authorized representative)

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the state or province of Massachusetts and employed by *See Below of Norwood, MA have inspected these items described in this data report on 5-15-92 and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III. Each part listed has been authorized for stamping on the date shown above.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this data report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.

Factory Mutual System

Date 5-15-92 Signed [signature] Commissions MA 1207
(Authorized Inspector) (Nat'l Bd (incl. endorsements) state or prov. and no.)

*Arkwright Mutual Insurance Company

CROSBY FACTORY ORDER NO.: N2769700

CROSBY ITEM NO.: 001

CUSTOMER ORDER NO.: 3 034061 D92

CUSTOMER ITEM NO.: 001

REVISED 06 MAY 1992

PO 4034061-0001
PG 1 OF 1

CERTIFICATE OF AUTHORIZATION
NO. N-1877 EXPIRES: 9/30/92

CERTIFICATE OF COMPLIANCE

The Crosby Valve & Gage Company hereby certifies that Part DISC INSERT, Part No. N94214, Serial No. (if applicable) N94214-36-0006 +0007, meets the requirements of the Customer Purchase Order, Item Description, Material Specification, Customer Specification, applicable Code Edition and Addenda, Class, applicable drawing; and that all required tests, and inspections, have been performed; and the item is interchangeable with the same item supplied in the original equipment. DWG. # DS-C-56264 Rev. A. Processed in accordance with QC-110 Rev. 18.

Applicable Code

ASME Section III 1971 Edition Winter 1972 Addenda, Class 1

Jeanette M. Melchen — April 16, 1992
Crosby QA Records Specialist — Date

p.p. Jeanette M. Melchen — 06 MAY 1992
QA Records Specialist — Date

FORM NIS-2 / NR-1 / NVR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

1. Owner Toledo Edison Company (Name) — Date 4/20/93

300 Madison Ave., Toledo, OH 43652 (Address) — Sheet 1 of ~~1~~ 2 (5-11-93 RCD 5/11/93 Rec 5/11/93)

2. Plant Davis-Besse Nuclear Power Station (Name) — Unit # 1

5501 N. SR 2, Oak Harbor, OH 43449 (Address) — MWO 1-91-1535-01 (Repair Organization P.O. No., Job No., etc.)

3. Work Performed By Toledo Edison Company (Name) — Type Code Stamp NR

5501 N. SR 2, Oak Harbor, OH 43449 (Address) — Authorization No. 20

Expiration Date 7-17-95

4. Identification of Systems REACTOR COOLANT SYSTEM

5. (a) Applicable Construction Code ANSI B31.1 Edition 19 67 Addendum Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 86

(c) Design Responsibilities ITT GRINNELL

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer's Serial NO.	National Board NO.	Other Identification/ Jurisdictional NO.	Year Built	Repaired Replaced or Replacement	ASME Code Stamped
RCP - 3-6 N/S	GRINNELL	15102	N/A	C-305 HSS5	N/A	REPAIRED	N/A
RCP - 3-5 E/W	GRINNELL	15104	N/A	C-304 HSS4	N/A	REPAIRED	N/A

7. Description of Work

ITT GRINNELL HYDRAULIC SNUBBERS C-304 AND C-305 WERE REMOVED, REBUILT, FUNCTIONALLY TESTED AND REINSTALLED ON HANGERS RCP-3-5E/W AND RCP-3-6N/W.

8. Tests Conducted: Hydrostatic (NO) Pneumatic (NO) Nominal Operating Pressure (NO) Other (NO)

Pressure N/A psi Test Temperature N/A °F

Pressure Relief Valves:

Service N/A Size N/A

Opening Pressure N/A Blowdown (if applicable) N/A

Set Pressure and Blowdown Adjustments Made Using N/A (Test Medium)

at N/A (Location)

NOTE: Supplemental sheets in the form of lists, sketches, or drawings may be used, provided (1) size is 8½ x 11 in. (2) Information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 /NR-1 / NVR-1

Page 2 of 2

9. REMARKS Applicable Manufacturers Data Reports to be Attached

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this conforms to the rules of the ASME Code Section XI.

Type Code Symbol NR Certificate of Authorization No. 20 Expiration Date 7-17-95

Signed Robert E Donald Quality Control Manager Date 21 APRIL 19 93
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors in the State or Province of Ohio and employed by H.S.B.I. & I. CO. of Hartford, CT have inspected the components described in this Owner's Report during the period 6/25/92 to 4/20/93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Raymond N. Accola Commissions NB-4557-N,I, OHIO
Inspector's Signature Date National Board, State, Province and Endorsements

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and the repair, modification, or replacement of the pressure relief device described above conforms to Section XI and Section III of the ASME Code and the National Board rules as defined in publications NB-65 and NB-102, current editions.

Cerittficate of Authorization No. 316 to use the "VR" stamp expires Dec. 13, 19 95

Certificate of Authorization No. 20 to use the "NR" stamp expires July 17, 19 95

Date _____, 19____, Signed Toledo Edison _____ Quality Control Mgr.
Repair Organization Authorized Representative Title

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Preassure Vessel Inspectors, and certificate of competency issued by the State or Province of Ohio and employed by H. S. B. I. & I. CO. of Hartford. CT have inspected the repair, modification, or replacement described in this report on _____, 19____ and state that to the best of my knowledge and belief, this repair, modification, or replacement has been made or constructed in accordance with Section XI and Section III of the ASME Code and the National Board rules as defined in the publication NB-65 and NB-102, current editions.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair, modification or replacement described in this report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

_____ Commissions _____
Authorized Inspector's Signature Date National Board, State, Province and Endorsements

FORM NIS-2 / NR-1 / ~~NVR~~-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

1. Owner Toledo Edison Company (Name) — Date 4/13/93

   300 Madison Ave., Toledo, OH 43652 (Address) — Sheet 1 of 4

2. Plant Davis-Besse Nuclear Power Station (Name) — Unit # 1

   5501 N. SR 2, Oak Harbor, OH 43449 (Address) — MWO# 1-91-1616-00 (Repair Organization P.O. No., Job No., etc.)

3. Work Performed By Toledo Edison Company (Name) — Type Code Stamp NR

   5501 N. SR 2, Oak Harbor, OH 43449 (Address) — Authorization No. 20

   Expiration Date 7-17-95

4. Identification of Systems Containment Spray System SUS# 061-01

5. (a) Applicable Construction Code ASME III Cl.2 Edition 19 71 Addendum No Code Case N/A

   (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 86

   (c) Design Responsibilities Toledo Edison

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer's Serial No.	National Board No.	Other Identification/ Jurisdictional No.	Year Built	Repaired Replaced or Replacement	ASME Code Stamped
Studs	Nova Machine	YK2	N/A	N/A	1989	Replacement	No
Studs	Nova Machine	24127	N/A	N/A	1992	Replacement	No
Studs	Velan Inc	V630-T66	N/A	N/A	1988	Replacement	No
Nuts	Vitco Nuclear	66H	N/A	N/A	1988	Replacement	No
Nuts	Nova Machine	39605	N/A	N/A	1988	Replacement	No
Nuts	Nova Machine	616275	N/A	N/A	1993	Replacement	No

7. Description of Work

Replaced studs and nuts for flanges on piping spool 33A-HCB-3-6 and 33A-HCB-3-7 and on blind flange downstream of valve CS3 (2" tap off of spool 33A-HCB-3-6).

8. Tests Conducted: Hydrostatic (NO) Pneumatic (NO) Nominal Operating Pressure (NO) Other (NO)

   Pressure N/A psi — Test Temperature N/A °F

   Pressure Relief Valves:

   Service N/A — Size N/A

   Opening Pressure N/A — Blowdown (if applicable) N/A

   Set Pressure and Blowdown Adjustments Made Using N/A (Test Medium)

   at N/A (Location)

NOTE: Supplemental sheets in the form of lists, sketches, or drawings may be used, provided (1) size is 8½ x 11 in. (2) Information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 /NR-1 / ~~NVR-1~~

Page 2 of 2

9. REMARKS Applicable Manufacturers Data Reports to be Attached

N/A

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code Section XI.

Type Code Symbol NR Certificate of Authorization No. 20 Expiration Date 7-17-95

Signed Robert C Dornuth Quality Control Manager Date 13 APRIL 19 93
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors in the State or Province of Ohio and employed by H.S.B.I. & I. CO. of Hartford, CT have inspected the components described in this Owner's Report during the period 2/25/92 to 4/12/93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Raymond V. Arnold Commissions NO-9557-N,I, OHIO
Inspector's Signature Date National Board, State, Province and Endorsements

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and the repair, modification, or replacement of the pressure relief device described above conforms to Section XI and Section III of the ASME Code and the National Board rules as defined in publications NB-65 and NB-102, current editions.

Ceritficate of Authorization No. 316 to use the "VR" stamp expires Dec. 13, 19 92.

Certificate of Authorization No. 20 to use the "NR" stamp expires July 17, 19 95.

Date _____, 19____, Signed Toledo Edison _____ Quality Control Mgr.
Repair Organization Authorized Representative Title

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors, and certificate of competency issued by the State or Province of Ohio and employed by H. S. B. I. & I. CO. of Hartford. CT have inspected the repair, modification, or replacement described in this report on _____, 19____ and state that to the best of my knowledge and belief, this repair, modification, or replacement has been made or constructed in accordance with Section XI and Section III of the ASME Code and the National Board rules as defined in the publication NB-65 and NB-102, current editions.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair, modification or replacement described in this report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

_____ Commissions _____
Authorized Inspector's Signature Date National Board, State, Province and Endorsements

FORM NIS-2 / NR-1 / ~~NVR-1~~ OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS SUPPLEMENTAL SHEET

As Required by the Provisions of the ASME Code Section XI

1. Owner Toledo Edison Company (Name) — Date 4/13/93
   300 Madison Ave., Toledo, OH 43652 (Address) — Sheet 3 of 4
2. Plant Davis-Besse Nuclear Power Station (Name) — Unit #1
   5501 N. SR 2, Oak Harbor, OH 43449 (Address) — MWO# 1-91-1616-00 (Repair Organization P.O. No., Job No., etc.)
3. Work Performed By Toledo Edison Company (Name) — Type Code Stamp NR
   5501 N. SR 2, Oak Harbor, OH 43449 (Address) — Authorization No. 20
   Expiration Date 7-17-95
4. Identification of Systems Containment Spray System SUS# 061-01
5. (a) Applicable Construction Code ASME III CL2 Edition 19 71 Addendum No Code Case N/A
   (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 86
   (c) Design Responsibilities TOLEDO EDISION

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer's Serial NO.	National Board NO.	Other Identification/ Jurisdictional NO.	Year Built	Repaired Replaced or Replacement	ASME Code Stamped
Nuts	Nova Machine	30404	N/A	N/A	1993	Replacement	No
Nuts	Allied Nut & Bolt	28969	N/A	N/A	1993	Replacement	No

REMARKS

NIS-2 / NR-1 / ~~NVR-1~~ FORM CONTINUED
SUPPLEMENTAL SHEET (BACK)

Sheet 4 of 4

QC Manager Robert E Donnelly Date 13 APRIL 93

ANII Raymond N. Acosta Date 4/13/93

FORM NIS-2 / NR-1 / ~~NVR-1~~ OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

1. Owner Toledo Edison Company (Name) — Date 4/29/93

300 Madison Ave., Toledo, OH 43652 (Address) — Sheet 1 of 2

2. Plant Davis-Besse Nuclear Power Station (Name) — Unit # 1

5501 N. SR 2, Oak Harbor, OH 43449 (Address) — 1-92-0170-00 (Repair Organization P.O. No., Job No., etc.)

3. Work Performed By Toledo Edison Company (Name) — Type Code Stamp NR

5501 N. SR 2, Oak Harbor, OH 43449 (Address) — Authorization No. 20

Expiration Date 7-17-95

4. Identification of Systems REACTOR COOLANT SYSTEM

5. (a) Applicable Construction Code ASME III Cl.1 Edition 19 68 Addendum S70 Code Case 1440

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 86

(c) Design Responsibilities CROSBY VALVE & GAGE

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer's Serial NO.	National Board NO.	Other Identification/ Jurisdictional NO.	Year Built	Repaired Replaced or Replacement	ASME Code Stamped
RC-13A	CROSBY	N54891-00-0002	NA	NA	1976	REPLACED	Yes
RC-13A	CROSBY	N54891-00-0001	NA	NA	1976	REPLACEMENT	Yes

7. Description of Work

CROSBY VALVE SERIAL # N54891-00-0002 WAS REMOVED AND CROSBY VALVE SERIAL #N54891-00-0001 WAS INSTALLED IN ITS PLACE. CROSBY VALVE SERIAL #N54891-00-0001 WAS REBUILT UNDER MWO 1-91-1117-00 AND SATISFACTORY TESTED AT WYLE TEST LAB BY SAME MWO. A VT-2 LEAKAGE TEST WAS CONDUCTED AT N.O.P. AND N.O.T. AFTER INSTALLATION.

8. Tests Conducted: Hydrostatic (NO) Pneumatic (NO) Nominal Operating Pressure (YES) Other (NO)

Pressure 2155 psi — Test Temperature NOT °F

Pressure Relief Valves:

Service NA — Size NA

Opening Pressure NA — Blowdown (If applicable) NA

Set Pressure and Blowdown Adjustments Made Using NA (Test Medium)

at NA (Location)

NOTE: Supplemental sheets in the form of lists, sketches, or drawings may be used, provided (1) size is 8½ x 11 in. (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 /NR-1 / ~~NVR-1~~

9. REMARKS Applicable Manufacturers Data Reports to be Attached

NA

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code Section XI.

Type Code Symbol NR Certificate of Authorization No. 20 Expiration Date 7-17-95

Signed Robert E Donnelly Quality Control Manager Date 29 APRIL 19 93
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors in the State or Province of Ohio and employed by H.S.B.I. & I. CO. of Hartford, CT have inspected the components described in this Owner's Report during the period 2/22/93 to 4/29/93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Raymond N. Arnold 4/29/93 Commissions NB 9557-N,I, OHIO
Inspector's Signature Date National Board, State, Province and Endorsements

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and the repair, modification, or replacement of the pressure relief device described above conforms to Section XI and Section III of the ASME Code and the National Board rules as defined in publications NB-65 and NB-102, current editions.

Ceritficate of Authorization No. 316 to use the "VR" stamp expires Dec. 13, 19 95.

Certificate of Authorization No. 20 to use the "NR" stamp expires July 17, 19 95.

Date _____, 19____, Signed Toledo Edison _____ Quality Control Mgr.
Repair Organization Authorized Representative Title

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors, and certificate of competency issued by the State or Province of Ohio and employed by H. S. B. I. & I. CO. of Hartford, CT have inspected the repair, modification, or replacement described in this report on _____, 19____ and state that to the best of my knowledge and belief, this repair, modification, or replacement has been made or constructed in accordance with Section XI and Section III of the ASME Code and the National Board rules as defined in the publication NB-65 and NB-102, current editions.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the repair, modification or replacement described in this report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

_____ Commissions _____
Authorized Inspector's Signature Date National Board, State, Province and Endorsements

FORM NIS-2 / NR-1 / ~~NVR~~-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

1. Owner Toledo Edison Company (Name) — Date 5/5/93

300 Madison Ave., Toledo, OH 43652 (Address) — Sheet 1 of 2

2. Plant Davis-Besse Nuclear Power Station (Name) — Unit # 1

5501 N. SR 2, Oak Harbor, OH 43449 (Address) — 1-92-0171-00 (Repair Organization P.O. No., Job No., etc.)

3. Work Performed By Toledo Edison Company (Name) — Type Code Stamp NR

5501 N. SR 2, Oak Harbor, OH 43449 (Address) — Authorization No. 20

Expiration Date 7-17-95

4. Identification of Systems REACTOR COOLANT SYSTEM

5. (a) Applicable Construction Code ASME III CL1 Edition 19 74 Addendum S74 Code Case NA

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 86

(c) Design Responsibilities CROSBY VALVE AND GAGE COMPANY

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer's Serial NO.	National Board NO.	Other Identification/ Jurisdictional NO.	Year Built	Repaired Replaced or Replacement	ASME Code Stamped
RC-13B	CROSBY	N59303-00-0001	NA	NA	1978	REPLACED	Yes
RC-13B	CROSBY	N56264-00-0005	NA	NA	1976	REPLACEMENT	Yes

7. Description of Work

CROSBY VALVE SERIAL#N59303-00-0001 WAS REMOVED AND CROSBY VALVE SERIAL#N56264-00-0005 WAS INSTALLED IN ITS PLACE. CROSBY VALVE SERIAL#N56264-00-0005 WAS REBUILT UNDER MWO 1-91-1116-00 AND SATISFACTORY TESTED AT WYLE TEST LAB BY SAME MWO. A VT-2 LEAKAGE TEST WAS CONDUCTED AT N.O.P. AND N.O.T. AFTER INSTALLATION.

8. Tests Conducted: Hydrostatic (NO) Pneumatic (NO) Nominal Operating Pressure (YES) Other (NO)

Pressure 2155 psi — Test Temperature NOT °F

Pressure Relief Valves:

Service NA — Size NA

Opening Pressure NA — Blowdown (if applicable) NA

Set Pressure and Blowdown Adjustments Made Using NA (Test Medium)

at NA (Location)

NOTE: Supplemental sheets in the form of lists, sketches, or drawings may be used, provided (1) size is 8½ x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 /NR-1 / ~~NVR-1~~ Page 2 of 2

9. REMARKS Applicable Manufacturers Data Reports to be Attached

NA

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code Section XI.

Type Code Symbol NR Certificate of Authorization No. 20 Expiration Date 7-17-95

Signed Robert E Cook Quality Control Manager Date 5 MAY 19 93
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors in the State or Province of Ohio and employed by H.S.B.I. & I. CO. of Hartford, CT have inspected the components described in this Owner's Report during the period 2-22-93 to 5-6-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Robert E Cook 5-6-93 Commissions NB10992 NNE (Ohio Comm.)
Inspector's Signature Date National Board, State, Province and Endorsements

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and the repair, modification, or replacement of the pressure relief device described above conforms to Section XI and Section III of the ASME Code and the National Board rules as defined in publications NB-65 and NB-102, current editions.

Certificate of Authorization No. 316 to use the "VR" stamp expires Dec. 13, 19 95.

Certificate of Authorization No. 20 to use the "NR" stamp expires July 17, 19 95.

Date _____, 19____, Signed Toledo Edison _____ Quality Control Mgr.
Repair Organization Authorized Representative Title

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors, and certificate of competency issued by the State or Province of Ohio and employed by H. S. B. I. & I. CO. of Hartford. CT have inspected the repair, modification, or replacement described in this report on _____, 19____ and state that to the best of my knowledge and belief, this repair, modification, or replacement has been made or constructed in accordance with Section XI and Section III of the ASME Code and the National Board rules as defined in the publication NB-65 and NB-102, current editions.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair, modification or replacement described in this report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

_____ Commissions _____
Authorized Inspector's Signature Date National Board, State, Province and Endorsements

FORM NIS-2 / NR-1 / ~~NVR-1~~ OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

1. Owner Toledo Edison Company (Name) — Date 3/29/93

300 Madison Ave., Toledo, OH 43652 (Address) — Sheet 1 of 2

2. Plant Davis-Besse Nuclear Power Station (Name) — Unit # 1

5501 N. SR 2, Oak Harbor, OH 43449 (Address) — MWO# 1-92-0338-00 (Repair Organization P.O. No., Job No., etc.)

3. Work Performed By Toledo Edison Company (Name) — Type Code Stamp NR

5501 N. SR 2, Oak Harbor, OH 43449 (Address) — Authorization No. 20

Expiration Date 7-17-95

4. Identification of Systems CTMT. SPRAY SYSTEM - LOOP 1 SUS# 061-01

5. (a) Applicable Construction Code ANSI B31.1 Edition 19 67 Addendum N/A Code Case N/A

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 86

(c) Design Responsibilities GRINNELL

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer's Serial No.	National Board No.	Other Identification/ Jurisdictional No.	Year Built	Repaired Replaced or Replacement	ASME Code Stamped
C-269	GRINNELL	SN# 30280	N/A	34HCB-4-H32	N/A	REPAIRED	N/A
C-270	GRINNELL	SN# 7978	N/A	34HCB-4-H32	N/A	REPAIRED	N/A

7. Description of Work

SNUBBERS C-269 AND C-270 WERE REBUILT AND THEN FUNCTIONALLY TESTED.

8. Tests Conducted: Hydrostatic (NO) Pneumatic (NO) Nominal Operating Pressure (NO) Other (NO)

Pressure N/A psi Test Temperature N/A °F

Pressure Relief Valves:

Service N/A Size N/A

Opening Pressure N/A Blowdown (if applicable) N/A

Set Pressure and Blowdown Adjustments Made Using N/A (Test Medium)

at N/A (Location)

NOTE: Supplemental sheets in the form of lists, sketches, or drawings may be used, provided (1) size is 8½ x 11 in., (2) Information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 /NR-1 / ~~NVR-1~~ Page 2 of 2

9. REMARKS Applicable Manufacturers Data Reports to be Attached

NONE

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this repair conforms to the rules of the ASME Code Section X

Type Code Symbol NR Certificate of Authorization No. 20 Expiration Date 7-17-95

Signed Robert E Donaldson Quality Control Manager Date 29 MARCH 1993
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors in the State or Province of Ohio and employed by H.S.B.I. & I. CO. of Hartford, CT have inspected the components described in this Owner's Report during the period 3-31-92 to 3-29-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Raymond N. Arnold Commissions ND-9557 NI, OHIO
Inspector's Signature Date National Board, State, Province and Endorsements

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and the repair, modification, or replacement of the pressure relief device described above conforms to Section XI and Section III of the ASME Code and the National Board rules as defined in publications NB-65 and NB-102, current editions.

Ceritificate of Authorization No. 316 to use the "VR" stamp expires Dec. 13, 1995.

Certificate of Authorization No. 20 to use the "NR" stamp expires July 17, 1995.

Date _____, 19____, Signed Toledo Edison _____ Quality Control Mgr.
Repair Organization Authorized Representative Title

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors, and certificate of competency issued by the State or Province of Ohio and employed by H. S. B. I. & I. CO. of Hartford, CT have inspected the repair, modification, or replacement described in this report on _____, 19____ and state that to the best of my knowledge and belief, this repair, modification, or replacement has been made or constructed in accordance with Section XI and Section III of the ASME Code and the National Board rules as defined in the publication NB-65 and NB-102, current editions.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair, modification or replacement described in this report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

_____ Commissions _____
Authorized Inspector's Signature Date National Board, State, Province and Endorsements

FORM NIS-2 / NR-1 / NVR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

1. Owner Toledo Edison Company (Name) — Date 3/29/93

300 Madison Ave., Toledo, OH 43652 (Address) — Sheet 1 of 2

2. Plant Davis-Besse Nuclear Power Station (Name) — Unit #1

5501 N. SR 2, Oak Harbor, OH 43449 (Address) — MWO# 1-92-0338-04 (Repair Organization P.O. No., Job No., etc.)

3. Work Performed By Toledo Edison Company (Name) — Type Code Stamp NR

5501 N. SR 2, Oak Harbor, OH 43449 (Address) — Authorization No. 20

Expiration Date 7-17-95

4. Identification of Systems SECONDARY SIDE DRAIN LINE FROM SG 1-1 NOZZLE H SUS# 063-01

5. (a) Applicable Construction Code ANSI B31.1 Edition 19 67 Addendum N/A Code Case N/A

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 86

(c) Design Responsibilities LISEGA

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer's Serial No.	National Board No.	Other Identification/ Jurisdictional No.	Year Built	Repaired Replaced or Replacement	ASME Code Stamped
C-449	LISEGA	SN# 61195/24	N/A	EBB-5-8-H11	N/A	REPLACED	N/A
C-449	LISEGA	SN# 61195/58	N/A	EBB-5-8-H11	N/A	REPLACEMENT	N/A

7. Description of Work

SNUBBER SN# 61195/24 WAS REPLACED WITH SNUBBER SN# 61195/58 DUE SPORADIC OPERATION DURING FUNCTIONAL TESTING. (NOTE: FUNCTIONAL TEST OF SNUBBER SN# 61195/24 WAS SATISFACTORY.) SNUBBER SN# 61195/58 WAS FUNCTIONALLY TESTED PRIOR TO INSTALLATION.

8. Tests Conducted: Hydrostatic (NO) Pneumatic (NO) Nominal Operating Pressure (NO) Other (NO)

Pressure N/A psi Test Temperature N/A °F

Pressure Relief Valves:

Service N/A Size N/A

Opening Pressure N/A Blowdown (if applicable) N/A

Set Pressure and Blowdown Adjustments Made Using N/A (Test Medium)

at N/A (Location)

NOTE: Supplemental sheets in the form of lists, sketches, or drawings may be used, provided (1) size is 8½ x 11 in. (2) Information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 /NR-1 / ~~NVR~~-1

9. REMARKS — Applicable Manufacturers Data Reports to be Attached

NONE

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this **replacement** conforms to the rules of the ASME Code Section XI.

Type Code Symbol NR   Certificate of Authorization No. 20   Expiration Date 7-17-95

Signed Robert E Donnelly   Owner or Owner's Designee Title   Quality Control Manager   Date 2 APRIL 19 93

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors in the State or Province of Ohio and employed by H.S.B.I. & I. CO. of Hartford, CT have inspected the components described in this Owner's Report during the period 3/12/93 to 4/3/93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Raymond N. Acord   Inspector's Signature   Date

Commissions NO 9557-N,I, OHIO   National Board, State, Province and Endorsements

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and the repair, modification, or replacement of the pressure relief device described above conforms to Section XI and Section III of the ASME Code and the National Board rules as defined in publications NB-65 and NB-102, current editions.

Certificate of Authorization No. 316 to use the "VR" stamp expires Dec. 13, 19 95.

Certificate of Authorization No 20 to use the "NR" stamp expires July 17, 19 95.

Date ________, 19____. Signed Toledo Edison (Repair Organization) ________ (Authorized Representative) Quality Control Mgr. (Title)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors, and certificate of competency issued by the State or Province of Ohio and employed by H. S. B. I. & I. CO. of Hartford, CT have inspected the repair, modification, or replacement described in this report on ________, 19____ and state that to the best of my knowledge and belief, this repair, modification, or replacement has been made or constructed in accordance with Section XI and Section III of the ASME Code and the National Board rules as defined in the publication NB-65 and NB-102, current editions.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the repair, modification or replacement described in this report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

________ Authorized Inspector's Signature   Date

Commissions ________ National Board, State, Province and Endorsements

FORM NIS-2 / NR-1 / NVR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

1. Owner Toledo Edison Company (Name) — Date 4/18/93

300 Madison Ave., Toledo, OH 43652 (Address) — Sheet 1 of 2

2. Plant Davis-Besse Nuclear Power Station (Name) — Unit # 1

5501 N. SR 2, Oak Harbor, OH 43449 (Address) — MWO# 1-92-0447-01 (Repair Organization P.O. No., Job No., etc.)

3. Work Performed By Toledo Edison Company (Name) — Type Code Stamp NR

5501 N. SR 2, Oak Harbor, OH 43449 (Address) — Authorization No. 20

Expiration Date 7-17-95

4. Identification of Systems PRESSURIZER SURGE LINE SNUBBERS SUS# 064-04

5. (a) Applicable Construction Code ANSI B31.1 Edition 19 67 Addendum N/A Code Case N/A

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 86

(c) Design Responsibilities GRINNELL

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer's Serial No.	National Board No.	Other Identification/ Jurisdictional No.	Year Built	Repaired Replaced or Replacement	ASME Code Stamped
C-203	GRINNELL	SN# 14239	N/A	PSU-1-R1	N/A	REPAIRED	N/A

7. Description of Work

EXISTING SNUBBERS HAVE BEEN REMOVED, REBUILT, FUNCTIONALLY TESTED AND THEN REINSTALLED IN ORIGINAL LOCATION.

8. Tests Conducted: Hydrostatic (NO) Pneumatic (NO) Nominal Operating Pressure (NO) Other (NO)

Pressure N/A psi Test Temperature N/A °F

Pressure Relief Valves:

Service N/A Size N/A

Opening Pressure N/A Blowdown (if applicable) N/A

Set Pressure and Blowdown Adjustments Made Using N/A (Test Medium)

at N/A (Location)

NOTE: Supplemental sheets in the form of lists, sketches, or drawings may be used, provided (1) size is 8½ x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 /NR-1 / ~~NVR-1~~

9. REMARKS Applicable Manufacturers Data Reports to be Attached

NONE

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this repair conforms to the rules of the ASME Code Section XI.

Type Code Symbol NR Certificate of Authorization No. 20 Expiration Date 7-17-95

Signed R C Drumb Quality Control Manager Date 14 APRIL 19 93
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors in the State or Province of Ohio and employed by H.S.B.I. & I. CO. of Hartford, CT have inspected the components described in this Owner's Report during the period 6/15/92 to 4/19/93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Raymond N. Acomb Commissions NB-9557-N,I, OHIO
Inspector's Signature Date National Board, State, Province and Endorsements

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and the repair, modification, or replacement of the pressure relief device described above conforms to Section XI and Section III of the ASME Code and the National Board rules as defined in publications NB-65 and NB-102, current editions.

Ceritficate of Authorization No. 316 to use the "VR" stamp expires Dec. 13, 19 95.

Certificate of Authorization No. 20 to use the "NR" stamp expires July 17, 19 95.

Date _____, 19____, Signed Toledo Edison _____ Quality Control Mgr.
Repair Organization Authorized Representative Title

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors, and certificate of competency issued by the State or Province of Ohio and employed by H. S. B. I. & I. CO. of Hartford. CT have inspected the repair, modification, or replacement described in this report on _____, 19____ and state that to the best of my knowledge and belief, this repair, modification, or replacement has been made or constructed in accordance with Section XI and Section III of the ASME Code and the National Board rules as defined in the publication NB-65 and NB-102, current editions.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair, modification or replacement described in this report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

_____ Commissions _____
Authorized Inspector's Signature Date National Board, State, Province and Endorsements

FORM NIS-2 / NR-1 / NVR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

1. Owner Toledo Edison Company (Name) — Date 4/5/93

300 Madison Ave., Toledo, OH 43652 (Address) — Sheet 1 of 2

2. Plant Davis-Besse Nuclear Power Station (Name) — Unit # 1

5501 N. SR 2, Oak Harbor, OH 43449 (Address) — MWO# 1-92-0447-02 (Repair Organization P.O. No., Job No., etc.)

3. Work Performed By Toledo Edison Company (Name) — Type Code Stamp NR

5501 N. SR 2, Oak Harbor, OH 43449 (Address) — Authorization No. 20

Expiration Date 7-17-95

4. Identification of Systems PRESSURIZER SURGE LINE SNUBBERS SUS# 064-04

5. (a) Applicable Construction Code ANSI B31.1 Edition 19 67 Addendum N/A Code Case N/A

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 86

(c) Design Responsibilities GRINNELL

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer's Serial NO.	National Board NO.	Other Identification/ Jurisdictional NO.	Year Built	Repaired Replaced or Replacement	ASME Code Stamped
C-204	GRINNELL	SN# 7440239322	N/A	PSU-1-R2	N/A	REPAIRED	N/A
C-205	GRINNELL	SN# 12831	N/A	PSU-1-R3	N/A	REPAIRED	N/A

7. Description of Work

EXISTING SNUBBERS HAVE BEEN REMOVED, REBUILT, FUNCTIONALLY TESTED AND THEN REINSTALLED IN ORIGINAL LOCATION.

8. Tests Conducted: Hydrostatic (NO) Pneumatic (NO) Nominal Operating Pressure (NO) Other (NO)

Pressure N/A psi Test Temperature N/A °F

Pressure Relief Valves:

Service N/A Size N/A

Opening Pressure N/A Blowdown (if applicable) N/A

Set Pressure and Blowdown Adjustments Made Using N/A (Test Medium)

at N/A (Location)

NOTE: Supplemental sheets in the form of lists, sketches, or drawings may be used, provided (1) size is 8½ x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 /NR-1 / ~~NVR-1~~

9. REMARKS Applicable Manufacturers Data Reports to be Attached

NONE

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this repair conforms to the rules of the ASME Code Section XI.

Type Code Symbol NR Certificate of Authorization No. 20 Expiration Date 7-17-95

Signed Robert L Donnelly Quality Control Manager Date 6 APRIL 19 93
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors in the State or Province of Ohio and employed by H.S.B.I.&I.CO. of Hartford, CT have inspected the components described in this Owner's Report during the period 8-28-92 to 4-6-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Raymond N. Acre Commissions NB-7557-NI, OHIO
Inspector's Signature Date National Board, State, Province and Endorsements

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and the repair, modification, or replacement of the pressure relief device described above conforms to Section XI and Section III of the ASME Code and the National Board rules as defined in publications NB-65 and NB-102, current editions.

Ceritficate of Authorization No. 316 to use the "VR" stamp expires Dec. 13, 19 95.

Certificate of Authorization No. 20 to use the "NR" stamp expires July 17, 19 95.

Date _____, 19____, Signed Toledo Edison _____ Quality Control Mgr.
Repair Organization Authorized Representative Title

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors, and certificate of competency issued by the State or Province of Ohio and employed by H. S. B. I. & I. CO. of Hartford, CT have inspected the repair, modification, or replacement described in this report on _____, 19____ and state that to the best of my knowledge and belief, this repair, modification, or replacement has been made or constructed in accordance with Section XI and Section III of the ASME Code and the National Board rules as defined in the publication NB-65 and NB-102, current editions.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair, modification or replacement described in this report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

_____ Commissions _____
Authorized Inspector's Signature Date National Board, State, Province and Endorsements

FORM NIS-2 / NR-1 / NVR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

1. Owner Toledo Edison Company (Name) — Date 4/7/93

   300 Madison Ave., Toledo, OH 43652 (Address) — Sheet 1 of 2

2. Plant Davis-Besse Nuclear Power Station (Name) — Unit #1

   5501 N. SR 2, Oak Harbor, OH 43449 (Address) — MWO 1-92-0469-00 (Repair Organization P.O. No., Job No., etc.)

3. Work Performed By Toledo Edison Company (Name) — Type Code Stamp NR

   5501 N. SR 2, Oak Harbor, OH 43449 (Address) — Authorization No. 20

   Expiration Date 7-17-95

4. Identification of Systems AUXILLARY FEEDWATER SYSTEM

5. (a) Applicable Construction Code ANSI B31.1 Edition 19 67 Addendum Code Case

   (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 86

   (c) Design Responsibilities ITT GRINELL

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer's Serial NO.	National Board NO.	Other Identification/ Jurisdictional NO.	Year Built	Repaired Replaced or Replacement	ASME Code Stamped
EBB-4-H15	GRINNELL	19191	N/A	C-186	N/A	REPAIRED	N/A

7. Description of Work

GRIINNELL HYDRAULIC SNUBBER S/N 19191 (C-186) WAS REMOVED FROM THE AUXILLARY FEEDWATER , REBUILT , FUNCTIONALLY TESTED AND RE-INSTALLED.

8. Tests Conducted: Hydrostatic (NO) Pneumatic (NO) Nominal Operating Pressure (NO) Other (NO)

   Pressure N/A psi Test Temperature N/A °F

   Pressure Relief Valves:

   Service N/A Size N/A

   Opening Pressure N/A Blowdown (if applicable) N/A

   Set Pressure and Blowdown Adjustments Made Using N/A (Test Medium)

   at N/A (Location)

NOTE: Supplemental sheets in the form of lists, sketches, or drawings may be used, provided (1) size is 8½ x 11 in. (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 /NR-1 / NVR-1

9. REMARKS Applicable Manufacturers Data Reports to be Attached

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this repair conforms to the rules of the ASME Code Section XI.

Type Code Symbol NR Certificate of Authorization No. 20 Expiration Date 7-17-95

Signed Robert E Donath Quality Control Manager Date 8 APRIL 19 93
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors in the State or Province of Ohio and employed by H.S.B.I. & I. CO. of Hartford, CT have inspected the components described in this Owner's Report during the period 3-1-93 to 4-5-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Raymond V. Arcuri 4-5-93 Commissions NB-7551-NI, OHIO
Inspector's Signature Date National Board, State, Province and Endorsements

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and the repair, modification, or replacement of the pressure relief device described above conforms to Section XI and Section III of the ASME Code and the National Board rules as defined in publications NB-65 and NB-102, current editions.

Ceritificate of Authorization No. 316 to use the "VR" stamp expires Dec. 13, 19 95.

Certificate of Authorization No. 20 to use the "NR" stamp expires July 17, 19 95.

Date _____, 19____, Signed Toledo Edison _____ Quality Control Mgr.
Repair Organization Authorized Representative Title

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors, and certificate of competency issued by the State or Province of Ohio and employed by H. S. B. I. & I. CO. of Hartford. CT have inspected the repair, modification, or replacement described in this report on _____, 19____ and state that to the best of my knowledge and belief, this repair, modification, or replacement has been made or constructed in accordance with Section XI and Section III of the ASME Code and the National Board rules as defined in the publication NB-65 and NB-102, current editions.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair, modification or replacement described in this report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

_____ Commissions _____
Authorized Inspector's Signature Date National Board, State, Province and Endorsements

FORM NIS-2 / NR-1 / NVR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

1. Owner Toledo Edison Company (Name) — Date 3/24/93
   300 Madison Ave., Toledo, OH 43652 (Address) — Sheet 1 of 2
2. Plant Davis-Besse Nuclear Power Station (Name) — Unit # 1
   5501 N. SR 2, Oak Harbor, OH 43449 (Address) — MWO# 1-92-0473-00 (Repair Organization P.O. No., Job No., etc.)
3. Work Performed By Toledo Edison Company (Name) — Type Code Stamp NR
   5501 N. SR 2, Oak Harbor, OH 43449 (Address) — Authorization No. 20
   Expiration Date 7-17-95
4. Identification of Systems LOW PRESSURE INJECTION LOOP 1 SUS# 049-02
5. (a) Applicable Construction Code ANSI B31.1 Edition 19 67 Addendum N/A Code Case N/A
   (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 86
   (c) Design Responsibilities ITT GRINNELL

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer's Serial No.	National Board No.	Other Identification/ Jurisdictional No.	Year Built	Repaired Replaced or Replacement	ASME Code Stamped
C-277	ITT GRINNELL	SN# 9872	N/A	33BCCB-6-H2	N/A	REPAIRED	N/A

7. Description of Work

THE SNUBBER SN# 9872 WAS REBUILT AND THEN REINSTALLED AFTER FUNCTIONAL TESTING.

8. Tests Conducted: Hydrostatic (NO) Pneumatic (NO) Nominal Operating Pressure (NO) Other (NO)
   Pressure N/A psi Test Temperature N/A °F

Pressure Relief Valves:

Service N/A Size N/A

Opening Pressure N/A Blowdown (if applicable) N/A

Set Pressure and Blowdown Adjustments Made Using N/A (Test Medium)

at N/A (Location)

NOTE: Supplemental sheets in the form of lists, sketches, or drawings may be used, provided (1) size is 8½ x 11 in. (2) Information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 /NR-1 / ~~NVR-1~~ Page 2 of 2

9. REMARKS Applicable Manufacturers Data Reports to be Attached

NONE

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this repair conforms to the rules of the ASME Code Section XI.

Type Code Symbol NR Certificate of Authorization No. 20 Expiration Date 7-17-95

Signed Robert E Donnellon Quality Control Manager Date 23 MARCH 19 93
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors in the State or Province of Ohio and employed by H.S.B.I. & I. CO. of Hartford, CT have inspected the components described in this Owner's Report during the period 3-17-93 to 3-24-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Raymond N. Acomb Commissions NB-9557 NI OHIO
Inspector's Signature Date National Board, State, Province and Endorsements

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and the repair, modification, or replacement of the pressure relief device described above conforms to Section XI and Section III of the ASME Code and the National Board rules as defined in publications NB-65 and NB-102, current editions.

Certificate of Authorization No. 316 to use the "VR" stamp expires Dec. 13, 19 95.

Certificate of Authorization No. 20 to use the "NR" stamp expires July 17, 19 95.

Date _____, 19____, Signed Toledo Edison _____ Quality Control Mgr.
Repair Organization Authorized Representative Title

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors, and certificate of competency issued by the State or Province of Ohio and employed by H. S. B. I. & I. CO. of Hartford, CT have inspected the repair, modification, or replacement described in this report on _____, 19____ and state that to the best of my knowledge and belief, this repair, modification, or replacement has been made or constructed in accordance with Section XI and Section III of the ASME Code and the National Board rules as defined in the publication NB-65 and NB-102, current editions.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair, modification or replacement described in this report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

_____ Commissions _____
Authorized Inspector's Signature Date National Board, State, Province and Endorsements

FORM NIS-2 / NR-1 / NVR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

1. Owner Toledo Edison Company (Name) — Date 4/3/93

300 Madison Ave., Toledo, OH 43652 (Address) — Sheet 1 of 2

2. Plant Davis-Besse Nuclear Power Station (Name) — Unit #1

5501 N. SR 2, Oak Harbor, OH 43449 (Address) — 1-92-0484-00 (Repair Organization P.O. No., Job No., etc.)

3. Work Performed By Toledo Edison Company (Name) — Type Code Stamp NR

5501 N. SR 2, Oak Harbor, OH 43449 (Address) — Authorization No. 20

Expiration Date 7-17-95

4. Identification of Systems MAIN STEAM SYSTEM

5. (a) Applicable Construction Code ANSI B31.1 Edition 19 67 Addendum Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 86

(c) Design Responsibilities ITT GRINELL

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer's Serial NO.	National Board NO.	Other Identification/ Jurisdictional NO.	Year Built	Repaired Replaced or Replacement	ASME Code Stamped
EBB1SR1	GRINNELL	14734	N/A	C-220	N/A	REPAIRED	No

7. Description of Work

REMOVED, REBUILT AND REINSTALLED GRINNELL HYDRAULIC SNUBBER C-220 (EBB1SR1).

8. Tests Conducted: Hydrostatic (NO) Pneumatic (NO) Nominal Operating Pressure (NO) Other (NO)

Pressure N/A psi Test Temperature N/A °F

Pressure Relief Valves:

Service N/A Size N/A

Opening Pressure N/A Blowdown (if applicable) N/A

Set Pressure and Blowdown Adjustments Made Using N/A (Test Medium)

at N/A (Location)

NOTE: Supplemental sheets in the form of lists, sketches, or drawings may be used, provided (1) size is 8½ x 11 in. (2) Information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 /NR-1 / NVR-1

9. REMARKS Applicable Manufacturers Data Reports to be Attached

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this conforms to the rules of the ASME Code Section XI.

Type Code Symbol NR Certificate of Authorization No. 20 Expiration Date 7-17-95

Signed Robert E Donaldson Quality Control Manager Date 5 APRIL 19 93
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors in the State or Province of Ohio and employed by H.S.B.I. & I. CO. of Hartford, CT have inspected the components described in this Owner's Report during the period 4-8-92 to 4-6-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Robert E Cook 4-6-93 Commissions NB10992 (A N I) Ohio Comm
Inspector's Signature Date National Board, State, Province and Endorsements

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and the repair, modification, or replacement of the pressure relief device described above conforms to Section XI and Section III of the ASME Code and the National Board rules as defined in publications NB-65 and NB-102, current editions.

Ceritficate of Authorization No. 316 to use the "VR" stamp expires Dec. 13, 19 95.

Certificate of Authorization No. 20 to use the "NR" stamp expires July 17, 19 95.

Date _____, 19____, Signed Toledo Edison _____ Quality Control Mgr.
Repair Organization Authorized Representative Title

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors, and certificate of competency issued by the State or Province of Ohio and employed by H. S. B. I. & I. CO. of Hartford. CT have inspected the repair, modification, or replacement described in this report on _____, 19____ and state that to the best of my knowledge and belief, this repair, modification, or replacement has been made or constructed in accordance with Section XI and Section III of the ASME Code and the National Board rules as defined in the publication NB-65 and NB-102, current editions.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair, modification or replacement described in this report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

_____ Commissions _____
Authorized Inspector's Signature Date National Board, State, Province and Endorsements

FORM NIS-2 / NR-1 / ~~NVR~~-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

1. Owner Toledo Edison Company (Name) — Date 4/9/93

   300 Madison Ave., Toledo, OH 43652 (Address) — Sheet 1 of 2

2. Plant Davis-Besse Nuclear Power Station (Name) — Unit #1

   5501 N. SR 2, Oak Harbor, OH 43449 (Address) — MWO 1-92-0717-01 (Repair Organization P.O. No., Job No., etc.)

3. Work Performed By Toledo Edison Company (Name) — Type Code Stamp NR

   5501 N. SR 2, Oak Harbor, OH 43449 (Address) — Authorization No. 20

   Expiration Date 7-17-95

4. Identification of Systems MAIN STEAM SYSTEM

5. (a) Applicable Construction Code ANSI B31.1 Edition 19 67 Addendum Code Case

   (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 86

   (c) Design Responsibilities ITT GRINNELL

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer's Serial NO.	National Board NO.	Other Identification/ Jurisdictional NO.	Year Built	Repaired Replaced or Replacement	ASME Code Stamped
EBB - 1 - H1	GRINNELL	18288	N/A	A - 42	N/A	REPAIRED	N/A
EBB - 1 - H1	GRINNELL	18292	N/A	A - 43	N/A	REPAIRED	N/A

7. Description of Work

GRINNELL HYDRAULIC SNUBBERS A-42 AND A-43 WERE REMOVED FROM HANGER EBB - 1 - H1; REBUILT, FUNCTIONALLY TESTED, AND REINSTALLED.

8. Tests Conducted: Hydrostatic (NO) Pneumatic (NO) Nominal Operating Pressure (NO) Other (NO)

   Pressure N/A psi — Test Temperature N/A °F

   Pressure Relief Valves:

   Service N/A — Size N/A

   Opening Pressure N/A — Blowdown (If applicable) N/A

   Set Pressure and Blowdown Adjustments Made Using N/A (Test Medium)

   at N/A (Location)

NOTE: Supplemental sheets in the form of lists, sketches, or drawings may be used, provided (1) size is 8½ x 11 in. (2) Information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 /NR-1 / ~~NVR-1~~

9. REMARKS Applicable Manufacturers Data Reports to be Attached

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this conforms to the rules of the ASME Code Section XI.

Type Code Symbol NR Certificate of Authorization No. 20 Expiration Date 7-17-95

Signed Robert E Donnelly Quality Control Manager Date 10 APRIL 19 93
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel inspectors in the State or Province of Ohio and employed by H.S.B.I. & I. CO. of Hartford, CT have inspected the components described in this Owner's Report during the period 6/14/92 to 7/14/93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Raymond N. Acord
Inspector's Signature Date

Commissions NB 9557-N, I, OHIO
National Board, State, Province and Endorsements

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and the repair, modification, or replacement of the pressure relief device described above conforms to Section XI and Section III of the ASME Code and the National Board rules as defined in publications NB-65 and NB-102, current editions.

Ceritficate of Authorization No. 316 to use the "VR" stamp expires Dec. 13, 19 95.

Certificate of Authorization No. 20 to use the "NR" stamp expires July 17, 19 95.

Date _____, 19____, Signed Toledo Edison _____ Quality Control Mgr.
Repair Organization Authorized Representative Title

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors, and certificate of competency issued by the State or Province of Ohio and employed by H. S. B. I. & I. CO. of Hartford. CT have inspected the repair, modification, or replacement described in this report on _____, 19____ and state that to the best of my knowledge and belief, this repair, modification, or replacement has been made or constructed in accordance with Section XI and Section III of the ASME Code and the National Board rules as defined in the publication NB-65 and NB-102, current editions.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair, modification or replacement described in this report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

_____ Commissions _____
Authorized Inspector's Signature Date National Board, State, Province and Endorsements

FORM NIS-2 / NR-1 / ~~NVR-1~~ OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

1. Owner Toledo Edison Company (Name) — Date 4/23/93

300 Madison Ave., Toledo, OH 43652 (Address) — Sheet 1 of 2

2. Plant Davis-Besse Nuclear Power Station (Name) — Unit # 1

5501 N. SR 2, Oak Harbor, OH 43449 (Address) — MWO# 1-92-0845-00 (Repair Organization P.O. No., Job No., etc.)

3. Work Performed By Toledo Edison Company (Name) — Type Code Stamp NR

5501 N. SR 2, Oak Harbor, OH 43449 (Address) — Authorization No. 20

Expiration Date 7-17-95

4. Identification of Systems CONTAINMENT VESSEL SYSTEM

5. (a) Applicable Construction Code ASME III CL2 Edition 19 68 Addendum S70 Code Case N/A

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 86

(c) Design Responsibilities BABCOX & WILCOX

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer's Serial NO.	National Board NO.	Other Identification/ Jurisdictional NO.	Year Built	Repaired Replaced or Replacement	ASME Code Stamped
NUT	SPECIAL T METAL	HT# 4304	N/A	SC 89-0622	N/A	REPLACEMENT	N/A
BOLT	NOVA MACHINE PROD.	HT# 33293/J7P	N/A	SC 15-2247	N/A	REPLACEMENT	N/A

7. Description of Work

ONE BOLT AND ONE NUT WERE REPLACED ON THE FUEL TRANSFER TUBE MECHANICAL PENETRATION FLANGES (P-23, P-24). THE REPLACEMENT MATERIAL USED IS IDENTIFIED AS FOLLOWS:

NUT, 1 1/4" - 8 HEX, MANG. BRONZE PER QQ-B-723 HH CLASS A241-A, PO # Q53077

TOLEDO EDISON SC # 89-0622, B&W ORDER NO. 070878, TRANSFER TUBE COVER HEX NUT

BOLT, HEX HEAD, 1 1/4"-8X6", SA 193 ('92), B8 CLASS 1, PO # C609504 D 93, HT# 33293/J7P,

TOLEDO EDISON SC # 15-2247, TRANSFER TUBE HEX HEAD BOLT

8. Tests Conducted: Hydrostatic (NO) Pneumatic (NO) Nominal Operating Pressure (NO) Other (NO)

Pressure _____ psi Test Temperature _____ °F

Pressure Relief Valves:

Service N/A Size N/A

Opening Pressure N/A Blowdown (if applicable) N/A

Set Pressure and Blowdown Adjustments Made Using N/A (Test Medium)

at N/A (Location)

NOTE: Supplemental sheets in the form of lists, sketches, or drawings may be used, provided (1) size is 8½ x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 /NR-1 / NVR-1

9. REMARKS Applicable Manufacturers Data Reports to be Attached

SEE ATTACHED DATA REPORTS.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this conforms to the rules of the ASME Code Section XI.

Type Code Symbol NR Certificate of Authorization No. 20 Expiration Date 7-17-95

Signed Robert E Donath Quality Control Manager Date 24 APRIL 19 93
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors in the State or Province of Ohio and employed by H.S.B.I. & I. CO. of Hartford, CT have inspected the components described in this Owner's Report during the period 2-11-93 to 4-24-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Robert E Cook 4-24-93 Commissions NB1072 (ANI), Ohio Com
Inspector's Signature Date National Board, State, Province and Endorsements

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and the repair, modification, or replacement of the pressure relief device described above conforms to Section XI and Section III of the ASME Code and the National Board rules as defined in publications NB-65 and NB-102, current editions.

Certificate of Authorization No. 316 to use the "VR" stamp expires Dec. 13, 19 95

Certificate of Authorization No. 20 to use the "NR" stamp expires July 17, 19 95

Date _____, 19____ Signed Toledo Edison _____ Quality Control Mgr.
Repair Organization Authorized Representative Title

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors, and certificate of competency issued by the State or Province of Ohio and employed by H. S. B. I. & I. CO. of Hartford, CT have inspected the repair, modification, or replacement described in this report on _____, 19____ and state that to the best of my knowledge and belief, this repair, modification, or replacement has been made or constructed in accordance with Section XI and Section III of the ASME Code and the National Board rules as defined in the publication NB-65 and NB-102, current editions.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair, modification or replacement described in this report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

_____ Commissions _____
Authorized Inspector's Signature Date National Board, State, Province and Endorsements

FORM NIS-2 / NR-1 / ~~NVR-1~~ OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

1. Owner Toledo Edison Company (Name) — Date 4/7/93

300 Madison Ave., Toledo, OH 43652 (Address) — Sheet 1 of 2

2. Plant Davis-Besse Nuclear Power Station (Name) — Unit #1

5501 N. SR 2, Oak Harbor, OH 43449 (Address) — MWO 1-92-0950-00 (Repair Organization P.O. No., Job No., etc.)

3. Work Performed By Toledo Edison Company (Name) — Type Code Stamp NR

5501 N. SR 2, Oak Harbor, OH 43449 (Address) — Authorization No. 20

Expiration Date 7-17-95

4. Identification of Systems MAIN FEEDWATER SYSTEM

5. (a) Applicable Construction Code ANSI B31.1 Edition 19 67 Addendum Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 86

(c) Design Responsibilities ITT GRINELL

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer's Serial NO.	National Board NO.	Other Identification/ Jurisdictional NO.	Year Built	Repaired Replaced or Replacement	ASME Code Stamped
EEB-3-SR25A	GRINNELL	12850	N/A	C-181	N/A	REPAIRED	N/A
EBB-3-SR24A	GRINNELL	12484	N/A	C-179	N/A	REPAIRED	N/A
EBB-3-SR20	GRINELL	12493	N/A	C-254	N/A	REPAIRED	N/A

7. Description of Work

GRIINNELL HYDRAULIC SNUBBERS S/N'S 12493, 12850, AND 12484 (C-254, C-181, C-179) WERE REMOVED FROM THE MAIN FEEDWATER SYSTEM, REBUILT, FUNCTIONALLY TESTED AND RE-INSTALLED.

8. Tests Conducted: Hydrostatic (NO) Pneumatic (NO) Nominal Operating Pressure (NO) Other (NO)

Pressure N/A psi Test Temperature N/A °F

Pressure Relief Valves:

Service N/A Size N/A

Opening Pressure N/A Blowdown (if applicable) N/A

Set Pressure and Blowdown Adjustments Made Using N/A (Test Medium)

at N/A (Location)

NOTE: Supplemental sheets in the form of lists, sketches, or drawings may be used, provided (1) size is 8½ x 11 in. (2) Information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 /NR-1 / NVR-1

9. REMARKS Applicable Manufacturers Data Reports to be Attached

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this conforms to the rules of the ASME Code Section XI.

Type Code Symbol NR Certificate of Authorization No. 20 Expiration Date 7-17-95

Signed Robert S Donald Quality Control Manager Date 8 APRIL 19 93
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors in the State or Province of Ohio and employed by H.S.B.I. & I. CO. of Hartford, CT have inspected the components described in this Owner's Report during the period 2-1-93 to 4-5-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Raymond N. Arnold Commissions NB-9557, N.E, OHIO
Inspector's Signature Date National Board, State, Province and Endorsements

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and the repair, modification, or replacement of the pressure relief device described above conforms to Section XI and Section III of the ASME Code and the National Board rules as defined in publications NB-65 and NB-102, current editions.

Ceritificate of Authorization No. 316 to use the "VR" stamp expires Dec. 13, 19 95.

Certificate of Authorization No. 20 to use the "NR" stamp expires July 17, 19 95.

Date _____, 19____, Signed Toledo Edison _____ Quality Control Mgr.
Repair Organization Authorized Representative Title

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors, and certificate of competency issued by the State or Province of Ohio and employed by H. S. B. I. & I. CO. of Hartford. CT have inspected the repair, modification, or replacement described in this report on _____, 19____ and state that to the best of my knowledge and belief, this repair, modification, or replacement has been made or constructed in accordance with Section XI and Section III of the ASME Code and the National Board rules as defined in the publication NB-65 and NB-102, current editions.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair, modification or replacement described in this report. Furthermore, nether the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

_____ Commissions _____
Authorized Inspector's Signature Date National Board, State, Province and Endorsements

FORM NIS-2 / NR-1 / NVR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

1. Owner Toledo Edison Company (Name) — Date 2/23/93

300 Madison Ave., Toledo, OH 43652 (Address) — Sheet 1 of 2

2. Plant Davis-Besse Nuclear Power Station (Name) — Unit #1

5501 N. SR 2, Oak Harbor, OH 43449 (Address) — MWO# 1-92-1006-00 (Repair Organization P.O. No., Job No., etc.)

3. Work Performed By Toledo Edison Company (Name) — Type Code Stamp NR

5501 N. SR 2, Oak Harbor, OH 43449 (Address) — Authorization NO. 20

Expiration Date 7-17-96

4. Identification of Systems CTMT. SPRAY DISCHARGE LINE SUS# 061-01

5. (a) Applicable Construction Code ANSI B31.1 Edition 19 67 Addendum N/A Code Case N/A

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 86

(c) Design Responsibilities ITT GRINNELL

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer's Serial NO.	National Board NO.	Other Identification/ Jurisdictional NO.	Year Built	Repaired Replaced or Replacement	ASME Code Stamped
A-93	ITT GRINNELL	SN# 21304	N/A	34-GCB-5-H32	N/A	REPLACED	No
A-93	ITT GRINNELL	SN# 18380	N/A	34-GCB-5-H32	N/A	REPLACEMENT	No
A-92	ITT GRINNELL	SN# 14150	N/A	34-GCB-5-H32	N/A	REPLACED	No
A-92	ITT GRINNELL	SN# 16150	N/A	34-GCB-5-H32	N/A	REPLACEMENT	No

7. Description of Work

INSTALLED SNUBBERS WERE REPLACED WITH SPARE SNUBBERS, OF WHICH WERE FUNCTIONALLY TESTED PRIOR TO INSTALLATION.

8. Tests Conducted: Hydrostatic (NO) Pneumatic (NO) Nominal Operating Pressure (NO) Other (NO)

Pressure N/A psi Test Temperature N/A °F

Pressure Relief Valves:

Service N/A Size N/A

Opening Pressure N/A Blowdown (if applicable) N/A

Set Pressure and Blowdown Adjustments Made Using N/A (Test Medium)

at N/A (Location)

NOTE: Supplemental sheets in the form of lists, sketches, or drawings may be used, provided (1) size is 8½ x 11, (2) Information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 /NR-1 / ~~NVR-1~~

9. REMARKS Applicable Manufacturers Data Reports to be Attached

NONE

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code Section XI.

Type Code Symbol NR Certificate of Authorization No. 20 Expiration Date 7-17-95

Signed Robert E Donnelly Quality Control Manager Date 24 FEB 1993
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors in the State or Province of Ohio and employed by H.S.B.I. & I. CO. of Hartford, CT have inspected the components described in this Owner's Report during the period 8-21-92 to 2-25-93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Robert E Cook 2/25/93 Commissions NB10992(ANI) Ohio Commission
Inspector's Signature Date National Board, State, Province and Endorsements

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and the repair, modification, or replacement of the pressure relief device described above conforms to Section XI and Section III of the ASME Code and the National Board rules as defined in publications NB-65 and NB-102, current editions.

Certificate of Authorization No. 316 to use the "VR" stamp expires Dec. 13, 1992

Certificate of Authorization No. 20 to use the "NR" stamp expires July 17, 1995

Date _____, 19____, Signed Toledo Edison _____ Quality Control Mgr.
Repair Organization Authorized Representative Title

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the State or Province of Ohio and employed by H. S. B. I. & I. CO. of Hartford. CT have inspected the repair, modification, or replacement described in this report on _____, 19____ and state that to the best of my knowledge and belief, this repair, modification, or replacement has been made or constructed in accordance with Section XI and Section III of the ASME Code and the National Board rules as defined in the publication NB-65 and NB-102, current editions.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair, modification or replacement described in this report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

_____ Commissions _____
Authorized Inspector's Signature Date National Board, State, Province and Endorsements

FORM NIS-2 / NR-1 / [illegible]-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

1. Owner Toledo Edison Company (Name) — Date 4/28/93
   300 Madison Ave, Toledo, OH 43652 (Address) — Sheet 1 of 4
2. Plant Davis-Besse Nuclear Power Station (Name) — Unit #1
   5501 N. SR 2, Oak Harbor, OH 43449 (Address) — 1-93-0227-00 (Repair Organization P.O. No., Job No., etc.)
3. Work Performed By Toledo Edison Company (Name) — Type Code Stamp NR
   5501 N. SR 2, Oak Harbor, OH 43449 (Address) — Authorization No. 20
   Expiration Date 7-17-95
4. Identification of Systems MAIN STEAM
5. (a) Applicable Construction Code ASME III CL2 Edition 19 71 Addendum S72 Code Case No
   (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 86
   (c) Design Responsibilities CONTROL COMPONENTS INC

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer's Serial No.	National Board No.	Other Identification/ Jurisdictional No.	Year Built	Repaired Replaced or Replacement	ASME Code Stamped
PLUG ASSEMBLY	CONTROL COMP. INC.	M327890	NA	AVV-ICS11A	1992	REPACEMENT	Yes
1/2"NUT	NOVA	NA	NA	SA194GR2H	1996	REPLACEMENT	No

7. Description of Work

REPLACED PLUG ASSEMBLY AND ONE1/2" NUT(SA194GR2H) FOR UPPER GUIDE ASS'Y. FOR VALVE AVV-ICS11A.

8. Tests Conducted: Hydrostatic (NO) Pneumatic (NO) Nominal Operating Pressure (YES) Other (NO)
   Pressure 910 psi — Test Temperature NOT °F

Pressure Relief Valves:

Service NA — Size NA

Opening Pressure NA — Blowdown (if applicable) NA

Set Pressure and Blowdown Adjustments Made Using NA (Test Medium)

at NA (Location)

NOTE: Supplemental sheets in the form of lists, sketches, or drawings may be used, provided (1) size is 8½ x 11 in. (2) Information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 /NR-1 / ~~NVR-1~~

Page 2 of 4

9. REMARKS — Applicable Manufacturers Data Reports to be Attached

SEE N-2 DATA FORMS FROM CONTROL COMPONENTS INC. ATTACHED.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code Section XI.

Type Code Symbol NR Certificate of Authorization No. 20 Expiration Date 7-17-95

Signed Robert E Donald Quality Control Manager Date 28 APRIL 19 93
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors in the State or Province of Ohio and employed by H.S.B.I. & I. CO. of Hartford, CT have inspected the components described in this Owner's Report during the period 3/5/93 to 4/28/93, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Raymond N. Acord — Commissions NB-9557-N, I, OHIO
Inspector's Signature — Date — National Board, State, Province and Endorsements

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and the repair, modification, or replacement of the pressure relief device described above conforms to Section XI and Section III of the ASME Code and the National Board rules as defined in publications NB-65 and NB-102, current editions.

Ceritficate of Authorization No. 316 to use the "VR" stamp expires Dec. 13, 19 95.

Certificate of Authorization No. 20 to use the "NR" stamp expires July 17, 19 95.

Date _____, 19____, Signed Toledo Edison — _____ — Quality Control Mgr.
Repair Organization — Authorized Representative — Title

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors, and certificate of competency issued by the State or Province of Ohio and employed by H. S. B. I. & I. CO.

of Hartford. CT have inspected the repair, modification, or replacement described in this report

on _____, 19____ and state that to the best of my knowledge and belief, this repair, modification, or replacement has been made or constructed in accordance with Section XI and Section III of the ASME Code and the National Board rules as defined in the publication NB-65 and NB-102, current editions.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair, modification or replacement described in this report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

_____ Commissions _____
Authorized Inspector's Signature — Date — National Board, State, Province and Endorsements

0 7 5 0 0 8 1 [illegible] CRDM #1613

7?

DIAMOND POWER SPECIALTY CORP.
TECHNICAL PROCEDURES
NUCLEAR

ITEM NO. 588

SECTION	7.811
PROC. NO.	T-103
PAGE NO.	15
DATE	4/9/76
REVISION	0

SUBJECT:
Data Sheets for Hydrostatic Test of the Closure Components Only (Reference: Paragraph 6.0)

1. Serial number of closure components:
   A. Closure Insert serial number 078
   B. Closure Nut serial number 007
   C. Square Head Screw serial numbers 458-419-476-443-467-457
   D. Vent Valve Assembly serial number N/A
   E. Vent Plug serial number 078
2. Pressure test gage serial number 2500
3. Hydro Fixture temperature prior to filling 90 °F
4. Water temperature prior to filling 73 °F
5. Stabilized test temperature 85 °F
6. Actual hydrostatic test pressure 8450 psig
7. Results of visual inspection for leakage (No leakage allowed):
   A. Vent Valve Assembly OK
8. Stabilized test temperature 85 °F
9. Results of visual inspection for leakage (No leakage allowed):
   A. Joints OK
   B. Regions around openings ok
   C. Transition welds OK
   D. Seal areas ok

1. F. Bearing Plate 087

DPSC Inspector [signature]

ANI [signature]

Date 12-16-77

NOTE: Please return this sheet to Quality Planning after completion.

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DP-6229

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[811

0 7 5 0 8 1 2 74

MILL CERTIFICATION INDEX FOR 704282-1145 MOTOR TUBE CAPS FOR PGE - 507601-N

CRDM NO.	PART NUMBER	SERIAL NUMBER	PURCHASE ORDER NO.	HEAT NUMBER
1601	704282-1145	076	45000-C	3963649
1602	704282-1145	065	45000-C	3963649
1603	704282-1145	068	45000-C	3963649
1604	704282-1145	070	45000-C	3963649
1605	704282-1145	064	45000-C	3963649
1606	704282-1145	069	45000-C	3963649
1607	704282-1145	071	45000-C	3963649
1608	704282-1145	062	45000-C	3963649
1609	704282-1145	077	45000-C	3963649
1610	704282-1145	079	45000-C	3963649
1611	704282-1145	022	45000-C	3963650
1612	704282-1145	027	45000-C	3963650
1613	704282-1145	023	45000-C	3963650
1614	704282-1145	026	45000-C	3963650
1615	704282-1145	025	45000-C	3963650
1616	704282-1145	081	45000-C	3963649
1617	704282-1145	019	45000-C	3963650
1618	704282-1145	029	45000-C	3963650
1619	704282-1145	073	45000-C	3963649
1620	704282-1145	072	45000-C	3963649
1621	704282-1145	058	45000-C	3963649
1622	704282-1145	054	45000-C	3963649
1623	704282-1145	074	45000-C	3963649
1624	704282-1145	056	45000-C	3963649

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0 0 7 0 0 8 1 3

75

MILL CERTIFICATION INDEX FOR 704285-1142 MOTOR TUBE BASE FOR PGE - S07601-N

CRDM NO.	PART NUMBER	SERIAL NUMBER	PURCHASE ORDER NO.	HEAT NUMBER
1601	704285-1142	012	45000-C	3963650
1602	704285-1142	001	45000-C	3963650
1603	704285-1142	005	45000-C	3963650
1604	704285-1142	008	45000-C	3963650
1605	704285-1142	013	45000-C	3963650
1606	704285-1142	011	45000-C	3963650
1607	704285-1142	009	45000-C	3963650
1608	704285-1142	010	45000-C	3963650
1609	704285-1142	014	45000-C	3963650
1610	704285-1142	017	45000-C	3963650
1611	704285-1142	023	45000-C	3963650
1612	704285-1142	018	45000-C	3963650
1613	704285-1142	007	45000-C	3963650
1614	704285-1142	015	45000-C	3963650
1615	704285-1142	016	45000-C	3963650
1616	704285-1142	020	45000-C	3963650
1617	704285-1142	021	45000-C	3963650
1618	704285-1142	024	45000-C	3963650
1619	704285-1142	025	45000-C	3963650
1620	704285-1142	027	45000-C	3963650
1621	704285-1142	040	45000-C	3963649
1622	704285-1142	039	45000-C	3963649
1623	704285-1142	026	45000-C	3963650
1624	704285-1142	002	45000-C	3963650

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McINNES STEEL COMPANY

STAINLESS & HIGH TEMPERATURE ALLOY / NUCLEAR / CARBON - FORGINGS

COMPLETE HEAT TREATING, LABORATORY & TESTING FACILITIES / ULTRA SONIC INSPECTION

JUN 30 1976

BGC

76

Customer Order No.	Date	Our No.
45000-C	6-25-76	64172-00

Sold To:
DIAMOND POWER
A SUB. OF BABCOCK & WILCOX CO.
P.O. BOX 415
LANCASTER, OHIO 43130

Ship To:
SAME
2600 E. MAIN ST.

Ship Via: LYONS - PREPAID & BILL - PARTIAL

Specification	Grade	Number of Pieces	Weight
ASME SA-182F-304 MOD. FORM 5503 REV. 11-19-75	304 VAR	36 PCS. BASES 36 PCS. CAPS	6480# 2160#

		Serial No.
704285-1647 REV. B AND 704285-1548 REV. A 704282-1541, REV. A	PER DWG.	001 THRU 036

1925°F WATER QUENCHED - H.T. CHART ATTACHED

Chemical Analysis

Item No.	Heat No.										
1 & 2	3963650	.073	1.40	.028	.004	.53	18.45	9.83			
				.10							

Mechanical Properties

Item No.	Serial No.	Dia.	Yield P.S.I. .2 % Offset	Ultimate Tensile P.S.I.	Elong. %	Red. Area %	Hardness BHN	Hardness Rock-C	Jominy Harden-Ability	Grain Size	Impact Ft. Lbs.
1 & 2		.505"	39,000	80,000	60.0	80.4					

MATERIAL FREE FROM MERCURY CONTAMINATION.
MATERIAL AND TESTS MEET THE REQUIREMENTS OF MOD 5503 (11-19-75)
AND SECTION III DIVISION 1 OF 1974 ASME CODE WITHOUT ADDENDA FOR CLASS 1 VESSELS.

TM 9-8-76

REC'D. Q.E.

JUN 30 1976

Melt Source: REPUBLIC

PER UT-ABPV-322, REV. 4B(2-6-76) AND ATTACHMENT 64172 REV. 5

XXXXX(2-11-76), REPORT ATTACHED

GOOD PER A262 PRACTICE E
PHOTOMICROGRAPH ATTACHED

PER PROC. NO. 62914, REV. 18(6-21-
REPORT ATTACHED

THIS IS TO CERTIFY THAT TO THE BEST OF OUR KNOWLEDGE AND BELIEF THE ABOVE MATERIAL HAS BEEN MANUFACTURED IN ACCORDANCE WITH THE BUYER'S PURCHASE ORDERS AND SPECIFICATIONS AND COMPLIES WITH DIMENSIONAL REQUIREMENTS AND WORKMANSHIP

McINNES STEEL COMPANY

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0 0 5 1 0 0 8 7 1 133

Babcock & Wilcox

Diamond Power

P.O. Box 415, Lancaster, Ohio 43130
Telephone: (614) 653-8646

NONDESTRUCTIVE EXAMINATION CERTIFICATION
PRESSURE BOUNDARY COMPONENTS

Customer BABCOCK AND WILCOX COMPANY, NUCLEAR POWER GENERATION DIVISION, LYNCHBURG, VIRGINIA

B&W Contract No. 620-0024 B&W Purchase Order No. 028282LG

Diamond Power Sales Order No. 907601M

Control Rod Drive Mechanism No.'s 1601 thru 1640

This is to certify that the pressure boundary components of the above CRDM's were nondestructively examined in accordance with the ASME Boiler & Pressure Vessel Code 1974 Edition with no addenda, utilizing the procedures outlined below and the components were acceptable.

Liquid Penetrant

Visible

QC-8 Issue 3
AS-2 Issue 5 thru 7

Flourescent

QC-7 Issue 5 thru 7
AS-2 Issue 5 7

Magnetic Particle

QC-49 Issue 1 thru 2 AS-M-21 Issue 2

Radiographic

705310-1130 Rev A
705311-1139 Rev. A
705312-1138 Rev. A
AS-R-13 Issue 1
AS-R-14 Issue 1

Ultrasonic

*QC-17 Issue 3
*QC-16 Issue 2
*Longitudinal at +14db sensitivity

See NDE Summary Package for individual component test results and personnel qualifications.

Charles E. Hyde
NDE Level III

March 17, 1978
Date

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Diamond Power a subsidiary of Babcock & Wilcox

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BW Nuclear Service Company

Engineering & Plant Service Division

CERTIFICATE OF CONFORMANCE

Nuclear Parts Center

CUSTOMER/PLANT SITE: Toledo Edison Co.

CUSTOMER ORDER NO.: S 008923 D90 CUST. C.O. NO.(S): ------

ORIGINAL/REFERENCED B&W SPECIFICATION/DRAWING (WHEN REQUIRED): ------

NUCLEAR PARTS TECHNICAL DOCUMENT(S): 21-1001171-0[illegible]

B&W CONTRACT NO.: 7C8-7089070 QA DATA PACKAGE NO.: 23-1178088-00

B&W ORDER NO.: 031405LE B&W CO.O. NO.(S): 01-03

ASME III Certificate of Authorization No. N-1650 expires 1/21/92.

QTY.	CUSTOMER ITEM NO.	B&W P.O. ITEM NO.	B&W P/N	DESCRIPTION
225	1	1	1006110-005	CRDM Hold Down Bolt Assy. HT# 20233-2 (Bolts) HT# 8060748 (Washers)

The above parts are supplied in accordance with B&W QA Program 56-1151146-05.
Subject Bolts are marked with last 4 digits of Base Heat Number only.

THE B&W NUCLEAR SERVICE COMPANY, ENGINEERING & PLANT SERVICE DIVISION, HEREBY CERTIFIES THAT THE ITEMS LISTED ABOVE ARE FURNISHED IN ACCORDANCE WITH THE APPLICABLE CODES, SPECIFICATIONS, AND PURCHASE ORDER REQUIREMENTS AND ARE INTERCHANGEABLE IN FORM, FIT AND FUNCTION WITH THOSE ORIGINALLY SUPPLIED, UNLESS OTHERWISE NOTED BELOW.

The referenced QA Data Package has been reviewed by EPS QA and found acceptable, except as noted below. Nonconformance to referenced requirements may result in equipment being released to ship in a QA HOLD status by the EPS QA Department.

Nonconformance to requirements: N/A

Nonconformance(s) will be/was resolved as follows: N/A

Shipment was made because: N/A

E A McLaughlin for — Manager, EPS QA

2/8/91 — Date

ATTACHMENT-2
Pg 1 of 26

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STANDARD **SPS** PRESSED STEEL CO • JENKINTOWN, PENNA 19046

CERTIFICATE OF CONFORMANCE

THE BABCOCK & WILCOX COMPANY
POWER GENERATION GROUP
P.O. BOX 1260
LYNCHBURG, VIRGINIA 24505

PAGE 1 OF 2

CONTRACT #620-0017

CUSTOMER PURCHASE ORDER NUMBER	DATE OF CERTIFICATION
031405LE CO'#3	2/22/78

ITEM	QUANTITY	PRODUCT NUMBER OR DESCRIPTION	LABORATORY CONTROL NUMBER
1	3/C	DWG.#139006D REV.5 CRDM HOLD DOWN BOLT SHOP ORDER # 650660-04	LAB. NO.

THE FINISHED PRODUCT WAS MANUFACTURED, TESTED, AND ACCEPTED TO: THE APPLICABLE NOTES CONTAINED IN THE BLUEPRINT, PURCHASE ORDER CHANGE #2, 08-1087000001 REV.04 9/76, 212 REV.01 1-74, 10-1095 REV.02 3-74, 48-1396 REV.01 9-76, 24-1001318 REV.00 12-76, ASME CODE SEC.III 1974 EDITION, NO ADDENDA, INCLUDING THE FOLLOWING:

1.0 RAW MATERIAL, SPEC., ASME SA-453 GR.660 CL.A. PURCHASED FROM: ______ CHEMISTRY: MILL REPORT ATTACHED. HEAT NO. 20233-2 SPS STEEL DATE: ______

1.1 LIQUID PENETRANT INSPECTION: PERFORMED BY SPS CO. TO ASME SUB. ART. NB2580, AND APPROVED PROCEDURE PT69805 7/30/75 REV.A 4/4/77. 100% OF BARS TESTED AND ACCEPTED.

D C Snader LEVEL III
NON-DESTRUCTIVE TESTING INSPECTOR

1.2 ULTRASONIC INSPECTION: PERFORMED BY SPS CO. TO ASME ART. NB-2000 AND APPROVED PROCEDURE UT-60010 9/4/75 REV.C 3/24/77. 100% OF BARS TESTED AND ACCEPTED.

Michael [illegible] 2/22/78
NON-DESTRUCTIVE TESTING INSPECTOR

2.0 MANUFACTURING, PERFORMED BY SPS CO. IN ACCORDANCE WITH APPROVED PROCEDURE M-77365-5 4/13/77 REV.(NONE).

3.0 HEAT TREAT PERFORMED BY PRECISION HEAT TREAT CO. TO ASME SA-453 GR.660 CL.A IN ACCORDANCE WITH APPROVED PROCEDURE HT 77365-5 2/18/77
HEAT TREAT SUMMARY: SOLUTION AT 1650°F, HOLD FOR 2 HOURS MIN - 7/OIL QUENCH/ AGE AT 1325°F, HOLD FOR 16 HOURS MIN - AIR.

PAGE 3 OF ___

STANDARD PRESSED STEEL CO
MANAGER ... LABORATORY

(CONTINUED ON PAGE 2)

ATTACHMENT - 2
2 of 26

STANDARD PRESSED STEEL CO • JENKINTOWN PENNA 19046

CERTIFICATE OF CONFORMANCE

THE BABCOCK & WILCOX COMPANY
POWER GENERATION GROUP
P.O. BOX 1260
LYNCHBURG, VIRGINIA 24505

PAGE 2 OF ?

CONTRACT #620-0017

CUSTOMER PURCHASE ORDER NUMBER	DATE OF CERTIFICATION
031405LE 0083	8/22/78

DWG. #1390060 REV. 5 LAB. NO. 00869
CROM HOLD DOWN BOLT SHOP ORDER #650660-04
ITEM #1 QTY 3/C

ITEM	QUANTITY	PRODUCT NUMBER OR DESCRIPTION	LABORATORY CONTROL NUMBER

(CONTINUED FROM PAGE 1)

4.0 LIQUID PENETRANT INSPECTION: OF CROM BOLTS PERFORMED BY SPS CO. TO ASME SUB. ART. NB2580 AND APPROVED PROCEDURE PT69805 7/30/75 REV.A 6/4/77. 100% TESTED AND ACCEPTED.

D C Sowden LEVEL III
NON-DESTRUCTIVE TESTING INSPECTOR

5.0 CLEANING: PERFORMED BY SPS CO TO APPROVED PROCEDURE C-77365-1 3/21/77 REV.B 7/13/77.

6.0 MECHANICAL TEST RESULTS: (SEE ATTACHMENTS.)

PAGE 4 OF ___

STANDARD PRESSED STEEL CO.
Sean A Doutt
MANAGER MATERIALS ENGINEERING

ATTACHMENT-2
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[3086

SPS

STANDARD PRESSED STEEL CO • JENKINTOWN, PENNA 19046

CERTIFICATE OF CONFORMANCE

THE BABCOCK & WILCOX COMPANY
POWER GENERATION GROUP
P.O. BOX 1260
LYNCHBURG, VIRGINIA 24505

PAGE 1 OF 2

CONTRACT #620-0017

CUSTOMER PURCHASE ORDER NUMBER	DATE OF CERTIFICATION
031409LE CO #3	2/22/78

ITEM	QUANTITY	PRODUCT NUMBER OR DESCRIPTION	LABORATORY CONTROL NUMBER
1	220	DWG.#139006D REV.5 CRDM HOLD DOWN BOLT SHOP ORDER # 650660- 04	LAB. NO. 20870

THE FINISHED PRODUCT WAS MANUFACTURED, TESTED, AND ACCEPTED TO: THE APPLICABLE NOTES CONTAINED IN THE BLUEPRINT, PURCHASE ORDER CHANGE #2, 08-1087000001 REV.04 9/76, 08-1212 REV.01 1-74, 10-1095 REV.02 3-74, 48-1396 REV.01 9-76, 24-1001318 REV.00 12-76 ASME CODE SEC.III 1974 EDITION, NO ADDENDA, INCLUDING THE FOLLOWING:

1.0 RAW MATERIAL: SPEC., ASME SA-453 GR.660 CL.A. PURCHASED FROM: ALTECH
HEAT NO. 20233-2 SPS STEEL DATE: AH 705 S CHEMISTRY: MILL REPORT ATTACHED.

1.1 LIQUID PENETRANT INSPECTION: PERFORMED BY SPS CO. TO ASME SUB. ART. NB2580, AND APPROVED PROCEDURE PT69805 7/30/75 REV.A 4/4/77. 100% OF BARS TESTED AND ACCEPTED.

D C Snyder LEVEL III
NON-DESTRUCTIVE TESTING INSPECTOR

1.2 ULTRASONIC INSPECTION: PERFORMED BY SPS CO. TO ASME ART. NB-2000 AND APPROVED PROCEDURE UT-60010 9/4/75 REV.C 3/24/77. 100% OF BARS TESTED AND ACCEPTED.

[signature] 2/22/78
NON-DESTRUCTIVE TESTING INSPECTOR

2.0 MANUFACTURING: PERFORMED BY SPS CO. IN ACCORDANCE WITH APPROVED PROCEDURE M-77365-5 4/13/77 REV.(NONE)

3.0 HEAT TREAT: PERFORMED BY PRECISION HEAT TREAT CO. TO ASME SA-453 GR.660 CL.A IN ACCORDANCE WITH APPROVED PROCEDURE HT 77365-5 2/18/77
HEAT TREAT SUMMARY: SOLUTION AT 1650°F, HOLD FOR 2 HOURS MIN - /OIL QUENCH/ AGE AT 1325°F, HOLD FOR 16 HOURS MIN - AIR.

PAGE 7 OF ___

STANDARD PRESSED STEEL CO

(CONTINUED ON PAGE 2)

ATTACHMENT - 2
4 of 26

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STANDARD PRESSED STEEL CO • JENKINTOWN, PENNA 19046

CERTIFICATE OF CONFORMANCE

We certify that the material covered by this certificate has been tested in accordance with and has been found to meet the applicable requirements for the material, including any supplementary requirements, forming a part of the description. Test reports are on file where indicated.

THE BABCOCK & WILCOX COMPANY
POWER GENERATION GROUP
P.O. BOX 1260
LYNCHBURG, VIRGINIA 24505

PAGE 2 OF 2

CONTRACT #620-0017

CUSTOMER'S ORDER NUMBER	DATE OF CERTIFICATION
031405LE 0013	2/22/78

DWG. #139006D REV. 5 LAB. NO. 00870
CROM HOLD DOWN BOLT SHOP ORDER #650660 04
ITEM #1 QTY 220

ITEM	QUANTITY	PRODUCT NUMBER OR DESCRIPTION	LABORATORY CONTROL NUMBER

(CONTINUED FROM PAGE 1)

4.0 LIQUID PENETRANT INSPECTION: OF CROM BOLTS PERFORMED BY SPS CO. TO ASME SUB. ART. NB2500 AND APPROVED PROCEDURE PT69805 7/30/75 REV.A 4/4/77. 100% TESTED AND ACCEPTED.

D C Snyder LEVEL III
NON-DESTRUCTIVE TESTING INSPECTOR

5.0 CLEANING: PERFORMED BY SPS CO TO APPROVED PROCEDURE C-77365-1 3/21/77 REV.B 7/13/77.

6.0 MECHANICAL TEST RESULTS: (SEE ATTACHMENTS.)

PAGE 8 OF ___

STANDARD PRESSED STEEL CO
Sean A Smith MATERIALS LABORATORY

ATTACHMENT
5 of 26

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STANDARD PRESSED STEEL CO • JENKINTOWN, PENNA 19046

CERTIFICATE OF CONFORMANCE

THE BABCOCK & WILCOX COMPANY
POWER GENERATION GROUP
P.O. BOX 1260
LYNCHBURG, VIRGINIA 24505

PAGE 1 OF 2

CONTRACT # 620-0017

CUSTOMER PURCHASE ORDER NUMBER	DATE OF CERTIFICATION
031405LE CO#3	2/22/78

ITEM	QUANTITY	PRODUCT NUMBER OR DESCRIPTION	LABORATORY CONTROL NO.
1	220	DWG.#170379C REV.1 HOLD DOWN WASHER SHOP ORDER NO.650662-01	LAB. NO. 00865

THE FINISHED PRODUCT WAS MANUFACTURED, TESTED, AND ACCEPTED TO: THE APPLICABLE NOTES CONTAINED IN THE BLUEPRINT, PURCHASE ORDER CHANGE #2, 08-1087000001 REV.04 9/76, 09-1212 REV.01 1-74, 10-1095 REV.02 3-74, 48-1396 REV.01 9-76, 24-1001318 REV.00 12-76 ASME CODE SEC.III 1974 EDITION, NO ADDENDA, INCLUDING THE FOLLOWING:

1.0 RAW MATERIAL, SPEC. ASME SA-540 GR.B23 CL.1. PURCHASED FROM: REPUBLIC HEAT NO.8060748 SPS STEEL DATE: GC 483 R CHEMISTRY: MILL REPORT ATTACHED

1.1 ULTRASONIC INSPECTION: PERFORMED BY SPS CO. TO ASME SUB ART NB2000 AND APPROVED PROCEDURE UT-60010 9/4/75 REV.C 3/24/77. 100% OF BARS TESTED AND ACCEPTED.

Michael J. Lozano Jr. 2/22/78
NON-DESTRUCTIVE TESTING INSPECTOR

2.0 MANUFACTURING: PERFORMED BY SPS CO. IN ACCORDANCE W/ APPROVED PROCEDURE M-77365-6 1/3/75 REV. NONE.

3.0 HEAT TREAT: PERFORMED BY SPS CO. TO SA-540 GR.B23 CL.1, IN ACCORDANCE WITH APPROVED PROCEDURE HT-77365-6 2/18/77, REV.A 9/16/77. HEAT TREAT SUMMARY: HARDEN @1550°F/2 HRS OIL QUENCH, TEMPER 1000°F / 2 HRS. AIR COOL.

4.0 LIQUID PENETRANT INSPECTION: OF WASHERS PERFORMED BY SPS CO. TO ASME ART NB-2000 PARA. NB 2546 AND APPROVED PROCEDURE PT-69805 7/30/75 REV.A 4/4/77. ALL WASHERS TESTED AND ACCEPTED.

B&W U.S. REP

D C Snyder LEVEL III
NON-DESTRUCTIVE TESTING INSPECTOR

STANDARD PRESSED STEEL CO
MANAGER MATERIALS LABORATORY

(CONTINUED ON PAGE 2)

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ATTACHMENT -2
6 of 26

SPS

STANDARD PRESSED STEEL CO • JENKINTOWN, PENNA

CERTIFICATE OF CONFORMANCE

[illegible]

THE BABCOCK & WILCOX COMPANY
POWER GENERATION GROUP
P.O. BOX 1260
LYNCHBURG, VIRGINIA 24505

PAGE 2 OF 2

CONTRACT # 620-0017

DG.#170379C REV.1 HOLD DOWN WASHER LAB.#30865
DP ORDER #650662-01 ITEM# 1 QTY 220

031405LE CO#5	2/22/78

ITEM	QUANTITY	PRODUCT NUMBER OR DESCRIPTION	LABORATORY CONTROL NUMBER

(CONTINUED FROM PAGE 1)

5.0 CLEANING: PERFORMED BY SPS CO. TO APPROVED PROCEDURE C-77365-1 3/21/77 REV.B 7/13/77

6.0 STRESS RELIEVE TO APPROVED PROCEDURE HT-77365-7 2/18/77 REV. NONE - SUMMARY: HEAT TO 500°F ±25°F - HOLD AT TEMP. 1 HOUR MIN. - AIR COOL.

7.0 HEAT TREAT LOT #1

8.0 MECHANICAL TEST RESULTS:

8.1 HARDNESS: BHN 352-362

8.2 CHARPY V IMPACT @+40°F:

FT/#	MILLS	%
45	28	40
43	28	50
43	34	50
50	32	40
46	33	40
50	32	40

8.3

TENSILE:	166,400	165,700	PSI
YIELD:	153,500	152,700	PSI
ELONG:	16.7	17.7	%
RED. OF AREA:	57.0	58.3	%

B&W QLS RCD

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STANDARD PRESSED STEEL CO
Sean A. [illegible] ...LABORATORY

ATTACHMENT-2
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CJC

[3094

B&W NUCLEAR SERVICE COMPANY

To: S. Dasgupta, Quality Assurance

BWNS 205538 5 (10/89)

From: E. Wilger, Technical Support, NPC E. Wilger

Customer or File: EW/90-002

Subj: IWA-7200 Review for CRDM Holddown Bolts

Date: February 6, 1990

Reference: B&W Contract No. 788-7089070 & Customer's P.O. #5008923 D90

The customer's purchase order specifies that the supplier shall provide certification that the product (CRDM Hold Down Bolt Assembly, B&W P/N 1006110-005) supplied for this purchase order meets the requirements of the 1968 Edition, Summer 1970 Addenda of Section III of the ASME Boiler and Pressure Vessel Code for Class I Components.

The parts being furnished were manufactured to the ASME Boiler and Pressure Vessel Code, 1974 Edition with no addenda, Section III, Class 1, Nuclear Power Plant Components.

In review of the requirements for bolting in accordance with the ASME Boiler and Vessel Code 1968, Summer 1970 Addenda and the 1974, No Addenda of Sections II and III, Class 1, Nuclear Power Plant Components, it has been determined that the bolts are equivalent in physicals, chemicals and testing and are acceptable for the intended application.

2/7/90

Engineering Concurrence

EW/slt

cc: M. B. Prasse
R. E. Klein
R. C. Pillow
S. Fyfitch

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B&W Nuclear Service Company
Engineering & Plant Service Division

CERTIFICATE OF CONFORMANCE
Nuclear Parts Center

CUSTOMER/PLANT SITE: Iolanda Edison Co.

CUSTOMER ORDER NO.: S 008923 D90 CUST. C.O. NO. (S): ------

ORIGINAL/REFERENCED B&W SPECIFICATION/DRAWING (WHEN REQUIRED): ------

NUCLEAR PARTS TECHNICAL DOCUMENT(S): 21-1001171-02

B&W CONTRACT NO.: 788-7089070 QA DATA PACKAGE NO.: 23-1178088-01*

B&W ORDER NO.: 03140SLE B&W CO.O. NO.(S): 01-03

ASME III Certificate of Authorization No. N-1650 expires 1/21/92.

Qty.	CUSTOMER ITEM NO.	B&W P.O. ITEM NO.	B&W P/N	DESCRIPTION
242	1	1,2	1006110-005	CRDM Hold Down Bolt Assy. consisting of: Bolts - HT# 20233-2 (126 ea) HT# 20233-3 (116 ea) Washers - HT# 8060748 (242 ea)

The above parts are supplied in accordance with B&W QA Program 56-1151146-05.

The subject bolts are marked with last 4 digits of BASE Ht No. only.

THE B&W NUCLEAR SERVICE COMPANY, ENGINEERING & PLANT SERVICE DIVISION, HEREBY CERTIFIES THAT THE ITEMS LISTED ABOVE ARE FURNISHED IN ACCORDANCE WITH THE APPLICABLE CODES, SPECIFICATIONS, AND PURCHASE ORDER REQUIREMENTS AND ARE INTERCHANGEABLE IN FORM, FIT AND FUNCTION WITH THOSE ORIGINALLY SUPPLIED, UNLESS OTHERWISE NOTED BELOW.

The referenced QA Data Package has been reviewed by EPS QA and found acceptable, except as noted below. Nonconformance to referenced requirements may result in equipment being released to ship in a QA HOLD status by the EPS QA Department.

Nonconformance(s) to requirements: N/A

Nonconformance(s) will be/was resolved as follows: N/A

Shipment was made because: N/A

*Rev. 01 - Adds Certification for quantity 242 ea. bolt assys. and material verification for HT # 20233-3.

[signature] 2/15/96
Manager EPS QA Date

ATTACHMENT-2
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PUS-21071-7 (4-75)

TO: Manager, NPGD Purchasing
Nuclear Power Generation Division
P. O. Box 1260
Lynchburg, Virginia 24505

SUPPLIER
CERTIFICATE OF CONFORMANCE

Supplier: STANDARD PRESSED STEEL CO. P.O. No.(s): 031405LE

B&W Contract No.(s): 620-0018 C.O. No.(s): #3

Item No.(s): 2 B&W Mark No.(s): NONE

NPGD Specification Number(s): 08-1067000001 REV.04 9/76

Equipment Description: CONTROL ROD DRIVE MECHANISM HOLD DOWN BOLT ASSEMBLIES

Exceptions (List of B&W Approved CVAR Numbers): NONE

The item of equipment identified herein meets the requirements of the above listed specification(s) and purchase order. Any exceptions to the Specifications or purchase order requirements of this Contract known to the undersigned are listed above and have been reported to and approved in writing by The Babcock & Wilcox Company. Documentation is available at the Manufacturer's plant, and documentation, as required by the B&W NPGD QA Data Sheets or Quality Requirements Matrices, has been assembled and is being or has been transmitted to B&W-NPGD.

The undersigned is the Quality Assurance/Control Manager of

STANDARD PRESSED STEEL CO.
(Name of Supplier

N. L. Hand 2/22
Authorized Signature

Manager, Quality Assurance
Title

Instructions for completion of this form are delineated on the reverse side.

ATTACHMENT - 2
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[3103

STANDARD PRESSED STEEL CO • JENKINTO N. PENNA 19046

CERTIFICATE OF CONFORMANCE

THE BABCOCK & WILCOX COMPANY
POWER GENERATION GROUP
P.O. BOX 1260
LYNCHBURG, VIRGINIA 24505

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CONTRACT #62[illegible]-0018

PURCHASE ORDER NUMBER	DATE OF CERTIFICATION
031405LE CO.#3	2/23/78

ITEM	QUANTITY	PRODUCT NUMBER OR DESCRIPTION	LABORATORY CONTROL NUMBER
2	78	DWG.#1390060 REV.5 CROM HOLD DOWN BOLT SHOP ORDER #650660-05	LAB. NO. 00803

THE FINISHED PRODUCT WAS MANUFACTURED, TESTED, AND ACCEPTED TO: THE APPLICABLE NOTES CONTAINED IN THE BLUEPRINT, PURCHASE ORDER CHANGE #2, 08-1087000001, REV.04 - 9/76, 08-1212 REV.01 1-74, 10-1095 REV.02 3-74, 48-1396 REV.01 9-76, 26-[illegible] REV.00 12-76, ASME CODE SEC. III 1974 EDITION, NO ADDENDA, INCLUDING THE FOLLOWING:

1.0 RAW MATERIAL: SPEC., ASME SA-453 GR.660 CL.A. PURCHASED FROM: ALTECH
HEAT NO. 20233-3 SPS STEEL DATE: AH 143 T CHEMISTRY: MILL REPORT ATTACHED.

1.1 LIQUID PENETRANT INSPECTION: PERFORMED BY SPS CO. TO ASME SUB. ART. NB2580, AND APPROVED PROCEDURE PT69805 7/30/75 REV.A 4/4/77. 100% OF BARS TESTED AND ACCEPTED

D.C. Snyder Level III
NON-DESTRUCTIVE TESTING INSPECTOR

1.2 ULTRASONIC INSPECTION: PERFORMED BY SPS CO. TO ASME ART. NB-2000 AND APPROVED PROCEDURE UT-60010 9/4/75 REV.C 3/24/77. 100% OF BARS TESTED AND ACCEPTED.

Michael J. Frazier Jr.
NON-DESTRUCTIVE TESTING INSPECTOR

2.0 MANUFACTURING: PERFORMED BY SPS CO. IN ACCORDANCE WITH APPROVED PROCEDURE M-77365-5 4/13/77 REV.(NONE).

3.0 HEAT TREAT: PERFORMED BY PRECISION HEAT TREAT CO. TO ASME SA-453 GR.660 CL.A IN ACCORDANCE WITH APPROVED PROCEDURE HT 17365-5 2/18/77
HEAT TREAT SUMMARY: SOLUTION AT 1650°F, HOLD FOR 2 HOURS MIN - WATER QUENCH, AGE AT 1325°F, HOLD FOR 16 HOURS MIN - AIR.

CONTINUED ON PAGE 2)

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ATTACHMENT-2
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STANDARD PRESSED STEEL CO. • JENKINTOWN, PENNA 19046

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CERTIFICATE OF CONFORMANCE

THE BABCOCK & WILCOX COMPANY
POWER GENERATION GROUP
P.O. BOX 1260
LYNCHBURG, VIRGINIA 24505

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CONTRACT #620-0018

DWG.#1390060 REV.5 LAB. NO. 00883
CRDM HOLD DOWN BOLT SHOP ORDER#650660-05
ITEM #2 QTY 12

CUSTOMER PURCHASE ORDER NUMBER	DATE OF CERTIFICATION
031405LE CO.#3	2/23/78

ITEM	QUANTITY	PRODUCT NUMBER OR DESCRIPTION	LABORATORY CONTROL NUMBER

(CONTINUED FROM PAGE 1)

4.0 LIQUID PENETRANT INSPECTION: OF CRDM BOLTS PERFORMED BY SPS CO. TO ASME SUB. ART. NB2580 AND APPROVED PROCEDURE PT69805 7/30/75 REV.A 4/4/77. 100% TESTED AND ACCEPTED.

D.C. Snider LEVEL III
NON-DESTRUCTIVE TESTING INSPECTOR

.0 CLEANING: PERFORMED BY SPS CO. TO APPROVED PROCEDURE C-77365-1 3/21/77 REV.B 7/13/77

6.0 MECHANICAL TEST RESULTS: (SEE ATTACHMENTS.)

B&W QLTY RECD

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STANDARD PRESSED STEEL CO.
Sean A. Jarrett
MANAGER METER

cjc

ATTACHMENT-2
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STANDARD PRESSED STEEL CO • JENKINTOWN, PENNA 19046

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CERTIFICATE OF CONFORMANCE

THE BABCOCK & WILCOX COMPANY
POWER GENERATION GROUP
P.O. BOX 1260
LYNCHBURG, VIRGINIA 24505

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CONTRACT #620-0018

031405LE CO.#3 ... 2/23/78

QUANTITY	PRODUCT NUMBER OR DESCRIPTION	LABORATORY CONTROL NUMBER
39	DWG.#139006D REV.5 CRDM HOLD DOWN BOLT SHOP ORDER #650660-05	LAB. NO. 00873

HE FINISHED PRODUCT WAS MANUFACTURED, TESTED, AND ACCEPTED TO: THE APPLICABLE NOTES CONTAINED IN THE BLUEPRINT, PURCHASE ORDER CHANGE #2, 08-1087000001 REV.04 9/76, -1212 REV.01 1-74, 10-1095 REV.02 3-74, 48-1396 REV.01 9/76 24-1001318 REV.00 12-76, ME CODE SEC. III 1974 EDITION, NO ADDENDA, INCLUDING THE FOLLOWING:

.0 RAW MATERIAL: SPEC., ASME SA-453 GR.660 CL.A. PURCHASED FROM: ALTECH
HEAT NO. 20233-3 SPS STEEL D/TE: AM 145 T CHEMISTRY: MILL REPORT ATTACHED.

1.1 LIQUID PENETRANT INSPECTION: PERFORMED BY SPS CO. TO ASME SUB. ART. NB2580, AND APPROVED PROCEDURE PT69805 7/30/75 REV.A 4/4/77. 100% OF BARS TESTED AND ACCEPTED.

D C Snyder LEVEL II
NON-DESTRUCTIVE TESTING INSPECTOR

1.2 ULTRASONIC INSPECTION: PERFORMED BY SPS CO. TO ASME ART. NB-2000 AND APPROVED PROCEDURE UT-60010 9/4/75 REV.C 3/24/77. 100% OF BARS TESTED AND ACCEPTED.

Michael J. Lizzio Jr.
NON-DESTRUCTIVE TESTING INSPECTOR

2.0 MANUFACTURING: PERFORMED BY SPS CO. IN ACCORDANCE WITH APPROVED PROCEDURE M-77365-5 4/13/77 REV.(NONE).

.0 HEAT TREAT: PERFORMED BY PRECISION HEAT TREAT CO. TO ASME SA-453 GR.660 CL.A IN ACCORDANCE WITH APPROVED PROCEDURE HT 77365-5 2/18/77
HEAT TREAT SUMMARY: SOLUTION AT 1650°F, D FOR 2 HOURS MIN - OIL QUENCH/ AGE AT 1325°F, HOLD FOR 16 HOURS MIN - AIR.

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CONTINUED ON PAGE 2

STANDARD PRESSED STEEL CO
MANAGER MATERIALS LABORATORY

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SPS

STANDARD PRESSED STEEL CO • JENKINTOWN, PENNA 19046

CERTIFICATE OF CONFORMANCE

[illegible]

THE BABCOCK & WILCOX COMPANY
POWER GENERATION GROUP
P.O. BOX 1260
LYNCHBURG, VIRGINIA 24505

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DWG.#139006D REV.5 LAB. NO. 00873
CRDM HOLD DOWN BOLT SHOP ORDER#650660-__05
ITEM #2 QTY 39

CONTRACT #620-0018

CUSTOMER PURCHASE ORDER NUMBER	DATE OF CERTIFICATION
031405LE CO.#3	2/23/78

ITEM	QUANTITY	PRODUCT NUMBER OR DESCRIPTION	LABORATORY CONTROL NUMBER

(CONTINUED FROM PAGE 1)

4.0 LIQUID PENETRANT INSPECTION: OF CRDM BOLTS PERFORMED BY SPS CO. TO ASME SUB. ART. NB2580 AND APPROVED PROCEDURE PT69805 7/30/75 REV.A 4/4/77. 100% TESTED AND ACCEPTED.

D C Snyder LEVEL III
NON-DESTRUCTIVE TESTING INSPECTOR

5.0 CLEANING: PERFORMED BY SPS CO. TO APPROVED PROCEDURE C-77365-1 3/21/77 REV.B 7/13/77

6.0 MECHANICAL TEST RESULTS: (SEE ATTACHMENTS.)

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STANDARD PRESSED STEEL CO.
Sean A. Jarrett
MANAGER MATERIALS LABORATORY

ATTACHMENT -2
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STANDARD PRESSED STEEL CO. • JENKINTOWN, PENNA. 19046

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CERTIFICATE OF CONFORMANCE

THE BABCOCK & WILCOX COMPANY
POWER GENERATION GROUP
P.O. BOX 1260
LYNCHBURG, VIRGINIA 24505

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CONTRACT # 620-0016

CUSTOMER PURCHASE ORDER NUMBER	DATE OF SHIPMENT
031403LE CO.#2	1/25/78

ITEM	QUANTITY	PRODUCT NUMBER OR DESCRIPTION	LABORATORY CONTROL NUMBER
	39	DWG.#170379C REV.1 HOLD DOWN WASHER SHOP ORDER NO.650662-01	LAB. NO. 00685

THE FINISHED PRODUCT WAS MANUFACTURED, TESTED, AND ACCEPTED TO THE APPLICABLE NOTES CONTAINED IN THE BLUEPRINT, PURCHASE ORDER CHANGE #2, 08-1087000001 REV.04 8/76, 09-1212 REV.01 1-74, 10-1095 REV.02 3-74, 48-1396 REV.01 9-76, 24-1001318 REV.00 12-76, ASME CODE SEC. III 1974 EDITION, NO ADDENDA, INCLUDING THE FOLLOWING:

1.0 RAW MATERIAL, SPEC. ASME SA-540 GR.B23 CL.1. PURCHASED FROM: REPUBLIC
HEAT NO.3060748 SPS STEEL DATE: GC 483 R CHEMISTRY: MILL REPORT ATTACHED
1.1 ULTRASONIC INSPECTION: PERFORMED BY SPS CO. TO ASME SUB ART NB2000 AND APPROVED PROCEDURE UT-60010 9/4/75 REV.C 3/24/77. 100% OF BARS TESTED AND ACCEPTED.

Michael J. Lozada
NON-DESTRUCTIVE TESTING INSPECTOR

2.0 MANUFACTURING: PERFORMED BY SPS CO. IN ACCORDANCE WITH APPROVED PROCEDURE M-77365-6 1/3/78 REV. NONE.

3.0 HEAT TREAT: PERFORMED BY SPS CO. TO SA-540 GR.B23 CL.1, IN ACCORDANCE WITH APPROVED PROCEDURE HT-77365-6 2/18/77, REV.A 9/16/77. HEAT TREAT SUMMARY: HARDEN @1550°F/2 HRS OIL QUENCH, TEMPER 1000°F / 2 HRS. AIR COOL.

4.0 LIQUID PENETRANT INSPECTION OF WASHERS PERFORMED BY SPS CO. TO ASME ART NB-2000 PARA. NB 2546 AND APPROVED PROCEDURE PT-69805 7/30/75 REV.A 4/4/77. ALL WASHERS TESTED AND ACCEPTED.

E. C. Shaker LEVEL III
NON-DESTRUCTIVE TESTING INSPECTOR

STANDARD PRESSED STEEL CO.
MANAGER MATERIALS LABORATORY

(CONTINUED ON PAGE 2)

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STANDARD PRESSED STEEL CO • JENKINTOWN PENNA 19046 37

CERTIFICATE OF CONFORMANCE

[illegible]

THE BABCOCK & WILCOX COMPANY
POWER GENERATION GROUP
P.O. BOX 1260
LYNCHBURG, VIRGINIA 24505

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CONTRACT # 620-0018

DWG.#1170379, REV. 1 HOLD DOWN WASHER LAB.#00865	CUSTOMER PURCHASE ORDER NUMBER	DATE OF CERTIFICATION
SHOP ORDER #C00662-01 ITEM# 2 QTY 52	031405LE CO.#3	2/23/78

ITEM	QUANTITY	PRODUCT NUMBER OR DESCRIPTION	LABORATORY CONTROL NUMBER

(CONTINUED FROM PAGE 1)

CLEANING: PERFORMED BY SPS CO. TO APPROVED PROCEDURE C-77365-1 3/21/77 REV.B 7/13/77

STRESS RELIEVE TO APPROVED PROCEDURE HT-77365-7 2/18/77 REV. NONE - SUMMARY: HEAT TO [illegible] ±25°F - HOLD AT TEMP. 1 HOUR [illegible] MIN. - AIR COOL.

HEAT TREAT LOT #1

MECHANICAL TEST RESULTS:

1. HARDNESS [illegible]
2. CHARPY V IMPACT @+40°F

	FT/#	MILS	%
	45	28	40
	43	2[illegible]	50
	43	34	50
	50	32	40
	40	3[illegible]	40
	5[illegible]	3[illegible]	40

3. TENSILE	166,400	165,700	PSI
YIELD	153,500	152,7[illegible]	PSI
ELONG.	16.[illegible]	17.7	%
RED. OF AREA	57.[illegible]	58.[illegible]	%

PAGE 4 OF ___

STANDARD PRESSED STEEL [illegible]
[signature]
MANAGER [illegible]

ATTACHMENT - 2
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B&W NUCLEAR SERVICE COMPANY

To: S. Dasgupta, Quality Assurance	BWNS-205538 5 (10/89)
From: E. Wilder, Technical Support, NPC E. Wilder	Customer or File: EW/90-002
Subj: IWA-7200 Review for CRDM Holddown Bolts	Date: February 6, 1990

Refererce: B&W Contract No. 788-7089070 & Customer's P.O. #5008923 D90

The customer's purchase order specifies that the supplier shall provide certification that the product (CRDM Hold Down Bolt Assembly, B&W P/N 1006110-005) supplied for this purchase order meets the requirements of the 1968 Edition, Summer 1970 Addenda of Section III of the ASME Boiler and Pressure Vessel Code for Class 1 Components.

The parts being furnished were manufactured to the ASME Boiler and Pressure Vessel Code, 1974 Edition with no addenda, Section III, Class 1, Nuclear Power Plant Components.

In review of the requirements for bolting in accordance with the ASME Boiler and Vessel Code 1968, Summer 1970 Addenda and the 1974, No Addenda of Sections II and III, Class 1, Nuclear Power Plant Components, it has been determined that the bolts are equivalent in physicals, chemicals and testing and are acceptable for the intended application.

Stephen Bush 2/7/90
Engineering Concurrence

EW/slt

cc: H. B. Prasse
R. R. Klein
R. C. Pillow
S. Fyfitch

ATTACHMENT -2
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BABCOCK & WILCOX
NUCLEAR POWER DIVISION
CERTIFICATE OF CONFORMANCE
NUCLEAR PARTS

CUSTOMER/PLANT SITE: Toledo Edison Co.
CUSTOMER ORDER NO.: Q 019297ST CUST. C.O. NO.(S): -----
ORIGINAL/REFERENCED B&W SPECIFICATION/DRAWING (WHEN REQUIRED): -----
NUCLEAR PARTS TECHNICAL DOCUMENT(S): 21-1101010-03
B&W CONTRACT NO.: 783-7039010 QA DATA PACKAGE NO.: 23-1172097-00
B&W ORDER NO.: 065158 B&W C.O. NO.(S): 001-004

QTY.	CUSTOMER ITEM NO.	B&W P.O. ITEM NO.	B&W/SUPPLIER/ CUSTOMER P/N	DESCRIPTION
4	1	1	1006110-004	Flange Rings, S/N's: 28, 29, 30, 36

The above items are provided in accordance with B&W QA Program 56-1151178-07 previously approved by Toledo Edison.

ASMEIII Class I - ASME Certificate of Authorization No. N-1650 expires Jan. 21, 1989.

THE BABCOCK & WILCOX COMPANY, NUCLEAR POWER DIVISION, HEREBY CERTIFIES THAT THE ITEMS LISTED ABOVE ARE FURNISHED IN ACCORDANCE WITH THE APPLICABLE CODES, SPECIFICATIONS, AND PURCHASE ORDER REQUIREMENTS AND ARE INTERCHANGEABLE IN FORM, FIT, AND FUNCTION WITH THOSE ORIGINALLY SUPPLIED, UNLESS OTHERWISE NOTED BELOW.

The referenced QA Data Package has been reviewed by NPD QA and found acceptable, except as noted below. Nonconformance to referenced requirements may result in equipment being released to ship in a QA HOLD status by the NPD QA Department.

Nonconformance(s) to requirements: N/A

Nonconformance(s) will be/was resolved as follows: N/A

Shipment was made because: N/A

Emily A. Mayhew 6/23/88

~~MANAGER, QCS NPD~~ [initials] 6/23/88 DATE
NE&PS Quality Assurance

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POS-21071A-10 (3-80) 5

SUPPLIER
CERTIFICATE OF CONFORMANCE

Supplier Name & Location Cleveland Special Tool Inc., Wickliffe, Ohio

B&W PO/PA NO.(s) 065158VC CO NO.(s) 1 thru 4

B&W Contract No.(s) 788-325039

Qty.	Item No.	Mark/Part No.	Description
46	01	1006110-004	Flange Rings, MK-120 per Dwg. 1460478-2
			Ht. No. 58761

The material has been ultrasonically tested, magnetic particle examined and 100% visually and dimensionally inspected in accordance with Sec. 3.0 of NP Spec. 06-1144005-01.

The parts have been identified by vibrotool with S/N's: 1 thru 18, and 20 thru 47.

B & W T/M MPD

QA program in accordance with CST Inc.
QA Manual Rev. 1 dated 12-1-76 with
addendas 'A' thru 'D', as audited to
B&W Spec. 09-1212-01, & NCA-3800

Any special certification statements required by this order may be inserted in the space above or on a separate certificate.

The items identified herein meet the requirements of the above listed procurement documents. Any exceptions to the technical or procurement requirements of this contract known to the undersigned have been reported to and approved in writing by B&W-MPGD. Documentation requirements of the B&W-MPGD technical and procurement documents have been met, including retention of auditable records at the supplier's plant and submittal of documents to B&W-MPGD for information and/or approval.

ATTACHMENT-2
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B. Singh
Authorized Signature of Supplier's QA/QC Manager

5-13-85
Date

(REVISED)

See reverse side for form completion instructions.

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CLEVELAND SPECIAL TOOL, INC.

Nuclear/Commercial Quality Fracesso...
Special Machine Work

12811 EAST 260th STREET • WICKLIFFE, OHIO 44092
PHONE: (216) 944-1830

CERTIFICATE OF CONFORMANCE

Customer
Babcock & Wilcox Co.
P.O. Box 10935
Lynchburg, Va. 24506

Date 5-13-85 (Revised)
Purchase Order 065158VC
Contract No. 788-325039
Customer Order

Gentlemen,

We hereby certify that we have conformed to all the requirements of the Purchase Order listed above regarding the material specifications, manufacturing procedures, special processes, and dimensional specifications which you have submitted to us, including those of your latest Change Order No. 1 thru 4, prior to shipment of the items indicated:

46 ea - Flange Rings, MK-120 per Dwg. 1460478-2
P/N 1006110-004
Mt. No. 58761

The material has been ultrasonically tested, magnetic particle inspected and 100% visually and dimensionally inspected in accordance with Sec. 3.0 of SP Spec. 06-1144005-01.

The parts have been identified by vibrotool with S/N's: 1 thru 18, and 20 [redacted] 47.

TJH
MPB

ATTACHMENT-2
20 of 26

QA program in accordance with CST Inc. QA Manual Rev. 1 dated 12-1-76 with addendas 'A' thru 'D', as audited to B&W Spec. 09-1212-01, & MCA-3800.

Signed B Siegel

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[redacted]

Babcock & Wilcox
a McDermott company
Nuclear Power Division

To	S. Dasgupta, Quality Assurance	BWNP 20553A-4 (1/87)
From	E. Wilder, Technical Support, EP&P E. Wilder	Customer or File EW/88-004
Subj	IWA-7200 Review 788-7089010	Date June 20, 1988

The customer's purchase order specifies that the supplier shall provide certification that the product (CRDM Flange Ring, B&W P/N 1006110-004) supplied for this purchase order meets the requirements of the 1968 Edition, Summer 1970 Addenda of Section III of the ASME Boiler and Pressure Vessel Code for Class A.

The parts being furnished were manufactured to the ASME Boiler and Pressure Vessel Code, 1980 Edition, Winter 1981 addenda, Section III, Class I, Nuclear Power Plant Components.

In review of the requirements for material in accordance with the ASME Boiler and Vessel Code 1968, Summer 1970 Addenda and the 1980, Winter 1981 Addenda of Sections II and III, Class 1, Nuclear Power Plant Components, it has been determined that the material is equivalent in physicals, chemicals and testing and is acceptable for the intended application.

Stephen Fyfitch 6/20/88
Engineering Concurrence

EW/slt

cc: H. B. Prasse QB for HBP
R. R. Klein
S. Fyfitch
D. L. Booth

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[redacted]

B&W Nuclear Service Company
Engineering & Plant Service Division

CERTIFICATE OF CONFORMANCE
Nuclear Parts Center

CUSTOMER/PLANT SITE: Toledo Edison Co.

CUSTOMER ORDER NO.: 8 010463 D90 CUST. C.O. NO.(S): ------

ORIGINAL/REFERENCED B&W SPECIFICATION/DRAWING (WHEN REQUIRED): ------

NUCLEAR PARTS TECHNICAL DOCUMENT(S): 21-1144888-03

B&W CONTRACT NO.: 788-7089095 QA DATA PACKAGE NO.: 23-1178125-02*

B&W ORDER NO.: 83-765184-15 B&W CO.O. NO.(S): 16-17

ASME III Certificate of Authorization No. N-1650 expires 1/21/92.
CVAR # 87-1193600-00

QTY.	CUSTOMER ITEM NO.	B&W P.O. ITEM NO.	B&W P/N	DESCRIPTION
48	1	1	1006110-004	Flange Rings, S/N's: 79421-46, 37, 2, 24, 22, 44, 43, 27, 14, 15, 50, 33, 3, 40, 48, 21, 20, 4, 11, 49 Rev.01 -- Added 39, 08, 35 Rev.02 -- Adds: 51, 53-57, 59, 60, 62, 64-69, 71, 72.

The above items meet all of the requirements of the purchase order and are supplied in accordance with BWNS QA Program 56-1151178-08.

THE B&W NUCLEAR SERVICE COMPANY, ENGINEERING & PLANT SERVICE DIVISION, HEREBY CERTIFIES THAT THE ITEMS LISTED ABOVE ARE FURNISHED IN ACCORDANCE WITH THE APPLICABLE CODES, SPECIFICATIONS, AND PURCHASE ORDER REQUIREMENTS AND ARE INTERCHANGEABLE IN FORM, FIT AND FUNCTION WITH THOSE ORIGINALLY SUPPLIED, UNLESS OTHERWISE NOTED BELOW.

The referenced QA Data Package has been reviewed by EPS QA and found acceptable, except as noted below. Nonconformance to referenced requirements may result in equipment being released to ship in a QA HOLD status by the EPS QA Department.

Nonconformance(s) to requirements: N/A

Nonconformance(s) will be/was resolved as follows: N/A

Shipment was made because: N/A

*Rev. 02 - Increases qty. from 23 to 48 each (Total P.O. qty.)
Adds S/N's: 51, 53-57, 59, 60, 62, 64-69, 71, 72.

E A Mayhew for
Manager, EPS QA

5/31/90
Date

ATTACHMENT-2
22 of 26

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[1617

4 URS

B&W NUCLEAR SERVICE COMPANY

To: S. Dasgupta, Quality Assurance

From: C.A. Ouellette, Materials Support C.A. Ouellette

Subj: IWA-7200 Reconciliation 788.7089.095

BWNS-205538-5 (10/8

Customer or File

Date: February 20, 1990

The customer's purchase order, S 010463 D90, specifies that the supplier shall provide certification that the product (Flange for CRDM connection to reactor vessel nozzle flange, B&W P/N 1006110-004) supplied meets the requirements of the ASME Boiler and Pressure Vessel Code for Class I, Nuclear Power Plant Components, Section III, 1968 edition through Summer 1970 addenda.

The parts were manufactured to the ASME Boiler and Pressure Vessel Code, Section III, 1974 edition with no addenda.

It has been determined through a review of the ASME Boiler and Pressure Codes for Class I, Nuclear Power Plant Components, Sections II and III, 1968 edition through Summer 1970 addenda and 1974 edition with no addenda, that the plates are equivalent in chemicals, physicals, and testing, and are acceptable for the intended application.

K S Price 2/20/90
Technical Concurrence

cc: RR Klein
HB Prasse
KS Price
CA Ouellette
E Wilder

ATTACHMENT-2
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PAGE 2 OF ___

10

B&W Nuclear Service Company
Engineering & Plant Service Division

CERTIFICATE OF CONFORMANCE
Nuclear Parts Center

CUSTOMER/PLANT SITE: Toledo Edison Co.

CUSTOMER ORDER NO.: S 010463 D90 CUST. C.O. NO.(S): ------

ORIGINAL/REFERENCED B&W SPECIFICATION/DRAWING (WHEN REQUIRED): ------

NUCLEAR PARTS TECHNICAL DOCUMENT(S): 21-1144888-02

B&W CONTRACT NO.: 788-7089095 QA DATA PACKAGE NO.: 23-1178125-00

B&W ORDER NO.: 83-765184-13 B&W CO.O. NO.(S): 14

ASME III Certificate of Authorization No. N-1650 expires 1/21/92.

QTY.	CUSTOMER ITEM NO.	B&W P.O. ITEM NO.	B&W P/N	DESCRIPTION
20	1	1	1006110-004	Flange Rings, S/N's: 79421-46, 37, 2, 24, 22, 44, 43, 27, 14, 15, 50, 33, 3, 40, 48, 21, 20, 4, 11, 49.

The above supplied items comply with all of the requirements of the purchase order.

The above items are supplied in accordance with BWNS QA Program 56-1151178-08.

THE B&W NUCLEAR SERVICE COMPANY, ENGINEERING & PLANT SERVICE DIVISION, HEREBY CERTIFIES THAT THE ITEMS LISTED ABOVE ARE FURNISHED IN ACCORDANCE WITH THE APPLICABLE CODES, SPECIFICATIONS, AND PURCHASE ORDER REQUIREMENTS AND ARE INTERCHANGEABLE IN FORM, FIT AND FUNCTION WITH THOSE ORIGINALLY SUPPLIED, UNLESS OTHERWISE NOTED BELOW.

The referenced QA Data Package has been reviewed by EPS QA and found acceptable, except as noted below. Nonconformance to referenced requirements may result in equipment being released to ship in a QA HOLD status by the EPS QA Department.

Nonconformance(s) to requirements: N/A

Nonconformance(s) will be/was resolved as follows: N/A

Shipment was made because: N/A

ATTACHMENT-2
24 of 26

Manager, EPS QA — Date: 2-27-96

PAGE 1 OF 2

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BW B&W NUCLEAR SERVICE COMPANY

7 2 2 2 1 2 5

To: S. Dasgupta, Quality Assurance	BWNS-20553B-5 (10/89)
From: C.A. Ouellette, Materials Support *C.A. Ouellette*	Customer or File
Subj: IWA-7200 Reconciliation 788-7089-095	Date: February 20, 1990

The customer's purchase order, S 010463 D90, specifies that the supplier shall provide certification that the product (Flange for CRDM connection to reactor vessel nozzle flange, B&W P/N 1006110-004) supplied meets the requirements of the ASME Boiler and Pressure Vessel Code for Class I, Nuclear Power Plant Components, Section III, 1968 edition through Summer 1970 addenda.

The parts were manufactured to the ASME Boiler and Pressure Vessel Code, Section III, 1974 edition with no addenda.

It has been determined through a review of the ASME Boiler and Pressure Codes for Class I, Nuclear Power Plant Components, Sections II and III, 1968 edition through Summer 1970 addenda and 1974 edition with no addenda, that the plates are equivalent in chemicals, physicals, and testing, and are acceptable for the intended application.

KS Price 2/20/90
Technical Concurrence

cc: RR Klein
HB Prasse
KS Price
CA Ouellette
E Wilder

ATTACHMENT - 2
25 of 26

BW Nuclear Service Company
Engineering & Plant Service Division

CERTIFICATE OF CONFORMANCE
Nuclear Parts Center

CUSTOMER/PLANT SITE: Toledo Edison Co.

CUSTOMER ORDER NO.: S 010463 D90 CUST. C.O. NO.(S): ------

ORIGINAL/REFERENCED B&W SPECIFICATION/DRAWING (WHEN REQUIRED): ------

NUCLEAR PARTS TECHNICAL DOCUMENT(S): 21-1144888-02

B&W CONTRACT NO.: 788-7089095 QA DATA PACKAGE NO.: 23-1178125-01*

B&W ORDER NO.: 83-765184-13 B&W CO.O. NO.(S): 14

ASME III Certificate of Authorization No. N-1650 expires 1/21/92.

QTY.	CUSTOMER ITEM NO.	B&W P.O. ITEM NO.	B&W P/N	DESCRIPTION
23	1	1	1006110-004	Flange Rings, S/N's: 79421-46, 37, 2, 24, 22, 44, 43, 27, 14, 15, 50, 33, 3, 40, 48, 21, 20, 4, 11, 49, *Added: 39, 08, 35.

The above supplied items comply with all of the requirements of the purchase order.
BWNS QA Program 56-1151178-08 applies to this order.

THE B&W NUCLEAR SERVICE COMPANY, ENGINEERING & PLANT SERVICE DIVISION, HEREBY CERTIFIES THAT THE ITEMS LISTED ABOVE ARE FURNISHED IN ACCORDANCE WITH THE APPLICABLE CODES, SPECIFICATIONS, AND PURCHASE ORDER REQUIREMENTS AND ARE INTERCHANGEABLE IN FORM, FIT AND FUNCTION WITH THOSE ORIGINALLY SUPPLIED, UNLESS OTHERWISE NOTED BELOW.

The referenced QA Data Package has been reviewed by EPS QA and found acceptable, except as noted below. Nonconformance to referenced requirements may result in equipment being released to ship in a QA HOLD status by the EPS QA Department.

Nonconformance(s) to requirements: N/A

Nonconformance(s) will be/was resolved as follows: N/A

Shipment was made because: N/A

*Rev. 01-Increase quantity to 23. Added S/N's 39, 08, 35. IWA 7200 REVIEW contained in Rev. 00.

Toledo Edison
QA Document Review
1 ☑ APPR...
2 ☐ ...
3 ☐ ... NOT USE
Approval of this document does not relieve supplier from full compliance with P.O./contract specification requirements.

E A Mac... (signature)
Manager, EPS QA

3/9/90
Date

ATTACHMENT-2
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PAGE 1 OF 1

FORM NR-1 REPORT OF REPAIR ☐ MODIFICATION ☒ OR INSTALLATION OF REPLACEMENT(S) ☐ TO NUCLEAR COMPONENTS AND SYSTEMS IN NUCLEAR POWER PLANTS

1. Work performed by B & W NUCLEAR SERVICE COMPANY (name) PER: P.O. C605600D92 TASK 5.0 (repair organization's P.O. no., job no., etc.)
3315 OLD FOREST ROAD, P.O. BOX 10935, LYNCHBURG, Va 24506 (address)

2. Owner TOLEDO EDISON COMPANY (name)
300 MADISON AVENUE, TOLEDO OHIO 43652 (address)

3. Name, address and identification of nuclear power plant DAVIS BESSE NUCLEAR POWER STATION
5501 NORTH STATE ROUTE 2, OAK HARBOR OHIO 43449

4. Identification of system OTSG 1-1 063-01 (FEEDWATER)

5. a: Identification of component repaired, modified or replaced OTSG 1-1 FEEDWATER RISER PIPE
b: Name of manufacturer BABCOCK & WILCOX
c: Identifying nos. 620-0014-55-11 (mfr.'s serial no.) | N-158 (Nat'l. Bd. no.) | N/A (jurisdictional no.) | OTSG 1-1 (other) | 1972 (year built)

6. Applicable section(s) XI of ASME Code, 1986 edition N/A addenda NO Code Case N/A

7. Design responsibilities BABCOCK & WILCOX

* 8. Tests conducted: hydrostatic ☐ pneumatic ☐ design pressure ☐ pressure _____ psi. INSERVICE

9. Description of work ADD AN ADDITIONAL FIELD WELD TO FEEDWATER RISER PIPE AT EACH RISER (use of additional sheet(s) or sketch(es) is acceptable if properly identified)
ON OTSG 1-1 (32) WELDS TOTAL, ADDED FIELD WELDS PER NCR 93-0120 AND 93-0115, REPLACED STUDS AND NUTS AT RISER LOCATION 1-31 (8 EA.) AND 1-19 (1 EA.) 5 O'CLOCK POSITION.

10. Remarks: WPS USED 51-1221674-01
WELD TRAVELER 50-1218800-02

* PERFORMED BY TOLEDO EDISON

ALSO SEE CODE CASES N-474, 416 AND 416-1

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that all design, material and workmanship on this MODIFICATION (repair, modification or replacement) conforms to the applicable section of the ASME Code.

Certificate of Authorization no. 64 to use the "NR" stamp expires MAY 17 1994

Signed BWNS (repair organization) for S.DasGupta (authorized representative) MANAGER, BWNS QA (title) 5/6 (date) 1993

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors, and certificate of competency issued by the state or province of OHIO and employed by HSB I&I CO of HARTFORD CT have inspected the repair, modification or replacement described in this report on 5-6 1993 and state that to the best of my knowledge and belief, this repair, modification or replacement has been made or constructed in accordance with Section XI and Section III of the ASME Code and the National Board rules as defined in the publications NB-65 and NB-102, current editions. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair, modification or replacement described in this report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 5-6 1993 Signed _____ (Authorized Inspection) Commissions NB10992 ANI) _____ (Nat'l. Bd. no. (including endorsements) state or province and number)

This form may be obtained from The National Board of Boiler and Pressure Vessel Inspectors, 1055 Crupper Ave., Columbus, OH 43229

NB-81
Rev. 4

FORM NR-1 REPORT OF REPAIR ☐ MODIFICATION ☒ OR INSTALLATION OF REPLACEMENT(S) ☐ TO NUCLEAR COMPONENTS AND SYSTEMS IN NUCLEAR POWER PLANTS

1. Work performed by B&W NUCLEAR SERVICE COMPANY (name) PER: P.O. C605600092 TASK 5.0 (repair organization's P.O. no., job no., etc.)

3315 OLD FOREST ROAD P.O. BOX 10935, LYNCHBURG, Va. 24506 (address)

2. Owner TOLEDO EDISON COMPANY (name)

300 MADISON AVENUE TOLEDO OHIO 43652 (address)

3. Name, address and identification of nuclear power plant DAVIS BESSE NUCLEAR POWER STATION
5501 NORTH STATE ROUTE 2, OAK HARBOR OHIO 43449

4. Identification of system OTSG 1-2 063-01

5. a: Identification of component repaired, modified or replaced OTSG 1-2 FEEDWATER RISER PIPE

b: Name of manufacturer BABCOCK & WILCOX

c: Identifying nos. 620-0014-55-12 (mfr.'s serial no.) N-159 (Nat'l. Bd. no.) N/A (jurisdictional no.) OTSG 1-2 (other) 1972 (year built)

6. Applicable section(s) XI of ASME Code, 19 86 edition N/A addenda NO Code Case N/A

7. Design responsibilities BABCOCK & WILCOX

* 8. Tests conducted: hydrostatic ☐ pneumatic ☐ design pressure ☐ pressure _____ psi. INSERVICE

9. Description of work OTSG 1-2 (32) WELDS TOTAL; ADD AN ADDITIONAL FIELDWELD TO FEEDWATER (use of additional sheet(s) or sketch(es) is acceptable if properly identified)

RISER PIPE AT EACH RISER. REPLACE STUDS & NUTS AT RISER LOCATIONS 2-25 (BEA.), 2-14 (BEA.), 2-29 (BEA.) AND 2-27 (BEA.)

10. Remarks: WPS USED 51-1221674-01

WELD TRAVELER 50-12 18800-02

* PERFORMED BY TOLEDO EDISON

ALSO SEE CODE CASES N-474, 416, 416-1

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that all design, material and workmanship on this MODIFICATION (repair, modification or replacement) conforms to the applicable section of the ASME Code.

Certificate of Authorization no. 64 to use the "NR" stamp expires MAY 17 1994

Signed BWNS (repair organization) Per Attached For S. DasGupta (authorized representative) MANAGER, BWNS QA (title) 5/6 (date), 1993

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors, and certificate of competency issued by the state or province of OHIO and employed by HSB I&I Co. of HARTFORD CT have inspected the repair, modification or replacement described in this report on 5-6 1993 and state that to the best of my knowledge and belief, this repair, modification or replacement has been made or constructed in accordance with Section XI and Section III of the ASME Code and the National Board rules as defined in the publications NB-65 and NB-102, current editions. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair, modification or replacement described in this report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 5-6 1993 Signed Robert E. Cook (Authorized Inspector) Commissions NB 10993 (ANI) (Nat'l. Bd. no. (including endorsement(s)) state or province and number)

This form may be obtained from The National Board of Boiler and Pressure Vessel Inspectors, 1055 Crupper Ave., Columbus, OH 43229

NB-61
Rev. 4

FORM NR-1 REPORT OF REPAIR ☐ MODIFICATION ☒ OR INSTALLATION OF REPLACEMENT(S) ☐ TO NUCLEAR COMPONENTS AND SYSTEMS IN NUCLEAR POWER PLANTS

1. Work performed by B&W NUCLEAR SERVICE COMPANY PER PO C6056000D92 TASK 5.2A
(name) (repair organization's P.O. no., job no., etc.)
3315 OLD FOREST ROAD, PO BOX 10935 LYNCHBURG, VA 24506
(address)

2. Owner TOLEDO EDISON COMPANY
(name)
300 MADISON AVENUE, TOLEDO OHIO 43652
(address)

3. Name, address and identification of nuclear power plant DAVIS-BESSE NUCLEAR POWER STATION
5501 NORTH STATE ROUTE 2, OAK HARBOR, OHIO 43449

4. Identification of system OTSG 1-1 063-01

5. a: Identification of component repaired, modified or replaced OTSG - 1-1
b: Name of manufacturer BABCOCK & WILCOX
c: Identifying nos. 620-0016-55-11 (mfr's serial no.) | N-15B (Nat'l. Bd. no.) | N/A (jurisdictional no.) | OTSG 1-1 (other) | 1972 (year built)

* 6. Applicable section(s) XI of ASME Code, 19 86 edition N/A addenda NO Code Case N/A

7. Design responsibilities BABCOCK & WILCOX

** 8. Tests conducted: hydrostatic ☐ pneumatic ☐ design pressure ☐ pressure _____ psi.

9. Description of work PERFORM TUBE PLUGGING AND STABILIZATION BASED ON EDDY CURRENT EXAMINATIONS IN OTSG 1-1 (B STEAM GENERATOR INLET AND OUTLET)
(use of additional sheet(s) or sketch(es) is acceptable if properly identified)

10. Remarks: SEE BWNS FIELD PROCEDURE 1154835A REV. 29 FOR DOCUMENTATION OF WORK PERFORMED.

SEE (3) PAGE LIST IDENTIFIED AS GCIR 93-440 Pg 2 OF 13 THRU 4 OF 13 FOR ROW, COL., AND PLUG SERIAL NUMBER INSTALLED

** N/A ASME SECTION XI 1986 NO ADDENDA

* ALSO SEE ASME SECTION III 1986 NO ADDENDA AND 1989 CODE CASE N-474-1
* MATERIAL: ASME SECTION II 1968 EDITION WITH SUMMER 1968 ADDENDA
* MANUFACTURER: ASME SECTION III 1968 EDITION WITH SUMMER 1968 ADDENDA

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that all design, material and workmanship on this MODIFICATION (repair, modification or replacement) conforms to the applicable section of the ASME Code.

Certificate of Authorization no. 64 to use the "NR" stamp expires MAY 17 19 94

Signed BWNS (repair organization) For S. DasGupta (authorized representative) MANAGER, BWNS QA (title) 4-20 (date) 19 93

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors, and certificate of competency issued by the state or province of OHIO and employed by H.S.B.I. AND I. Co. of HARTFORD CT have inspected the repair, modification or replacement described in this report on 4-20 19 93 and state that to the best of my knowledge and belief, this repair, modification or replacement has been made or constructed in accordance with Section XI and Section III of the ASME Code and the National Board rules as defined in the publications NB-65 and NB-102, current editions. By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the repair, modification or replacement described in this report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 4-20 19 93 Signed Robert E. Cook (authorized inspector) Commissions NB10992 (ANI) Ohio Comm (Nat'l. Bd. no. including endorsement(s) state or province and number)

This form may be obtained from The National Board of Boiler and Pressure Vessel Inspectors, 1055 Crupper Ave., Columbus, OH 43229

NB-61
Rev. 4

1. Work performed by B & W NUCLEAR SERVICE COMPANY PER: P.O. C605600D92 TASK # 5.2A
(name) (repair organization's P.O. no., job no., etc.)

3315 OLD FOREST ROAD, P.O. BOX 10935 LYNCHBURG, VA. 24506
(address)

2. Owner TOLEDO EDISON COMPANY
(name)

300 MADISON AVENUE, TOLEDO OHIO 43652
(address)

3. Name, address and identification of nuclear power plant DAVIS BESSE NUCLEAR POWER STATION
5501 NORTH STATE ROUTE 2 OAK HARBOR, OHIO 43449

4. Identification of system OTSG 1-2 063-01

5. a: Identification of component repaired, modified or replaced OTSG 1-2

b: Name of manufacturer BABCOCK & WILCOX

c: Identifying nos. 620-0014-55-12 (mfr.'s serial no.) | N-159 (Nat'l. Bd. no.) | N/A (jurisdictional no.) | OTSG 1-2 (other) | 1972 (year built)

6. Applicable section(s) XI of ASME Code, 1986 edition N/A addenda NO Code Case N/A

7. Design responsibilities BABCOCK & WILCOX

8. Tests conducted: hydrostatic ☐ pneumatic ☐ design pressure ☐ pressure _____ psi.

9. Description of work PERFORM TUBE PLUGGING AND STABILIZATION BASED ON EDDY CURRENT
(use of additional sheet(s) or sketch(es) is acceptable if properly identified)

EXAMINATIONS IN OTSG 1-2 (A STEAM GENERATOR INLET AND OUT LET)

10. Remarks: SEE BWNS FIELD PROCEDURE 1154835A REV. 29 FOR DOCUMENTATION OF WORK PERFORMED.

SEE ATTACHED (20) PAGE LIST IDENTIFIED AS GCIR 93-471 PG 2 OF 41 THRU 21 OF 41 FOR ROW, COL., AND PLUG SERIAL NUMBER INSTALLED

N/A ASME SECTION XI 1986 NO ADDENDA

* ALSO SEE ASME SECTION III 1986 NO ADDENDA AND 1989 CODE CASE N-474-1
* MATERIAL: ASME SECTION II 1968 EDITION WITH SUMMER 1968 ADDENDA
* MANUFACTURER: ASME SECTION III 1968 EDITION WITH SUMMER 1968 ADDENDA

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that all design, material and workmanship on this MODIFICATION (repair, modification or replacement) conforms to the applicable section of the ASME Code.

Certificate of Authorization no. 64 to use the "NR" stamp expires MAY 17 1994

Signed BWNS (repair organization) For S. DASGUPTA (authorized representative) MANAGER, BWNS QA (title) 4-20 (date) 1993

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors, and certificate of competency issued by the state or province of OHIO and employed by H. S. B. I. BOILER INS. CO. of HARTFORD, CT have inspected the repair, modification or replacement described in this report on 4-20 1993 and state that to the best of my knowledge and belief, this repair, modification or replacement has been made or constructed in accordance with Section XI and Section III of the ASME Code and the National Board rules as defined in the publications NB-65 and NB-102, current editions. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair, modification or replacement described in this report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 4-20 1993 Signed Robert E. Cook (Authorized Inspector) Commissions NB10992(+NI) Ohio Commission (Nat'l. Bd. no. (including endorsements) state or province and number)

This form may be obtained from The National Board of Boiler and Pressure Vessel Inspectors, 1055 Crupper Ave., Columbus, OH 43229

NB-81
Rev. 4

FORM NR-1 REPORT OF REPAIR ☐ MODIFICATION ☒ OR INSTALLATION OF REPLACEMENT(S) ☒ TO NUCLEAR COMPONENTS AND SYSTEMS IN NUCLEAR POWER PLANTS

1. Work performed by B&W NUCLEAR SERVICE COMPANY (name) PER P.O. C606600 D92 TASK # 428 (repair organization's P.O. no., job no., etc.)

3315 OLD FOREST ROAD, P.O. BOX 10935 LYNCHBURG Va 24506 (address)

2. Owner TOLEDO EDISON COMPANY (name)

300 MADISON AVENUE, TOLEDO OHIO 43652 (address)

3. Name, address and identification of nuclear power plant DAVIS BESSE NUCLEAR POWER STATION
5501 NORTH STATE ROUTE 2, OAK HARBOR, OHIO 43449

4. Identification of system MAKE UP 065-01

5. a: Identification of component repaired, modified or replaced MUIA VALVE

b: Name of manufacturer VELAN INC.

** c: Identifying nos. (mfr.'s serial no.) (Nat'l. Bd. no.) (jurisdictional no.) (other) (year built)

* 6. Applicable section(s) XI of ASME Code, 19 86 edition N/A addenda NO Code Case N/A

7. Design responsibilities VELAN INC

☒ 8. Tests conducted: hydrostatic ☒ pneumatic ☐ design pressure ☐ pressure _____ psi.

9. Description of work PERFORM REPAIR WORK ON LETDOWN COOLER VALVE MUIA VALVE ** (use of additional sheet(s) or sketch(es) is acceptable if properly identified)

PRESERVICE HYDROSTATIC TEST TO BE PERFORMED BY TOLEDO EDISON. (LEAKAGE)

10. Remarks: SEE FPR-93-0059-701 FOR APPROVAL OF MATERIALS DIFFERENT THAN ORIGINAL DESIGN

* ALSO SEE 1968 ASME STANDARD CODE FOR PUMPS AND VALVES (DRAFT)

** SEE: VELAN FORGED GATE VALVE MAINTENANCE (03-1221774), PACKING VALVES (03-1271773), MAINTENANCE AND REPAIR OF LIMITORQUE VALVE ACTUATORS TYPES SMB-00 THROUGH SMB-000 (03-1221722) FOR DOCUMENTATION OF WORK.
REPLACED WEDGE STOCK CODE T326313; SA182 FXM-19 STELLITED; HEAT # 697657
REPLACED STEM STOCK CODE T326903; SA564, 6R630; HEAT # H3364

*** PARTS FOR VALVE ORIGINALLY CONSTRUCTED TO PRE ASME SECTION III (BEFORE 1971) N-2 CODE DATA REPORT NOT REQUIRED.

☒ PERFORMED BY TOLEDO EDISON

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that all design, material and workmanship on this REPLACEMENT/MODIFICATION (repair, modification or replacement) conforms to the applicable section of the ASME Code.

Certificate of Authorization no. 64 to use the "NR" stamp expires MAY 17 19 94

Signed BWNS (repair organization) Lisa Pettinato For S. DASGUPTA (authorized representative) MANAGER, BWNS QA (title) 5/6 (date) 19 93

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors, and certificate of competency issued by the state or province of OH. and employed by H.S.B.I.&C. Co. of HARTFORD, CT have inspected the repair, modification or replacement described in this report on 5-6, 1993 and state that to the best of my knowledge and belief, this repair, modification or replacement has been made or constructed in accordance with Section XI and Section III of the ASME Code and the National Board rules as defined in the publications NB-65 and NB-102, current editions. By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the repair, modification or replacement described in this report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 5-6, 1993 Signed Robert E. Cook (Authorized Inspector) Commissions NB 11554 (ANI) Ohio Commission (Nat'l. Bd. no. (including endorsements) state or province and number)

This form may be obtained from The National Board of Boiler and Pressure Vessel Inspectors, 1055 Crupper Ave., Columbus, OH 43229

NB-81
Rev. 6

FORM NR-1 REPORT OF REPAIR ☐ MODIFICATION ☒ OR INSTALLATION OF REPLACEMENT(S) ☐ TO NUCLEAR COMPONENTS AND SYSTEMS IN NUCLEAR POWER PLANTS

1. Work performed by Welding Services Inc. (name) S046410D93 (repair organization's P. O. no. job. no., etc.)
2225 Skyland Ct., Norcross, Georgia, 30071 (address)

2. Owner Toledo Edison Company (name)
300 Madison Ave., Toledo, Ohio 43652 (address)

3. Name, address and identification of nuclear power plant Davis-Besse Nuclear Power Plant Unit 1 5501 N. S.R. 2, Oak Harbor, Ohio 43449

4. System Reactor Coolant, Steam Generator 1-2

5. a: Component repaired, modified or replaced OTSG 1-2
b: Name of manufacturer Babcock & Wilcox Company
c: Identifying nos. 620-0014-55-12 (mfr.'s serial no.), N159, (Nat'l. Bd. No.) N/A (jurisdictional no.) N/A (other) 1972 (year built)
d: Construction Code ASME III 1968 (edition) Summer 1968 (addenda) 1332-4, 1407-1 (Code Case(s)) A (Code Class)

6. Section XI 1986 (edition) None (addenda) None (Code Case(s))

7. Applicable edition of ASME Code Section XI under which repairs, modifications, or replacements were made: None (edition) None (addenda) None (Code Case(s))

8. Applicable edition of Construction Code under which repairs, modifications, or replacements were made: ASME Sec. III (Code) 1986 (edition) None (addenda) (Code Case(s))

9. Design responsibilities Toledo Edison

10. Tests conducted: hydrostatic ☐ pneumatic ☐ design pressure ☐ pressure ______ psi 1) Acceptance to be performed by Toledo Edison

11. Description of work (use of additional sheet(s) or sketch(es) is acceptable if properly identified)
Repair of cladding per ASME Sec III NB 4622.10 on the OTSG 1-2 Generator Upper Hand Hole Flange Face. WPS #M03243 R/O 7 WPS #A08240 R/O. WSI performed NDE. and Cooperheat

12. Remarks: supplied preheat and intermediate postweld heat treatment. NDE was performed per WSI QAP 9.6 Rev. 0, Dye Penetrant Examination.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and the repair, modification or replacement of the items described above conforms to Section XI of the ASME Code and the National Board rules as defined in the publication NB-102, current edition.
Certificate of Authorization no. NR-69 to use the "NR" stamp expires Nov. 7, 1995

Date 4-7 1993 Signed Welding Services Inc. (repair organization) [signature] (authorized representative) QA Supervisor (title)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors, and certificate of competency issued by the state or province of OHIO and employed by HSBI + I. Co. of Hartford, CT have inspected the repair, modification or replacement describe in this report on 4/8, 1993 and state that to the best of my knowledge and belief, this repair, modification or replacement has been made in accordance with Section XI of the ASME Code and the National Board rules as defined in the publication NB-102, current edition. By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the repair, modification or replacement described in this report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 4/8 1993 Signed Robert E. Cook (Authorized Inspector) Commissions KB10952 (own), Ohio Comm (Nat'l Bd. No. (including endorsements) state or province and number)