

SUMMARY

VIRGINIA ELECTRIC & POWER COMPANY
NORTH ANNA POWER STATION UNIT #2

2nd OUTAGE/1st PERIOD/1st INTERVAL

I. Introduction

An inservice examination of Class 1 and 2 components and piping, including two reactor coolant pump flywheels, reactor vessel weld, nozzle welds, ligaments, vessel interior, and closure head was conducted at North Anna Power Station Unit 2 from April 1, 1983 to May 26, 1983. The examinations were performed in accordance with an approved examination program.

Examination procedures were approved prior to the examinations, and certification documents relative to personnel, equipment, and materials were reviewed and determined to be satisfactory.

Inspections, witnessing, and surveillance of the examinations and related activities were conducted by personnel from the Hartford Steam Boiler Inspection and Insurance Company, North Anna Station Quality Assurance Department, and North Anna Station technical staff.

II. Limitations

Some of the arrangements and details of the piping system and components were designed and fabricated before the access and examination requirements of Section XI of the 1974 Code could be applied; consequently some examinations are limited or not practical due to geometric configuration or accessibility. Generally these limitations exist at all fitting to fitting joints such as elbow to tee, elbow to valve, reducer to valve, etc., where geometry and sometimes surface condition preclude ultrasonic coupling or access for the required scan length.

III. Examination

Examinations were conducted to review as much of the examination zones as was practical, within geometric, metallurgical and physical limitations. When the required ultrasonic examination volume or area could not be examined 100%, the examination was considered to be partial (PAR) and so noted. Generally PAR's are noted at fitting to fitting assemblies and in areas where integrally welded supports, lugs, or hangers, etc., preclude access to some part of the examination.

IV. Results

The reactor vessel examination performed, utilizing the remote operated tool, revealed no indication in the welds. A detailed explanation of the inspection may be found on Summary Report under Reactor Vessel Inservice Inspection Program 2nd Outage/1st Period/1st Interval.

The balance of plant non-destructive examinations resulted in a total of 7 recordable indications being noted on the basis of procedure recording criteria, which generally are more critical than specified ASME Section XI acceptance standards. Seven indications were treated and dispositioned by the North Anna Station Maintenance Department.

A summary of the indications and dispositions follows:

- A. Three indications were related to boric acid residue or rust on bolting and flange areas due to minor leakage. The affected areas were cleaned, re-examined, and accepted.
- B. Two indications were related to nuts not properly engaged on studs. The areas were tightened, re-examined, and accepted.
- C. Two indications were related to improper thread engagement on studs. The areas were tightened, re-examined, and accepted.

A compilation of all recorded indications and their disposition by maintenance report is available, should you require more detailed information, the entire Inservice Inspection Program is maintained on file at the facility and the corporate office.

INSERVICE INSPECTION REPORT

INTERVAL - 1
PERIOD - 1
OUTAGE - 2

FOR THE

NORTH ANNA UNIT #2 NUCLEAR POWER STATION
P.O. BOX 402
MINERAL, VIRGINIA 23117

FOR

VIRGINIA ELECTRIC AND POWER COMPANY
P.O. BOX 1194
RICHMOND, VIRGINIA 23261

OUTAGE DATE: MAY 1983
COMMERCIAL SERVICE DATE: DECEMBER 1980
OPERATING CAPACITY: 907 MWe

PREPARED BY:

WESTINGHOUSE ELECTRIC CORPORATION
NUCLEAR SERVICES INTEGRATION DIVISION
INSPECTION SERVICE
P.O. BOX 2728
PITTSBURGH, PENNSYLVANIA 15230

FORM NIS-1 OWNERS' DATA REPORT FOR INSERVICE INSPECTIONS

As required by the Provisions of the ASME Code Rules

1. Owner Virginia Electric and Power Company, Richmond, Va.
(Name and Address of Owner)
2. Plant North Anna Power Station, Mineral, Virginia
(Name and Address of Plant)
3. Plant Unit 2 4. Owner Certificate of Authorization (if required) _____
5. Commercial Service Date Dec. 1980 6. National Board Number for Unit _____
7. Components Inspected

Component or Appurtenance	Manufacturer or Installer	Manufacturer or Installer Serial No.	State or Province No.	National Board No.
Reactor Vessel	Rotterdam	30662	061445	N/A
Reactor Vessel Internals	W Pensacola Division	RCRIRI	N/A	N/A
Steam Gen. Loops 1, 2, 3	W Tampa Division	1281, 1282 1283	N/A	68-95, 68-96 68-97
R. C. Pumps	W EMD	RCPCPC-01 02, 03	N/A	NPV-1, 2, 3
R. C. Piping	Southwest Fabricating	N/A	N/A	N/A
C. L. 1 Piping	Southwest Fabricating	N/A	N/A	N/A
C. L. 2 Piping	Southwest Fabricating	N/A	N/A	N/A
Excess Letd. Ht. Exchanger	Atlas	1307	61436	1126
Residual Ht. Exchanger	Jos. Oat & Sons	1832-5	061417	372
Seal Water Ht. Exchanger	Jos. Oat & Sons	1817-20	059688	349
Non-Regenerat. Letdown Ht. Ech.	Jos. Oat & Sons	J-18303	059687	363
Regenerative Ht. Exchanger	Jos. Oat & Sons	1831-12	061435	450, 451 & 452
Volume Control Tank	Jos. Oat & Sons	2034-1B	059825	501
Accumulator Tank	Delta-Southern	41370-71-1.2	061422 061420	2823 2822
Boron Injection Tank	Struthers Wells	N/A	059700	13351
Seal Water Injection Filt.	Commercial Fitters Div.	19076-1967	N/A	1465

Note: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 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.

As required by the Provisions of the ASME Code Rules

7. Components Inspected

[illegible]

Note: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size is 8 1/4 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.

REACTOR VESSEL INTERNALS EXAMINATION

SITE: NORTH ANNA UNIT #2

INTERVAL: 1

PERIOD: 1

DATE: APRIL, 1983

OUTAGE: 2

A video tape record was made of the areas identified by the INTERNAL PROGRAM. This tape has been reviewed by WESTINGHOUSE for compliance with the required examinations.

Westinghouse:

R. M. Johnson

Date:

4/25/83

Receipt of 1 reel ~~(s)~~ of video tape from Westinghouse is acknowledged.

Utility:

J. Paul

Date:

4-25-83

Procedure: ISI-88 Rev. 1

Examiner(s): Edward E. Tang

John Ball

Date(s): 4-21, 24-83

UPPER INTERNALS

COMPONENT	Location	Tape Ref. Location	Remarks	RI	NRI	Initial as Exam. is Completed
Thermocouple and Flow Mixer Device Fastenings (As Accessible)	30° to 270°	658 to 717			X	JWB RET
Upper Internals - Head Alignment Pin Interface Surfaces. Examine 2	0° 270°	635 565			X X	JWB RET JWB RET
Upper Core Plate Fuel Assembly Guide Pins (As accessible)	Peripheral Pins 0° to 270° vessel axis.	565 to 658			X	JWB RET

End
4-25-63

Qm 175B
4-26-63

Procedure: ISI-88 Rev. 1

Examiner(s): Raymond E. Toney

John Basso

Date(s): 4-21-83

UPPER INTERNALS

COMPONENT	Location	Tape Ref. Location	Remarks	RI	NRI	Initial as Exam. is Completed
Thermal Couple Conduit Supports, Fastenings and Fittings. Examine accessible length of conduit runs associated with 2 columns.	225° to 0°	717 to 781			X	JWB RET
Support Column Fastenings (As accessible)	30° to 270°	658 to 717			X	JWB RET
Guide Tube Welds and Fastenings (As accessible)	30° to 270°	658 to 717			X	JWB RET
						JWB 4-25-83

Procedure: ISI-88 Rev. 1

Examiner(s): Stephen E. Turek

John Ball

Date(s): 4-21-24-83

LOWER INTERNALS

COMPONENTS	Location	Tape Ref. Location	Remarks	RI	NRI	Initial as Exam. is Completed
Head and Vessel Alignment Pin Mating Surfaces and Attachments. Examine 4	Vessel Axis 0° 90° 180° 270°	250 035 138 212			X X X X	JWB RET JWB RET JWB RET JWB RET
Upper Core Plate Guide Key. Examine	Vessel Axis 0° 90° 180° 270°	270 to 312			X X X X	JWB RET JWB RET JWB RET JWB RET
Outlet Nozzle Mating Surface. Examine	Vessel Axis 24.48° 265.03°	465 to 488			X X	JWB RET JWB RET
Flange to Core Barrel Weld	From 270° to 0°	522 to 545			X	JWB RET
Core Barrel Flange Flow Nozzle Welds.	From 0° to 360°	035 to 251			X	JWB RET
Core Barrel Mid Plane Weld	From 270° to 0°	488 to 522			X	JWB RET

PAH
4-21-83

PAH
4-26-83

Procedure: ISI-88 Rev. 1

Examiner(s): Raymond E. Tacey

John Bell

date(s): 4-21, 24-83

LOCAL INTERNALS

COMPONENT	Location	Tape Ref. Location	Remarks	RI	NRI	Initial as Exam. is Completed
and necessary formers on the Plate. Examine Top 2 Formers	From <u>90</u> ° to <u>180</u> °	384 to 441			X	JWB RET
Lower Core Plate bolting	From <u>0</u> ° to <u>360</u> °	300 to 384			X	JWB RET

EMH
4-25-83

EMH SB
4-26-83

VIRGINIA ELECTRIC AND POWER COMPANY
NORTH ANNA POWER STATION UNIT NO. 2
REACTOR VESSEL INSERVICE INSPECTION PROGRAM
2ND OUTAGE/1ST PERIOD/1ST INTERVAL
1983

The areas listed below were examined as required by the Plant Technical Specification, the 1974 Edition of Section XI of the ASME Boiler and Pressure Vessel Code with Addenda through Summer, 1975, and the NRC Regulatory Guide 1.150, utilizing the Westinghouse remotely operated reactor vessel inservice inspection tool.

VESSEL-TOOL INTERFACE PARAMETERS (Dwg. 2222D24 (5 Sheets))

- (a) Vessel head alignment pins located at 0, 90, 180 and 270 degrees vessel axis.
- (b) Closure head guide studs located in stud holes #5, #21 and #37 on 171.25 inch bolt circle diameter. Guide stud #5 removed.
- (c) Tool aligned on pin at 90 degrees and other two legs at 210 degrees and 330 degrees.

EXAMINATION REQUIREMENTS

IWB-2600 Item B1.3

W VGB 1-1100

Weld #1

VESSEL TO FLANGE WELD
(Dwg. 2222D24 Sheet 5)

Thirty-three percent of the total length of the weld to be examined. Examine from centerline between stud hole #58 and #1 at 356.90° vessel axis, clockwise to centerline between stud hole #12 and #13 at 71.38° vessel axis and from centerline between #44 and #45 at 270° vessel axis clockwise to centerline between stud hole #51 and #52 at 313.44° vessel axis. (117.9 degrees total)

IWB-2600 Item B1.4

W VGB-1-1100

Loop 1 - Weld #14

Loop 3 - Weld #10

Loop 3 - Weld #12

IWB-2600 Item B1.6

W VGB-1-1100

W VGB-1-4100

Loop 1 - Weld #1(DM)

W VGB-1-4200

Loop 2 - Weld #1(DM)

W VGB-1-4300

Loop 3 - Weld #1(DM)

IWB-2600 Item B1.9

W VGB 1-1100

OUTLET NOZZLE TO VESSEL SHELL WELDS

(Dwg. 2222D24 Sheet 4)

Examine the nozzle to shell weld and nozzle protrusion of Loop 1, Loop 2 and Loop 3 outlet nozzles. Centerline of nozzles located 82.94 inches from top surface of flange. Outlet nozzle located at 24.9 degrees vessel axis for Loop 2, 145.1 degrees for Loop 1 and 265.1 degrees for Loop 3.

OUTLET NOZZLE TO SAFE-END WELDS

(Dwg. 2222D24 Sheet 4)

Examine nozzle to safe-end welds on Loops 1, 2 and 3 at locations given under Item B1.4. Centerline of nozzle to safe-end weld is at 122.53 inches from centerline of vessel.

LIGAMENTS BETWEEN THREADED STUD HOLES

(Dwg. 2222D24 Sheet 2)

Examine thirty-three percent of the vessel flange ligaments.

Examine ligaments around stud holes #1 through #12 and #45 through #51 (19 total). Stud holes are threaded 6"-8N-38, are 11 inches deep and are located on 171.25 inches Bolt circle diameter. Flange top surface is 0.5 inches above flange seal surface.

EXAMINATION

The above listed areas were examined utilizing the remotely operated reactor vessel inservice inspection tool in accordance with the requirements of Procedure ISI-154, Rev. 1. The examinations were performed using search unit sizes, frequencies and refracted angles as defined below. Detailed parameters for the examination of each individual weld or area, including the location of each scan with reference to the vessel axis and datums, the number of scans, the incremental distances between scans are defined in the inspection program input data prepared in accordance with Procedure RV-ISI-01, Rev. 1. The requirements of NRC Regulatory Guide 1.150 as defined in Westinghouse Recommended Position" dated March 22, 1983 were applied to the examination of the Vessel to Flange Weld and the Outlet Nozzle to Vessel Shell Welds.

LOCATION	SEARCH UNIT	S. U. SIZE	FREQUENCY MHz	INCIDENT ANGLE	REFRACTED ANGLE
Outlet Nozzle to Shell Welds and Nozzle Protrusions	TR5	1.5	2.25	0°	0°
	TR7	1.5	2.25	23.5°	60°S
	TR8	1.5	2.25	23.5°	60°S
Outlet Nozzle Safe End Welds	TR0	.750	2.25	0°	0°
	TR1	.750	2.25	9 1/2°	41°L
	TR2	.750	2.25	9 1/2°	41°L
	TR3	.750	2.25	9 1/2°	41°L
	TR4	.750	2.25	9 1/2°	41°L
Vessel to Flange Weld	TR5	1.5	2.25	0°	0°
	TR9	1.5	2.25	1.5°	6°L
	TRL0	1.5	2.25	3°	12°L
Flange Ligaments	TR10	1X.5	5.0	0°	0°

CALIBRATION

All search units were calibrated utilizing the information given in Appendix A in accordance with ISI-154 Rev. 1.

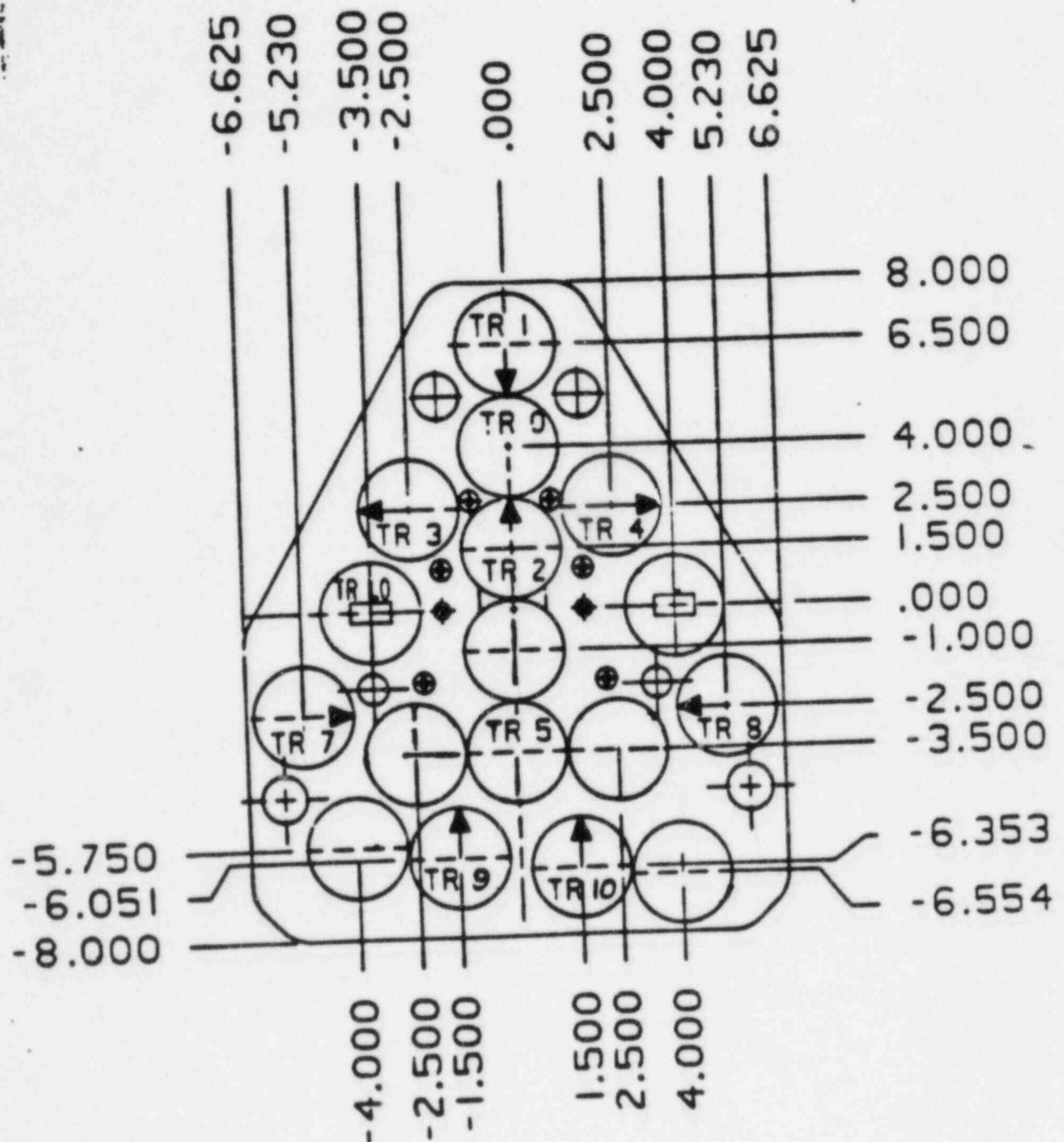
APPENDIX A
CALIBRATION REQUIREMENTS

AREA TO BE EXAMINED	INCIDENT ANGLE	REFRACTED ANGLE	CAL. BLOCK IDENTITY	WATER PATH DISTANCE	CALIBRATION REFLECTOR IDENTITIES			MANIPULATOR ORIENTATION
Outlet Nozzle to Vessel Welds	0°	0°	VRA-020	TR5:11"	Hole A	Hole D	Hole F**	Vertical
Nozzle Inside Radius (Protrusion)	23.5°	60°S	VRA-021	TR7:12" & TR8	Hole D	Hole E	N/A	Vertical
Vessel to Flange Weld	0°	0°	VRA-020	TR5:12"	Hole D	Hole C	Hole B	Horizontal
	1.5°	6°L	VRA-020	TR9:12"	Hole D	Hole C	Hole B	Horizontal
	3°	12°L	VRA-020	TR10:12"	Hole D	Hole C	Hole B	Horizontal
Ligaments	0°	0°	VRA-020	TRL0:9 1/2"	N/A	Hole B	Hole C	Horizontal
Safe-End Welds	0°	0°	VRA-022	TR0:5"	Hole A	Hole B	Hole C	Vertical
	9 1/2°	41°L	VRA-022	TR1:5.1"	Hole A	Hole B	Hole C	Vertical
	9 1/2°	41°L	VRA-022	TR2:5.1"	Hole A	Hole B	Hole C	Vertical
	9 1/2°	41°L	VRA-022	TR3:4.7"	Hole A	Hole B	Hole C	Vertical
	9 1/2°	41°L	VRA-022	TR4:4.7"	Hole A	Hole B	Hole C	Vertical

**Manipulator Orientation - Horizontal

NORTH ANNA UNIT 2 - 1983

Transducers TR0, TR1, TR2, TR3, TR4 are 3/4" diameter
 Transducers TR5, TR7, TR8, TR9, TR10 are 1 1/2" diameter
 Transducer TR10 is 1" x 1/2"



40 MONTH TRANSDUCER PLATE

VIRGINIA ELECTRIC AND POWER COMPANY
NORTH ANNA POWER STATION UNIT 2
INSERVICE INSPECTION PROGRAM
2ND OUTAGE/1ST PERIOD/1ST INTERVAL
1983

All items listed below were examined, as indicated, in accordance with the requirements of the Plant Technical Specification, Section 4.2 and the 1974 Edition of Section XI of the ASME Boiler and Pressure Vessel Code up to and including Summer, 1975 Addenda to the extent practical with the access provided and the limitations of component geometry.

PROGRAM ITEM	IWB-2600 REFERENCE	AREA AND EXTENT OF EXAMINATION	EXAMINATION PROCEDURE			SKETCH REFERENCE
			U/T	SURF	V/Y	VGB
<u>REACTOR VESSEL</u>						
1.	B1.3	Weld #1 - 120°	154	--	--	1-1100
2.	B1.3	Weld #1 - 0° thru 120°	47	--	--	1-1300
3.	B1.4	Welds #10, #12 and #14	154	--	--	1-1100
4.	B1.6	Weld #1(DM)	154	--	--	1-4100
5.	B1.6	Weld #1(DM)	205	11	--	1-4100
6.	B1.6	Weld #1(DM)	154	--	--	1-4200
7.	B1.6	Weld #1(DM)	205	11	--	1-4200
8.	B1.6	Weld #1(DM)	154	--	--	1-4300
9.	B1.9	Closure Ligaments - Examine #1 thru #12 and #45 thru #51	154	--	--	1-1100
10.	B1.11	Conoseal Bolting - Area #1	--	--	8	1-1300
11.	B1.15	Vessel Interior	--	--	88	1-1200
<u>STEAM GENERATORS</u>						
12.	B3.1	Welds 1-1, 2-1, and 3-1 from 0" thru 7.5"	47	--	--	1-3100
<u>PIPING</u>						
13.	B4.8	Weld #19	--	11	--	1-4109

PROGRAM ITEM	IWB-2600 REFERENCE	AREA AND EXTENT OF EXAMINATION	EXAMINATION PROCEDURE			SKETCH REFERENCE
			U/T	SURF	V/T	VGB
<u>PUMPS</u>						
14.	B5.1	Flange Bolting 3-B1 thru 3-B24	15	--	--	1-5100
15.	B5.3	Flange Bolting 3-B1 thru 3-B24	--	--	8	1-5100
16.	B5.2	Seal House Bolting 2-B1 thru 2-B12	15	70	8	1-5100
17.	B5.5	Pump Supports 1-1SC, 1-2SC and 1-3SC	--	--	8	1-5100
<u>VALVES</u>						
18.	B6.9	Items: 6,9,12,13,15,16,18, and 59	--	--	8	1-6300
<u>FLYWHEEL</u>						
19.	--	Flywheel 2-1 and 3-1	41	11	8	1-5100

PROGRAM ITEM	IWC-2600 REFERENCE	AREA AND EXTENT OF EXAMINATION	EXAMINATION PROCEDURE			SKETCH REFERENCE
			U/T	SURF	V/T	VGB
<u>EXCESS LETDOWN HEAT EXCHANGER</u>						
20.	C1.1	Weld #1 from 0" thru 1"	205	--	--	2-1110
21.	C1.4	Bolting B1 thru B12	15	--	8	2-1110
<u>RESIDUAL HEAT EXCHANGERS</u>						
22.	C1.1	Weld 1-1 from 71.0" thru 73.5"	205	--	--	2-1120
23.	C1.1	Weld 2-2 from 71.0" thru 73.5"	205	--	--	2-1120
24.	C1.3	Welded Supports 1-2WS and 2-1WS	--	11	--	2-1120
25.	C1.4	Bolting 1-B1 thru 1-B48	15	--	8	2-1120
<u>SEAL WATER HEAT EXCHANGER</u>						
26.	C1.1	Welds #1 and #2 from 0" thru 2"	205	--	--	2-1130
27.	C1.3	Welded Supports 1WS and 2WS	--	11	--	2-1130

PROGRAM ITEM	IWC-2600 REFERENCE	AREA AND EXTENT OF EXAMINATION	EXAMINATION PROCEDURE			SKETCH REFERENCE
			U/T	SURF	V/T	
		<u>NON-REGENERATIVE LETDOWN HEAT EXCHANGER</u>				
28.	C1.1	Welds #1 and #2 from 0" thru 4.5"	205	--	--	2-1140
29.	C1.3	Welded Supports 1WS and 2WS	--	11	--	2-1140
30.	C1.4	Bolting B1 thru B36	15	--	8	2-1140
		<u>REGENERATIVE HEAT EXCHANGER</u>				
31.	C1.1	Welds #1, #3, #5 and #11	205	11	--	2-1150
		<u>VOLUME CONTROL TANK</u>				
32.	C1.1	Weld #1 from 6" to 11"	205	--	--	2-1200
33.	C1.1	Weld #2 from 0" to 5"	205	--	--	2-1200
34.	C1.3	Welded Supports 1WS and 2WS	--	11	--	2-1200
35.	C1.4	Bolting B1 thru B16	15	--	8	2-1200
		<u>ACCUMULATOR TANKS</u>				
36.	C1.1	Weld #1-1 from 0" thru 10"	205	--	--	2-1210
37.	C1.1	Weld #1-4 from 0" thru 10"	205	--	--	2-1210
38.	C1.1	Weld #2-3 from 0" thru 10"	205	--	--	2-1210
39.	C1.2	Weld #1-6	205	--	--	2-1210
40.	C1.3	Welded Support 1-5 from 0" thru 10"	--	11	--	2-1210
41.	C1.4	Bolting 1-B1 thru 1-B20	15	--	8	2-1210
		<u>BORON INJECTION TANK</u>				
42.	C1.1	Weld 1 from 0" thru 5"	205	--	--	2-1220
43.	C1.2	Weld #3	205	--	--	2-1220
44.	C1.3	Weld Support WS-1	--	11	--	2-1220
45.	C1.4	Bolting B1 thru B16	15	--	8	2-1220

PROGRAM ITEM	IWC-260D REFERENCE	AREA AND EXTENT OF EXAMINATION	EXAMINATION PROCEDURE			SKETCH REFERENCE
			U/T	SURF	V/T	
		<u>PIPING</u>				
46.	C2.1	Weld #8	205	--	--	2-2525
		<u>RESIDUAL HEAT REMOVAL PUMPS</u>				
47.	C3.2	Bolting 1-B1 thru 1-B24	15	--	8	2-3100
48.	C3.4	Supports 1-1SC, 1-2SC and 1-3SC	--	--	8	2-3100
		<u>CENTRIFUGAL CHARGING PUMPS</u>				
49.	C3.2	Bolting 1-B1 thru 1-B16	15	--	8	2-3110
50.	C3.3	Welded Supports 1-1WS, 1-4WS, 2-2WS and 3-4WS	--	11	8	2-3110
51.	C3.4	Supports 100% Pump 1	--	--	8	2-3110
		<u>REACTOR COOLANT PUMP</u>				
52.	C1.4	Seal House Bolts 2-B1 thru 2-B12	15	70	8	2-3120
		<u>VALVES</u>				
53.	C4.2	Items 6, 7 and 8	15	--	8	2-4100

AUGMENTED PROGRAM AND MISC. ITEMS

ITEM NO.	CATEGORY NO.	AREA AND EXTENT OF EXAMINATION	EXAMINATION PERFORMANCE	SKETCH OR NDT - R#
54	--	System Leakage Test	VT	--
		<u>STEAM GENERATORS</u>		
55	B3.10	Bolts 1-B1 thru 1-B32, 2-B1 thru 2-B32 and 3-B1 thru 3-B32	MT/VT	1-1300
		<u>PIPING</u>		
56	B4.5	Welds 1,2,3,4,6,7 and 10	UT	1-4103
57	B4.5	Weld 18(82)	UT	1-4201
58	B4.5	Welds 6,7,8,9 and 10	UT	1-4203
59	B4.5	Welds 10(82) and 11(82)	UT	1-4206
60	B4.5	Weld 17(82)	UT	1-4302
61	B4.5	Welds 1,2,3,6,7 and 10	UT	1-4304
62	B4.5	Welds 44(82) and 45(82)	UT	1-4306
63	B4.5	Welds 8,9 and 18	UT	1-4500
64	B4.5	Welds 14,22,30,31 and 35	UT	1-4502
65	B4.10	Support Components	VT	--
66	B4.12	Items 16 and 17	VT	1-4700
		<u>REACTOR COOLANT PUMP</u>		
67	B5.2	Seal House Bolting 3-B1 thru 3-B12	MT/UT	1-5100
68	B5.3	Seal House Bolting 3-B1 thru 3-B12	VT	1-5100
		<u>VALVES</u>		
69	B6.7	Item 32	VT	1-6200
70	B6.9	Items 9,28,40,52,53 and 54	MT/VT	1-6300

ITEM NO.	CATEGORY NO.	AREA AND EXTENT OF EXAMINATION	EXAMINATION PERFORMANCE	SKETCH OR NDT - R#
<u>STEAM GENERATORS</u>				
71	C1.1	Weld 2-6 100%	UT	2-1100
72	C1.4	Bolts 2-B1 thru 2-B40	UT/VT	2-1100
<u>SEAL WATER INJECTION FILTERS</u>				
73	C1.1	Welds 1-1 and 2-2 from 1" thru 2"	UT	2-1300
74	C1.3	Welded Supports 1-1WS, 1-3WS and 2-2WS	PT/VT	2-1300
75	C1.4	Bolting 1-B1 thru 1-B16	UT/VT	2-1300
<u>REACTOR COOLANT PUMPS</u>				
76	C1.4	Seal House Bolts 3-B1 thru 3-B12	MT/UT/VT	2-3120
77	C2.6	Support Components	VT	--
<u>VALVES</u>				
78	C4.2	Items 6,7,8 and 28	VT	2-4100
<u>MISC. ITEMS</u>				<u>NDT - R#</u>
<u>WELDS</u>				
79	--	Weld 23	VT/PT	83-073
80	--	Weld 23	VT/PT	83-073
<u>VALVES</u>				
81	--	Valve 2-S1-21	VT	83-225
82	--	Valve 2-S1-1	VT	83-157
<u>STEAM GENERATORS</u>				
83	--	Hand Hole Bolts - Steam Generators #2	VT	83-172

AUGMENTED PROGRAM AND MISC. ITEMS

ITEM NO.	CATEGORY NO.	AREA AND EXTENT OF EXAMINATION	EXAMINATION PERFORMANCE	SKETCH OR NDT-R#
84	B4.5	Welds 28 and 30	UT	1-4504