CYNEP'S DATA REPORT

FOR

INSERVICE INSPECTION

EDWIN I. HATCH NUCLEAR PLANT

UNIT 2

JANUARY 1988 - MARCH 1988

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NOTE: Portions of this report are compiled from Southern Company Services issued report; "Nondestructive Examination Of Selected Class 1, 2, and 3 Components", for the Winter 1988 Refueling Outage at E.I. Hatch Nuclear Plant, Unit 2. This report will be available for review in the Records Management Department at the plant site.

LIST OF ABBREVIATIONS

ANI/ANII Authorized Nuclear Inspector/Authorized Nuclear Inservice

Inspector

ASME American Society of Mechanical Engineers

ASNT American Society for Nondestructive Testing

BC Branch Connection

BWR Boiling Water Reactor

CH Closure Head CONT Containment

CPI Containment Purge and Inerting System

CRD Control Rod Drive System

CS Core Spray System

CU Cleanup

C&L Cramer and Lindell Engineers

DCR Design Change Request

ET Eddy Current Examination

EPRI Electric Power Research Institute

FB Flange Bolting

FPC Fuel Pool Cooling System

FW Feedwater System
GE General Electric

GPC Georgia Power Company

HL Hanger Lug

HPCI High Pressure Coolant Injection System

INF Indication Notification Form

IGSCC Intergranular Stress Corrosion Cracking

ISI Inservice Inspection

ITL International Testing Laboratories

LD-I Longitudinal Seam Weld Extending Downstream

LD-I Longitudinal Weld Downstream on Inside of Elbow

LD-O Longitudinal Weld Downstream on Outside of Elbow

LMT Lambert, MacGill, and Thomas, Inc.

Lo Zero Reference Location

LU Longitudinal Seam Weld Extending Upstream

LU-I Longitudinal Weld Upstream on Inside of Elbow
LU-O Longitudinal Weld Upstream on Outside of Elbow

MSIV Main Steam Isolation Valve

MS Main Steam System

MSA Main Steam Auxiliary System
MT Magnetic Particle Examination

MWO Maintenance Work Order

NDE Nondestructive Examination

NI No Indication

NRC Nuclear Regulatory Commission

NRI No Recordable Indication

OL Overlay
PL Pipe Lug
PLT Plant

PR Pipe Restraint

PROD Product

PS Pipe Support

PSW Plant Service Water System
PT Liquid Penetrant Examination

QC Quality Control (GPC)

RC Reactor Recirculation System

RCIC Reactor Core Isolation Cooling System

RHR Residual Heat Removal System

RI Recordable Indication

RINTSA Recirculation Inlet Nozzle Thermal Sleeve Attachment Welds

RL Refracted Longitudinal

RL Restraint Lug

RPV Reactor Pressure Vessel

RX Reactor

RWCU Reactor Water Cleanup System
SBLC Standby Liquid Control System

SCS Southern Company Services

SER Service

SRV Safety Relief Valve

SWRI Southwest Research Institute

TOP Torus Drainage and Purification System

TSB Turbine Steam Bypass System

UT Ultrasonic Examination

VLV Valve

VT Visual Examination

This list is comprised of standard abbreviations used in Inservice Inspection Documentation. All of these abbreviations may not appear in this report.

FORM NIS-1 OWNERS' DATA REPORT FOR INSERVICE INSPECTIONS . As Required By the Provisions Of The ASME Code Rules

- 1. Owner Georgia Power Company, 333 Piedmont Ave., NE P.O. Box 4545 Atlanta Georgia 30302
- 2. Plant Edwin I. Hatch Nuclear Plant, Route 1, Box 278, Baxley, Ga. 31513
- 3. Plant Unit 2 4. Owner Certificate of Authorization(if req.) N/A
- 5. Commercial Service Date 09/05/79 6. National Board No. for Unit N/A
- 7. Components Inspected:

Component or Appurtenance or System	Appurtenance Manufacturer or System or Installer		State or Province Number	National Board No.
Rx. Pressure Vessel	Combustion Eng.	70101	N/A	11570
Rx. Pressure Vessel	Combustion Eng.	70201	N/A	11570
2B21 Main Steam	Pullman Power Prod.	*	N/A	*
2821 Feedwater	Pullman Power Prod.	*	N/A	*
2321 M.S. Relief	Pullman Power Prod.	*	N/A	*
2B31 Rx. Recirc	Pullman Power Prod.	*	N/A	*
2B31 Recirc Pump	Byron Jackson	*	N/A	*
2C11 CRD	Pullman Power Prod.	*	N/A	*
2C41 SBLC	Pullman Power Prod.	*	N/A	*
2E11 RHR	Pullman Power Prod.	*	N/A	*
2E21 Core Spray	Pullman Power Prod.	*	N/A	*
2E41 HPCI	Pullman Power Prod.	*	N/A	*
			-	

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 are recorded at the top of this form. **

^{* -} Spool piece or fitting numbers too numerous to list for each specific system. Material certifications for all piping, fittings, etc., are available for review in the Records Management Department at the plant site.

^{**} Exception taken to note 2.

7. Components Inspected (continued):

FORM NIS-1 (Continued)

Component or Appurtenance or System	Manufacturer or Installer	Manufacturer or Installer Serial No.	State or Province Number	National Board No.	
2G31 RWCU	Pullman Power Prod.	*	N/A	*	
2G41 FPC & CU	Pullman Power Prod.	*	N/A	*	
2N11 M S Auxiliary	Pullman Power Prod.	*	N/A	*	
2P41 Plt Serv Water	Pullman Power Prod.	*	N/A	*	

^{* -} Spool piece or fitting numbers too numerous to list for each specific system. Material certifications for all piping, fittings, etc., are available for review in the Records Management Department at the plant a.

- 8. Examination Dates 01/04/88 to 03/23/88.
- 9. Inspection Interval from 01/86 to 01/96.
- 10. Abstract of Examinations. Include a list of examinations and a statement concerning status of work required for current interval. **
- 11. Abstract of Conditions Noted. **
- 12. Abstract of Corrective Measures Recommended and Taken. **

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 June 6 1988 Signed Georgia Power Company By D 5 Reas 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 GA. and employed by *** of Hartford, CT have inspected the components described in this Owners' Data Report during the period 01/88 to 03/88 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 anyl 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.

Tharles of Signature Commissions Georgia - 201
National Board, State, Province, & No.

^{**} The following NIS-1 Form supplementary information and report includes the responses to NIS questions #10, #11, and #12.

^{***} Hartford Steam Boiler Insurance and Inspection Company.

Owner's Data Report for Inservice Inspection

Date: June 1, 1988

Owner Name & Address: Georgia Power Company

333 Piedmont Avenue, N.E.

P.O. Box 4545

Atlanta, Georgia 30302

Name & Address of Nuclear Generating Plant:

Edwin I, Hatch Nuclear Plant

Route 1, Box 2/8
Baxley, Georgia 31513

Name Assigned to Nuclear Plant Station:

Edwin I. Hatch Nuclear Plant Unit 2

Commercial Service Date: September 5, 1979

Gross Generating Capability:

2436 MWt, 817.3 MWe

State, Province, or Municipality Assigned Number:

N/A

National Board Number Assigned by Manufacturer:

N/A

Name of Component or Part of Component ISI Involved:

Representative samples of the following components and areas were examined with nondestructive testing techniques.

Class 1

Reactor Pressure Vessel

Reactor Pressure Vessel Closure Head

Main Steam Piping System

Feedwater Piping System

Residual Heat Remova: System

Control Rod Drive System

Reactor Recirculation System

Core Spray System

Reactor Water Cleanup System

Valve Internal Surfaces

Valve Rolting

Standby Liquid Control System
High Pressure Coolant Injection System
Reactor Core Isolation Cooling System

Class 2
RHS System
Core Spray System
HPCI System
Control Rod Drive System
Reactor Water Cleanup System
Main Steam Auxiliary Piping System

Hydrostatic Testing

Class 2

Residual Heat Removal System (ISI Hydros 2E11-HT-2, 2E11-HT-3, 2E11-HT-5, 2E11-HT-14, 2E11-HT-23, and 2E11-HT-24)

Class 3

Plant Service Water System (ISI Hydros 2P41-HT-13, 2P41-HT-28, and 2P41-HT-29)

System Pressure/Leakage Tests

System	Class	Test Required
Reactor Pressure Vessel and Associated Piping and Components	1	Leakage (2B21-LT-1)
Residual Heat Removal Service Water System	3	Inservice (2E11-IT-1)

Pipe Support & Hanger Examination

Class 1

Main Steam System
High Pressure Coolant Injection System
Reactor Recirculation System

Class 2

Core Spray System
High Pressure Coolant Injection System
Residual Heat Removal System
Main Steam Auxiliary System

Class 3

Main Steam Safety/Relief Valve Discharge System
RHR Service Water System
Plant Service Water System
Fuel Pool Cooling System

Name & Address of Manufacturer of Components:

- Reactor Pressure Vessel and Closure Head: Combustion Engineering, Inc. Chattanooga, TN
- Piping (Classes 1, 2, and 3)
 a. Pullman Power Products
 Division of Pullman-Kellogg
 Williamsport, PA
 - General Electric Company San Jose, CA

Note:

Piping purchased by General Electric and Pullman and installed by Pullman. Material certifications and manufacturer information are available for review in the Records Management Department at the Hatch Plant Site.

- 3. Piping Supports and Hangers (Classes 1, 2, and 3)
 - a. Bergen-Paterson Pipe Support Corporation Laconia, NH
 - b. ITT Grinnell Corporation Providence, Rhode Island
 - c. Pacific Scientific Anaheim, CA
- 4. Valves, Pumps, and Heat Exchangers
 - a. Byron-Jackson, Inc. Los Angeles, CA
 - b. Crane New York, NY
 - c. Wm. Powell Company Cincinnati, OH
 - d. General Electric San Jose, CA

Date of Inservice Inspection:

January 1988 - March 1988

Completion Date of Inservice Inspection:

March 23, 1988 *

Name of Inspector: Charles F. Toegel, Jr. (ANI/ANII)

Name & Mailing Address of Inspector's Employer:

The Hartford Steam Boiler Inspection and Insurance Company 1117 Perimeter Center West Suite E 301 Atlanta, Georgia 30338

^{*} Small portion of pressure test 2E11-IT-1 was not completed until 05-03-88 due to required valve line up. Majority of test was completed prior to 03-23-88 and is beng included in this report.

ABSTRACT

An Inservice Inspection of selected Class 1, 2, and 3 components of Georgia Power Company's Edwin I. Hatch Nuclear Plant Unit 2 was performed during the Winter 1988 Maintenance/Refueling Outage. The components were examined in accordance with the applicable outage plan, including any changes made during the ISI as approved by Georgia Power Company.

The nondestructive examinations were performed using VT, PT, MT, AND UT examination techniques. SCS personnel and their contractors; SWRI and EBASCO Services, Inc. performed NDE of the selected welds and components. In addition, CTS assisted SCS personnel with VT examinations of selected RPV internal components.

SCS, SWRI, and EBASCO personnel performed Class 1, 2, and 3 examinations. SCS and SWRI procedures were used to perform the NDE Examinations. EBASCO personnel were qualified to the applicable SCS procedures prior to performance of examinations. EPRI qualified inspectors were utilized for examinations involving IGSCC susceptible materials.

In addition to NDE testing of Class 1 and 2 welds and components, pressure testing, visual examination of Class 1 valve internal surfaces and visual examination of pipe supports and hangers were also performed. GPC QC Personnel performed the Class 1 Valve Internals Inspections and supplied copies of the examination reports to SCS for inclusion in the final report.

Third party review (e.g. an ANII) was utilized for the ISI.

Selected components were examined in accordance with the following documents:

 Section XI of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, "Rules for Inservice Inspection of Nuclear Power Plant Components," 1980 Edition with Addenda through Winter 1981.

 United States Nuclear Regulatory Commission, NUREG 0313, Revision 2, (Draft), "Technical Report on Material Selection and Processing Guidelines for BWR Coolant Pressure Boundary Piping".

 United States Nuclear Regulatory Commission, NUREG 0619, "BWR Feedwater Nozzle and Control Rod Drive Return Line Nozzle Cracking".

- United States Nuclear Regulatory Commission I&E Bulletin 80-13 Visual Examination of Core Spray Spargers.

 General Electric Company Service Information Letter-330, Jet Pump Beam Inspection.

- General Electric Company Service Information Letter-420, Inspection of Jet Pump Sensing Lines.

- General Electric Company Service Information Letter-433, Shroud Head Bolting Inspection.

 SCS "Second Ten-Year Examination Plan, Edwin I. Hatch Nuclear Plant, Unit 2", Rev. 1.

- SCS "Inservice Inspection Outage Plan, Edwin I. Hatch Nuclear Plant, Unit 2 1988 Winter Refueling Outage", Revision 1 and Deviation 001.

Representative samples of the following systems, comprised of selected Class 1, 2, and 3 components, were examined using various NDE techniques, in accordance with the above documents:

Class 1
Reactor Pressure Vessel (2811)
Main Steam System (2821)
Feedwater System (2821)
Reactor Recirculation System (2831)
Control Rod Drive System (2C11)
Standby Liquid Control System (2C41)
Residual Heat Removal System (2E11)
Core Spray System (2E21)
High Pressure Coolant Injection System (2E41)
Reactor Core Isolation Cooling System (2E51)
Reactor Water Cleanup System (2G31)
Valve Internals
Valve Bolting

Class 2
Residual Heat Removal System (2E11)
Core Spray System (2E21)
High Pressure Coolant Injection System (2E41)
Control Rod Drive System (2C11)
Reactor Water Cleanup System (2G31)
Main Steam Auxiliary System Piping (2N11)
Main Steam Relief Valve Discharge Piping (2B21)

Class 3
Service Water System (2E11) (2P41)
Fuel Pool Cooling System (2G41)
Main Steam Safety/Relief Yalve Discharge System (2B21)

Other (Non-ASME Related)

UT thickness measurements were performed on selected components in the Extraction Steam, Auxiliary Vents and Drain, and Condensate Feedwater Piping Systems. A portion c these components were selected due to their similarity in design and operating conditions to components involved with the "Surry Pipe Break Incident". A separate report for these examinations was prepared by SCS and was submitted to GPC engineering.

RPV Shell Welds (SWRI Mechanized UT)

Mechanized UT was utilized to examine four (4) circumferential welds and twelve (12) longitudinal welds. A minimum of 5% of each circumferential weld and 10% of each longitudinal weld was examined. These examination lengths meet the requirements of the ASME Section XI Code, 1974 Edition with Addenda through Summer 1975. No reportable indications were detected.

PPV Examinations (UT)

Five (5) nozzle-to-shell welds and four (4) nozzle inner radius welds were examined using manual UT techniques. No reportable indications were detected.

The RPV closure head-to-flange weld was examined due to indications detected during a previous outage. There was no significant change in the indications and they were deemed acceptable.

Nineteen (19) closure head studs and eighteen (18) vessel flange ligaments were examined. No reportable indications were detected.

RPV Examinations (MT & VT)

Nineteen (19) closure head ness were MT examined and the corresponding nineteen (19) washers were VT examined. No reportable indications were detected.

RPV Internal Examinations (UT & VT)

All twenty (20) jet pump hold down beams were UT examined per GE SIL-330. Jet pump beam #20 was found to have a crack like indication and was removed and replaced. The replacement beam was UT examined and found to be acceptable.

All thirty-six (36) shroud head hold down bolts were UT examined per GE SIL-433. Eight (8) bolts were found to have crack like indications (#6, #10, #13, #17, #24, #32, #34, and #36). Six (6) bolts were replaced (#6, #10, #17, #24, #32, and #36). The remaining two (2) bolts were evaluated and deemed to be acceptable by GE.

Per IE Bulletin 80-13, the core spray sparger and associated piping was VT examined. No reportable indications were detected.

Per ASME Section XI, selected RPV internals were examined using remote visual examination techniques. VT of the steam dryer revealed forty-five (45) indications in the support ring, two (2) indications in the vertical vane welds and forty-five (45) indications in the steam dryer support brackets. Indications were evaluated and found to be acceptable by GE.

Visual examination of the jet pump mixing nozzles revealed evidence of erosion in the throat area. The erosion was evaluated by GE and deemed acceptable with recommendations for additional monitoring in future outages.

Other Class 1 Examinations (UT, MT, PT, & VT)

Sixty-three (63) welds were examined using volumetric and surface NDE techniques. One (1) of the welds was per NUREG-0619, fifty-six (56) welds were per NUREG-0313 and the remaining six (6) were for ASME Section XI requirements. One (1) MT indication was reported to GPC. This indication was evaluated by UT and found to be acceptable. One (1) weld was being re-examined due to previous indications. There was no significant change in the indication and it was deemed acceptable.

Twenty-three (23) integral attachments were examined using surface NDE techniques. One (1) attachment had unacceptable indications and required surface conditioning to remove indications.

Five (5) RINTSA welds were UT examined per NUREG-0313 and all were found to be acceptable.

Bolting on recirculation pump 2B31-C001A was UT examined and no reportable indications were detected.

Thirteen (13) components were examined using VT for bolting and valve body examination requirements of ASME Section XI. No reportable indications were detected.

CLASS II EXAMINATIONS

Seventy-two (72) welds were examined using surface and volumetric NDE techniques. These examinations included piping welds and integral attachment welds. Three (3) of these were examined for GPC augmented commitments, three (3) were examined per NUREG-0619 and the remaining sixty-six (66) were examined for ASME Section XI requirements. Four (4) indications were reported to GPC. These indications were repaired and re-examined and found to be acceptable.

PRESSURE TESTING

Six (6) Class 2 and three (3) Class 3 hydrostatic test, one (1) Class 3 Inservice Tests and a Class 1 Leakage Test were performed during the Outage. See the Pressure Test Section of this report for specific information.

COMPONENT SUPPORT EXAMINATIONS (CLASS 1, 2, AND 3)

One hundred and sixty-five (165) component supports were VT examined during the outage. Twenty-three (23) examinations revealed unacceptable results. These supports were either repaired and re-examined or evaluated by engineering and found to be acceptable as is.

REPAIRS AND REPLACEMENTS (CLASS 1 AND 2)

No major repairs or replacements were performed during the outage. Some minor repairs to valves and component supports were performed due to ISI examinations, six shroud head hold down bolts, and one jet pump hold down beam were replaced. See Repair and Replacement Section of this report for specific information.

REPORTABLE INDICATIONS

Following is an itemized list of all welds and components which were reported to contain indications or were considered unacceptable due to ISI examinations. All of these items were either repaired or evaluated and then deemed acceptable.

RPV Internals

- 92 linear indications in steam dryer (VT) Deficiency Card 2-88-0465
- 8 Moisture Separator Shroud Head Hold Down Bolts (UT)
 Deficiency Card 2-88-0477 (Bolts 6, 10, 13, 17, 24, 32, 34, 36)
 MWO 2-88-0065 (Bolts 6, 10, 17, 24, 32, 36)
- Jet Pump Hold Down Beam #20 (UT) Deficiency Card 2-88-0464 MWO 2-88-0659
- Jet Pump Inlet Mixing Nozzles all 20 (VT) Deficiency Card 2-88-0583

Class 1 Welds

- 2E41-1HPCI-10-D-8 (MT) Deficiency Card 2-88-0466 MWO 2-88-0565
- 2B21-IMS-24A-5PL-2 (MT) Deficiency Card 2-88-0644 MWO 2-88-0727

Class 2 Welds

- 2E11-2RHR-8-FPS-8 (MT) Deficiency Card 2-88-1058 MWO 2-88-1159
- 2E11-2RHR-208-D-3 (MT) Deficiency Card 2-88-1059 MWO 2-88-1160
- 2N11-2MSA-24B-IPS-1 (MT) Deficiency Card 2-88-0942 MWO 2-88-1020
- 2N11-2MSA-248-IPS-2 (MT) Deficiency Card 2-88-0942 MWO 2-88-1020

Component St	(Class 1, 2, AND 3)	
SUPPORT	DEFICIENCY CARD	MWO
2B21-MS-H3	2-88-0860	2-88-0970
2821-MSRV-H7	2-88-0860	2-88-0970
2B21-MSRV-H26	2-88-0860	2-88-0970
2B21-MSRV-R55	2-88-0614	2-88-0703
2E11-RHR-A58	2-88-0817	2-88-0929
2E11-RHR-H57	2-88-0864	2-88-0975
2E11-RHR-H175	2-88-0864	2-88-0975
2E11-RHR-H181	2-88-0864	2-88-0975
2E11-RHR-H182	2-88-0864	2-88-0975
2E11-RHR-H183	2-88-0864	2-88-0975
2E11-RHR-H195	2-88-0864	2-88-0975
2E11-RHR-R298	2-88-0817	2-88-0930
2E11-RHR-R299	2-88-0817	2-88-0928
2E11-RHR-R300	2-88-0817	2-88-0931
2E11-RHR-H314	2-88-0864	2-88-0975
2E41-HPCI-H31	2-88-0227	2-88-0287
2E41-HPCI-H71	2-88-0887	2-88-1006
2E41-HPCI-H98	2-88-0835	2-88-1120
	2-88-0584	2-88-0672
2E41-HPCI-H108	2-88-0887	2-88-1006
2E41-HPCI-HR710	2-88-0835	2-88-1120
	2-88-0584	2-88-0672
2E41-HPCI-R102	2-88-0835	2-88-1120
2E41-HPCI-R104	2-88-0835	2-88-1120
	2-88-0584	2-88-0672
2P41-SW-H265	2-88-0888	2-88-1007

The following sections of this NIS-1 Report contain the summary of the NDE Examinations performed, provides additional information and gives results of those examinations.

SUMMARY

OF

CLASS 1 COMPONENTS

Edwin I. Hatch Unit 2 1988 Winter Refueling Outage Class 1 Components Page 1 of 34

A SME						
SECTION XI CAT. NO.	FIG. NO.	EXAMINATION/AREA	EXAM METHOD	NDE PROCEDURE	EXAM/CAL. RI SHEET NO. NI NRI GEOM/OTHER	REMARKS/BASIC CALIBRATION BLOCK
	RPV EXAMINA	ZNOITA				STATE OF BEOCK
B-A	A-1/04	2C-2 Upper Shell-To- Upper Middle Shell	Mech	SWRI	Please see SwRI Report	PL-CSCL-5.875-62-H
B1.11 B-A	A-1/04	2C-3 Upper Middle Shell- To-Lower Middle Shell	Mech	SWRI	Please see SwRI Report	PL-CSCL-5.875-62-H
B-A	A-1/04	2C-4 Lower Middle Shell- To-Lower Shell Weld	Mech	SwRI	Please see SwRI Report	PL-SSCL-5.875-62-H
B1.11 B-A	A-1/04	2C-5 Lower Shell-To- Bottom Head Torus	Mech	SwRI	Please see SwRI Report	PL-CSCL-5.875-62-H
B1.12 B-A	A-1/04	2C-1-A Longitudinal Weld on Upper Shell	Mech	SWRI	Please see SwRI Report	PL-CSCL-5.875-62-H
B1.12 B-A	A-1/04	2C-1-B Longitudinal Weld on Upper Shell	Mech	SwRI	Please see SwRI Report	PL-CSCL-5.875-62-H

Edwin I. Hatch Unit 2 1988 Winter Refueling Outage Class 1 Components Page 2 of 34

ASME SECTION XI CAT. NO.	EXAM FIG. NO.	EXAMINATION/AREA	EXAM METHOD	NDE PROCEDURE	EXAM/CAL. RI SHEET NO. NI NRI GEOM/OTHER	REMARKS/BASIC CALIBRATION BLOCK
	RPV EXAMIN	ATIONS (Cont'd)			acony orner	CHETOKATION BLUCK
B1.12 B-A	A-1/04	2C-1-C Longitudinal Weld on Upper Shell	Mech	SwRI	Please see SwRI Report	PL-CSCL-5.875-62-H
в1.12 в-А	A-1/04	2C-2-A Longitudinal Weld on Upper Mid Shell	Mech	SWRI	Please see SwRI Report	PL-CSCL-5.875-62-H
B1.12 B-A	A-1/04	2C-2-B Longitudinal Weld on Upper Mid Shell	Mech	SWRI	Please see SwRI Report	PL-CSCL-5.875-62-H
B1.12 B-A	A-1/04	2C-2-C Longitudinal Weld on Upper Mid Shell	Mech	SwRI	Please see SwRI Report	PL-CSCL-5.875-62-H
B1.12 B-A	A-1/04	2C-3-A Longitudinal Weld on Lower Mid Shell	Mech	SWRI	Please see SwRI Report	PL-CSCL-5.875-62-H
B1,12 B-A	A-1/0/	2C-3-B Longitudinal Weld on Lower Mid Shell	Mech	SwRI	Please see SwRI Report	PL-CSCL-5.875-62-H
81.12 8-A	A-1/04	2C-3-C Longitudinal Weld on Lower Mid Shell	Mech	SwRI	Please see SwRI Report	PL-CSCL-5.875-62-H

Edwin I. Hatch Unit 2 1988 Winter Refueling Outage Class 1 Components Page 3 of 34

ASME SECTION XI CAT. NO.	EXAM FIG. NO. RPV EXAMINA	EXAMINATION/AREA ATIONS (Cont'd)	EXAM METHOD	NDE PROCEDURE	EXAM/CAL. RI SHEET NO. NI NRI GEOM/OTHER	REMARKS/BASIC CALIBRATION BLOCK
B1.12 B-A	A-1/04	2C-4-A Longitudinal Weld on Lower Shell	Mech	SWRI	Please see SwRI Report	PL-CSCL-6.875-61-H
B1.12 B-A	A-1/04	2C-4-B Longitudinal Weld on Lower Shell	Mech	SWRI	Please see SwRI Report	PL-CSCL-6.875-61-H
B1.12 B-A	A-1/04	2C-4-C Longitudinal Weld on Lower Shell	Mech	SWRI	Please see StRI Report	PL-CSCL-6.875-61-H
B1.40 B-A	A-3/03	2HC-2 Closure Head-To-Flg Centerline Stud 1 to Stud 20 (CW)	MT UT	MT-H-500/2 UT-H-410/4	\$88H2M048	PL-CS-4.5-64-H Indications detected during previous outage. See INF 186H2010. Acceptable per IWB-3510-1.
8-D 8-D	A-1/04	2N2A B Loop Recirculation Inlet Nozzle To Shell	UT	UT-H-410/4	\$88H2U169 x \$88H2U176 x \$88H2U177 x \$88H2C073 UT Cal. \$88H2C074 UT Cal. \$88H2C075 UT Cal.	PL-CSCL-6.875-61-H

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ASME SECTION XI CAT. NO.	EXAM FIG. NO.	EXAMINATION/AREA	EXAM METHOD	NDE PROCEDURE	EXAM/CAL. SHEET NO.	<u>NI</u>	NRI	RI GEOM/OTHER	REMARKS/BASIC CALIBRATION BLOCK
B3.90 B-D	A-1/04	2N2D B Loop Recirculation Inlet Nozzle to Shell	UT	UT-H-410/4	\$88H2U172 \$88H2U175 \$88H2U178 \$88H2C073 \$88H2C074 \$88H2C075		X X UT Ca UT Ca	1.	PL-CSCL-6.875-61-H Laminar indication. Acceptable per IWB-3511-2.
B3, 90 B-D	A-1/04	2N2G A Loop Recirculation Inlet Nozzle to Shell	UT	UT-H-410/4	\$88H2U171 \$88H2U173 \$88H2U179 \$88H2C073 \$88H2C074 \$88H2C075		x x UT Ca UT Ca UT Ca	1,	PL-CSCL-6.875-61-H
B3, 90 B-D	A-1/04	2N2K A Loop Recirculation Inlet Nozzle to Shell	UT	UT-H-410/4	\$88H2U170 \$88H2U174 \$88H2U180 \$88H2C073 \$88H2C074 \$88H2C075		x x UT Ca UT Ca	1.	PL-CSCL-6.875-61-H
83,90 8-D	A-1/04	2N4D B-D Loop Feedwater Inlet Nozzle to Shell	UT	UT-H-410/4	\$88H2U214 \$88H2U215 \$88H2U216 \$88H2U217 \$88H2C09G \$88H2C091 \$88H2C092		x x x y y y t Ca y t Ca y t Ca y t Ca	1.	PL-CSCL-5.875-62-H

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ASME SECTION XI CAT. NO.	EXAM FIG. NO.	EXAMINATION/AREA	EXAM METHOD	NDE PROCEDURE	EXAM/CAL. SHEET NO.	NI NRI GEOM/OTH	REMARKS/BASIC R CALIBRATION BLOCK
	RPV EXAMINA	ATIONS (Cont'd)					CALIBRATION BLUCK
83.100 8-0	A-1/04	2N2A B Loop Recirculation Inlet Nozzle IR	UT	UT-H-480/3	\$88H2U188 \$88H2C077	UT Cal.	PL-CSCL-6.875-61-H
83.100 8-0	A-1/04	2N2D B Loop Recirculation Inlet Nozzle IR	UT	UT-H-480/3	S88H2U187 S88H2C077	UT Cal.	PL-CSCL-6.875-61-H
B3.100 B-D	A-1/04	2N2G A Loop Recirculation Inlet Nozzle IR	UT	UT-H-480/3	S88H2U186 S88H2C077	UT Cal.	PL-CSCL-6.875-61-H
83.100 8-0	A-1/04	2N2K A Loop Recirculation Inlet Nozzle IR	UT	UT-H-480/3	\$88H2U135 \$88H2C077	UT Cal.	PL-CSCL-6.875-61-H
86.10 8-6-1	A-33/01	2NUT-1 Closure Head Nuts	MT	MT-H-501/2	S88H2M063	x	
86.10 8-6-1	A-33/01	2NUT-2 Closure Head Nuts	MT	MT-H-501/2	S88H2M063	x	
8-G-1	A-J3/UI	2NUI-3 Closure Head Nuts	мт	MT-H-501/2	S88H2M063	x	
86,10 8-6-1	A-33/01	2NUT-4 Closure Head Nuts	МТ	MT-H-501/2	S88H2M063	x	

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ASME SECTION XI CAT. NO.	EXAM FIG. NO.	EXAMINATION/AREA	EXAM METHOD	NDE PROCEDURE	EXAM/CAL. SHEET NO.	NI NR	RI I GEOM/OTHER	REMARKS/BASIC CALIBRATION BLOCK
	RPV EXAMINA	ATIONS (Cont'd)						
86,10 8-6-1	A-33/01	2NUT-5 Closure Head Nuts	MT	MT-H-501/2	\$88H2M063	×		
86.10 B-G-1	A-33/01	2NUT-6 Closure Head Nuts	MT	MT-H-501/2	S88H2M063	x		
86.10 8-G-1	A-33/01	2NUT-29 Closure Head Nuts	MT	MT-H-501/2	S88H2M063	х		
во. 10 в-G-1	A-33/01	2NUT-45 Closure Head Nuts	MT	MT-H-501/2	S88H2M064	x		
86.10 8-6-1	A-33/01	2NUT-46 Closure Head Nuts	MT	MT-H-501/2	S88H2M064	×		
86, 10 B-G-1	A-33/01	2NUT-47 Closure Head Nuts	MT	MT-H-501/2	S88H2M064	x		
86.10 8-G-1	A-33/01	2NUT-48 Closure Head Nuts	MT	MT-H-501/2	S88H2M063	х		
B6.10 B-G-1	A-33/01	2NUT-49 Closure Head Nuts	MT	MT-H-50!/2	S88H2MC62	×		
86.10 8-6-1	A-33/01	2NUT-50 Closure Head Nuts	MT	MT-H-501/2	S88H2M064	. *		

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ASME SECTION XI CAT. NO.	EXAM FIG. NO.	EXAMINATION/AREA	MAX3 MOPTEM	NDE PROCEDURE	EXAM/CAL. SHEET NO.	NI NRI	RI GEOM/OTHER	REMARKS/BASIC CALIBRATION BLOCK	t
	RPV EXAMINA	ATIONS (Cont'd)							
86.10 8-6-1	A-33/01	2NUT-51 Closure Head Nuts	MT	MT-H-501/2	\$88H2M064	x			
80.10 B-G-1	A-33/01	2NUT-52 Closure Head Nuts	MT	MT-H-501/2	\$88H2M062	x			
86.10 8-G-1	A-33/01	2NUT-53 Closure Head Nuts	MT	MT-H-501/2	S88H2M062	х			
86.10 8-G-1	A-33/01	2NUT-54 Closure Head Nuts	MT	MT-H-501/2	\$88H2M062	х			
B6.10 B-G-1	A-33/01	2NUT-55 Closure Head Nuts	MT	MT-H-501/2	S88H2M064	x			
86,10 8-G-1	A-33/01	2NUT-56 Clasure Head Nuts	MT	MT-H-501/2	S88H2M064	х			
86.30 8-G-1	A-33/01	2STUD-1 Closure Head Studs	UT	UT-H-421/2	S88H2U227 S88H2C099	X UT Ca	1.	23-н	
80.30 8-6-1	A-33/01	2STUD-2 Closure Head Studs	UT	UT-H-421/2	S88H2U227 S88H2C099	X UT Cal		23-н	
B6.30 B-G-1	A-33/01	2STUD-3 Closure Head Studs	UT	UT-H-421/2	S88H2U227 S88H2C099	X UT Cal		23-н	

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ASME SECTION X1 CAT. NO.	EXAM FIG. NO.	EXAMINATION/AREA	EXAM METHOD	NDE PROCEDURE	EXAM/CAL. SHEET NO.	NI NRI GEOM/OTHER	REMARKS/BASIC CALIBRATION BLOCK
	RPV EXAMINA	TIONS (Cont'd)					
Bo, 30 B-G-1	A-33/01	2STUD-4 Closure Head Studs	UT	UT-H-421/2	\$88H2U227 \$88H2C099	X UT Cal.	23-н
86.30 8-G-1	A-33/01	2STUD-5 Closure Head Studs	UT	UT-H-421/2	S88H2U227 S88H2C099	X UT Cal.	23-н
B-G-1	A-33/01	2STUD-6 Closure Head Studs	UT	UT-H-421/2	\$88H2U227 \$88H2C099	UT Cal.	23-Н
B6.30 B-G-1	A-33/01	2STUD-40 Closure Head Studs	UT	UT-H-421/2	S88H2U227 S88H2C099	UT Cal.	23-Н
86.30 8-G-1	A-33/01	2STUD-45 Closure Head Studs	UT	UT-H-421/2	\$88H2U227 \$88H2C099	UT Cal.	23-Н
B6.30 B-G-1	A-33/01	2STUD-46 Closure Head Studs	UT	UT-H-421/2	\$88H2U227 \$88H2C099	UT Cal.	23-Н
8-G-1	A-33/01	2STUD-47 Closure Head Studs	UT	UT-H-421/2	\$88H2U227 \$88H2C099	UT Cal.	23-H
B6.30 B-G-1	A-33/01	2STUD-48 Closure Head Studs	UT	UT-H-421/2	\$88H2U227 \$88H2C099	UT Cal.	23-Н
B6,30 B-G-1	A-33/01	2STUD-49 Closure Head Studs	UT	UT-H-421/2	S88H2U227 S88H2C099	X UT Cal.	23-н

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ASME SECTION XI CAT. NO.	EXAM FIG. NO.	EXAMINATION/AREA	EXAM METHOD	NDE PROCEDURE	EXAM/CAL. SHEET NO.	NI	NRI	RI GEOM/OTHER	REMARKS/BASIC , CALIBRATION BLOCK
	RPV EXAMIN	ATIONS (Cont'd)							
86.30 8-G-1	A-33/01	2STUD-50 Closure Head Studs	UT	UT-H-421/2	\$88H2U227 \$88H2C099		uT c	al.	23-Н
86.30 8-G-1	A-33/01	2STUD-51 Closure Head Studs	UT	UT-H-421/2	\$88H2U227 \$88H2C099		uT c	al.	23-Н
80.30 B-G-1	A-33/01	2STUD-52 Closure Head Studs	UT	UT-H-421/2	\$88H2U227 \$88H2C099		uT c	al.	23-Н
B6.30 B-G-1	A-33/01	2STUD-53 Closure Head Studs	UT	UT-H-421/2	\$88H2U227 \$88H2C099		uT c	a1.	23-н
B6.30 B-G-1	A-33/01	2STUD-54 Closure Head Studs	UT	UT-H-421/2	S88H2U227 S88H2C099		UT C	al.	23-Н
86.30 8-G-1	A-33/01	2STUD-55 Closure Head Studs	UT	UT-H-421/2	\$88H2U227 \$88H2C099		uT C	al.	23-н
80.30 B-G-1	A-33/01	2STUD-56 Closure Head Studs	UT	UT-H-421/2	\$88H2U227 \$88H2C099		uT c	a1.	23-Н
86.40 B-G-1	A-33/01	2LIG-1 Flange Ligaments	UT	UT-H-419/0	\$88H2U226 \$88H2C098		UT C	al.	23-н

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ASME SECTION X1 CAT. NO.	EXAM FIG. NO.	EXAMINATION/AREA	EXAM METHOD	NDE PROCEDURE	EXAM/CAL. SHEET NO.	NI I	RI NRI GEOM/OTHER	REMARKS/BASIC CALIBRATION BLOCK
	RPV EXAMINA	NTIONS (Cont'd)						
Bo. 40 B-G-1	A-33/01	2LIG-2 Flange Ligaments	UT	UT-H-419/0	\$88H2U226 \$88H2C098	U	x IT Cal.	23-н
86.40 B-G-1	A-33/01	2LIG-41 Flange Ligaments	UT	UT-H-419/0	\$88H2U226 \$88H2C098		X IT Cal.	23-н
B6.40 B-G-1	A-33/01	2LIG-42 Flange Ligaments	UT	UT-H-419/0	\$88H2U226 \$88H2C098		X T Cal.	23-Н
86.40 B-G-1	A-33/01	2LIG-43 Flange Ligaments	UT	UT-H-419/0	S88H2U226 S88H2C098		x T Cal.	23-Н
86.40 B-G-1	A-33/01	2LIG-44 Flange Ligaments	UT	UT-H-419/0	\$88H2U226 \$88H2C098		x T Cal.	23-Н
B-G-1	A-33/01	2LIG-45 Flange Ligaments	UT	UT-H-419/0	S88H2U226 S88H2C098		x T Cal.	23-Н
8-6-1	A-33/01	2LIG-46 Flange Ligaments	UT	UT-H-419/0	\$88H2U226 \$88H2C098		x T Cal.	23-H
B6,40 B-G-1	A-33/01	211G-47 Flange Ligaments	UT	UT-H-419/0	\$88H2U226 \$88H2C098		x T Cal.	23-н
B6.40 B-G-1	A-33/01	2LIG-48 Flange Ligaments	UT	UT-H-419/0	\$88H2U226 \$88H2C098		X T Cal.	23-н

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ASME SECTION XI CAT. NO.	EXAM FIG. NO.	EXAMINATION/AREA	EXAM METHOD	NDE PROCEDURE	EXAM/CAL. SHEET NO.	NI NRI GEOM/OTHER	REMARKS/BASIC CALIBRATION BLOCK
	RPV EXAMINA	ATIONS (Cont'd)					
B6.40 B-G-1	A-33/01	2LIG-49 Flange Ligaments	UT	UT-H-41 9/0	\$88H2U226 \$88H2C098	UT Cal.	23-Н
86.40 B-G-1	A-33/01	2LIG-50 Flange Ligaments	UT	UT-H-419/0	\$88H2U226 \$88H2C098	UT Cal.	23-Н
86.40 B-G-1	A-33/01	2LIG-51 Flange Ligaments	UT	UT-H-419/0	S88H2U226 S88H2C098	UT Cal.	23-Н
86.40 B-G-1	A-33/01	2LIG-52 Flange Ligaments	UT	UT-H-419/0	\$88H2U226 \$88H2C098	X UT Cal.	23-н
86.40 8-G-1	A-33/01	2LIG-53 Flange Ligaments	UT	UT-H-419/0	\$88H2U226 \$88H2C098	UT Cal.	23-н
B6.40 B-G-1	A-33/01	2LIG-54 Flange Ligaments	UT	UT-H-419/0	S88H2U226 S88H2C098	UT Cal.	23-Н
86.40 8-G-1	A-33/01	2LIG-55 Flanço Ligaments	вī	UT-H-419/0	\$88H2U226 \$88H2C098	UT Cal.	23-Н
86,40 8-6-1	A-33/07	2LIG-56 Flange Ligaments	υT	UT-H-419/0	\$88H2U226 \$88H2C098	X UT Cal.	23-н
Bo.50 B-G-1	A-33/01	2WASHER-1 Closure Head Washers	VT	VT-H-710/2	S88H2V183	Satisfactory	

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ASME SECTION XI CAT. NO.	EXAM FIG. NO.	EXAMINATION/AREA	EXAM METHOG	NDE PROCEDURE	EXAM/CAL. SHEET NO.	NI	NRI	RI GEOM/OTHER	REMARKS/BASIC CALIBRATION BLOCK		
	RPV EXAMINA	ATIONS (Cont'd)									
Bo. 50 B-G-1	A-33/01	2WASHER-2 Closure Head Washers	VT	VT-H-710/2	S88H2V183		Sati	sfac lory			
B6.50 B-G-1	A-33/01	2WASHER-3 Closure Head Washers	VT	VT-H-710/2	\$88H2V183		Satisfactory				
86.50 B-G-1	A-33/01	2WASHER-4 Closure Head Washers	VT	VT-H-710/2	S88H2V183		Satisfactory				
B6,50 B-G-1	A-33/01	2WASHER-5 Closure Head Washers	VT	VT-H-710/2	S88H2V183		Satisfactory				
B6,50 B-G-1	A-33/01	2WASHER-6 Closure Head Washers	VT	VT-H-710/2	S88H2V183		Satis	sfactory			
86.50 8-3-1	A-33/01	2WASHER-29 Closure Head Washers	VT	VT-H-710/2	S88H2V183		Satisfactory				
Bo. 50 B-G-1	A-33/01	2WASHER-45 Closure Head Washers	VT	VT-H-710/2	S88H2V183		Satisfactory				
B6.50 B-G-1	£-33/01	2WASHER-46 Closure Head Washers	VT	VT-H-710/2	S88H2V183		Satisfactory				
86.50 8-6-1	A-33/01	2WASHER-47 Closure Head Washers	VT	VT-H-710/2	S88H2V183		Satis	factory			

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SECTION XI CAT. NO.	EXAM FIG. NU.	EXAMINATION/AREA	EXAM METHOD	NDE PROCEDURE	EXAM/CAL. SHEET NO.	NI NE	RI GEOM/OTHER	REMARKS/BASIC CALIBRATION BLOCK		
	RPV EXAMIN	ATIONS (Cont'd)								
86.50 8-G-1	A-33/01	2WASHER-48 Closure Head Washers	V.	VT-H-710/2	S88H2V183	Sa	tisfactory			
86.10 8-6-1	A-33/01	2WASKER-49 Closure Head Washers	VT	VT-H-710/2	S88H2V183	Sa	tis:actory			
B6.50 B-G-1	A-33/01	2WASHER-50 Closure Head Washers	VT	V H-710/2	S88H2V183	Sa	tisfactory			
Bo. 50 B-G-I	A-33/01	2WASHER-51 Closure Head Washers	VT	VT-H-710/2	S88H2V183	Sa	Satisfactory			
B-G-1	A-33/01	2WASHER-52 Closure Head Washers	VT	VT-H-710/2	S88H2V183	Sa	tisfactory			
Bo. 50 B-G-1	A-33/01	2WASHER-53 Closure Head Washers	VT	VT-H-710/2	S88H2V183	Sa	tisfactory			
86.50 8-G-1	A-33/01	2WASHER-54 Closure Head Washers	VT	VT-H-710/2	S88H2V183	Sa	tisfactory			
B6.50 B-G-1	A-33/01	2WASHER-55 Closure Head Washers	VΤ	VT-H-710/2	S88H2V183	Sa	tisfactory			
86.50 8-G-1	A-33/01	2WASHER-56 Closure Yead Washers	VT	VT-H-710/2	S88H2V183	Sa	tisfactory			

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ASME SECTION XI CAT. NO.	EXAM §1G. NO.	EXAMINATION/AREA	EXAM METHOD	NDE PROCEDURE	EXAM/CAL. SHEET NO.	NI	NRI	RI GEOM/OTHER	REMARKS/BASIC CALIBRATION BLOCK
	RPV EXAMINAT	TIONS (Cont'd)							
B13.10 B-N-1		RFV Examination of Vecal Interfor	VT	VT-H-750/1	\$88H2V115			×	Visual exam revealed cracklike indications See INF 188H2003. Acceptable per GE Letter G-GPC-8-053. Visual exam revealed signs of erosion in all 20 jet pumps. See INF 188H2006. No corrective action required at this outage.
B13.20 B-N-2	*****	RFV Examination of Interior Attachments Within Baltline Reg.	νī	VT-H-750/1	S88H2V115		×		
B13.21 B-N-2	*****	RPV Examination of Interior Attachments Beyond Beltline Reg.	VT	VT-H-750/1	S88H2V115		×		
Bi3.22 B-N-2	*****	RPY Examination of Core Support Structure	TV	VT-H-750/1	\$88H2V115		х		
B15.10 B-P	*****	Class 1 Pressure Retaining Boundary Leakage Test	VT	VT-H-720/1	See Pressure	Test S	Section	n of Report	

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ASME									
SECTION XI CAT. NO.	FIG. NO.	EXAMINATION/AREA	EXAM METHOD	NDE PROCEDURE	EXAM/CAL. SHEET NO.	NI	NRI	RI GEOM/OTHER	REMARKS/BASIC CALIBRATION BLOCK
	MAIN STEAM	SYSTEM							
B10.10 B-K-1	A-6/04	2B21-1MS-24A-5PL-2 Device 2B21-MS-H1	мт	MT-H-500/2	\$88H2M046 \$88H2M052 \$88H2M061	×		X X	Linear indication detected. See INF I88H2009. After grinding, weld was re-examined and deemed acceptable.
B10.10 B-K-1	A-6/04	2821-1MS-24A-5PL-3 Device 2821-MS-H1	МТ	MT-H-500/2	S88H2M047	y			
B10.10 B-K-1	A-6/04	2821-1MS-24A-5PL-4 Device 2821-MS-H1	MT	MT-H-500/2	S88H2M047	Y			
89.31 B-J	A-7/05	2821-1MS-24B-88C-2/ 2821-1MS-8B-BSR Pipe to Branch Connection	MT UT	MT-H-500/2 UT-H-400/7	\$88H2M036 \$88H2U208 \$88H2U209 \$88H2C086 \$38H2C087		X X UT Ca		24-CS-80-1.218-69-Н
B10.10 8-K-1	A-7/05	2B21-1MS-24B-8PL-1 Device 2B21-MS-R53	MT	MT-H-500/2	S88H2M030	x			
B10.10 B-K-1	A-7/05	2821-1MS-24B-8PL-2 Device 2821-MS-R53	MT	MT-H-500/2	S88H2M030	×			
B10.10 B-K-1	A-7/05	2821-1MS-24B-8PL-3 Device 2821-MS-R53	мТ	MT-H-500/2	S88H2M030	×			

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ASME SECTION XI CAT. NO.	EXAM FIG. NO.	EXAMINATION/AREA	MAX3 MC:IT3M	NDE PROCEDURE	EXAM/CAL. SHEET NO.	NI NRI	RI GEOM/OTHER	REMARKS/BASIC CALIBRATION BLOCK
	MAIN STEAM	SYSTEM (Cont'd)						
H10.10	A-7/05	2B21-1MS-24B-8PL-4 Device 2B21-MS-R53	MT	MT-H-500/2	S88H2M030	x		
1:10.10 1:-K-1	A-7/05	2B21-1MS-24B-8PL-5 Device 2B21-MS-R53	MT	MT-H-500/2	S88H2M030	x		
B10.10 B-K-1	A-7/05	2B21-1MS-24B-8PL-6 Device 2B21-MS-R53	MT	MT-H-500/2	S88H2M030	х		
B10.10 B-K-1	A-7/05	2B21-1MS-24B-8PL-7 Device 2B21-MS-R53	MT	MT-H-500/2	S88H2M030	х		
B10.10 B-K-1	A-7/05	2B21-1MS-24B-8PL-8 Device 2B21-MS-R53	MT	MT-H-500/2	S88H2M030	х		
B10.10 B-K-1	A-8/06	2B21-1MS-24C-5PL-1 Device 2B21-MS-H7	MT	MT-H-500/2	\$88H2M060	x		
810.10 8-k-1	A-8/06	2B21-1MS-24C-5PL-3 Device 2B21-MS-H7	MT	MT-H-500/2	S88H2M060	x		
B10.10 B-K-1	A-8/06	2B21-1MS-24C-5PL-4 Device 2B21-MS-H7	MT	MT-H-500/2	S88H2M060	x		
B9.31 B-J	A-8/06	2B21-1MS-24C-8BC-3/ 2B21-1MS-8C-CSR Pipe to Branch Connection	MT UT	MT-H-500/2 UT-H-400/7	\$88H2M029 \$88H2U039 \$88H2U207 \$88H2C002 \$88H2C085	X X UT CO		24-CS-80-1.218-69-H

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ASME								
SECTION XI	FIG. NO.	EXAMINATION/AREA	EXAM METHOD	NDE PROCEDURE	EXAM/CAL. SHEST NO.	NI	RI MRI GEOM/OTHER	REMARKS/BASIC CALIBRATION BLOCK
	MAIN STEAM	SYSTEM (Cont'd)						
B).11 B-J	A-9/05	2B21-IMS-24D-9 Elbow to Pipe	MT UT	MT-H-500/2 UT-H-400/7	\$88H2M056 \$88H2U197 \$88H2C081	x	X UT Cal.	24-СS-80-1.218-69-Н
B10,10 B-K-1	A-9/05	2B21-1MS-24D-9PL-2 Device 2B21-MS-R37	MT	MT-H-500/2	S88H2M031	×		
B10.10 B-K-1	A-9/05	2B21-1MS-24D-9PL-6 Device 2B21-MS-R37	MT	MT-H-500/2	S88H2M031	×		
B10.10 B-K-1	A-9/05	2B21-1MS-24D-9PL-7 Device 2B21-MS-R37	MT	MT-H-500/2	S88H2M031	×		
B10.10 B-K-1	A-9/05	2B21-1MS-24D-9PL-8 Device 2B21-MS-R37	MT	MT-H-500/2	S88H2M031	x		
	REACTOR COO	LANT PUMPS						
Bo. 180 B-G-1		2RC-A Pump Bolt Pump Bolting 1 through 5	UT	UT-H-420/4	S88H2U224 S88H2C097		UT Cal.	28-Н
Bo. 200 B-G-1		2RC-A Pump-Nuts and Washers 1 through 16	VT	VT-H-710/2	S88H2V2O3		Satisfactory	
#10,20 B-K-1	A-4/02	2RC-A Pump Lug-1A2 Restraint Lug	PT	PT-H-600/2	S88H2P060		х	Acceptable per IWB-3516-2

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ASME SECTION XI CAT. NO.	EXAM FIG. NO.	EXAMINATION/AREA	EXAM METHOD	NDE PROCEDURE	EXAM/CAL. SHEET NO.	NI	NRI	RI GEOM/OTHER	REMARKS/BASIC CALIBRATION BLOCK
	REACTOR COL	OLANT PUMPS (Cont'd)							
B10.20 B-K-1	A-4/02	2RC-A Pump Lug-3A2 Restraint Lug	PT	PT-H-600/2	S88H2P021		x		
B10.20 B-K-1	A-4/02	2RC-A Pump Lug-3B2 Restraint Lug	PT	PT-H-600/2	S88H2P021		x		
810.20 B-K-1	A-4/02	2RC-A Pump Lug-3C2 Restraint Lug	PT	PT-H-600/2	S88H2P021		x		
B10.20 B-K-1	A-4/02	2RC-A Pump Lug-3D2 Restraint Lug	PT	PT-H-600/2	S88H2P021		х		
	RESIDUAL HE	AT REMOVAL SYSTEM							
87.50 8-6-2	A-20/02	2E11-1RHR-9A-HS-1FB Flange Bolting	VT	VT-H-710/2	S88H2V244		Satis	factory	
	CORE SPRAY	SYSTEM							
89.11 B-J	A-25/03	2E21-1CS-108-13 Elbow to Pipe	MT UT	MT-H-500/2 UT-H-400/7	\$88H2M039 \$88H2U1 61 \$88H2C066		x x UT Ca	1.	54-н
	HIGH PRESSU	RE COOLANT INJECTION SY	STEM						
89.11 8-J	A-26/03	2E41-1HPCI-10-D-7 Pipe to Elbow	MT UT	MT-H-500/2 UT-H-400/7 UT-H-460/1	\$88H2M037 \$88H2U1 94 \$88H2U1 95 \$88H2C079		x Weld I UT Ca	x Profile	10-CS-100-0.719-54-H

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ASME SECTION XI CAT. NO.	FIG. NO.	EXAMINATION/AREA RE COOLANT INJECTION S	EXAM METHOD	NDE PROCEDURE	EXAM/CAL. SHEET NO. N	RI NRI GEOM/OTHER	REMARKS/BASIC CALIBRATION BLOCK
85.11 B-J	A-26/03	2E41-1HPCI-10-D-8 Elbow to Pipe	MT UT	MT-H-500/2 UT-H-400/7 UT-H-460/1	\$88H2M035 \$88H2U165 \$88H2U183 \$88H2U184 \$88H2U206 \$88H2C070 \$88H2C076	X Weld Profile Ind. Eval. UT Cal. UT Cal.	10-CS-100-0.719-54-H Linear indication detected. See INF 188H2007. Acceptable per IWB-3514-2.
	VALVE BOLTI	NG					
B7.70 B-G-2	A-5/01	2B21-F013F Valve Bolting	VT	VT-H-710/2	S88H2V216	Satisfactory	
B7.70 B-G-2	A-5/01	2B21-F013G Valve Bolting	VT	VT-H-710/2	S88H2V217	Satisfactory	
B7.70 Fi-G-2	A-5/01	2B21-F013H Valve Bolting	VT	VT-H-710/2	S88H2V218	Satisfactory	
H7.70 H-G-2	A-5/01	2B21-F013K Valve Bolting	VT	VT-H-710/2	S88H2V219	Satisfactory	
87.70 8-6-2	A-5/01	2B21-F013L Valve Bolting	VT	GPC-45QC- INS-010-0S/0	MWO 2-87-3163	Satisfactory	Exam performed by GPC
в7.70 В-G-2	A-5/01	2B21-F013M Valve Bolting	VT	VT-H-710/2	S88H2V220	Satisfactory	

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ASME SECTION XI CAT. NO.	EXAM FIG. NO.	EXAMINATION/AREA	EXAM METHOD	NDE PROCEDURE	EXAM/CAL. SHEET NO.	NI NR	RI I GEOM/OTHER	REMARKS/BASIC CALIBRATION BLOCK
	VALVE BOLTI	NG (Cont'd)						
B7.70 B-G-2	A-28/03	2G31-F004 Valve Bolting	VT	VT-H-710/2	S88H2V198	Sa	tisfactory	
U7.70 B-G-2	A-28/03	2G31-F027 Valve Bolting	VT	VT-H-710/2	S88H2V157	Sa	tisfactory	
	VALVE BODIE	<u>s</u>						
812.50 8-M-2	****	2821-FU22B Valve Bodies	VT	VT-H-730/3	NA	Sa	tisfactory	Exam Performed By GPC
B12.50 B-M-2		2821-F0288 Valve Bodies	VT	VT-H-730/3	NA	Sa	tisfactory	Exam Performed By GPC
	CORE SPRAY	SPARGER SYSTEM						
		2N5A Sparger A-A Loop Nozzle	VT	VT-H-750/1	\$88H2V115	x		IEB-80-13
		2N5B Sparger A-B Loop Nozzle	VT	VT-H-750/1	S88H2V1 i 5	×		IEB-80-13

NOTE: Valve 2821-F010A was disassembled for maintenance, however only a limited visual examination was performed. Valve 2821-F010B was disassembled and visually examined during the Fall 1986 outage, therefore the requirement of ASME Section XI, IWB-2500-1, Examination Category B-M-2 has been satisfied (See NIS-1, Page 156).

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ASME SECTION XI CAT. NO.	EXAM FIG. NO.	EXAMINATION/AREA	EXAM METHOD	NDE PROCEDURE	EXAM/CAL. SHEET NO.	NI	NRI	RI GEOM/OTHER	REMARKS/BASIC CALIBRATION BLOCK
	MUREG-0313	EXAMINATIONS							
		2N2F RINTSA Weld	UT	UT-H-415/2	\$88H2U190 \$88H2C078		UT C	x al.	RINTSA-125-H
		2N2G RINTSA Weld	UT	UT-H-415/2	S88H2U193 S88H2C078		UT C	x al.	RINTSA-125-H
		2N2H RINTSA Weld	UT	UT-H-415/2	\$88H2U191 \$88H2C078		UT C	x al.	RINTSA-125-H
		2N2J RINTSA Weld	UT	UT-H-415/2	\$88H2U192 \$88H2C078		UT C	x al.	RINTSA-125-H
***		2N2K RINTSA Weld	UT	UT-H-415/2	\$88H2U189 \$88H2C078		UT C	x s1.	RINTSA-125-H
85.10 B-f	A-37/00	2B31-1RC-4JP-A-1 Nozzle 2N8A to Safe-End	PY UT	PT-H-600/2 UT-H-409/3 UT-H-400/7	\$88H2P047 \$88H2U119 \$88H2U147 \$88H2C037 \$88H2C055		X UT CA UT CA		5.437-SS-X-0.813-121-H
89.11 B-J	A-37/00	2B31-1RC-4JP-A-2 Safe End to Penetration Seal	PT UT	PT-H-600/2 UT-H-401/6	\$88H2P034 \$88H2U117 \$88H2C036		X UT Ca	x al.	4-SS-80-0.337-80-Н

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ASME SECTION XI CAI. NO.	EXAM FIG. NO.	EXAMINATION/AREA	EXAM METHOD	NDE PROCEDURE	EXAM/CAL. SHEET NO.	NI NRI GEOM/OTHER	REMARKS/BASIC CALIBRATION BLOCK
	NUREG-0313	EXAMINATIONS (Cont'd)					
B-F	A-37/00	2B31-1RC-4JP-B-1 Nozzle 2N8B to Safe-End	PT UT	PT-H-600/2 UT-H-409/3 UT-H-400/7	\$88H2P035 \$88H2U120 \$88H2U146 \$88H2C038 \$88H2C054	x X UT Cal. UT Cal.	5.437-SS-X-0.813-121-H
89.11 8-J	A-37/00	2B31-1RC-4JP-B-2 Safe End to Penetration Seal	PT UT	PT-H-600/2 UT-H-401/6	\$88H2P036 \$88H2U118 \$88H2C036	x X UT Cal.	4-SS-80-0.337-80-Н
89.11 B-J	A-14/02	2B31-1RCM-12AF-3 Pipe to Safe-End	PT UT	PT-H-600/2 UT-H-401/6	\$88H2P023 \$88H2U109 \$88H2U111 \$88H2C033 \$88H2C034	X X UT Cal. UT Cal.	12-SS-0.792-132-Н
B9.12 B-J	A-14/02	2B31-1RCM-12AF-3LU Longitudinal Seam Weld Extending Upstream	PT UT	PT-H-600/2 UT-H-401/6	\$88H2P022 \$88H2U106 \$88H2C033	x UT Cal.	12-SS-0.792-132-Н
89.11 B~J	A-14/02	2B31-1RCM-12AG-2 Pipe to Safe-End	PT UT	PT-H-600/2 UT-H-401/6	\$88H2P013 \$88H2U067 \$88H2U068 \$88H2U069 \$88H2C014 \$88H2C015	X X Weld Profile UT Cal. UT Cal.	12-SS-0.792-132-Н

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ASME SECTION XI CAT. NO.	EXAM FIG. NO.	EXAMINATION/AREA	EXAM METHOD	NDE PROCEDURE	EXAM/CAL. SHEET NO.	NI	NRI	RI GEOM/OTHER	REMARKS/BASIC CALIBRATION BLOCK
	NUREG-0313	EXAMINATIONS (Cont'd)							
89.11 B-J	A-14/02	2B31-1RCM-12AH-2 Pipe to Safe-End	PT UT	PT-H-600/2 UT-H-401/6	\$88H2P031 \$88H2U108 \$88H2U110 \$88H2C033 \$88H2C034		X UT C		12-SS-0.792-132-Н
89.11 8-J	A-14/02	2B31-1RCM-12AJ-2 Pipe to Safe-End	PT UT	PT-H-600/2 UT-H-401/6	\$88H2P012 \$88H2U070 \$88H2U071 \$88H2U072 \$88H2C016 \$88H2C017		We. UT C	75.07	12-SS-0.792-132-Н
B9.12 B-J	A-14/02	2B31-1RCM-12AJ-2LU Longitudinal Seam Weld Extending Upstream	PT UT	PT-H-600/2 UT-H-401/6	\$88H2P033 \$88H2U107 \$88H2C033		X UT C	al.	12-SS-0.792-132-H
89.11 8-J	A-14/02	2B31-1RCM-12AK-3 Pipe to Safe-End	PT UT	PT-H-600/2 UT-H-401/6	\$88H2P014 \$88H2U065 \$88H2U066 \$88H2C012 \$88H2C013		X X UT C		12-SS-0.792-132-H
89.11 B-J	A-15/02	2B31-1RCM-12BA-3 Pipe to Safe-End	PT UT	PT-H-600/2 UT-H-401/6	\$88H2P030 \$88H2U073 \$88H2U074 \$88H2C018 \$88H2C019		X X UT C		12-SS-0.792-I32-H

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ASME SECTION XI CAT. NO.	EXAM FIG. NO. NUREG-G313	EXAMINATION/AREA EXAMINATIONS (Cont'd)	EXAM METHOD	NDE PROCEDURE	EXAM/CAL. SHEET NO.	NI NRI GEOM/OTHER	REMARKS/BASIC CALIBRATION BLOCK
85.11 8-J	A-15/02	2B31-1RCM-12BB-2 Pipe to Safe-End	PT UT	PT-H-600/2 UT-H-401/6	\$88H2P032 \$88H2U076 \$88H2U077 \$88H2C020 \$88H2C021	x x X UT Cal.	12-SS-0.792-132-н
B-J B-J	A-15/02	2B31-1RCM-12BC-2 Pipe to Safe-End	PT UT	PT-H-600/2 UT-H-401/6	\$88H2P024 \$88H2U063 \$88H2U064 \$88H2C010 \$88H2C011	x x X UT Cal. UT Cal.	12-SS-0,792-132-H
89.11 8-J	A-15/02	2B31-1RCM-12BD-2 Pipe to Safe-End	PT UT	PT-H-600/2 UT-H-401/6	\$88H2P025 \$88H2U101 \$88H2U103 \$88H2C031 \$88H2C032	x x UT Cal. UT Cal.	12-SS-0.792-132-H
89.11 8-J	A-15/02	2B31-1RCM-12BE-3 Pipe to Safe-End	PT UT	PT-H-600/2 UT-H-401/6	\$88H2P026 \$88H2U100 \$88H2U102 \$88H2C031 \$88H2C032	X X UT Cal. UT Cal.	12-SS-0.792-132-Н

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ASME SECTION XI CAT. NO.	EXAM FIG. NO.	EXAMINATION/AREA	EXAM METHOD	NDE PROCEDURE	EXAM/CAL. SHEET NO.	NI	NRI	RI GEOM/OTHER	REMARKS/BASIC CALIBRATION BLOCK
	NUREG-0313	EXAMINATIONS (Cont'd)							
B9.11 B-J	A-17/02	2B31-1RCM-28AD-1 Pump to Pipe	PT UT	PT-H-600/2 UT-H-401/6	\$88H2P002 \$88H2P054 \$88H2U094 \$88H2U097 \$88H2C029 \$88H2C030		X UT C		22-SS-1.184-128-H Linear and rounded indications. After flapping, weld was found to be acceptable.
89.11 8-J	A-17/02	2B31-1RCM-28AD-2 Pipe to Valve	PT UT	PT-H-600/2 UT-H-401/6	\$88H2P003 \$88H2U095 \$88H2U098 \$88H2C029 \$88H2C030	х	X UT C		28-SS-1.184-128-1
89.11 B-J	A-17/02	2B31-1RCM-28AD-3 Valve to Elbow	PT UT	PT-H-600/2 UT-H-401/6	\$88H2P004 \$88H2U096 \$88H2U099 \$88H2C029 \$88H2C030	x	UT CO	7 7 7 M	28-SS-1.184-128-Н
89.11 8-J	A-16/03	2B31-1RCM-28AS-2 Safe-End to Elbow	PT UT	PT-H-600/2 UT-H-401/6	\$88H2P028 \$88H2U083 \$88H2U089 \$88H2C024 \$88H2C026		X X UT CO		28-SS-1.184-128-н
89.12 B-J	A-16/03	2B31-1RCM-28AS-2LD-I Longitudinal Weld Downstream on Inside of Elbow	PT UT	PT-H-600/2 UT-H-401/6	\$88H2P027 \$88H2U084 \$88H2C024		X UT C	nl.	28-SS-1.184-128-Н

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ASME SECTION XI CAI. NO.	EXAM FIG. NO.	EXAMINATION/AREA EXAMINATIONS (Cont'd)	EXAM METHOD	NDE PROCEDURE	EXAM/CAL. SHEET NO.	NI NRI GEOM/OTHER	REMARKS/BASIC CALIBRATION B' OCK
89.12 B-J	A-16/03	2831-1RCM-28AS-2LD-0 Longitudinal Weld Downstream on Outside of Elbow	PT UT	PT-H-600/2 UT-H-401/6	\$88H2P029 \$88H2U085 \$88H2C024	X X UT Cal.	28-SS-1.184-128-Н
89.11 8-J	A-16/03	2831-1RCM-28AS-8 Elbow to Valve	PT UT	PT-H-600/2 UT-H-401/6	\$88H2P039 \$88H2U078 \$88H2U086 \$88H2C024 \$\$8H2C025	X X X UT Cal. UT Cal.	28-SS-1.184-128-H
89.12 B-J	. 13	2B31-1RCM-28AS-8LU-I Longitudinal Weld Upstream on Inside of Elbow	PT UT	PT-H-600/2 UT-H-401/6	S88H2P038 S88H2U079 S88H2C024	X X UT Cal.	28-SS-1.184-128-Н
B9.12 B-J	A-16/03	2B31-1RCM-28AS-8LU-0 Longitudinal Weld Upstream on Outside of Elbow	PT UT	PT-H-600/2 UT-H-401/6	\$88H2P040 \$88H2U080 \$88H2C024	X X UT Cal.	28-SS-1.184-128-H
89.11 B-J	A-10/03	2B31-1RCM-2BAS-9 Valve to Elbow	PT UT	PT-H-600/2 UT-H-401/6	\$88H2P015 \$88H2U081 \$88H2U087 \$88H2C024 \$88H2C025	X X UT Cal. UT Cal.	28-SS-1.184-128-H

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ASME SECTION XI CAT. NO.	EXAM FIG. NO.	EXAMINATION/AREA	EXAM METHOD	NDE PROCEDURE	EXAM/CAL. SHEET NO.	NI NI	RI GEOM/OTHER	REMARKS/BASIC CALIBRATION BLOCK
	NUREG-0313	EXAMINATIONS (Cont'd)						
89.11 B-J	A-16/03	2B31-1RCM-28AS-10 Elbow to Pump	PT UT	PT-H-600/2 UT-H-401/6	\$88H2P016 \$88H2U082 \$88H2U688 \$88H2C024 \$88H2C025)) II		28-SS-1.184-128-H
89.11 8-J	A-19/02	2831-1RCM-288D-1 Pump to Pipe	PT UT	PT-H-600/2 UT-H-401/6	\$88H2P 01 7 \$88H2U056 \$88H2U058 \$88H2C006 \$88H2C008		x	28-SS-1.184-128-Н
89.12 8-J	A-19/02	2B31-1RCM-28BD-1LD Longitudinal Seam Weld Extending Downstream	PT UT	PT-H-600/2 UT-H-401/6	\$88H2P018 \$88H2U057 \$88H2C007	x X U1	Cal.	28-SS-1.184-128-Н
89.11 8-J	A-19/02	2B31-1RCM-28BD-2 Pipe to Valve	PT UT	PT-H-600/2 UT-H-401/6	\$88H2P019 \$88H2U055 \$88H2U075 \$88H2C005 \$88H2C008		x	28-SS-1.18 4- 128-Н

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ASME SECTION XI CAT. NO.	EXAM FIG. NO.	EXAMINATION/AREA	EXAM METHOD	NDE PROCEDURE	EXAM/CAL. SHEET NO.	NI NRI GEOM/OTHER	REMARKS/BASIC CALIBRATION BLOCK
	NUREG-0313	EXAMINATIONS (Cont'd)					
89.11 B-J	A-19/02	2B31-1RCM-28BD-3 Valve to Elbow	PT	PT-H-600/2 UT-H-401/6	\$88H2P020 \$88H2U159 \$88H2U160 \$88H2C064 \$88H2C065	X X X UT Cal. UT Cal.	28-SS-1.184-128-Н
89.11 8-J	A-18/03	2B31-1RCM-28BS-2 Safe End to Elbow	PT UT	PT-H-600/2 UT-H-401/6	\$88H2P041 \$88H2U090 \$88H2U091 \$88H2C027 \$88H2C028	X X UT Cal. UT Cal.	28-SS-1.184-128-Н
89.12 8-J	A-18/03	2831-1RCM-28BS-2LD-I Longitudinal Weld Downstream on Inside of Elbow	PT UT	PT-H-600/2 UT-H-401/6	\$88H2P042 \$88H2U092 \$88H2C028	X X UT Cal.	28-SS-1.184-128-H
B9.12 B-J	A-18/03	2831-1RCM-28BS-2LD-0 Longitudinal Weld Downstream on Outside of Elbow	PT UT	PT-H-600/2 UT-H-401/6	S88H2P043 S88H2U093 S88H2C028	x X UT Cal.	28-SS-1.184-128-H
89.11 8-J	A-18/03	2B31-1RCM-28BS-7 Elbow to Valve	PT UT	PT-H-600/2 UT-H-401/6	\$88H2P007 \$88H2U122 \$88H2U127 \$88H2C022 \$88H2C023	X X UT Cal. UT Cal.	28-SS-1.184-128-Н

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ASME SECTION XI CAT. NO.	EXAM FIG. NO. NUREG-0313	EXAMINATION/AREA EXAMINATIONS (Cont'd)	EXAM METHOD	NDE PROCEDURE	EXAM/CAL. SHEET NO.	NI NRI GEOM/OTHER	REMARKS/BASIC CALIBRATION BLOCK
89.11 8~∂	A-18/03	2831-1RCM-288S-8 Valve to Elbow	PT UT	PT-H-600/2 UT-H-401/6	\$88H2P0C8 \$88H2U123 \$88H2U128 \$88H2C022 \$88H2C023	x x X UT Cal. UT Cal.	28-SS-1.184-128-H
89.11 8-J	A-18/03	2B31-1RCM-28BS-9 Elbow to Pump	PT UT	PT-H-600/2 UT-H-401/6	\$88H2P011 \$88H2U124 \$88H2U129 \$88H2C022 \$88H2C023	X X UT Cal. UT Cal.	28-SS-1.184-128-Н
89.12 B-J	A-18/03	2B31-1RCM-28BS-9LU-I Longitudinal Weld Upstream on Inside of Elbow	PT UT	PT-H-600/2 UT-H-401/6	\$88H2P010 \$88H2U125 \$88H2C022	X X UT Cal.	28-SS-1.184-128-н
B9.12 B-J	A-18/03	2B31-1RCM-28BS-9LU-0 Longitudinal Weld Upstream on Outside of Elbow	PT UT	PT-H-600/2 UT-H-401/6	\$88H2P009 \$88H2U126 \$88H2C022	X UT Cal.	28-SS-1.184-128-Н
85.50 B-F	A-21/U3	2E ¹ 1-1RHRM-2ORS-3 Elbow to Pipe	PT UT	PT-H-600/2 UT-H-401/6	\$88H2P057 \$88H2P061 \$89H2U166 \$88H2C071	x X UT Cal.	20-SS-0.879-130-H Linear indication. Acceptable after surface preparation.

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ASME SECTION XI CAT. NO.	EXAM FIG. NO.	EXAMINATION/AREA	EXAM METHOD	NDE PROCEDURE	EXAM/CAL. SHEET NO.	NI NRI GEOM/OTHER	REMARKS/BASIC CALIBRATION BLOCK
	NUREG-0313	EXAMINATIONS (Cont'd)					
89.12 8-J	A-21/03 .	2Ell-IRHRM-2ORS-3LU-I Longitudinal Weld Upstream on Inside of Elbow	PT UT	PT-H-600/2 UT-H-401/6	\$88H2P005 \$88H2U168 \$88H2C072	X X UT Cal.	20-SS-0. 879-130-н
B9.12 B-J	A-21/03	2E11-1RHRM-2ORS-3LU-0 Longitudinal Weld Upstream on Outside of Elbow	PT UT	PT-H-600/2 UT-H-401/6	\$88H2P006 \$88H2U167 \$88H2C072	X X UT Cal.	20-SS-0. 879-1 30-Н
85.50 8-F	A-22/03	2E11-1RHRM-24A-10 Pipe to Elbow	PT UT	PT-H-600/2 UT-H-401/6	\$88H2P044 \$88H2U158 \$88H2C063	x UT Cal.	24-SS-1.186-131-H
85.50 8-F	A-23/03	2E11-1RHRM-24B-10 Pipe to Elbow	PT UT	PT-H-600/2 UT-H-401/6	\$88H2P062 \$88H2U210 \$88H2C088	V UT Cal.	24-SS-1.186-131-H Acceptable per IWB-3514-3
85.50 8-F	A-24/03	Pipe to Safe-End	PT UT	PT-H-600/2 UT-H-400/7	S88H2P037 S88H2U199 S88H2C082	x UT Cal.	10-9-IN-X-0.600-79-H
85.10 8-F	A-24/03	2E21-ICS-10A-21 Safe-End to Nozzle	PT UT	PT-H-600/2 UT-H-400/7 UT-H-409/3	\$88H2P045 \$88H2P055 \$88H2U149 \$88H2U150 \$88H2U151 \$88H2C048 \$88H2C056	X X Weld Profile UT Cal. UT Cal.	13.2-IN-X-1.200-78-H Rounded indication. Acceptable after surface preparation.

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ASME SECTION XI CAT. NO.	EXAM FIG. NO.	EXAMINATION/AREA EXAMINATIONS (Cont'd)	EXAM METHOD	NDE PROCEDURE	EXAM/CAL. SHEET NO.	NI NRI GEOM/OT	REMARKS/BASIC HER CALIBRATION BLOCK
85.50 8-F	A-25/03	2E21-1CS-10B-19 Pipe to Safe-End	PT UT	PT-H-600/2 UT-H-400/7	\$88H2P056 \$88H2U1 98 \$88H2C082	X UT Cal.	10-9-IN-X-0.600-79-H
85.10 8-F	A-25/03	2E21-1CS-10B-20 Safe-End J Nozzle	PT	PT-H-600/2 UT-H-400/7 UT-H-409/3	\$88H2P048 \$88H2V138 \$88H2V139 \$88H2V148 \$88H2C047 \$88H2C056	x Weld Profile x UT Cal. UT Cal.	13.2-IN-X-1.200-78-H
иэ.11 В-J	Λ-28/03	2G31-1RWCUM-6-D-17 Valve to Penetration	TC	PT-H-600/2 UT-H-400/7	\$88H2P050 \$88H2U154 \$88H2U155 \$88H2C059 \$88H2C060	x x X UT Cal. UT Cal.	2-н
89.12 B-J	A-28/03	2G31-1RWCUM-6-D-6 Pipe to Valve	PT UT	PT-H-600/2 UT-H-401/6	\$88H2P053 \$88H2U134 \$88H2U135 \$88H2C043 \$88H2C044	X X VT Cal. UT Cal.	6-SS-0.432-133-Н
89.12 8-J	A-28/03	2G31-1RWCUM-6-D-6LU Longitudinal Seam Weld Extending Upstream	PT UT	PT-H-600/2 UT-H-401/6	\$88H2P052 \$88H2U133 \$88H2C042	x UT Cal.	6-SS-0.432-133-Н

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ASME SECTION XI CAT. NO.	EXAM FIG. NO.	EXAMINATION/AREA	EXAM METHOD	NDE PROCEDURE	EXAM/CAL. SHEET NO.	NI	NRI	RI GEOM/OTHER	REMARKS/BASIC CALIBRATION BLOCK
	NUREG-0313	EXAMINATIONS (Cont'd)							
89.11 8-J	A-28/03	2G31-1RWCUM-6-D-7 Valve to Pipe	PT	PT-H-600/2 UT-H-401/6	\$88H2P051 \$88H2U1 36 \$88H2U1 37 \$88H2C045 \$88H2C046		X X UT C		6-SS-0.432-133-Н
89.11 B-J	A-28/03	2G31-1RWCUM-6-D-14 Pipe to Valve	PT UT	PT-H-600/2 UT-H-401/6	\$88H2P049 \$88H2U156 \$88H2U157 \$88H2C061 \$88H2C062		X X UT C UT C		6-SS-0.432-133-н
89.11 8-J	A-28/03	2G31-1RWCUM-6-D-15 Penetration to Pipe	PT UT	PT-H-600/2 UT-H-401/6	\$88H2P065 \$88H2U219 \$88H2U221 \$88H2C094 \$88H2C095	x	UT C		6-SS-0.432-133-н
B9.11 B-J	A-28/03	2G31-1RWCUM-6-D-16 Pipe to Valve	PT UT	PT-H-600/2 UT-H-401/6	\$88H2P063 \$88H2U220 \$88H2U222 \$88H2C094 \$88H2C095	х	X X UT C		6-SS-0.432-133-н
89, 12 8-J	A-28/03	2G31-1RWCUM-6-D-16LU Longitudinal Seam Weld Extending Upstream	PT UT	PT-H-600/2 UT-H-401/6	\$88H2P064 \$88H2U223 \$88H1C096	x x	UT C	al.	6-SS-0.432-133-Н

Edwin I. Hatch Unit 2 1988 Winter Refueling Outage Class 1 Components Page 33 of 34

ASME SECTION XI CAI. NO.	EXAM FIG. NO.	EXAMINATION/AREA	EXAM METHOD	NDE PROCEDURE	EXAM/CAL. SHEET NO.	NI	NRI	RI GEOM/OTHER	REMARKS/BASIC CALIBRATION BLOCK
	NUREG-U619	EXAMINATIONS							
89.11 8-J	A-10/03	2821-1FW-12AA-12 Transition Piece To Nozzle	MT	MT-H-500/2 UT-H-400/7	\$88H2M038 \$88H2U162 \$88H2U163 \$88H2U164 \$88H2C067 \$88H2C068 \$88H2C069		X X UT Ca UT Ca UT Ca	1.	16-CS-100-1.031-53-H No significant change in length or depth when compared to past outages.
	JET PUMP BE	AM EXAMINATIONS							
==		RPV Jet Pump Beams No. 1-20	UT	UT-H-414/2	\$88H2U130 \$88H2C040		UT Ca	1. ×	JPB-124-H Crack-like indi- cation in jet pump beam #20. See INF I88H2004. Jet pump beam was removed and replaced.
		RPV Jet Pump Beams No. 20	UT	UT-H-414/2	\$88H2U196 \$88H2U218 \$88H2C080 \$88H2C093		X . UT Ca	1. 1.	JPB-124-H Replacement Beam Baseline Exam.

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Edwin I. Hatch Unit 2 1988 Winter Refueling Outage Class 1 Components Page 34 of 34

SECTION XI CAT. NO.	EXAM FIG. NO.	EXAM YATION/AREA	EXAM METHOD	NDE PROCEDURE	EXAM/CAL. SHEET NO.	NI	NRI	RI GEOM/OTHER	REMARKS/BASIC CALIBRATION BLOCK
	SHROUD HEAD	BOLTS							
		Shroud Head Bolts 1 thru 36	UT	UT-H-418/0	\$88H2U036 \$88H2C001		UT C	al. ×	INC-SHB-136-H Crack-like indi- cations found. See INF I88H2002. Six of the 8 cracked bolts were removed and re- placed. No re-exam required at this time per GE MDE 39-0286. Re-exam next outage.

Exam figures referenced throughout these tables are a part of the SCS-ISI Examination Plan and can be reviewed at the Plant Site.

INFs referenced throughout these tables are part of the SCS Final Report and may be reviewed at the Plant Site.

SUMMARY

OF

CLASS 2 COMPONENTS

Edwin I. Hatch Unit 2 1988 Winter Refueling Outage Class 2 Components Page 1 of 10

ASME SECTION X1 CAT. NO.	EXAM FIG. NO.	EXAMINATION/AREA	EXAM METHOD	NDE PROCEDURE	EXAM/CAL. SHEET NO.	NI	RI NRI GEOM/OTHER	REMARKS/BASIC CALIBRATION BLOCK
	RESIDUAL HE	EAT REMOVAL SYSTEM						
C6.10 C-G	B-2/02	2E11-2RHR-PMI-A RHR Pump A Inlet Nozzle Weld	MT	MT-H-500/2 VT-H-710/2	S88H2M015 S88H2V048		X Satisfactory	Limited MT Exam, Supplemented by VT.
(6,10 C-6	8-2/02	2E11-2RHR-POP-A-1 Flange to Elbow RHR Pump A	MT	MT-H-500/2	S88H2M011		×	
Co.10 C-G	8-2/02	2E11-2RHR-POP-A-1BC/ Shaft-Elbow to BC RHR Pump A	MT	MT-H-500/2	S88H2M012		х	
C6.10 C-G	B-2/02	2E11-2RHR-POP-A-2 Elbow to Flange RHR Pump A	MT	MT-H-500/2	S88H2M013		×	
C5.11 C-F	B-23/03	2E11-2RHR-8-FPS-8 45-Degree Elbow to 45-Degree Elbow	MT	MT-H-500/2	\$88H2M067 \$88H2M070		x	Linear indication. See INF 188H2016. After grinding, weld was re-examined and found to be acceptable.
CS. 11 C-F	B-23/03	2E11-2RHR-8-FPS-21 Elbow to Pipe	MT	MT-H-500/2	S88H2M050	×		
C3.40 C-C	B-14/05	2E11-2RHR-16A-DS-7APS- Device 2E11-RHR-H321	1 MT	MT-H-500/2	S88H2M044		x	

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Edwin I. Hatch Unit 2 1988 Winter Refueling Outage Class 2 Components Page 2 of 10

ASME SECTION XI CAT. NO.	EXAM FIG. NO.	EXAMINATION/AREA	EXAM METHOD	NDE PROCEDURE	EXAM/CAL. SHEET NO.	<u>NI</u>	NRI	RI GEOM/OTHER	REMARKS/BASIC CALIBRATION BLOCK
	RESIDUAL H	EAT REMOVAL SYSTEM Cont'd)							
C3.40 C-C	B-14/05	2E11-2RHK-16A-DS-7APS-2 Device 2E11-RHR-H321	мт	MT-H-500/2	S88H2M045		x		
C5.11 C-F	B-14/05	2E11-2RHR-16A-DS-8 Pipe to Elbow	MT	MT-H-500/2	S88H2M043		х		
C3.40 C-C	8-29/03	2E11-2RHR-16A-PD-C-3PL-1 Device 2E11-RHR-H180	MT	MT-H-500/2	S88H2M014		x		
C3.40 C-C	B-29/03	2E11-2RHR-16A-PD-C-3PL-2 Device 2E11-RHR-H180	MT	H-500/2	S88H2M014		x		
C3.40 C-C	B-29/03	2E11-2RHR-16A-PD-C-3PL-3 Device 2E11-RHR-4180	МТ	MT-H-500/2	S88H2M014		x		
C3.40 C-C	B-29/03	2E11-2RHR-16A-PD-C-3PL-4 Device 2E11-RHR-H180	MT	MT-H-500/2	\$88H2M016 \$88H2M020		x	×	Linear indication. After flapping, weld was re-examined and found to be acceptable.
C5.11 C-F	8-36/02	2E11-2RHR-2OB-D-3 Pipe to 45-Degree Elbow	MT	MT-H-500/2	\$88H2M068 \$88H2M059		x	×	Linear indication. See INF 188H2017. After grinding, weld was re-examined and found to be acceptable.

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ASME SECTION XI CAT. NO.	EXAM FIG. NO.	EXAMINATION/AREA	EXAM METHOD	NDE PROCEDURE	EXAM/CAL. SHEET NO.	NI	NRI	RI GEOM/OTHER	REMARKS/BASIC CALIBRATION BLOCK
	RESIDUAL H	EAT REMOVAL SYSTEM Cont'	1)						
C5.11 C-F	B-36/02	2E11-2RHR-20B-D-8 Elbow to Pipe	MT	MT-H-500/2	S88H2M005		×		
C5.11 C-F	8-38/03	2E11-2RHR-2OD-D-8 Pipe to Elbow	MT	MT-H-500/2	\$88H2M019		x		
C3.40 C-C	B-38/03	2E11-2RHR-20D-D-10PL-1 Device 2E11-RHR-H174	MT	MT-H-500/2	S88H2M026		×		
C3.40 C-C	8-38/03	2E11-2RHR-20D-D-10PL-2 Device 2E11-RHR-H174	MT	MT-H-500/2	S88H2M026		×		
C3.40 C-C	8-38/03	2E11-2RHR-20D-D-10PL-3 Device 2E11-RHR-H174	МТ	MT-H-500/2	S88H2M026		×		
C3.40 C-C	B-38/03	2E11-2RHR-20D-D-10PL-4 Device 2F1-RHR-H174	MT	MT-H-500/2	S88H2M026		×		
C5.11 C-F	B-38/03	2E11-2RHR-20D-D-11 Pipe to Branch Connection	MT	MT-H-500/2	S88H2M025		×		
	CORE SPRAY	SYSTEM							
C3.46 C-C	8-53/02	2E21-2CS-10A-TL-15 Pipe to Torus Penetration	мт	MT-H-500/2	\$88H2M049	х			

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Edwin I. Hatch Unit 2 1988 Winter Refueling Outage Class 2 Components Page 4 of 10

ASME SECTION XI CAT. NO.	EXAM FIG. NO.	EXAMINATION/AREA	EXAM METHOD	NDE PR-CEDURE	EXAM/CAL. SHEET NO.	NI	NRI GEOM/OTHER	REMARKS/BASIC CALIBRATION BLOCK
	CORE SPRAY	SYSTEM (Cont'd)						
C3.40 C-C	B-61/03	2E21-2CS-2OA-TS-1 Torus Penetration X-2O8A to Pipe	VT	VT-H-710/2	S88H2V2G9		Satisfactory	Inaccessible for surface exam
C3.40 C-C	8-61/03	2E21-2CS-20A-TS-12PS-1 Device 2E21-CS-H708	мт	MT-H-500/2	S869/2M021		X	
C3.40 C-E	B-61/03	2E21-2CS-20A-TS-12PS-2 Device 2E21-CS-H708	MT	MT-H-500/2	S88H2M022		х	
C3.40 C-C	B-£1/03	2E21-2CS-2OA-TS-12PS-2A Device 2E21-CS-R41	т	MT-H-500/2	S88H2M027		x	
	HIGH PRESSI	URE COOLANT INJECTION SYS	TEM					
€5.21 €-F	8-66/03	2E41-2HPCI-14-R-37 Pipe to Elbow	MT UT	MT-H-500/2 UT-K-400/7	\$88H2M028 \$88H2U059 \$88H2U060 \$88H2C009		x Contour Report UT Cal.	14-СS-80-0.750-116-н
C5. 21 C-F	B-66/03	2E41-2HPCI-14-R-43 Pipe to Elbow	MT UT	MT-H-500/2 UT-H-400/7	\$88H2M059 \$88H2U211 \$88H2C089	x	X UT Cal.	14-СS-100-0, 938-43-н
C5.11 C-F	8-69/03	2E41-2HPCI-20TD-8 Elbow to Pipe	мт	MT-H-500/2	\$88H2M008		x	

Edwin I. Hatch Unit 2 1988 Winter Refueling Outage Class 2 Components Page 5 of 10

ASME SECTION XI CAT. NO.	EXAM FIG. NO.	EXAMINATION/AREA	EXAM METHOD	NDE PROCEDURE	EXAM/CAL. SHEET NO.	NI	NRI	RI GEOM/OTHER	REMARKS/BASIC CALIBRATION BLOCK
	HIGH PHESS	URE COOLANT INJECTION SYS	TEM (Cont'	<u>d)</u>					
C3.40 C-C	8-69/03	2E41-2HPCI-20-TD-15PS-1 Device 2E41-HPCI-R22	MT	MT-H-500/2	S88H2M024		×		
C3.40 C-C	B-69/03	2E41-2HPCI-20-TD-15PS-2 Device ZE41-HPCI-R22	мт	MT-H-500/2	S88H2M024		×		
C5.11 C-F	B-69/03	2E41-2HPCI-20-TD-19 Pipe to Reducer	МТ	Mï-H-500/2	S88H2M051	х			
	MAIN STEAM	SYSTEM							
C3.40 C-C	8-7/03	2N11-2MSA-16A-13PL-1 Device 2N11-MS-R69	MT	MT-H-500/2	S8 2/42M018		x		
C3.40 C-C	B-7/03	2N11-2MSA-16A-13PL-2 Device 2N11-MS-R69	МТ	MT-H-500/2	8 1 CM2H882		×		
C3.40 C-C	B-7/03	2N11-2MSA-16A-13PL-3 Device 2N11-MS-R69	MT	MT-H-500/2	S88H2M018		×		
C3.40 C-C	B-7/03	2N11-2MSA-16A-13PL-4 Device 2N11-MS-R69	MT	MT-H-500/2	S88H2M018		х		
€3.40 C-€	B-7/03	2N11-2MSA-16A-13PL-5 Device 2N11-MS-R69	MT	MT-H-500/2	S88H2M018		×		

Edwin I. Match Unit 2 1938 Winter Refueling Outage Class 2 Components Page 6 of 10

ASME SECTION XI CAI. NO.	EXAM FIG. NO.	EXAMINATION/AREA	EXAM METHOD	NDE PROCEDURE	EXAM/CAL. SHEET NO.	NI I	RI NRI GEOM/OTHER	REMARKS/BASIC CALIBRATION BLOCK
	MAIN STEAM	SYSYEM (Cont'd)						
C3.40 C-C	B-7/03	2N11-2MSA-16A-13PL-6 Device 2N11-MS-R69	MT	MT-H-500/2	S88H2M018		×	
C3.40 C-C	B-7/03	2N11-2MSA-16A-13PL-7 Device 2N11-MS-R69	MT	MT-H-500/2	S88H2M018		x	
C3.40 C-C	B-7/03	2N11-2MSA-16A-13PL-8 Device 2N11-MS-R69	MT	MT-H-500/2	S88H2M018		x	
C5.21 C-F	B-7/03	2N11-2MSA-16C-16 Pipe to Pipe	MT UT	MT-H-500/2 UT-H-400/7	S88H2M034 S88H2U140 S88H2C050	x	x JT Cal.	16-CS-100-1.031-53-H
C 5. 31 C-F	B-9/03	2N11-2MSA-24A-11BC/ 2N11-2MSA-6A-SJAE Pipe to Branch Connection	MT UT	MT-H-500/2 UT-H-400/7	\$88H2M055 \$88H2U152 \$88H2U153 \$88H2C057 \$88H2C058		x x JT Cal.	12-Н
C3.40 C-C	8-9/03	2N11-2MSA-24A-11PL-1 Device 2N11-MS-A60	MT	MT-H-500/2	S88H2M023		x	
C3.40 C-C	8-9/03	2N11-2MSA-24A-11PL-2 Device 2N11-MS-A60	MT	MT-H-500/2	S88H2M023		x	

Edwin I. Hatch Unit 2 1988 Winter Refueling Outage Class 2 Components Page 7 of 10

ASME SECTION XI CAT. NO.	FIG. NO.	EXAMINATION/AREA	EXAM METHOD	NDE PROCEDURE	EXAM/CAL. SHEET NO.	NI NRI	RI GEOM/OTHER	EMARKS/BASIC CALIBRATION BLOCK
	MAIN STEAM	M SYSTEM (Cont'd)						
C3.40 C-C	b-9/03	2N11-2MSA-24A-11PL-3 Device 2N11-MS-A60	MT	MT-H-500/2	S88H2M023	х		
C3.40 C-C	B-9/03	2N11-2MSA-24A-11PL-4 Device 2N11-MS-A60	MT	MT-H-500/2	\$88H2M023	x		
C3.40 C-C	B-9/03	2N11-2MSA-24A-11PL-5 Device 2N11-MS-A60	MT	M:~H-500/2	S88H2M023	x		
€3.40 €-€	8-9/03	2N:1-2MSA-24A-11PL-6 Device 2N11-MS-A60	MT	MT-H-500/2	S88H2M023	х		
C3.40 C-C	8-9/03	2N11-2MSA-24A-11PL-7 Device 2N11-MS-A60	MI	MT-H-500,'2	S88H2M023	x		
C3.40 C-C	B-9/03	2N11-2MSA-24A-11PL-8 Device 2N11-MS-A60	MT	MT~H-500/2	S88H2M023	x		
C3.40 C-C	B-10/03	2N11-2MSA-24B-1PS-1 Pipe Support	MT	MT-H-500/2	\$88H2M057 \$88H2M065 \$88H2M072 \$88H2M073	х	x x x	Linear Indications. See INF 188H2015 After grinding, and re,air welding, welds found to be acceptable.

1988 Winter Refueling Outage Class 2 Components Page 8 of 10

ASME SECTION XI CAT. NO.	EXAM FIG. NO. MAIN STEAM	EXAMINATION/AREA SYSTEM (Cont'd)	EXAM METHOD	NDE PROCEDURE	EXAM/CAL. SHEET NO.	NI	NRI	RI GEOM/OTHER	REMARKS/BASIC CALIBRATION BLOCK
C3.40 C-C	B-10/03	2N11-2MSA-24B-1PS-2 Pipe Support	MT	MT-H-500/2	\$88H2M058 \$88H2M066 \$88H2M071		×	x x	Linear indication. See INF 188H2015. After grinding weld found to be acceptable.
C5. 21 C-F	B-10/03	2N11-2MSA-24B-18 Tee to Pipe	MT	MT-H-500/2 UT-H-400/7	\$88H2M033 \$88H2U121 \$88H2C039	x	UT C	x al.	12-Н
C3.40 C-C	B-11/03	2N11-2MSA-24C-6PL-1 Device 2N11-MS-R54	MT	MT-H-500/2	S88H2M017		×		
C3.40 C-C	8-11/03	2N11-2MSA-24C-6PL-2 Device 2N11-MS-R54	MT	MT-H-500/2	S88H2M017		х		
C3.40 C-C	B-11/03	2N11-2MSA-24C-6PL-3 Device 2N11-MS-R54	MT	MT-H-500/2	S88H2M017		×		
C3.40 C-C	B-11/03	2N11-2MSA-24C-6PL-4 Device 2N11-MS-R54	MT	MT-H-500/2	S88H2M017		х		
C3,40 C-C	8-11/03	2N11-2MSA-24C-6PL-5 Device 2N11-MS-R54	MT	MT-H-500/2	S88H2M017		×		

Edwin I. Hatch Unit 2 1988 Winter Refueling Outage Class 2 Components Page 9 < 10

ASME SECTION XI CAT. NO.	EXAM FIG. NO.	EXAMINATION/AREA	EXAM METHOD	NDE PROCEDURE	EXAM/CAL. SHEET NO.	NI	NRI	RI GEOM/OTHER	REMARKS/BASIC CALIBRATION BLOCK
	MAIN STEAM	SYSTEM (Cont'd)							
C3.40 C-C	B-11/03	2N11-2MSA-24C-6PL-6 Device 2N11-MS-R54	MT	MT-H-500/2	S88H2M017		x		
C3.40 C-C	B-11/03	2N11-2MSA-24C-6PL-7 Device 2N11-MS-R54	MT	MT-H-500/2	S88H2M017		х		
C3.40 C-C	8-11/03	2N11-2MSA-24C-6PL-8 Device 2N11-MS-R54	MT	MT-H-500/2	S88H2M017		×		
C3.40 C-C	8-12/03	2N11-2MSA-24D-8PL-5 Device 2N11-MS-R51	MT	MT-H-500/2	S88H2M054	×			
C3.40 C-C	B-12/03	2N11-2MSA-24D-8PL-6 Device 2N11-MS-R51	MT	MT-H-500/2	S88H2M054	×			
C3.40 C-C	8-12/03	2N11-2MSA-24D-8PL-7 Device 2N11-MS-R51	МТ	MT-H-500/2	S88H2M054	х			
C3.40 C-L	8-12/03	2N11-2MSA-24D-8PL-8 Device 2N11-MS-R51	мт	MT-H-500/2	S88H2M054	x			
C5.21 C-F	8-12/03	2N11-2MSA-24D-9 Pipe to Elbow	MT UT	MT-H-500/2 UT-H-400/7	\$88H2M032 \$88H2U116 \$88H2C035	x	UT Ca	x nl.	12-H

Edwin I. Hatch Unit 2 1988 Winter Refueling Outage Class 2 Components Page 10 of 10

SECTION XI CAT. NO.	EXAM FIG. NO.	EXAMINATION/AREA	EXAM METHOD	NDE PROCEDURE	EXAM/CAL. SHEET NO.	<u>:1</u>	NRI	RI GEOM/OTHER	REMARKS/BASIC CALIBRATION BLOCK
	AUGMENTED	EXAMINATIONS							
100 mark	B73A/01	2E41-2HPCI-6-CS-1 BC to Flange	PT	PT-H-600/2	S88H2P001		x		
	B-73/03	2E41-2HPCI-16-TS-9 Pipe to Elbow	MT	MT-H-500/2	S88H2M010		x		
	B-73/03	2E41-2HPCI-16-TS-18 45 Degree Elbow to Tee	МТ	MT-H-500/2	S88H2M009		x		
	NUREG-0619	EXAMINATIONS							
	B-83/02	2G31-2RWCU-4-2FW-3U52 Tee to Pipe	UT	UT-H-400/7	\$88H2U2O4 \$88H2U2O5 \$88H2CO83 \$88H2CO84		X UT CA	al.	4-н
	8-83/02	2C11-2CRD-3-2FW-1611 Pipe to Reducer	UT	UT-H-400/7	\$88H2U2O2 \$88H2U2O3 \$88H2CO83 \$88H2CO84		X UT CA		4-н
	8-83/02	2C11-2CRD-4-2FW-1611 Reducer to Tee	UT	UT-H-400/7	\$88H2U200 \$88H2U201 \$88H2C083 \$88H2C084		X UT CA UT CA		4-11

Exam Figures referenced throughout these tables are a part of the SCS-ISI Examination Plan and can be reviewed at the Plant Site.

INFs referenced throughout these tables are part of the SCS Final Report and may be reviewed at the Plant Site.

SUMMARY

OF

CLASS 1, 2, AND 3 PRESSURE TESTS

PRESSURE TESTING

This section of the report provides a discussion of the pressure tests that were performed during the Plant Hatch Unit 2 Winter 1988 Refueling Outage. These pressure tests were performed for the purpose of injervice inspection on selected Class 1, 2, and 3 piping systems. The pressure tests and their boundaries are identified in the inservice examination plan prepared by Southern Company Services, Revision 1.

All pressure tests were performed in accordance with ASME Section XI, 1980 Edition with Addenda through Winter 1981. All tests were witnessed and/or reviewed by the resident ANI/ANII. The completed test reports are available for review in the Records Management Department at the plant site.

TESTING

Class 1

No class 1 Hydrostatic Tests were performed during this outage. A Class 1 System Leakage Test, 2B21-LT-1, was performed prior to unit start-up per ASME XI, Section IWA-5211(a). This test was performed using GPC Procedure 42IT-TET-006-2S under Maintenance Work Order 2-87-3043. The pressure and examination boundary was in accordance with ASME Section XI, Table IWB-2500-1 Examination Category B-P, Note 1.

Only minor leakage was detected during VT-2 examination and after some repair work the Class 1 System was deemed acceptable by plant engineering.

Any Class 1 system Components not examined during performance of 42IT-TET-006-2S were examined during rlant start-up using GPC procedure 42IT-TET-001-0S. The pressure boundary was in accordance with ASME Section XI, Table IWB-2500-1 Examination Category B-P, Note 1.*

Class 2

Six Class 2 Hydrostatic Tests were performed during the outage. These hydrostatic tests were performed per ASME XI, IWA-5211(d). The tests were performed in accordance with GPC procedure 42IT-TET-001-0S. Listed below are the Class 2 Hydrostatic Tests and accompanying Maintenance Work Orders:

2E11-HT-2	MWO 2-87-3034	2E11-HT-14	MWO 2-87-3045
2E11-HT-3	MWO 2-87-3035	2E11-HT-23	MWO 2-87-3039
2E11-HT-6	MWO 2-87-3037	2E11-HT-24	MWO 2-87-3036

Only minor leakage was detected during VT-2 examination and all tests results were deemed acceptable by plant engineering.

^{*} Valve 2821-F001 and 2821-F002 were disassembled prior to test, however, during test they were both in their normally closed position. As a result, valve 2821-F002 did not experience test pressure.

Class 3

Three Class 3 Hydrostatic tests were performed during the outage. These hydrostatic tests were performed per ASME XI, IWA-5211(d) and in accordance with GPC Procedure 42IT-TET-001-0S. Only minor leakage was detected and after engineering evaluation all tests results were deemed acceptable. Listed below are the Class 3 Hydrostatic Tests and accompanying Maintenance Work Orders:

2P41-HT-13 MW0 2-87-3041 2P41-HT-28 MW0 2-87-3040 2P41-HT-29 MW0 2-87-3042

Class 3 Inservice Test

One Class 3 Inservice Test was performed per ASME XI, IWA-5211(c). A special purpose procedure, 42SP-011388-0W-1-2S, was written to perform the test. This test was on the Residual Heat Removal Service Water System and is identified as test 2E11-IT-1.

SUMMARY OF VISUAL EXAMINATIONS

CLASS 1, 2, AND 3

COMPONENT SUPPORTS

COMPONENT SUPPORT EXAMINATIONS

This section of the report provides a discussion of the visual examinations performed on selected component supports on Hatch Unit 2. The subject examinations were performed prior to and during the Refueling/Maintenance Outage. Examinations were performed using SCS Procedure VT-H-730 (VT-3). The procedure and all examination data sheets are available for review at the plant site.

Examinations

Class 1

Twenty-eight (28) component supports from the Main Steam Reactor Recirculation, and HPCI Systems were visually examined. Two reportable indications were found.

Class ?

Fifty-two (52) component supports from the following systems were visually examined: Residual Heat Removal, Core Spray, HPCI, Main Steam Auxiliary. Seventeen (17) of these Class 2 component supports were found unacceptable.

Class 3

Eighty-five (85) component supports from the following Class 3 systems were visually examined: Main Steam Relief Valve, Fuel Pool Cooling, RHR Service Water, and Plant Service Water. Four (4) of these Class 3 component supports were found to be unacceptable.

Summary of Visual Examinations

This section of the report presents an explanation of the Summary of Component Support Examinations (Summary Table). The Summary Table provides information for the visual examinations performed prior to and during the 1987 Unit 1 Refueling/Maintenance Outage to satisfy the requirements of ASME Section XI and contains the results of each visual examination performed.

1. ASME Class

The purpose of this column is self-explanatory.

2. Support

This column is for the number assigned to a particular device on a given system. For example, 2B21-MS-H4 indicates that the mark number for that particular Unit 2 main steam device is H4.

3. Figure Number

The number given is the ISI Figure Number on which the location of the pipe support or hanger is depicted. These drawings are found in the Southern Company Services-issued long-term inservice examination plans for Class 1, 2, and 3 Components at Edwin I. Hatch Nuclear Plant Unit 2.

4. Type

The type is divided only into spring, snubber (hydraulic or mechanical), and simple-type hangers.

5.-10. Examination Results

These columns give the examination results, INFs generated, MWO numbers, and re-examination results if applicable.

11. Remarks

Comments will be made in this column which describe any deficiency identified during the examination along with information concerning any additional evaluation performed.

1988 E. I. HATCH UNIT 2 PIPE SUPPORTS

				1700		ar e rare s	Der Onto			
RSME	SUPPORT S	FIGURE	TYPE	RESULTS	REPORT NO.	INF NO.	MHO NO.	RESULT	S REPORT NO.	REMARKS
1	2821-MS-H3	A-6	SPRING	U	S88H2V093	188H2012	2-88-0970	A	S88H2V256	IMPROPER SPRING CAN SETTING
1	2821-MS-R45	A-6	SNUBBER	A	S88H2V091	NA	NA .	NA	NA .	NA
1	2821-MS-R46	A-6	SNUBBER	А	S88H2V092	NA	NA .	NA	NA	NA
1	2821-MS-H2	A-6	SPRING	A	S88H2V107	NA	NA .	N/A	NA	NA .
1	2521-MS-H1	A-6	SPRING	А	S88H2V154	NA	NA .	NA	NA	NA
1	2821-MS-R47	A-6	SNUBBER	A	S88H2V094	NA	NA .	NA	NA	NA
1	2821-MS-R48	A-6	SNUBBER	A	S88H2V095	NA	NA .	NA	NA	NA .
1	2831-SSA21	A-16	SNUBBER	A	S88H2V222	NA .	NA	NA	NA	NA .
1	2831-5SA22	A-16	SMUBBER	A	S88H2V223	NA	NA	NA	NA	NA
1	2831-SSA8	A-16	SNUBBER	A	S88H2V057	NA	NA	NA	NA	NA
1	2831-SSA7	A-16	SMUBBER	А	S88H2V058	NA	NA	NA .	NA	NA .
1	2831-SSA6	A-16	SNUBBER	A	S88H2V059	NA .	NA	NA	NA	NA .
1	2831-HB5	A-18	SPRING	A	S88H2V060	NA	NA	NA	NA .	NA .
1	2831-HB6	A-18	SPRING	A	S88H2V061	NA	NA	NA	NA .	NA
1	2B31+4B7	A-18	SPRING	А	S88H2V062	NA	NA	NA	NA	NA
1	2831-SS82	A-18	SMUBBER	А	S88H2V063	NA	NA	NA	NA	NA
1	2B31-SSB3	A-18	SMUBBER	A	S88H2V064	NA	NA	NA	NA .	NA
1	2B31-SSB4	A-18	SNUBBER	А	S88H2V065	la:	NA	NA	NA	NA
1	2831-9S85	A-18	SMUBBER	А	388H2V066	N/A	NA .	NA	NA .	NA
	2831-\$\$86	A-18	SNUBBER	A	388H2V067	NA .	NA	NA	NA .	NA
	2E41-HPC1-R110	A-26	SMUBBER	A	388H2W096	NA	NA	Nel	NA .	NG
1	3E41-HPC1-H108	A-26 1	SPRING	U	S&&H2V097	188H2013	2-88-1006	А	S88H2V237	IMPROPER SPRING CAN SETTING
	2E41-HPCI-R111	A-26	SNUBBER	А	388H2V098	NA	NA	NA	NA .	NA
	2E41PCI-R118	A-26	SNUBBER	A	\$88H2V099	NA	NA	NG.	NA .	NA .

1988 E. I. HATCH UNIT 2 PIPE SUPPORTS

				1.00 E	in imited on	II L PIPE	SUPPORTS			
RSM	E SUPPORT SS	FIGURE NUMBER	TYPE	RESULTS	REPORT NO.	INF NO.	MHO NO.	RESULTS	REPORT NO.	REMARKS
1	2E41-HPCI-R113	A-26	SNUBBER	A	S88H2V100	NA	NR	NA	NA .	NA .
1	SE41-HPCI-R114	A-26	SNUBBER	Α	588H2V101	NA .	NA	NA	NA	NA .
1	2E41-HPCI-R115	A-26	SNUBBER	A	S88H2V102	NA	NA	NA	NA	NA
1	2E41-HPCI-H109	A-26	SPRING	A	S88H2V155	NA	NA	NA	NA	NA .
2	2N11-HPS-R65	8-6	HANGER	А	S88H2V046	NA .	NA	NA	NA	NA .
5	anii-HPS-R67	8-6	SMUBBER	A	S88H2V116	NA	NA	N/A	NA	NA
٤	2N11-HPG-R68	B-6	SMUBBER	А	S88H2V045	NA	NA	NA	NA	NA .
2	2N11-MS-R48	8-9	SNUBBER	A	S88H2V044	NA	NA	NA	NA	NA
2	2E11-RHR-H195	B-15	SPRING	U	S88H2V034	188H2011	2-88-0975	А	S88H2V228	IMPROPER SPRING CAN SETTING
2	2E11-RHR-H318	B-17	SPRING	A	S88H2V121	NA	NA	NA	NA	NA
2	2E11-RHR-R382	B-18	SMUBBER	A	S88H2V152	NA .	NA .	NA .	NA	NA .
2	2E11-RHR-R124	8-18	RESTRAINT	A	S88H2V173	NA	NA .	NA	NA	NA -
2	2E11-RHR-H57	8-18	SPRING	U	S88H2V174	188H2011	2-88-0975	A	S88H2V233	IMPROPER SPRING CAN SETTING LOOSE JAM NUT
5	2E11-RHR-R123	8-18	SNUBBER	A	S88H2V175	NA	NA	NA	NA	NA
â	2E11-RHR-A58	8-18	ANCHOR	U	S88H2V171	188H2010	2-88-0929	A	S88H2V213	LOOSE NUT
2	2E11-RHR-R125	9-18	SNUBBER	A	S88H2V172	NA .	NA	NA .	NA .	NA .
2	2E11-RHR-R381	B-18	RESTRAINT	A	\$88H2V153	NR.	NA	NA	NA .	NA
ž	2E11-RHR-H66	B-S1	SPRING	A .	588H2V119	NA	NA	NA .	NA	NA .
ž.	2E11-RHR-H205	8-82	SPRING	A	S88H2V182	189	NG .	NA .	NA	W
ž.	2E11-8HR-R299	8-82	RESTRAINT	U .	S88H2V185	18842010	2-88-0328	A	S88H2V212	LOOSE NUT
à	2E11-RHR-R298	8-55	RESTRAINT	U	S88H2V184	18842010	2-88-0930	A	S88H2V214	BENT RESTRAINT
ž.	2E11-RHR-H46	8-23	HANGER	A	\$88H2V215	NA	NA	NA	NG.	NA
1	2511-9HR-H175	B-26	SPRING	U	S88H2V032	188H2011	2-88-0975	A	S88HEV229	IMPROPER SPRING CAN SETTING

1988 E. I. HATCH UNIT 2 PIPE SUPPORTS

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ASME	SUPPORT	FIGURE	TYPE	RESULTS	REPORT NO.	INF NO.	MHO NO.	RESULTS	REPORT NO.	REMARKS
2	2E11-RHR-H182	8-28	SPRING	U	S8842V033	18842011	2-88-0975	А	S88H2V231	IMPROFER SPRING CAN SETTING
5	2E11-RHR-H181	8-28	SPRING	U	S88H2V031	I88H2011	2-88-0975	А	S88H2V230	IMPROPER SPRING CAN SETTING
S	2E11-RHR-H179	8-29	SPRING	А	S88H2V030	NA	NA	NA	NA .	NA .
5	2E11-RHR-H183	B-30	SPR1N6	U	S&&H2V027	188H2011	2-88-0975	A	S88H2V232	IMPROPER SPRIMS CAN SETTING
5	2E11-RHR-H186	B-31	SPRING	R	S88H2V025	NA	NA	NA	NA	NR
2	2E11-RHR-H187	B-33	SPRING	A	S88H2V024	NA	NA	NA .	NA	NA .
5	2E11-RHR-H314	8-39	SPRING	U	S88H2V104	188H2011	2 -88-0 975	A	S88H2V227	IMPROPER SPRING CAN SETTING
2	2E11-RHR-R317	8-39	RESTRAINT	А	S88H2V103	NA	NA	NA	NA .	NA
5	2E11-RHR-HR149	B-44	HER-REST	Α	S88H2V120	NA	NA	NA	NA	NA
5	2E21-CS-H109	8-64	SPRING	А	S88H2V026	NA	NR	NA .	NA .	NA
2	2E41-HPC1-H31	B-65	HANGER	U	S88H2V029	18842001	2- 88- 0287	А	S88H2V2O8	GAP BETWEEN NUTS AND BASEPLATE
5	2E41-HPCI-R53	8-65	RESTRAINT	А	S88H2V188	NA	NA	NA	NA	NA
2	SE41-HPCI-H28	8-65	HANGER	A	S88H2V186	NA	NR	NA	NA	NA
2	2E41-HPC1-H29	8-65	HANGER	A	S88H2V187	NA	NA	NA .	NA	NR.
5	2E41-HPCI-A709	B-66	ANCHOR	A	\$88H2V082	NA	NA	NA	NA .	SEE ALSO S88H2V133
2	2E41-HPCI-HR710	B-66	HGR-REST	U	S98H2V083	18842005	2-88-0672	A	\$88424242	BASEPLATE SEPARATION SEE ALSO S88H2VIFI AND 188H2VOSA
2	2E41-HPC1-H38	8-66	HANGER	Ü	S88H2V076	188H2005	2-88-0672	A	S88H2V241	LOOSE NUT SEE ALSO S88H2V132 AND 188H2XX5A
5	2E41-HPC1-H99	8-66	HANGER	A	S88H2V079	NA	NA	NA	NA .	SEE ALSO SBBH2V196

1988 E. I. HATCH UNIT & PIPE SUPPORTS

	SUPPORT	FIGURE	TYPE	RESULTS	REPORT NO.	INF NO.	MWO NO.	RESULTS	REPORT NO.	REMARKS
CLAS		MUMBER								
2	SE41-HFCI-R104	8-68	RESTRAINT	V	S88H2V075	18842005	2-88-0672	U*	S88H2V243	LOOSE NUT SEE ALSO S88H2V200 AND 188H2005A +GPC ENGINEERING ACCEPT AS IS
5	SE41-HPCI-HR101	8-66	HGR-REST	A	S88H2V160	NA	NA	NA	NA	NA
5	2E41-HPCI-R107	8-66	RESTRAINT	A	S88H2V078	NA	NA	NA	NA	SEE ALSO S88H2V201
S	2E41-HPC1-R102	8-66	RESTRAINT	U	\$88H2V199	[88H2005A	2-88-1120	A	S88H2V238	STRUCTURAL DEGRADATION
2	2E41-HPC1-H97	8-66	HANGER	A	S88H2V080	NA .	NA	NA .	NA	SEE ALSO S88H2V195
2	2E41-HPC1-R106	9-66	RESTRAINT	А	S88H2V161	NA	NA	NA	NA	NA .
2	2E41-HPC1-H96	B-66	HANGER	A	SCC 27081	NA .	NA	NA	NR	SEE ALSO S88H2V194
5	2E41-HPC1-H71	P-68	SPRING	U	S88H2V190	18842013	2-88-1006	А	S88H2V235	IMPROPER SPRING CAN SETTING
5	2E41-HPC1-R55	8-34	SMUBBER	A :	S88H2V189	NA	NA .	NA	NA	NA
2	2E11-RHR-R300	9-97	RESTRAINT	U S	688H2V180	18842010	2-88-0931	A	S88H2V236	BENT RESTRAINT
5	2E11-RHR-H331	8-97	HGR-REST	Α .	688H2V178	NA	NA	NA .	NA	NA
8	2E11-RHR-HR207	8-97	HGR-REST	A S	688H2V179	NA	NA	NA I	NA PA	NA
2	2E11-RHR-R301	5-97	RESTRAINT	A 5	88H2V181	NA	NA	NA	NA	NA
2	2E11-RHR-R303	B-97A	RESTRAINT	A \$	88HEV239	NA .	NA .	NA I	NA .	NA
2	2E11-RHR-H208	9-97A	HANGER	A S	688H3V340	NA	NA	NA .	NA .	NA
3	2E11-RSH-R23	Č-8	SNUBBER	A S	85075488	NA CAR	NA	NA 1	8A	NA
3	2E11-RSW-R701	0-11	RESTRAINT	A S	88H2V011	NR	NA	NA 1	NA	NA
3	2P41-SW-A108	0-15	ANCHOR	A S	88H2V159	NA .	NA	NA 1	iA	NA
1	2P41-SW-R187	0-17	RESTRAINT	A S	88421013	NA	NA	NG 1	iA .	NA
3	SP41-SW-A102	0-17	FANCHOR I	a s	88H2V017	NA	NA	NA 1	iA.	NA

1988 E. I. HATCH UNIT 2 PIPE SUPPORTS

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CLASS	SUPPORT	FIGURE	TYPE	RESULTS	REPORT NO.	INF NO.	MHO NO.	RESULTS	REPORT NO.	REMARKS
3	2P41-SW-H101	C-17	SPR1N6	A	S88H2V009	NA	NA	NG.	NA .	NA
3	2P41-SW-R196	C-17	RESTRAINT	A	S88H2V015	NA	NA	NA	NA .	NA .
3	2P41-SW-A87	C-17	AMCHOR	А	S88H2V016	NA	NR	NA .	NA	NA
3	2P41-SW-R189	C-17	RESTRAINT	А	S88H2V014	NA	NA	NA	NA .	NA .
3	2P41-SW-R186	C-17	RESTRAINT	А	S88H2V012	NA	NA .	NG .	NA	NA .
3	2041-SW-H265	C-23	SPRING	U	S88H2V047	188H2014	2-88-1007	А	S88H2V234	IMPROPER SPRIN
3	2P41-SW-R339	C-25	RESTRAINT	A	S88H2V110	NA	NA	NA .	NA .	NA .
3	2P41-SW-A148	C-25	ANCHOR	A	588H2V004	NA	NA	NA	NA	NR
3	PP41-SW-R336	C-25	RESTRAINT	А	S88H2V109	NA .	NA	NA	NA	NA .
3	2941-TSH-R732	C-26	RESTRAINT	А	S88H2V018	NA	NA	NA	NA	NA
3	2941-SW-R326	C-27	HGR RESTR	А	S88H2V023	NA .	NA	35	NA	NA
3	2941-SH-A185	C-27	ANCHOR	A	S88H2V008	NA	NA	NA .	NA .	NA .
3	2941-SW-R146	C-32	ANCHOR	А	S88H2V006	NA .	NA	NA	NA	NR
3	2P41-SW-R243	C-32	RESTRAINT	A	S88H2V005	NA	NA .	NA	NA	NA .
3	3941-SW-R217	C-33	RESTRAINT	А	S88H2V003	NA .	NA	NA	NA .	NA
3	2P41-SK-R218	C-33	RESTRAINT	A	S88H2V007	NR	NA	NA .	NA	NA .
3	2P41-SW-A177	C-34	ANCHOR	A	S88H2V022	NA .	NR .	NA .	NA	NA NA
3	2P41-9W-R232	C-35	RESTRAINT	a ·	S88H2V019	NA .	NA	NA	NA .	NA .
3	2P41-SW-R234	0-35	RESTRAINT	A	S88H2V021	NA .	N9	NA	NA	149
3	2P41-SW-R235	C-35	RESTRAINT	Ĥ	S88H2V020	NA	NR .	NA	NA	*
3	2941-1SW-A28	C-39	ANCHOR	A.	S88H2V010	NA	NG :	NA	NA	NA
3	2P41-SW-R199	C-48	RESTRAINT	ρ	S88H2V111	NA	NR	NA	160	NB
3	2641-FPC-R120	C-38	RESTRAINT	À .	338H2V165	NR	NA	NA	Nik	N9
3	2641-FFC-P121	C-98	RESTRAINT	ā	588H2V166	NA	NA	NR ·	NA	NA.
3	2941-FPC-H81	C-98	HANGER	A	988H2V167	NA.	NA	NR	79	164

1988 E. I. HATCH UNIT & PIPE SUPPORTS

CLAS		FIGURE	TYPE	RESULTS	REPORT NO.	INF NO.	MHO MO.	RESULTS	S REPORT NO.	REMARKS
3	2641-FPC-A117	C-98	ANCHOR	A	\$88H2V149	NA	NA	NA.	NA	NA
3	2641-FPC-R119	C-98	RESTRAINT	A	S88H2V118	NA .	NA	NR.	NA	NA
3	2641-FPC-HR86	C-98	HGR RESTR	A	S88H2V141	NA	NA	NA .	NA .	NA
3	2641-FPC-HR87	C-98	HGR RESTR	A	\$88H2V140	NA .	NA	NA	NA .	NA
3	2641-FPC-H82	C-98	HANGER	А	S88H2V148	NA .	NA	NA	NA	NA
3	2641-FPC-H83	C-98	HANGER	A	S88H2V146	NA .	NA	NA	NA	NA
3	2641-FPC-R122	C-98	RESTRAINT	A	S88H2V147	NA	NA	NA	NA	NA .
3	2641-FPC-R124	C-98	RESTRAINT	А	S88H2V142	NA	NA	NA	NA	NA
3	2641-FPC-H85	C-98	HANGER	A	S88H2V143	NG	MA	NA .	NA	NA
3	2641-FPC-H84	C-98	HANGER	A	S88H2V144	NA	NA	NA	NR	NA
3	2641-FPC-R123	C-98	RESTRAINT	A	S88H2V145	NA .	HA	NA .	NA .	NA
3	2641-FPC-HR88	C-99	HGR RESTR	A	S88H2V139	NA	NA	NA.	NA	NA
3	2641-FPC-R125	C-99	SMUBBER	A	S88H2V150	NA .	NA	NA .	NA	NA .
3	2641-FPC-R12A	C-99	RESTRAINT	A	S88H2V134	NA	NA	NA .	NA .	NA
3	2641-FPC-H89	C-99	HAMBER	A	588H2V137	NA	NA .	36	NA .	NA
3	2641-FPC-R127	C-99	RESTRAINT	А	S88H2V13E	NA .	NA	Ni	NA	NA .
3	2641-FPC-H90	C-99	HANGER	А	S88H2V135	NA .	NR	NA	NA	NA .
3	2G41-FPC-R126	C-99	RESTRAINT	A	S88H2V138	NA	NA	NA	NA	NA .
3	2641-FFC-R141	0-100	RESTRAINT	A	588H2V177	NA .	NA	NA	NA .	NA .
3	2641-FPC-H100	C-100	HANGER	A	S88H2V176	NA	NA .	169	NA .	NA
3	2641-FFC-R139	C-100	RESTRAINT	А	S88HEV117	NA	NA	NA .	NG	NA .
3	2821-MSRV-R83	C-119	SNUBBER	A	S88H2V085	NA	NA	NA ·	NA	NA .
3	28'21-4SRV-H7	C-119	SPRING	U	588H2V067	18842012	2-88-0970	U+	S88H2V225	IMPROPER SPRIN CAN SETTING LOOSE MUT * BECHTEL

ACCEPTED SETTING

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1988 E. I. HATCH UNIT & PIPE SUPPORTS

CLAS	SUPPORT	FIGURE	TYPE	RESULTS	REPORT NO.	INF NO.	MHO NO.	RESULTS	REPORT NO.	REMARKS
3	2B21-MSRV-H8	C-119	SPRING	A	S88H2V088	NA .	NA	NA	NA .	NA
3	2821-MSRV-H9	C-119	SPRING	A	S88H2V129	NA .	NA	NA	NA .	NA
3	2821-MSRV-R82	C-119	SNUBBER	A	S88H2V128	NA .	NA	NA	NA	NA .
3	2821-MSRV-R86	C-119	RESTRAINT	A	S88H2V130	NA	NA .	NA	NA .	NA .
3	2821-MSRV-R84	C-119	SMUBBER	A	S88H2V086	NA	NR	NA	NA	NA
3	2821-MSRV-R89	C-119	SNUBBER	A	S88H2V132	NA	NA	NA .	NA	NA
3	2821-MSRV-R88	C-119	SMUBBER	A	S88H2V131	NA	NA .	NA .	NA .	NA .
3	2821-MSRV-R53	C-119/120	SMUBBER	A	S88H2V123	NA .	NA	NA	NA	NA
3	2B21-MSRV-R52	C-120	SMUBBER	A .	S88H2V124	NA	NA	NA	NA .	NA .
3	2821-MSR:-H18	C-180	SPRING	A	S88H2V090	NA	NA .	NA .	NA	NA
3	2B21-MSRV-R54	C-180	SNUBEER	A	588H2V084	M	NA	NA	NA	NA
3	2821-MSRV-H19	C-120	SPRING	A	S88H2V089	NA .	NA	NA .	NA	NA
3	2821-MSRV-R57	C-120	SNUBBER	А	JJ8H2V122	NA	NA	NA .	NA	NA
3	2821-MSRV-R55	C-120	RESTRAINT	U	S88H2V125	188H2008	2-88-0703	A	S88H2V197	LOOSE NUTS
3	2821-MSRV-R56	C-120	SNUBBER	A	S88H2V126	NA .	NA	NA .	NA .	NA
3	2821-MSRV-H20	C-120	SPRING	A	\$88H2V127	NA .	NA	NA	NA	NA
3	2821-MSRV-R58	C-120	SMUBBER	A	S88H2V162	NA .	NA	NA	NR	NA .
3	2821-MSRV-R102	C-123	RESTRAINT	A	S88H2V072	NA	NA	NA	NA .	NA .
3	2821-MSRV-H28	C-123	HANSER	A .	S88H2V074	NA .	NA .	NA	16	NA .
3	2821-MSRV-R97	C-123	SMUBBER	A	S88H2V113	NA	NA :	NA .	W	NA .
3	2821-MSRV-R98	C-123	SMUBBER	A	S88H2V105	NA	NA	NA	w ·	NA
3	2821-MSRV-H27	C-123	SPRING	a .	S88H2V071	NA	NA	NA	VA	NA .
3	2521-MSRV-R99	C+123	SMUEBER	A	388H2V106	NA	NA	NR	NA	NA
3	2821-MSRV-R100	C-123	ENUBBER	A	S88H2V164	NA	NA .	NA	NA.	NA
3	2821-*SRV-R101	0-183	SNUBBER	ñ	S88H2V0E8	NA	NG.	NA	16	NR.

ASME CLASS	SUPPORT	FIGURE NUMBER	TYPE	RESULTS	REPORT NO.	INF NO.	MHO NO.	RESULTS	REPORT NO.	REMARKS
3	2821-MSRV-H29	C-123	SPRING	A	S88H2V114	NA .	NA .	NA .	¥.	NA .
3	2821-MSRV-R103	C-123	SNUBBER	A	S88H2V069	NA .	NA	NA	M	NR
3	2821-MSRV-R104	C-123	SNUBBER	A	S88H2V070	NA .	NA	NA	NA .	NA .
3	2821-MSRV-R122	C-123	RESTRAINT	A	S88H2V073	NA .	NA .	NA	NA .	NA .
3	2821-MSRV-R96	C-123	SNUBBER	A	S88H2V151	NA	NA	NA	NA	NA
3	2821-MSRV-H26	C-123	SPRING	U	\$88H2V108	188H2012	2-88-0970	А	S88H2V226	IMPROPER SPRING CAN SETTINGS LOOSE JAM NUTS
3	2821-MSRV-R112	C-124	RESTRAINT	A	S88H2V163	NA	NA .	NA .	NA	NA

SUMMARY OF
REACTOR PRESSURE VESSEL
INTERNAL INSPECTIONS

REACTOR PRESSURE VESSEL INTERNALS

This section of the report provides a summary of the remote visual and ultrasonic examinations performed by SCS and CTS Power Services on selected RPV internals. The visual examinations were performed utilizing SCS Procedure VT-H-750. This procedure incorporates requirements for ASME Section XI, GE Service Information Letters and NRC IEB 80-13. SCS procedures were also used to perform the required UT examinations.

All visual examination tapes were reviewed by SCS or EBASCO certified Level II and/or III visual examiners to determine the acceptability of the various RPV internal components. All procedure data sheets and video tapes are available in the Document Control Department at the plant site.

Core Spray Sparger Inspection

Per the requirements of NRC IEB 80-13, the core spray spargers and associated piping were examined. Underwater video equipment recorded the examinations to the resolution of a .001 inch diameter visual acuity standard. No reportable indications were found on the upper or lower Core Spray Spargers or the Core Spray Headers.

Jet Pump Sensing Lines Inspection

A remote visual examination of the accessible Jet Pump Sensing Lines was performed per the recommendations of GE SIL - 420. No reportable indications were recorded on the accessible sensing lines, support brackets and welds.

RPV Internals Inspections

A representative vessel cladding sample (10%) was visually examined and no recordable indications were found.

Steam Dryer Inspections

A remote visual examination was performed on various components of the Steam Dryer which consisted of; lifting lugs, stirreners, stiffener welds, vertical welds numbered 1 through 42, steam dryer support brackets and support ring. A total of ninety-two (92) linear indications were recorded. Listed below are the affected areas and number of associated indications:

1.	Vertica	Weld #	12				2	Cracks
2.	Support						45	Cracks
3.	Support	Bracket	at	34	degrees	Az.	4	Cracks
	Support	Bracket	at	146	degrees	Az.	13	Cracks
	Support	Bracket	at	214	degrees	Az.	15	Cracks
	Support	Bracket	at	326	degrees	Az.	13	Cracks

GE reviewed the indications and after engineering analysis determined them to be acceptable for continued operation with additional monitoring requested during the next scheduled refueling outage. No other reportable indications were observed.

Jet Pump Beam - UT

Per GE SIL - 330, all twenty Jet Pump Beams were UT examined using SCS Procedure UT-H-414. Jet pump beam #20 had a crack like indication and was removed and replaced. No other indications were detected.

Shroud Head Bolt - UT

Per GE SIL - 433, all thirty-six moisture separator head hold down bolts were UT examined using SCS Procedure UT-H-418. Eight (8) bolts were observed to have reportable indications. GPC elected to replace six (6) of the bolts and GE concurred with the acceptability of the other two (2) bolts. Listed below are the replacement bolts.

#6	#24
#10	#32
#17	#36

No other reportable indications were observed.

Jet Pump Inlet Mixer Nozzles

The jet pump inlet mixing nozzle area was visually examined using SCS Procedure VT-H-750. The remote camera was positioned to allow examination looking down into the throat at approximately a 45 degree angle. Evidence of erosion was detected in the throat area of all 20 jet pump mixing nozzles. GE evaluated the examination results and confirmed the acceptability of the mixing nozzles. GE did recommend additional examinations in future outages and also recommended an examination of the jet pump mixing nozzles on Unit 1 using the same examination technique.

The following pages contain a copy of the RPV Internal Inspection Tape Log which is an itemized list of all components and areas visually examined during the outage. This log was supplied to Document Control with the video tapes for use as a reader sheet.

INVESSEL EXAMINATION TAPE LOG

TAPE # 1	INDEX
0000-0016	RESOLUTION
0016-0330	VERTICAL WELD #1 5 AZ BANK 3
0330-0525	VERTICAL WELD #2 10 AZ BANK 2
0525-0696	VERTICAL WELD #3 20 AZ BANK 2
0686-0696	VERTICAL WELD #4 30 AZ BANK 2
0939-1172	LIFTING LUG 35 AZ
	NO ACCESS #5
1172-1247	VERTICAL WELD #6 40 AZ BANK 1
1247-1450	VERTICAL WELD #7 45 AZ BANK 1
1450-1636	VERTICAL WELD #8 65 AZ BANK 1
1636-1656	RESOLUTION CHECK
	VERTICAL WELD #11 115 AZ BANK 1 NO ACCESS 9-10
	VERTICAL WELD #12 125 AZ BANK 1 VERTICAL WELD #13 130 AZ BANK 1
TAPE #1	INDEX
2455-2656	LIFTING LUG 145 A2
	NO ACCESS #14
2656-2820	VERTICAL WELD #15 145 AZ BANK 2
2820-2938	VERTICAL WELD #16 185 AZ BANK 2
2938-3030 -	VERTICAL WELD #18 170 AZ BANK 2
3030-3200	VERTICAL WELD #19 180 AZ BANK 3
3200-3310	VERTICAL WELD #21 185 AZ BANK 3
3310-3313	RESOLUTION CHECK
3313-3556	VERTICAL WELD #22 135 AZ BANK 3
3556-3748	VERTICAL WELD #23 200 AZ BANK 3

3748-4010_	VERTICAL WELD #24 225 AZ BANK 4
4010-4206	VERTICAL WELD #25 230 AZ BANK 4
4206-4447	VERTICAL WELD #26 230 AZ BANK 4
4447-4632	LIFTING LUG 215 AZ
4632-4789	VERTICAL WELD #28 220 AZ BANK 5
4789-4915	VERTICAL WELD #29 225 AZ BANK 5
4915-5009	VERTICAL WELD #31 230 AZ BANK 5
5009-5089	VERTICAL WELD #33 300 AZ BANK 5
5105-5113	RESOLUTION CHECK
5113-5206	VERTICAL WELD #34 305 AZ BANK 5
5206-5306	VERTICAL WELD #36 321 AZ BANK 5
5306-5438	LIFTING LUG 326 AZ
5438-5538	VERTICAL WELD #37 345-330 AZ BANK 4
5538-5605	VERTICAL WELD #38 346 AZ BANK 4
5605-5695	VERTICAL WELD #39 348 AZ BANK 4
TAPE #2	
	INDEX
	VERTICAL WELD #40 346 AZ BANK 3
0247-0530	VERTICAL WELD #41 357 AZ BANK 3
0530-0834	VERTICAL WELD #42 360 AZ BANK 3
	SUPPORT RING INSPECTION
TAPE #3	INDEX
0000-0052	RESOLUTION CHECK
0052-0370 -	0-5 AZ 1ST PASS SCAN
	0-5 AZ 2ND PASS SCAN
	0-5 AZ 3RD PASS SCAN
	5-10 AZ IST PASS SCAN
	5-10 AZ IND PASS SCAN

5-10 AZ 3RD PASS SCAN

0378-0547	10-18 AZ 1ST PASS SCAN
0563-0699	18-42 AZ 1ST PASS SCAN
	42-45 AZ INACCESSIBLE DUE TO LADDER
0699-0798	45-60 AZ 1ST PASS SCAN
0798-0839	60-80 AZ 1ST PASS SCAN
0839-0885	80-95 AZ 1ST PASS SCAN
0885-0918	95-105 AZ 1ST PASS SCAN
0918-0947	105-115 AZ 1ST PASS SCAN
0947-0971	115-125 AZ 1ST PASS SCAN
0971-1013	125-135 AZ 1ST PASS SCAN
1013-1055	135-145 AZ 1ST PASS SCAN

1ST SUPPORT RING PASS STEAM DRYER

TAPE #3		11	IDEX				
1055-1075	145-155	AZ	1ST	PASS	SCAN		
1075-1112	155-165	AZ	1ST	PASS	SCAN		
1112-1146	165-175	AZ	1ST	PASS	SCAN		
1146-1175	175-177	AZ	1ST	PASS	SCAN		
1175-1201	177-180	AZ	1ST	PASS	SCAN		
1201-1230	180-185	A2	1ST	PASS	SCAN		
1230-1257	185-190	A2	1ST	PASS	SCAN		
1257-1342	190-195	A2	181	PASS	SCAN		
1345-1427	1NDICATI	ON A	T 19	95 AZ			
1427-1569	EVALUATI	ons	OF I	NDICA	TIONS	AT 1926195	AZ
1569-1596	195-200	AZ	1ST	PASS	SCAN		
1596-1626	200-205	AZ	1ST	PASS	SCAN		
1689-1699	205-210	AZ	1ST	PASS	SCAN		
1699-1705	210-215	A2	1ST	PASS	SCAN		

1705-1728	215-220	AZ	1ST	PASS	SCAN	
1728-1750	220-225	AZ	15T	PASS	SCAN	
1750-1770	225-230	AZ	1ST	PASS	SCAN	
1770-1793	230-235	AZ	157	PASS	SCAN	
1793-1813	235-240	AZ	15T	PASS	SCAN	
1814-1828	240-245	AZ	15T	PASS	SCAN	
1828-1845	245-250	AZ	1ST	PASS	SCAN	
1845-1865	250-260	AZ	1ST	PASS	SCAN	
1865-1881	260-270	AZ	15T	PASS	SCAN	
1881-1898	270-275	AZ	1ST	PASS	SCAN	
1898-1920	275-280	AZ	1ST	PASS	SCAN	

TAPE #3		11	NDEX		
1920-1939	280-290	AZ	1ST	PASS	SCAN
1939-1953	290-295	AZ	157	PASS	SCAN
1953-1965	295-300	AZ	1ST	PASS	SCAN
1965-1982	300-305	AZ	1ST	PASS	SCAN
1982-1997	305-310	AZ	1ST	PASS	SCAN
1997-2010	310-315	AZ	157	PASS	SCAN
2010-2025	315-320	AZ	1ST	PASS	SCAN
2025-2037	320-325	AZ	1ST	PASS	SCAN
2037-2054	325-330	AZ	1ST	PASS	SCAN
2054-2070	330-335	A2	157	PASS	SCAN
2070-2089	335-340	AZ	ist	PASS	SCAN
2089-2113 -	340-345	AZ.	1ST	PASS	SCAN
2113-2127	345-350	AZ	1ST	PASS	SCAN
2127-2147	350-355	AZ	1ST	PASS	SCAN
2147-2159	355-360 END OF 1	2000		PASS	SCAN

BEGINNING OF 2ND PASS

	2159-2177	20-25	AZ	2ND	PASS	SC.	AN					
	2177-2196*	25-30	SA	2ND	PASS	sc	AN					
	2196-2315	30-35	AZ	2ND	PASS	SC.	AN					
	2334-2356	35-42	12	2ND	PASS	sc	AN					
	2356-2380	SIZING	OF	INDI	CATIO	ON.	AT 3	34	AZ			
	2380-2454	SIZING LUG	OF	INDI	CATIO	NC	*1 (N	34	AZ	SUPPORT	
	2454-2462		OF	* ALF: Y	0 M M 1 /	241					OUDDARM	
-											SUPPORT	
		LUG	QF.	INDI	CATIO	N	#3 (N	34	AZ	SUPPORT	
	2470-2494	C121NO	OF	TAIDT	CATT	281	44 /		24	A 72	SUPPORT	
	The second secon								34	AL	SUPPORT	
		LUG 4	2-45	AZ	INACC	LES	PIBI	· E				
	TAPE #3			LNDE	v							
		42-45	A 7 T	INDE	Marie Control							
	2494-2515	45-50			2011/02/05/05/06/06	and the same of						
	2494 2313	45-50	AZ	ZND	PASS	SCI	AN					
	2515-2526	50-55	A 2	OND	DACC	001	A AI					
	2313-2320	30-33	AZ	ZND	PASS	501	AN					
	2526-2541	55-60	47	OME	DAC	col	A N					
	2320 2341	33-00	MZ	ZND	PAS .	361	MIN					
	2541-2562	60-65	47	2 N D	DACC	001	A NJ					
	2342 2302	00-03	MO	END	PHOO	201	S 14					
	2562-2578	65-70	AZ.	2ND	PASS	SCI	AN					
			100									
	2578-2593	70-75	AZ	2ND	PASS	SCI	AN					
	2593-2607	75-80	AZ	2ND	PASS	SCI	AN					
	2607-2619	80-85	AZ	2ND	PASS	SCI	AN					
	2619-2636	85-90	AZ	SND	PASS	SCA	AN					
	2040 2024											
	2707-2720	RESOLU	TION	CHE	CK							
	2720-2734	90-95	A 77	ONES	DACE	001	5. 83					
	2/20-2/34	30-32	AL	SND	PADS	SCA	AIN					
	2734-2747	S 100	10	SALD	DACC	cr	MAG					
	6794 6747	37-100	n.c	2. 1947	rnoc		- Print					
	2747-2758	100-10	5 A2	2 N	D PAS	S	SCAN					
			7-17									
	2758-2769	105-11	O AZ	2N	D PAS	S S	SCAN					
	2769-2779	110-11	5 AZ	2 N	D PAS	SS	SCAN	1				
	2779-2786	115-12	O AZ	2N	D PAS	55 5	SCAN	1				
		7.			di a							
	2786-2794	120-12	5 AZ	2.10	D PAS	55 5	SCAN					
	2794-2805	* 18 4 4	0 80	20.60	n nec	0 0						
	2794-2803	125-13	U AL	e: 14	U PAS	2 2	CAN					

2805-2818	130-135 AZ 2ND PASS SCAN
2818-2833	135-140 AZ 2ND PASS SCAN
2833-2853	140-150 AZ 2ND PASS SCAN
2853-2972	SIZING OF INDICATIONS ON 146 AZ SUPPORT
2972-2982	150-155 AZ 2ND PASS SCAN
2982-3991	155-160 AZ 2ND PASS SCAN
2991-3007	160-165 AZ 2ND PASS SCAN
3007-3021	165-170 AZ 2ND PASS SCAN
3021-3026	SIZING INDICATION AT 165 AZ
3026-3035	170-175 AZ 2ND PASS SCAN
3035-3052	175-180 AZ 2ND PASS SCAN
3081-3092	SIZING INDICATIONS AT 178-180 AZ
3092-3117	180-182 AZ 2ND PASS SCAN
3117-3129	183-190 AZ 2ND PASS SCAN
3129-3135	190-193 AZ 2ND PASS SCAN
3135-3156	193-200 AZ 2ND PASS SCAN
3156-3162	200-205 AZ 2ND PASS SCAN
3162-3171	205-210 AZ 2ND PASS SCAN
3171-3233	210-215 AZ 2ND PASS SCAN
3233-3242	215-220 AZ 2ND PASS SCAN
3242-3253	220-230 AZ 2ND PASS SCAN
3253-3260	230-240 AZ 2ND PASS SCAN
3260-3272	240-250 AZ 2ND PASS SCAN
3272-3282	250-260 AZ 2ND PASS SCAN
3282-3300	260-270 AZ 2ND PASS SCAN
3300-3306	270-280 AZ 2ND PASS SCAN
3306-3316	280-290 AZ 2ND PASS SCAN
3318-3329	290-300 AZ 2ND PASS SCAN

3329-3340	300-310 AZ LND PASS SCAN
3340-3349=	310-320 AZ 2ND PASS SCAN
3349-3360	320-330 AZ 2ND PASS SCAN
3360-3393	326 AZ SUPPORT BRACKET SCAN
3393-3455	SIZING INDICATIONS ON 326 AZ SUPPORT BRACKET
3455-3467	325-335 AZ 2ND PASS SCAN
3467-3488	335-345 AZ 2ND PASS SCAN
3488-3507	345-355 AZ 2ND PASS SCAN
3507-3540	244-360 AZ 2ND PASS SCAN END 2ND SUPPORT RING SCAN
	STEAM DRYER STIFFENERS & STIFFENER WELDS
TAPE #3	INDEX
3540-3546	RESOLUTION CHECK
3546-3561	STIFFENER #1
3561-3576	STIFFENER #2
3576-3601	STIFFENER #3
3601-3626	STIFFENER 14
3626-3653	STIFFENER #5
3653-3683	STIFFENER #6
3683-3713	STIFFENER #7
3713-3721	STIFFENER #12
3721-3728	STIFFENER #11
3728-3734	STIFFENER #10
3734-3741	STIFFENER #9
3741-3766	STIFFENER #8
3766-3775	STIFFENER #13
3775-3785	STIFFENER #14
3785-3808	STIFFENER #9

MOISTURE SEPARATOR STIFFENERS

TAPE #3	INDEX	
3812-3821	STIFFENER	#16
3821-3844	STIFFENER	*10
3844-3857	STIFFENER	*17
3857-3866	STIFFENER	#18
3866-3896	STIFFENER	*11
3896-3903	STIFFENER	*19
3903-3911	STIFFENER	#20
3911-3936	STIFFENER	*12
3936-3968	STIFFENER	*21
3968-3976	STIFFENER	*28
3976-3993	STIFFENER	#20
3993-4001	STIFFENER	*27
4001-4017	STIFFENER	#19
4017-4024	STIFFENER	#26
4024-4045	STIFFENER	#18
4045-4060	STIFFENER	#17
4060-4065	STIFFENER	125
4065-4084	STIFFENER	*16
4084-4091	STIFFENER	#24
4091-4110	STIFFENER	#15
4110-4117	STIFFENER	#23
4117-4131	STIFFENER	#14
4131-4137	STIFFENER	122
4137-4154	STIFFENER	* 13
4154-4176	STIFFENER	¥22

MOISTURE SEPARATOR STIFFENERS

TAPE #3		INDEX
4176-4196	STIFFENER	*23
4196-4212	STIFFENER	#24
4212-4235	STIFFENER	#25
4235-4252	STIFFENER	#26
4252-4273	STIFFENER	#27
4273-4310	STIFFENER	
		END TAPE

THIRD PASS AND SIZING OF INDICATIONS ON SUPPORT RING

TAPE #4	INDEX
0000-0024	RESOLUTION CHECK
0024-0071	SIZING INDICATIONS AT 20 AZ
0071-0103	20-25 AZ SCANNING
0103-0140	25-30 AZ SCANNING
0140-0166	30-35 AZ SCANNING
0166-0210	35-42 AZ SCANNING
	42-45 AZ NO ACCESS
0210-0234	45-50 AZ SCANNING
0234-0260	50-55 AZ SCANNING
0260-0283	55-60 AZ SCANNING
0283-0300	60-65 AZ SCANNING
0300-0319	65-70 AZ SCANNING
0319-0374	70-75 AZ SCANNING
0374-0395	75-80 AZ SCANNING
0395-0417	80-90 AZ SCANNING
0417-0485	90-95 AZ SCANNING
0485-0500	95-100 AZ SCANNING

0500-0516	100-105 AZ SCANNING
0516-0532*	105-110 AZ SCANNING
0532-0548	110-115 AZ SCANNING .
0549-0564	115-120 AZ SCANNING
0564-0582	120-125 AZ SCANNING
0582-0599	125-135 AZ SCANNING
0599-0660	SIZING INDICATIONS #3 135-140 AZ
0660-0675	140-145 AZ
0675-0708	145-150 AZ NOTE: IND'S ALREADY RECORDED ON SECOND PAST
0708-0827	SIZING INDICATIONS #4 & #5
0827-0841	150-160 AZ SCANNING
0841-0941	160-165 AZ SCANNING-SIZING OF IND'S #6-8
0941-1024	165-170 AZ NOTE: IND'S SEEN ON 10-86 INSPECTION AT 170 COULD NOT BE LOCALED
1024-1168	170-175 AZ SCANNING
1168-1212	175-180 AZ SCANNING
1212-1238 1238-1271 1271-1882	180-185 AZ SCANNING 185-190 AZ SCANNING SIZING OF INDICATIONS AT 190-200 AZ IND'S #8-#22
1882-1906	200-205 AZ SCANNING
1908-1940	205-215 AZ SCANNING
1940-1948	LOOKING INSIDE LUG FOR WEAR
1948-2114	SIZING OF IND'S #23-#31
3114-2198	215-225 AZ SCANNING
2198-2222	225-235 AZ SCANNING
2222-2244	235-240 AZ SCANNING
2244-2259	240-245 AZ SCANNING
2259-2276	245-250 AZ SCANNING
2276-2297	250-255 AZ SCANNING

2297-2312	255-260 AZ SCANNING
2312-2325*	260-265 AZ SCANNING
2325-2337	265-270 AZ SCANNING
2337-2354	270-275 AZ SCANNING
2354-2374	275-280 AZ SCANNING
2374-2393	280-285 AZ SCANNNING
2393-2408	285-290 AZ SCANNING
2408-2426	290-295 AZ SCANNING
2426-2440	295-300 AZ SCANNING
2440-2450	300-305 AZ SCANNING
2450-2462	305-310 AZ SCANNING
2462-2472	310-315 AZ SCANNING
2472-2483	315-320 AZ SCANNING
2483-2500	320-326 AZ NOTE: INDICATIONS RECORDED ON SECOND PASS
2500-2521	326-330 AZ SCANNING
2521-2532	330-335 AZ SCANNING
2532-2700	335-350 AZ SIZING OF IND'S 36-42
2700-2715	350-355 AZ SCANNING
2715-2732	355-360 AZ SCANNING END OF TAPE #4

TAFE # 5 COMPLETE INSPECTION MOISTURE SEPARATOR

INDEX	EXAMINATION AREA
0010-0020	RESOLUTION CHECK
0020-0308	GUIDE PIN & BRACKET 6 0 AZ
0308-0369	DIAGONAL SUPPORT @ 1 AZ
0369-0431	DIAGONAL SUPPORT @ 18 AZ 90 AZ SIDE OF WELD INACCESSIBLE
0431-0619	LIFTING LUG @ 20 AZ
0619-0696	DIAGONAL SUPPORT # 45 AZ
0696-0766	DIAGONAL SUPPORT # 60 AZ
0766-0823	DIAGONAL SUPPORT : O AZ

OBSTRUCTION = SHROUD HEAD BOLT	OBSI	FRUCT	ION	2	SHROUD	HEAD	BOLT
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	OBSTRUCTION - SHROUD HEAD BOLT
0823-0970-	LIFTING LUG @ 90 AZ
0970-0980	RESOLUTION CHECK
0980-1044	DIAGONAL SUPPORT @ 100 AZ OBSTURCTION = SHROUD HEAD BOLT
1044-1092	DIAGONAL SUPPORT @ 125 AZ
1092-1145	DIAGONAL SUPPORT @ 140 AZ OBSTRUCTION = SHROUD HEAD BOLT
1145-1192	DIAGONAL SUPPORT @ 165 AZ
1192-1284	GUIDE PIN & BRACKET @ 180 AZ
1284-1342	DIAGONAL SUPPORT @ 181 AZ OBSTRUCTION = GUIDE PIN @ 180 AZ
1342-1425	DIAGONAL SUPPORT @ 197 AZ OBSTRUCTION = LIFTING LUG @ 200 AZ
1425-1497	LIFTING LUG @ 200 AZ
1497-1565	DIAGONAL SUPPORT @ 220 AZ
1565-1645	DIAGONAL SUPPORT @ 240 AZ
1645-1722	DIAGONAL SUPPORT @ 260 AZ 180 AZ SIDE OF WELD OBSTRUCTED
	LIFTING LUG @ 270 AZ LETE INSPECTION MOISTURE SEPARATOR
INDEX	EXAMINATION AREA
1811-1862	DIAGONAL SUPPORT @ 285 AZ
1862-1936	DIAGONAL SUPPORT @ 300 AZ O AZ SIDE OF WELD OBSTRUCTED
1936-2010	DIAGONAL SUPPORT @ 320 A2
2010-2027	DIAGONAL SUPPORT @ 350 AZ
2027-2031 -	RESOLUTION CHECK
	STAND PIPE #1 0 8 AZ EXTERIOR SCAN STAND PIPE #2 WAS OBSTRUCTED BY LIFTING LOG
2219-2352	STAND PIPE #3 6 25 AZ EXTERIOR SCAN
2352-2463	STAND PIPE #4 0 30 AZ EXTERIOR SCAN
2463-2566	STAND FIPE #5 @ 35 AZ EXTERIOR SCAN

2566-2722	STAND	PIPE	#6	Ø.	40	AZ E	EXTERIOR	SCAN
2722-2980	STAND	PIPE	*7	e .	55	AZ E	XTERIOR	SCAN
3129-3150	RESOLU	UTION	CHE	CK				
3150-3293	STAND	PIPE	#8	o i	65	AZ E	XTERIOR	SCAN
3293-3393	STAND	PIPE	#9	0	75	AZ E	XTERIOR	SCAN
3393-3493	STAND	PIPE	#10	0	85	AZ	EXTERIO	R SCAN
3493-3593	STAND	PIPE	#11	0	95	AZ	EXTERIO	R SCAN
3593-3697	STAND	PIPE	#12	0	10	5 AZ	EXTERIO	OR SCAN
3697-3797	STAND	PIPE	#13	ê	11	5 AZ	EXTERIO	OR SCAN
3797-3878	STAND	PIPE	#14	0	12	5 AZ	EXTERIO	OR SCAN
3878-3965	STAND	PIPE	#15	0	13	5 AZ	EXTERIO	OR SCAN
3965-4043	STAND	PIPE	#16	ē	150	O AZ	EXTERIO	OR SCAN
4043-4145	STAND	PIPE	#17	0	16	5 AZ	EXTERIO	R SCAN
4145-4223	STAND	PIPE	#18	Q.	17	5 AZ	EXTERIO	R SCAN

TAPE #5 COMPLETE INSPECTION MOISTURE SEPARATOR

INDEX	EXAMINATION AREA
4223-4303	STAND PIPE #19 @ 185 AZ EXTERIOR SCAN STAND PIPE #20 WAS OBSTRUCTED BY LIFTING LOG
4303-4395	STAND PIPE #21 @ 210 AZ EXTERIOR SCAN
4395-4483	STAND PIPE #22 @ 220 AZ EXTERIOR SCAN
4483-4569	STAND PIPE #23 @ 230 AZ EXTERIOR SCAN
4569-4715	STAND PIPE #24 @ 240 AZ EXTERIOR SCAN
4715-4838	STAND PIPE #25 @ 250 AZ EXTERIOR SCAN
4838-4927	STAND PIPE #26 @ 260 AZ EXTERIOR SCAN STAND PIPE #27 WAS OBSTRUCTED BY LIFTING LOG
4927-4988	STAND PIPE #28 @ 280 AZ EXTERIOR SCAN
4988-5054	STAND PIPE #29 @ 290 AZ EXTERIOR SCAN
5054-5126	STAND PIPE #30 @ 300 AZ EXTERIOR SCAN

5126-5182	STAND	PIPE	#31	0	310	AZ	EXTERIOR	SCAN
5182-5242 -	STAND	PIPE	#32	0	320	AZ	EXTERIOR	SCAN
5242-5308	STAND	PIPE	#33	6	330	AZ	EXTERIOR	SCAN
5308-5311	STAND	PIPE	#34	0	340	AZ	EXTERIOR	SCAN
5373-5440	STAND	PIPE	#35	0	350	AZ	EXTERIOR	SCAN
5440-5497	STAND	PIPE	#36	0	360	AZ	EXTERIOR	SCAN

NOTE

Tape #6 was used for special reexaminations per a request of GPC. These exams are covered by tapes included in this report, therefore tape #6 is not included.

TAPE #7 1ST SCAN	CORE SPRAY SPARGERS
0000-0011	RESOLUTION CHECK
0011-0148	NOZZLE 1A - JUNCTION BOX A
0148-0276	JUNCTION BOX A - NOZZLE 53A
0276-0424	NOZZLE 1C - JUNCTION BOX C
0424-0541	JUNCTION BOX C - NOZZLE 53C
2ND SCAN	(SCAN OF UPPER AND LOWER SPARGER RINGS)
0541-0656	NOZZLE 1B-53A
0656-0777	NOZZLE 1D-53C NOTE: BENT DISPERSAL KNOB IN NOZZLE BY JUNCTION BOX D
3RD SCAN	(3RD SCAN LOWER SPARGER RINGS B & D)
0777-0888	NOZZLE 1B-JUNCTION BOX B
0888-1016	JUNCTION BOX B-NOZZLE 53B
1016-1126	NOZZLE 1D-JUNCTION BOX D
1126-1256	JUNCTION BCX D-NOZZLE 53D
TAPE #8	CORE SPRAY SUPPLY PIPING
0000-0028	RESOLUTION
FIRST PASS	
0028-0078	90 AZ CORE SPRAY COUPLING 100 AZ AND VERTICAL RUN FROM COUPLING TO UPPER ELBOW TO BRACKET 30 AZ
0078-0328	HORIZONTAL SECTION FROM ELBOW TO BRACKET AT 30 AZ
0328-0463	BRACKET AND ATTACHMENT WELDS
0463-0700	HORIZONTAL SECTION FROM 30 AZ BRACKET TO JUNCTION BOX AT 90 AZ
0700-0806	JUNCTION BOX AT 90 AZ
TAPE #8	
0806-1015	HORIZONTAL SECTION FROM JUNCTION BOX 90 AZ TO BRACKET AT 150 AZ
1015-1076	BRACKETS AND ATTACHMENT WELDS

1075-1094~	HORIZONTAL SECTION FROM BRACKET-UPPER ELBOW 150 AZ - 170 AZ
1094-1145	VERTICAL RUN FROM UPPER ILBOW TO COUPLING AT 170 AZ INCLUDING COUPLING SCAN
SECOND RUN	
35-1228	COUPLING AT 170 AZ-UPPER ELBOW 170 AZ
1228-1260	UPPER ELBOW 170 AZ
1260-1290	HORIZ. SECTION 170 AZ - 150 AZ UPPER ELBOW BRACKET
1290-1310	BRACKET 150 AZ
1310-1414	HORIZONTAL SECTION FROM BRACKET TO JUNCTION BOX 150 AZ - 90 AZ
1414-1561	HORIZONTAL SECTION FROM JUNCTION BOX TO BRACKET INCLUDING BRACKET 90 AZ - 30 AZ
1561-1603	HORIZONTAL SECTION FROM 30 AZ BRACKET TO 10 AZ ELBOW
1603-1689	VERTICAL DOWN FROM 10 AZ ELBOW TO COUPLING AT 10
FIRST PASS	270 AZ CORE SPRAY NOZZLE
1689-1749	COUPLING 190 AZ
1749-1791	VERTICAL RUN FROM COUPLING 190 AZ TO UPPER ELL TW
1791-1810	HORIZONTAL SECTION FROM UPPER ELBOW-BRACKET 190 AZ - 210 AZ
1810-1879	BRACKET AT 210 AZ AND ATTACHMENT WELDS
1879-1943	HORIZONTAL SECTION FROM 210 AZ BRACKET TO 270 AZ JUNCTION BOX
1943-2019	JUNCTION BOX AT 270 AZ
TAPE #8	
2019-2148	HORIZONTAL SECTION FROM JUNCTION BOX AT 270 AZ TO BRACKET AT 330 AZ
2148-2189	BRACKET AT 330 AZ
2189-2201	HORIZONTAL SECTION FROM BRACKET 330 AZ TO UPFER ELBOW 330 AZ - 350 AZ

2201-2220	UPPER ELBOW AT 350 AZ
2220-2265	VERTICAL RUN FROM UPPER ELBOW TO COUPLING 350 AZ
SECOND PASS	
2265-2374	COUPLING TO UPPER ELBOW 350 AZ
2374-2443	HORIZONTAL SECTION FROM UPPER ELBOW TO BRACKET 350 AZ TO 330 AZ
2443-2505	BRACKET AT 330 AZ - JUNCTION BOX 270
2505-2639	JUNCTION BOX AT 270 AZ - 210 AZ BRACKET
2639-2652	BRACKET 210 AZ TO ELBOW 190 AZ
2652-2682	ELBOW 190 AZ TO COUPLING 190 AZ
2689-2694	RESOLUTION
2694-2767	HEADER FROM SHROUD TO LOWER ELBOW 10 AZ, LOWER ELBOW 10 AZ AND VERTICAL RUN FROM LOWER ELBOW TO COUPLING 10 AZ
2767-2834	VERTICAL RUN FROM COUPLING TO LOWER ELBOW AND FROM HEADER TO LOWER ELBOW TO SHROUD ALL AT 170 AZ
2834-2934	HEADER FROM SHROUD TO LOWER ELBOW, LOWER ELBOW 190 AZ AND VERTICAL RUN FROM LOWER ELBOW 10 COUPLING
2934-3034	VERTICAL RUN FROM COUPLING TO LOWER ELBOW AT 350 AZ AND HEADER TO LOWER ELBOW TO SHROUD 350 AZ
TAPE #9	TOP GUIDE ROD BRACKETS
0000-0675	O AZ TOP GUIDE ROD BRACKET AND ATTACHMENT WELDS
0675-0690	O AZ BOTTOM ROD BRACKETS AND ATTACHMENT WELDS
0690-1290	180 AZ TOP GUIDE ROD BRACKETS AND ATTACMENT WELDS
TAPE #9	A DELTO
1290-1295 -	180 AZ BOTTOM GUIDE BRACKET AND ATTACHMENT WELDS
	STEAM DRYER SUPPORT LUGS
1293-1466	146 AZ SUPPORT LUG AND ATTACHMENT WELDS SEE INDICATION SHEET
	214 AZ SUPPORT LUG AND ATTACHMENT WELDS SEE INDICATION SHEET
1611-1800	326 AZ SUPPORT LUG AND ATTACHMENT WELDS SEE INDICATION SHEET

1800-2046*	34 AZ SUPPORT LUG AND ATTACHMENT WELDS SEE INDICATION SHEET
	VESSEL CLADDING
2046-2326	STARTS AT 0 AZ ROD GUIDE FROM 6' ABOVE FEEDWATER SPARGER TO FEEDWATER SPARGER GOING 6' TO THE RIGHT 6 SCANS
TAPE #10	SURVEILLANCE SPECIMEN BRACKETS
0006-0043	UPPER SURVEILLANCE SPECIMEN BRACKET AND ATTACHMENT AT 30 AZ
0043-0071	LOWER BRACKET AT 30 AZ ON SURVEILLANCE SPECIMEN
	AND ATTACHMENT WELD
0071-0121	UPPER AND LOWER SURVEILLANCE SPECIMEN BRACKETS AND ATTACHMENT WELDS
0121-0154	UPPER AND LOWER SURVEILLANCE SPECIMEN BRACKETS AND ATTACHMENT WELDS
TAPE #11	SHROUD SUPPORT RING A. SUPPORT RING ATTACHMENT WELD TO VESSEL
0000-0025	RESOLUTION CHECK
0025-0131	INDICATION FOUND BY ACCIDENT ON RECIRC NOZZLE 28-1A. EVALUATION DONE ON TAPE #14 FOUND TO BE NOTHING.
0131-0157	AREAS BETWEEN O AZJET PUMP #1
0157-0179	AREAS BETWEEN JET PUMP #2JET PUMP #3
0179-0239	AREAS BETWEEN JET PUMP #4JET PUMP #5
0239-0264 TAPE #11	AREAS BETWEEN JET PUMP #6JET PUMP #7
0264-0413	AREAS BETWEEN JET PUMP #8JET PUMP #9 NOTE: LINEAR INDICATION SEEN THIS AREA. 0310-0354 COUNTS
0419-0475 -	AREAS BETWEEN JET PUMP #10180 AZ MANWAY
0475-0538	AREAS BETWEEN 180 AZ MANWAY JET PUMP #11
0542-0595	AREAS BETWEEN JET PUMP #12JET PUMP #13
0595-0619	AREAS BETWEEN JET PUMP #14JET PUMP #15
0619-0647	AREAS BETWEEN JET PUMP #16JET PUMP #17 NOTE: LIMITED SCAN DUE TO ING RUMENT LINES.
0647-0671	AREAS BETWEEN JET PUMP #18JET PUMP #19

0671-0689-	AREAS BETWEEN JET PUMP #20 AZ MANWAY
	SUPPORT RING ATTACHMENT W L TO SHROUD
0689-0725	AREAS BETWEEN O AZ MANWAYJET PUMP #1
0725-0735	AREAS BETWEEN JET PUMP #2JET PUMP #3
0735-0754	AREAS BETWEEN JET PUMP #4JET PUMP #5 NOTE: AREAS BETWEEN JET PUMP #6 & #7 ARE LIMITED
0754-0771	AREAS BETWEEN JET PUMP #8JET PUMP #9
0771-0791	AREAS BETWEEN JET PUMP #10180 AZ MANWAY
0791-0806	AREAS BETWEEN JET PUMP #12JET PUMP #13
0806-0821	AREAS BETWEEN JET PUMP #14JET PUMP #15
0821-0836	AREAS BETWEEN JET PUMP #16JET PUMP #17 ARE LIMITED DUE TO INSTRUMENT LINES
0836-0848	AREAS BETWEEN JET PUMP #18JET PUMP #19
0848-0878	AREAS BETWEEN JET PUMP #20 O AZ MANWAY
0879-1023	O AZ SUPPORT RING MANWAY
1023-1180	180 SUPPORT RING MANWAY COVER
TAPE #12	SHROUD HEAD HOLD DOWN BRACKET & WELD
0000-0039	BRACKET & WELD & 5 AZ
0039-0064 TAPE #12	BRACKET & WELD @ 15 AZ
0064-0087	BRACKET & WELD @ 25 AZ
0087-0112	BRACKET & WELD @ 35 AZ
0112-0134	BRACKET & WELD @ 45 AZ
0134-0160	BRACKET & WELD @ 55 AZ
0160-0182	BRACKET & WELD @ 65 AZ
0181-0209	BRACKET & WELD @ 75 AZ
0209-0227	BRACKET & WELD @ 85 AZ
0227-0249	BRACKET & WELD @ 95 AZ
0249-0183	BRACKET & WELD @ 105 AZ
0283-0331	BRACKET & WELD @ 115 AZ

	0331-0383	BRACKET	&	WELD	Q	125	AZ
	0383-0406	BRACKET	6	WELD	Q	135	AZ
	0406-0435	BRACKET	&	WELD	6	145	AZ
	0435-0465	BRACKET	&	WELD	Ø	155	AZ
	0465-0501	BRACKET	&	WELD	ø	165	AZ
	0501-0522	BRACKET	&	WELD	0	175	AZ
,	0522-0557	BRACKET	&	WELD	0	185	AZ
	0557-0574	BRACKET	&	WELD	ø	195	AZ
	0574-0596	BRACKET	&	WELD	ø	205	AZ
	0596-0626	BRACKET	&	WELD	0	215	AZ
	0626-0646	BRACKET	&	WELD	0	225	AZ
	0646-0669	BRACKET	&	WELD	ø	235	AZ
	0669-0695	BRACKET	&	WELD	0	245	AZ
	0695-0733	BRACKET	٤	WELD	6	255	AZ
	0733-0781	BRACKET	&	WELD	6	265	AZ
	0781-0805	BRACKET	٤	WELD	Q	275	AZ
	TAPE #12						
	0805-0819	BRACKET	&	WELD	0	285	AZ
	0819-0831	BRACKET	&	WELD	6	295	AZ
	0831-0851	BRACKET	&	WELD	ø	305	AZ
	0851-0872	BRACKET	&	WELD	ø	315	AZ
	0872-0894	BRACKET	&	WELD	Ô	325	AZ
	0894-0905	BRACKET	£	WELD	Ø	335	AZ
	0905-0920 -	BRACKET	&	WELD	6	345	AZ
	0920-0945	BRACKET	٤	WELD	Ģ	355	AZ
	0945-0952	RESOLUTI	ON	CHEC	K		
		SHROUD F	LA	NGE S	UK	FACE	
	0952-1067	0 AZ	9	O AZ			
	1067-1152	90 AZ	*	180 A	Z		

1152-1232	180 AZ 270 AZ
1232-1350	270 AZ 360 AZ
	TOP GUIDE HOLD DOWN
1350-1357	HOLD DOWN @ 356 AZ
1357-1364	HOLD DOWN @ 86 A2
1364-1376	HOLD DOWN @ 176 AZ
1376-1397	HOLD DOWN @ 266 AZ
TAPE #13	JET PUMP HOLD DOWN BEAMS
0000-0038	JET PUMP #1 BEAM
0038-0076	JET PUMP #2 BEAM
0076-0109	JET PUMP #3 BEAM
0109-0141	JET PUMP #4 BEAM
0141-0162	JET PUMP #5 BEAM
0162-0180	JET PUMP #6 BEAM
TAPE #13	
0180-0206	JET PUMP #7 BEAM
0206-0228	JET PUMP #8 BEAM
0228-0265	JET PUMP #9 BEAM
0265-0291	JET PUMP #10 BEAM
0291-0322	JET PUMP #11 BEAM
0322-0354	JET PUMP #12 BEAM
0354-0396	JET FUMP #13 BEAM
0396-0441	JET PUMP #14 BEAM
0441-0482	JET PUMP #15 BEAM
0482-0531	JET PUMP #16 BEAM
0531-0581	JET PUMP #17 BEAM
0581-0629	JET PUMP #18 BEAM
0629-0674	JET PUMP #19 BEAM
0674-0708	JET PUMP #20 BEAM

TAFE #13 -	JET PUMP INSPECTIONS ACCESSIBLE AREA OF JET PUMPS
0707-0741	JET PUMP #1 180 AZ BEND NOZZLE & PARTS OF TRANSITION PIECE
0741-0842	INLET MIXER & JET PUMP RISER BRACE
0842-0913	RESTRAINER
0913-0954	DIFFUSSER SLIP JOINT & RISER NOZZLE
0954-1070	DIFFUSER
1070-1152	JET PUMP #2 180 AZ BEND NOZZLE & PARTS OF TRANSITION PIECE
1152-1423	INLFT MIXER & JET PUMP RISER BRACE
1423-1517	RESTRAINER
1517-1610	DIFFUSER SLIP JOINT
1610-1660 TAPE #13	SENSING LINE - DIFFUSER
1660-1665	SENSING LINE UPPER BRACKET
1665-1676	SENSING LINE
1676-1695	LOWER SENSING LINE BRACKET
1695-1731	SENSING LINE & COUPLING
1731-1882	DIFFUSER
1882-1929	JET PUMP #3 180 AZ BEND NOZZLE & TRANSITION PIECE
1929-2051	INLET MIXER & RISER BRACE
2051-2153	RESTRAINER
2153-2203	D'FFUSER SLIP JOINT
2203-2389	DIFFUSER
2389-2437	JET PUMP #4 100 AZ BEND NOZZLE & TRANSITION PIECE
2437-2537	INLET MIXER & RISER BRACE
2537-2599	RESTRAINER
2599-2654	DIFFUSER SLIP JOINT
2654-2691	SENSING LINE

2691-2697	SENSING LINE-UPPER BRACKET
2697-2715	SENSING LINE
2715-2742	SENSING LINE LOWER BRACKET
2742-2774	SENSING LINE & COUPLING
2774-2945	DIFFUSER
	JET PUMP #5
2945-2996	180 AZ BEND NOZZLE & TRANSITION
2996-3001	INLET MIXER & RISER BRACE
3001-3080	RESTRAINER
3080-3125	DIFFUSER SLIP JOINT
TAPE #13	
3125-3275	DIFFUSER
	JET PUMP #6 180 AZ BEND NOZZLE & TRANSITION
3300-3458	INLET MIXER & RISER BRACE
3458-3501	RESTRAINER
3501-3544	DIFFUSER SLIP JOINT
3544-3568	SENSING LINE
3568-3588	SENSING LINE-UPPER BRACKET
3588-3606	SENSING LINE
3606-3616	SENSING LINE LOWER BRACKET
3616-3708	SENSING LINE & COUPLING
3708-3768	DIFFUSER
	JET PUMP #7
3763-3785	180 AZ BEND NOZZLE & TRANSITION
3785-3853	INLET MIXER - RISER BRACE
3853-3894	RESTRAINER
3894-3910	DIFFUSER SLIP JOINT
3910-3950	CAMERA MISPLACED-RAN OVER SAME AREA TWICE
3950-4044	SENSING LINE DIFFUSER

4044-4053*	SENSING LINE UPPER BRACKET
4053-4062	SENSING LINE & DIFFUSER
4062-4078	LOWER SENSING LINE ERACKET
4078-4103	SENSING LINE & DIFFUSER & COUPLING
4103-4154	180 AZ BENL NOZZLE & TRANSITION
4154-4280	INLET MIXER & RISER BRACE
4280-4300	RESTRAINER
4300-4321 TAPE #14 M 2	DIFFUSER SLIP JOINT
4321-4425	DIFFUSER
	JET PUMP #9
4425-4446	180 AZ BEND NOZZLE & TRANSITION
4446-4489	INLET MIXER & RISER BRACE
4489-4509	RESTRAINER
4509-4545	DIFFUSER SLIP JOINT
4545-4557	SENSING LINE
4557-4560	UPPER SENSING LINE BRACKET
4560-4562	SENSING LINE
4562-4569	LOWER SENSING LINE ERACKET
4569-4576	SENSING LINE & COUPLING
4576-4632	DIFFUSER
	JET PUMP #10
4632-4642	180 AZ BEND NOZZLE & TRANSITION
4642-4675	INLET MIXER & RISER BRACE
4675-4692 -	RESTRAINER
4692-4701	DIFFUSER SLIP JOINT
4701-4765	DIFFUSER
	RESOLUTION CHECK JET PUMP #1
4769-4770	TOP OF SENSING LINE

NOTE

	DET PUMP #4
4770-4773	TOP OF SENSING LINE
	JET PUMP #6
4773-4775	TOP OF SENSING
	JET PUMP #7
	TOP OF SENSING LINE
TAPE #14 13	My 2-3-88
4778-4781	JET PUMP #9 TOP OF SENSING LINE
4781-4791	JET PUMP #9 UPPER & LOWER SENSING LINE BRACKET
TAPE #15	RELOOK OF MANWAY COVERS
0000-0015	RESOLUTION CHECK
0015-0120	O AZ MANWAY COVER & WELD
0120-0390	180 AZ MANWAY COVER & WELD
TAPE #16	JET PUMP INSPECTION
0000-0018	RESOLUTION CHECK
0018-0050	JET PUMP #11 180 AZ BEND NOZZLE & TRANSITION
0050-0173	INLET MIXER
0173-0227	RESTRAINER
0227-0246	DIFFUSER SLIP JOINT
0246-0351	DIFFUSER
0351 · 0365	RISER BRACE
0365-0390	JET PUMP #12 180 AZ BEND NOZZLE & TRANSITION
0390-0473	INLET MIXER & BRACE
0473-0539	RESTRAINER
0539-0564	DIFFUSER SLIP JOINT
0564+0702	DIFFUSER 6 SENSING LINE
0702-0726	UPPER SENSING LINE BRACKET
0726-0735	LOWER SENSING LINE ERACKET

0735-0739 "	SENSING LINE COUPLING
0739-0767	SENSING LINE
0767-0792	JET PUMP #13 180 AZ BEND NOZZLE & TRANSITION
TAPE #16	
0792-0851	INLET MIXER
' 0851-0908	RESTRAINT
0908-0937	SLIP JOINT DIFFUSER
0937-1044	DIFFUSER JET PUMP 14
1044-1066	180 AZ BEND NOZZLE & TRANSITION
1066-1165	INLET MIXER & RISER BRACE
1165-1197	RESTRAINER
1197-1218	DIFFUSER SLIP JOINT
1218-1245	SENSING LINE
1245-1254	UPPER SENSING LINE BRACKET
1254-1263	SENS' G LINE
1263-1267	SENSING LINE LOWER BRACKET
1267-1284	SENSING LINE & COUPLING
1285-1317	JET PUMP #15 180 BEND NOZZLE
1317-1400	INLET MIXER & RISER BRACKET
1400-1434	RESTRAINER
1434-1467	DIFFUSER SLIP JOINT
1467-1540	DIFFUSER
1540-1597 -	JET PUMP #16 180 AZ BEND & TRANSITION
1597-1701	INLET MIXER & RISER BRACE
1701-1730	RESTRAINER
1730-1740	DIFFUSER SLIP JOINT
1740-1775	SENSING LINE & DIFFUSER
1775-1780	SENSING LINE UPPER BRACKET

TAPE #16

1794-1829	180 AZ BEND & TRANSITION PIECE
1829-1950	INLET MIXER & RISER BRACE
1950-1979	RESTRAINER
1979-1986	DIFFUSER SLIP JOINT
1986-2016	DIFFUSER & SENSING LINE
2016-2020	SENSING-LINE BRACKET UPPER
2020-2031	LOWER SENSING LINE BRACKET
2031-2064	SENSING LINE
	JET PUMP #18
2064-2084	180 AZ BEND & TRANSITION PIECE
2084-2117	INLET MIXER & RISER BRACE
2117-2131	RESTRAINER
2131-2137	SLIP JOINT DIFFUSER
2137-2202	DIFFUSER
	JET PUMP #19
2202-2221	180 AZ BEND & TRANSITION PIECE
2221-2280	INLET MIXER & RISER BRACE
2280-2302	RESTRAINER
2302-2318	SLIP JOINT DIFFUSER
2318-2363	DIFFUSER & SENSING LINE & BRACKETS
	JET PUMP #20
2363-2383 -	180 AZ BEND & TRANSITION
2383-2455	INLET MIXER & RISER BRACE
2455-2475	RESTRAINER
2475-2500	DIFFUSER SLIP JOINT
2500-2608	DIFFUSER

SUMMARY

OF CLASS 1 AND 2

REPAIRS AND REPLACEMENTS

REPAIRS AND REPLACEMENTS

Repairs and Replacements

No significant repairs or replacements were performed during the outage. As mentioned previously in the report, one (1) Jet Pump Hold Down Beam and six (6) Shroud Head Hold Down Bolts were replaced due to rejectable indications reported from ISI examinations.

Numerous repairs were initiated or component supports due to indications detected during ISI examination. These repairs are not described in detail in this report, but Deficiency Card Numbers and MWO Numbers are referenced in the ABSTRACT SECTION and in the EXAMINATION TABLES for additional information.

Valves 2821-F001 and 2821-F002 were disassembled and repaired due to leakage detected during performance of the Class 1 System Leakage Test prior to plant start-up. These valves were examined after repairs during performance of an isolated leakage inspection that was performed during plant start-up.

The ANI/ANII was utilized for review and/or inspection of all repair and/or replacement NDE activities.