Omaha Public Power District, 1623 Harney St., Omaha, NE 68102,
Fort Calhoun Station - Unit 1, P.O. Box 399, Fort Calhoun, NE 68023-0399
Commercial Service Date 9/26/73

I. INTRODUCTION

During the September-November 1981 refueling outage, Southwest Research Institute (SwRI) personnel performed nondestructive examinations (NDE) of selected components in Omaha Public Power District's (OPPD) Fort Calhoun Station, Unit No. 1. The examinations constituted the sixth such inservice examination (ISI) performed at Fort Calhoun Station, and the first ISI of the third 40-month period of commercial operation.

A. Examination Areas

The ISI was performed 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," 1974 Edition, with Addenda through Summer 1975 and Code Case N-307.
- SwRI "Project Plan for the 1981 Inservice Examination of Fort Calhoun Station, Unit No. 1."
- Fort Calhoun Station, Unit No. 1, 10-Year Inservice Examination Plan for Class 1, 2, and 3 Components, revised July 1980.
- Supplement #10, dated August 12, 1981, to OPPD Purchase Order No. 16525.
- Omaha Public Power District Technical Specifications.
- SwRI Nuclear Quality Assurance Program Manual, Revision 2, with all applicable changes.

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

Class 1

Reactor Pressure Vessel and Closure Head

- Closure Head Studs, Nuts, and Washers
- Closure Head Cladding
- Reactor Pressure Vessel Flange Ligaments

Pressurizer

- Longitudinal Welds
- Circumferential Weld

- Nozzle-to-Shell Welds
- Nozzle Inside Radiused Sections
- Nozzle-to-Safe End Weld
- Cladding
- Manway Bolting

Steam Generators

- Circumferential Welds
- Meridional Welds
- Nozzle-to-Shell Welds
- Nozzle Inside Radiused Sections
- Nozzle-to-Safe End Welds
- Support Lug Welds
- Cladding
- Manway Bolting

Regenerative Heat Exchanger

- Circumferential Weld
- Longitudinal Weld
- Shell-to-Nozzle Weld

Piping

- Reactor Coolant Loop 1, 32-in. Line and Loop 2, 24-in. Line
- 10-in. Surge Line
- 4-in. Pressurizer Spray and Safety Lines
- 3-in. Pressurizer Spray and Relief Lines
- 2-1/2-in. Pressurizer Relief Line
- 2-in. Pressurizer Auxiliary Spray Line
- 12-in. Safety Injection Lines

- 6-in. Safety Injection Lines
- 3-in. High Pressure Headers
- 2-in. High Pressure Headers
- 12-in. Shutdown Coolant Line
- 2-in. Charging Line
- 2-in. Letdown Lines

Reactor Coolant Pumps

- Case Bolting Studs
- Support Lug Welds and Components
- Flange Bolting

Valves

- Valve Restraints and Support Components

Class 2

Vessels

- Regenerative Heat Exchanger
- Shutdown Heat Exchanger
- Letdown Heat Exchanger
- Volume Control Tank

Piping

- 28-in. Main Steam, Loops A and B
- 16-in. Feedwater, Loops A and B
- 24-, 20- and 6-in. Safety Injection
- 14-, 12-, 10- and 8-in. Low Pressure Safety Injection
- 12-in. Shutdown Coolant
- 12-, 10- and 6-in. Low Pressure Headers
- 12-, 8- and 6-in. Containment Spray System

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- 6-in. Safety Injection
- 8- and 6-in. High Pressure Safety Injection
- 10-, 8- and 6-in. Auxiliary Coolant

B. Summary of Examination Results

The nondestructive examinations were performed using visual (VT), liquid penetrant (PT), magnetic particle (MT), and manual ultrasonic (UT) techniques. The various examinations were conducted in accordance with standard SwRI NDT procedures which were written to conform to the requirements of the applicable sections of the ASME Boiler and Pressure Vessel Code and the SwRI Nuclear Quality Assurance Program Manual. A copy of each applicable SwRI NDT procedure is included in Appendix D (not attached).

SwRI Operating Procedures for weld joint identification marking on nuclear power plant piping, recording data during VT, PT, and MT examinations, and measuring and recording search unit location and maximum signal amplitude during UT examinations are included in Appendix C (not attached).

One indication was observed during the VT examination of Auxiliary Coolant Weld 8-AC-2003-21-SW and reported on CNF 81-501. Reexamination by OPPD personnel after repair by OPPD personnel revealed no recordable indications.

Three indications were observed during the VT examination of Auxiliary Coolant Weld 8-AC-2004-19-SW and reported on CNF 81-502. After evaluation, the indications were accepted "as is" by OPPD personnel.

One indication was observed during the VT examination of the Letdown Heat Exchanger and reported on CNF 81-503. Reexamination by OPPD personnel after repair by OPPD personnel revealed no recordable indications.

Boric Acid buildup was observed during the VT examination of the RC Pump case studs and reported on CNF 81-504. Removal of the boric acid deposits revealed 14 corroded studs (in pumps A, B and C) which were removed and replaced with new studs by OPPD personnel. One of the 14 was not on CNF 81-504, but was removed after inspection by OPPD QC.

Two indications were observed during the PT examination of Auxiliary Spray Line Weld 2-AS-3 and reported on CNF 81-506. After rework by OPPD personnel, reexamination by OPPD personnel revealed an acceptable PT indication.

Seven indications were observed during the PT examination of Steam Generator Outlet-to-Safe End Weld 24-RC-21-7 and reported on CNF 81-507. Reexamination by OPPD personnel after rework by OPPD personnel revealed no recordable indications.

Six indications were observed during the PT examination of Steam Generator Outlet-to-Safe End Weld 24-RC-23-19 and reported on CNF 81-508. Reexamination by OPPD personnel after rework by OPPD personnel revealed no recordable indications.

Nine indications were observed during the MT examination of two Closure Head Studs and five Nuts and reported on CNF 81-509. The indications were evaluated and accepted "as is" by OPPD personnel.

One indication was observed during the PT examination of High Pressure Header Weld 2-HPH-1.22-13 and reported on CNF 81-510. Reexamination by OPPD personnel after rework by OPPD personnel revealed no recordable indications.

Two indications were observed during the VT examination of pipe restraints on a 3-in. pressurizer safety line and a 6-in. safety injection line and reported on CNF 81-511. Reexamination by OPPD personnel after rework by OPPD personnel revealed no recordable indications.

Two indications were observed during the VT examination of pipe restraint 12-CSS-2004-12-PR-3 and reported on CNF 81-512. Reexamination by OPPD personnel after rework by OPPD personnel revealed no recordable indications.

One indication was observed during the VT examination of pipe restraint 28-MS-2002-7-PR and reported on CNF 81-513. The indication was evaluated and accepted "as is" by OPPD personnel.

One indication was observed during the VT examination of pipe restraint 16-FW-2001-3-PR-2/1B and reported on CNF 81-514. Reexamination by OPPD personnel after rework by OPPD personnel revealed no recordable indications.

No other reportable indications were observed during the examinations. Copies of CNF's generated during this ISI are located in Appendix H (not attached), and with each affected data summary sheet.

The SwRI Quality Assurance Section was represented on site by the SwRI quality assurance (QA) representative who was present for approximately 50 percent of the examination period. The QA representative performed the appropriate duties outlined in Section 3.3.1(4), "Onsite SwRI Quality Assurance Activities", of the Project Plan.

Test personnel were certified in accordance with SwRI NQAP 11-1 which incorporates the guidelines of SNT-TC-1A of the American Society for Nondestructive Testing. A copy of each individual's certifications is included in Appendix F. Included in Appendix G (not attached) are copies of the certifications for the ultrasonic instruments, transducers, couplant, PT materials, MT materials and equipment, and marking pencils used during the examinations.

Drawings, sketches and certifications of the basic calibration blocks used during the ultrasonic system calibration are located in Appendix E (not attached).

II. SUMMARY OF THE INSERVICE EXAMINATION

This section of the report provides a description of the equipment used during the ISI, a listing of approximate radiation exposure levels encountered during the ISI, a discussion of the field data records plus a summary of the nondestructive examinations performed.

A. Equipment

1. Manual Examination Equipment

a. Sonic FTS MK I (See Figures 1 and 2)

Sonic FTS MK I ultrasonic flaw detection instruments were used for the manual nondestructive testing and thickness gauging of materials. They were also used to determine the acoustical characteristics of the materials tested by measuring their transmission and attenuation properties.

The Sonic FTS MK I ultrasonic instrument is a small portable unit, powered by a self-contained battery or battery-charger pack. In-plant examinations are normally performed using the 12-hour (externally recharged) battery to provide complete portability and freedom of movement. The ultrasonic instrument utilizes transistorized plug-in printed circuit boards and a cathode-ray tube (CRT) for video display of examination indications. Instrument calibration certifications are in Appendix G (not attached).

b. Transducers

Various brands, sizes, types, and frequencies of ultrasonic transducers (search units) were used to perform the examinations. A transducer frequency of either 2.25, 1.5 or 1.0 MHz was used. The 2.25 MHz transducers were used on carbon steels and 1.5 MHz or 2.25 MHz on stainless steels as specified in the procedure. For centrifugually cast stainless steel, 1.0 MHz transducers were used. Attenuation measurements (only) on carbon steel components were made using 5.0 MHz transducers. For information on the actual transducer used for any specific examination, consult the data sheets and referenced calibration sheets in the field data volume.

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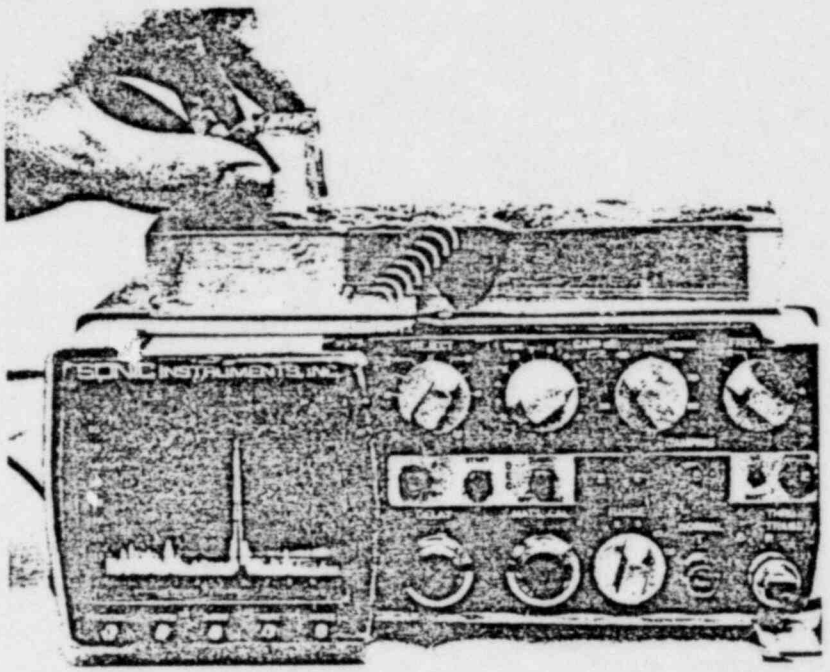

FIGURE 1.
Sonic FTS MK I and
Pictorial Representation
of Crown Indication

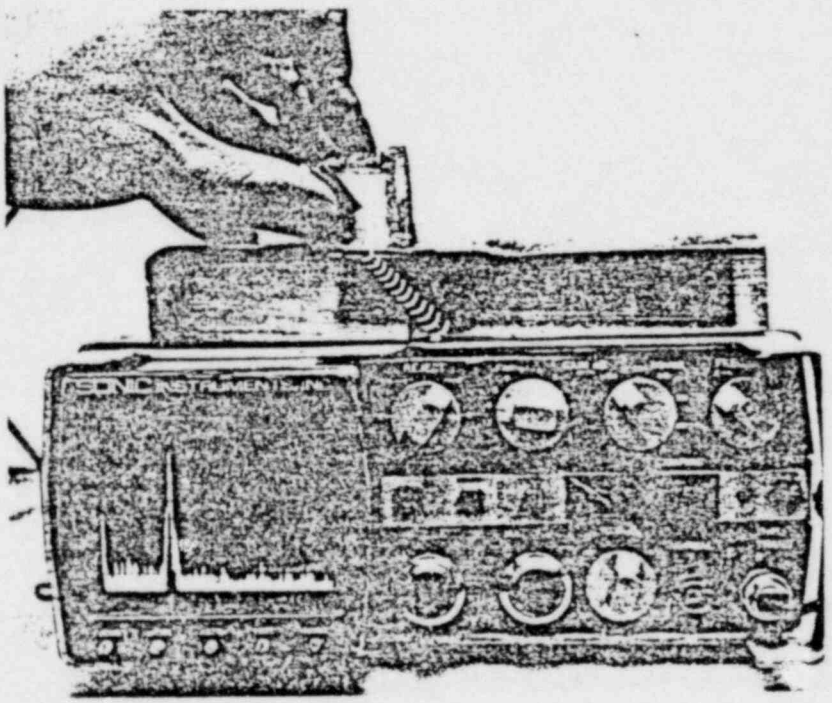

FIGURE 2.
Sonic FTS MK I and
Pictorial Representation
of Root Indication

c. SwRI Stud Probe (See Figure 3)

UT examinations of the Reactor Pressure Vessel (RPV) Closure Head studs were performed using the SwRI Stud Probe, which employs a 60-degree shear wave search unit. The stud probe is inserted into the heater hole of the stud and is moved up and down by the operator with a slight rotation for each pass. The examination area includes the thread root and 1/4 inch as measured inward from the thread root (with the exception of the nonloadbearing portion beyond the nut). Also the outer 1/4 inch of the nonthreaded portion is examined. This examination procedure meets the requirements of ASME Boiler and Pressure Vessel Code Case N-307, as authorized for use at Fort Calhoun Station by NRC letter to Mr. W. C. Jones, dated October 8, 1981, Docket No. 50-285.

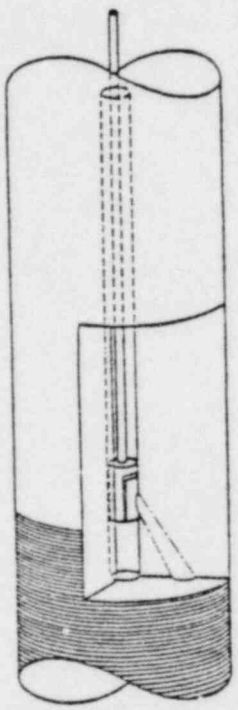

FIGURE 3. Conceptual Drawing Showing Operation of the Manual Stud Probe

B. Radiation Exposure

Radiation exposure encountered during the ISI was of fundamental concern to all SwRI personnel involved during the daily examination activities. SwRI personnel took the necessary precautions in order to minimize overall exposure and consequently received the minimum dosage practicable while performing the selected examinations. The following listing details the approximate radiation exposure levels associated with various examination areas.

Radiation Exposure Levels

Area	Exposure Level
Pressurizer	500 mR/hr
Steam Generators	150-200 mR/hr
Regenerative Heat Exchanger	300 mR/hr
Reactor Coolant Piping	100-200 mR/hr
Pressurizer Surge Line	100 mR/hr
12-in Safety Injection Lines	250-300 mR/hr
Miscellaneous Piping in Containment	50-150 mR/hr
Auxiliary Building, Rooms 15A and 29	200 mR/hr
Auxiliary Building, Miscellaneous Areas	10-50 mR/hr

C. Explanation of Field Data Records

The results of the NDE examinations and calibrations performed by SwRI personnel were recorded on standard SwRI forms. These completed documents constitute a portion of the Inservice Examination Report. The original records are retained in the SwRI Data Storage Facility, and copies are provided herein for completeness. Documentation of examinations performed by OPPD personnel is retained by OPPD.

The field data records for each weld or area are assembled into a package preceded by a summary sheet. The examination areas and summary sheet numbers are listed in the Summary Table. A general explanation of the individual field data forms follows.

- The instruments used in performing UT examinations were calibrated prior to use, then verified again at specified intervals during the examinations and upon completion of the examinations. The calibration parameters were recorded on the appropriate calibration record sheet as specified in the applicable NDT procedure. The documented calibration and calibration verification provide immediate assurance that the examinations were performed using properly calibrated instruments.

- The results of manual UT examinations were recorded on the applicable data record sheets as specified in the appropriate NDT procedure. The information documented on these forms describes the parameters associated with those indications which were greater than the recording levels specified in the applicable NDT procedures.

- When required, the size, location, and nature of reflectors were determined by analyzing the indication parameters recorded on the forms described above. The analysis is documented on SwRI Indication Resolution Record Sheets, which are included as a part of each affected data package.

- Visual Examination, Liquid Penetrant, and Magnetic Particle Examination Record sheets were used to record the results of those examinations. The equipment and/or materials used in VT, PT, and MT examinations are identified on the record sheets.

D. Summary of Nondestructive Examinations

The following section of this report is the Summary of Nondestructive Examinations Table (Summary Table). The Summary Table provides information and results for the nondestructive examinations performed during the ISI. See Figure 4, page 10, for an explanation of the Summary Table format. A description of the weld identification system used to assign unique identifiers to each examination area and weld identification figures for Class 1 and Class 2 systems are located in Appendices A and B, respectively.

1. ASME Section XI Item No. and Category

The ASME Section XI Item No. and Category are listed in the first and second columns respectively.

2. Examination Area Identification Column

In the column "Examination Area Identification," each area, component, or weld is designated with a unique alphanumeric code. Each area, component, or weld which was examined is listed in the following manner.

a. Pressure Retaining Vessels, Pumps and Valves

The examination areas for these components are listed by the generic terms which specifically identify the area, component, or weld examined. These terms, such as "Nozzle-to-Shell Weld at 240°", are self-explanatory and are exclusive to that area, component, or weld. In addition to generic names, weld numbers are used wherever possible.

b. Class 1 Piping

The Class 1 piping welds examined during this ISI are identified by nominal pipe size, function, and line number within the systems, which are abbreviated functionally as follows:

RC - Reactor Coolant System

Weld Identification Figures (Appendix A) identify component welds and piping weld locations along with other information pertinent to the performance of the ISI. Line numbering and designations for Class 1 are unchanged from those used for the baseline examination and are explained in the 10-Year examination plan.

c. Class 2 Piping

Weld Identification Figures (Appendix B) identify component welds and piping weld locations along with other information pertinent to the performance of the ISI.

For the Class 2 piping systems, the designation system consists of several parts:

(1) The first character set is one or two digits indicating nominal pipe size.

(2) The second set, of two to four letters, identifies the system by an abbreviation of its functional name. The abbreviations for the lines examined during this ISI are listed below:

SDC - Shutdown Coolant System Line
SI - Safety Injection System Line
CSS - Containment Spray System Line
HPSI - High Pressure Safety Injection System Line

(3) The third set consists of a unique line number. The first digit is a "2", signifying Class 2. The second digit is a "0". The third and fourth digits assure uniqueness.

(4) The fourth set is usually a 1- or 2-digit number identifying a specific circumferential weld. Items such as pipe supports, etc., are identified by adding initials to the number of the circumferential weld directly upstream. For example, -4-PR is a pipe restraint downstream from circumferential weld No. 4. If there are successive components between circumferential welds, a fifth set will be added to identify them sequentially either clockwise from zero reference location (LO) or in the direction of flow, as appropriate.

3. Examination Method Column

a. Visual (VT)

Areas requiring VT were examined in accordance with SwRI Procedure NDT-900-1, Rev. 46 or NDT-900-4, Rev. 22. These SwRI procedures include those guidelines outlined in Paragraph IWA-2210 of Section XI and specify methods of documenting indications.

b. Liquid Penetrant (PT)

PT examinations were performed in accordance with SwRI Procedure NDT-200-1, Rev. 51, using a visible red-dye penetrant. PT material certifications are in Appendix G.

c. Magnetic Particle (MT)

MT examinations were performed in accordance with SwRI Procedure NDT-300-2, Rev. 29 and NDT-300-1, Rev. 21, using the fluorescent magnetic particle method. MT material certifications are in Appendix G.

d. Ultrasonic (UT)

The specific UT procedures employed in any particular examination covered in this report are found in Appendix D.

Each weld was subjected to examination scans as discussed in the following subsections. Exceptions to these scans were usually due to area/component configurations and/or inaccessibility.

(1) Longitudinal Attenuation. The base metal adjacent to piping welds was examined with a straight-beam search unit in order to determine the relative sound transmission characteristics of the base metal and the calibration standard. Attenuation measurements were not taken on clad materials.

(2) Examination Scans

(a) Straight Beam Lamination Scan (0°L). A 0-degree (deg) longitudinal wave was used to examine the base metal adjacent to the welds to determine the existence of any laminations or inclusions which, if present, would cast "shadows" which could prevent sound beam access to all or part of the welds and/or could affect the interpretation of the examination results (see Paragraph I-2330 of Appendix I to Section XI, 1974 Edition, and Paragraph T-534.3 of Article 5, Section V).

(b) Straight Beam Longitudinal Wave Weld Scan (0°W). Where physical configuration prohibited [illegible]ave examinations from one side of piping welds, a 0-deg longitudina[illegible]examination was performed from the surface of the weld whenever possi[illegible] 0-degree longitudinal wave examination was performed on vessel welds unless the accessibility and/or configuration prevented the examination. The examinations are used to determine the existence of any reflectors in the weld positioned parallel to the weld surface (see Paragraph I-2310 of Appendix I to Section XI, and Paragraph T-536 of Article 5, Section V). The 0°W scan requirement is not applicable to welds in material 0.40 inches or less in thickness, per SwRI's NDT procedure for thin wall pipe examinations.

(c) Straight Beam Scan (0°). In the case of the RPV flange ligaments, a 0-degree straight beam examination was performed from the RPV seal surface. This type of examination was also used for examination of the closure head nuts.

(d) Angle Beam Scans (45°, 45°T, 60°, 60°T, 29°RL, and 45°RLT). Each weld was examined using 45- and 60-deg shear waves, as required, to determine the internal characteristics of the weld metal and, when required, the adjacent base metal for at least 1/2 thickness beyond the edge of the weld. Whenever possible, examinations were performed from both sides of the weld using the required test angles. In addition, a transverse scan (applied along the weld to detect any reflectors oriented "transverse to the weld") using a 45-deg shear wave search unit was performed whenever possible. The use of these techniques is denoted by "45°T" in the Summary Table. For vessel welds a 60-deg transverse scan (60°T) was also performed whenever possible. Optimum coverage of the RPV nozzle inside radius sections was obtained by use of a 29° refracted longitudinal wave beam (29°RL).

A 60-deg shear wave was used to examine the closure studs from the heater hole utilizing the SwRI stud probe. This technique is designed to detect radial flaws propagating from the outside surface of the studs in the threaded areas.

4. Procedure Identification Column

The column titled "SwRI Procedure No./Rev." lists the SwRI NDT Procedure that was used for each examination.

5. Summary Sheet Column

The column titled "Summary Sheet No." references the summary sheet provided for each examination area. The summary sheets are included in the Field Data volumes. In addition to summarizing the results of the examinations, the summary sheets list the record sheet numbers, the SwRI examiners, dates of the examinations, and resolution sheet numbers.

6. Indications Columns

The four columns under the general heading of "Indications" are "No Recordable", "Insignificant", "Geometric", and "Other". These columns were used as required, and their general description is provided below.

The results for the VT, PT, MT examinations are indicated by an "X" in the appropriate column to be either "No Recordable" or "Other". The term "Other" is used when indications are observed that exceed the recording requirements of the applicable procedure.

The results of the UT examinations are indicated by recording the angle of the ultrasonic search unit under the column heading which describes the test results for that angle, i.e., the "No Recordable", "Insignificant", "Geometric", or "Other" column.

In the performance of the UT examination, the data recording level was established by the applicable NDT procedure.

The term "No Recordable" was applied when no indications were observed greater than the recording level and no indications were observed between 20 percent of the Distance Amplitude Correction (DAC) curve and the recording level which were suspected by the Level II examiner to be other than geometric in nature.

"Insignificant" was applied when (1) the amplitude of any indication observed was equal to or greater than the recording level, but less than 100 percent of the DAC curve, or (2) nonrelevant indications, such as reflections due to standing waves, trapped glycerine, etc. were observed.

"Geometric" indications are (1) those indications which have an amplitude equal to or greater than 100 percent of the DAC curve, and have been resolved and documented to be geometric in nature, or (2) indications that are less than 100 percent of the DAC curve but were suspected by the Level II examiners to be geometric in nature.

Indications that are geometric in nature are those resolved as due to a reflection from a geometric feature of the weld or component such as "root" geometry, "crown" geometry, "inside surface" geometry, or "outside surface" geometry. An indication due to "root" geometry is one in which the ultrasonic wave is reflected by the root geometry of the weld bead; "crown" geometry indications occur when the ultrasonic wave reflects off the inside surface of the examination area, strikes the crown of the weld, and is returned to the transducer; "inside surface" geometric indications occur when the internal surface of the examination area of the weld fitup contains an angular plane sufficient to reflect a portion of the ultrasonic beam back to the transducer; and "outside surface" geometric indications occur when the ultrasonic wave reflects off the inside surface of the examination area, strikes the outside surface of the examination area, and is returned to the transducer.

"Other" indications include those indications evaluated to be other than "Insignificant" or "Geometric" indications, as described above. No such indications were reported during this ISI.

The resolution of each "Geometric" and "Other" indication was documented on SwRI Indication Resolution Records and included with the weld data package. These records are listed by serial number along with the appropriate examination data sheets on the summary sheet for that component.

7. Remarks Column

The "Remarks" column is used to provide additional information pertinent to the examination results:

- When complete coverage of the examination area was not possible, the "Remarks" column was used to indicate the limitations.
- For VT, PT, and MT results reported in the "Other" column, a brief description is given in the "Remarks" column. (There were no VT, PT, or UT indications reported in the "Other" column).
- For UT examination results reported in the "Geometric" or "Other" columns, a brief description of the resolution of the indication is presented in the "Remarks" column.
- Reference is made in "Remarks" column to CNFs used in the reporting of indications.
- The required UT calibration block number is listed in the "Remarks" column for the applicable examination.

E. Summary Table

The Summary Table is included from page 17 through 56 of this report.

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Appendix 1 - Reactor Coolant Pump Stud Replacement

There is a slight discrepancy between the OPPD records with regard to the number of reactor coolant pump studs replaced and the number recorded on the SWRI Customer Notification Forms. SWRI reports that 13 studs were observed to have significant corrosion and were recommended for replacement. OPPD records indicate that 14 studs were replaced. The explantion for the difference is that indeed 14 studs were replaced. The one stud in question that was replaced beyond the SWRI record was done so at the discretion of OPPD personnel, the stud having a fair amount of surface corrosion and boric acid deposition.

Total stud replacement was 14 studs; 5 each from A & B pump and 4 from C pump.

FORT CALHOUN STATION, UNIT 1
1981 INSERVICE EXAMINATION - CLASS 1
SUMMARY OF NONDESTRUCTIVE EXAMINATIONS

REACTOR PRESSURE VESSEL COMPONENTS (See Figure A-2A)

ASME SEC XI ITEM NO	ASME SEC XI CATGY	EXAMINATION AREA IDENTIFICATION	EXAM METHOD	SwRI PROCEDURE NO./REV.	WELD EXAM SUM SHEET NO.	INDICATIONS				REMARKS
						NO RECORDABLE	INSIGNIFICANT	GEOMETRIC	OTHER	
		BOLTING								
B1.8	B-G-1	Closure Head Studs	UT	600-18/26 Dev. 6&7	300501	60°				16 studs examined, Nos. 2, 24, 26 28, 29, 32, 34, 35, 36, 37, 38, 40,
			MT	300-2/29					X	41, 43, 44 and 48. MT indications (tool marks) on studs 32 and 36, evaluated and accepted "as is" by OPPD personnel. See CNF 81-509. 6.125-1.125-8-CS-5
B1.8	B-G-1	Closure Head Nuts	UT	600-19/28 Dev. 4	300502	0°, 43°				16 nuts examined, Nos. 2, 24, 26, 28, 29, 32, 34, 35, 36, 37, 38, 40,
			MT	300-2/29					X	41, 43, 44 and 48. MT indications (tool marks) on nuts 2, 28, 32, 38 and 44, evaluated and accepted "as is" by OPPD personnel. See CNF 81-509. 6.125-1.125-8-CS-5 9.125-6-8-CS-5
B1.9	B-G-1	Ligaments	UT	600-5/27 Dev.13&14	300503	0°				Ligaments 32 through 2 examined. 6.125-1.125-8-CS-5
B1.10	B-G-1	Closure Head Washers	VT	900-1/48 Dev. 1	300504	X				16 washers examined, Nos. 2, 24, 26, 28, 29, 32, 34, 35, 36, 37, 38, 40, 41, 43, 44 and 48.
B1.13	B-I-1	Closure Head Cladding	VT	900-1/48 Dev. 1	300505	X				Two 6" x 6" square patches examined, centered on stud holes 7 and 15, 15" above flange face.
			PT	200-1/51		X				

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FORT CALHOUN STATION, UNIT 1
1981 INSERVICE EXAMINATION - CLASS 1
SUMMARY OF NONDESTRUCTIVE EXAMINATIONS

PRESSURIZER (See Figures A-3 and A-4)

ASME SEC. XI ITEM NO	ASME SEC. XI CATGY	EXAMINATION AREA IDENTIFICATION	EXAM. METHOD	Swtl PROCEDURE NO./REV.	WELD EXAM. SUM SHEET NO.	INDICATIONS				REMARKS
						NO RECORDABLE	INSIGNIFICANT	GEOMETRIC	OTHER	
		VESSEL WELDS								
B2.1	B-B	2-403-A Upper Shell Course Longitudinal Weld	UT	600-15/42 Dev. 7	300506	0°L, 0°W, 45° 45°T, 60°, 60°T				5-CSCL-6-FCL
B2.1	B-B	2-403-D Lower Shell Course Longitudinal Weld	UT	600-15/42 Dev. 7	300507	0°L, 0°W, 45° 45°T, 60°, 60°T				5-CSCL-6-FCL
B2.1	B-B	3-403 Shell-to-Bottom Head Circumferential Weld	UT	600-15/42 Dev. 7	300508	0°L, 0°W, 45° 45°T, 60°, 60°T				Limited UT due to proximity of support skirt and insulation support. 5-CSCL-6-FCL
		NOZZLE WELDS								
B2.2	B-D	Safety Line No. 2 Head-to-Nozzle Weld	UT	600-15/42 Dev. 7	300509	0°L, 0°W, 45° 45°T, 60°, 60°T				No UT from nozzle side due to nozzle configuration. Limited UT from head side due to the proximity of other nozzles. 3-CSCL-8-FCL
B2.2	B-D	Safety Line No. 2 Nozzle Inside Radiused Section	UT	600-11/30 Dev. 10	300510	60°				3-CSCL-8-FCL
B2.2	B-D	Spray Nozzle Nozzle-to-Head Weld (PSS-1)	UT	600-15/42 Dev. 7	300511	0°L, 0°W, 45° 45°T, 60°, 60°T				No UT from nozzle side due to nozzle configuration. Limited UT from head side due to proximity of other nozzles. 3-CSCL-8-FCL
B2.1	B-D	Spray Nozzle Inside Radiused Section	UT	600-11/30 Dev. 10	300512	60°				3-CSCL-8-FCL
		NOZZLE-TO-SAFE END WELDS								
B2.4	B-F	Spray Nozzle-to-Safe End (4-PSS-18, see Figure A-15)	PT UT	200-1/51 600-3/55	300513	X 0°L, 0°W, 45°T	60°	45°		No UT from the nozzle side due to the nozzle configuration. 4-2507-2-5.160

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PRESSURIZER (See Figures A-3 and A-4) (Cont'd)

ASME SEC XI ITEM NO	ASME SEC XI CATGY	EXAMINATION AREA IDENTIFICATION	EXAM METHOD	SwRI PROCEDURE NO./REV.	WELD EXAM SUM SHEET NO.	INDICATIONS				REMARKS
						NO RECORDABLE	INSIGNIFICANT	GEOMETRIC	OTHER	
		OTHER COMPONENTS								
B2.9	B-I-2	Cladding	VT	900-1/48 Dev. 1	300514	X				One 6" x 6" patch examined. Centerline 6" below manway.
B2.11	B-G-2	Manway Bolting	VT	900-1/48 Dev. 1	300515	X				19 Bolts examined in place, in 20 bolt holes; 1 bolt missing; replaced by OPPD personnel. See DNR 81-132 in data package.

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STEAM GENERATOR No. 1 (See Figure A-5)

ASME SEC XI ITEM NO	ASME SEC XI CATGY	EXAMINATION AREA IDENTIFICATION	EXAM METHOD	SwRI PROCEDURE NO./REV	WELD EXAM SUM SHEET NO	INDICATIONS				REMARKS
						NO RECORDABLE	INSIGNIFICANT	GEOMETRIC	OTHER	
		MERIDIONAL WELDS								
B3.1	B-B	1-M-1 Meridional Weld	UT	600-15/42 Dev. 7	300516	0°L, 0°W, 45° 45°T, 60°, 60°T				7-CSCL-7-FCL
		INTEGRALLY WELDED SUPPORT LUGS								
B3.7	B-H	1-SL-2 Support Lug	UT	600-15/42 Dev. 7&8	300518	0°L, 0°W, 45° 45°T, 60°, 60°T				Limited UT due to lug configuration. No UT on weld due to weld crown configuration. PL-CS-5.0-3-FCL
B3.7	B-H	1-SL-4 Support Lug	UT	600-15/42 Dev. 7&8	300517	0°L, 0°W, 45° 45°T, 60°, 60°T				Limited UT due to lug configuration. No UT on weld due to weld crown configuration. PL-CS-5.0-3-FCL
		OTHER COMPONENTS								
B3.10	B-G-2	Outlet Manway Bolting	VT	900-1/48 Dev. 1	300519	X				20 studs and 20 nuts examined in place.
B3.10	B-G-2	Inlet Manway Bolting	VT	900-1/48 Dev. 1	300520	X				20 studs and 20 nuts examined in place.

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STEAM GENERATOR NO. 2 (See Figure A-6)

ASME SEC XI ITEM NO.	ASME SEC XI CATGY	EXAMINATION AREA IDENTIFICATION	EXAM METHOD	SwRI PROCEDURE NO./REV.	WELD EXAM. SUM SHEET NO.	INDICATIONS				REMARKS
						NO RECORDABLE	INSIGNIFICANT	GEOMETRIC	OTHER	
		CIRCUMFERENTIAL WELDS								
B3.1	B-B	2-C-1 Dollar Plate Weld	UT	600-15/42 Dev. 7	300521	0°L, 0°W, 45° 45°T, 60°, 60°T				20% (13") of weld length examined. 7-CSCL-7-FCL
B3.1	B-B	2-C-2 Lower Head-to-Extension Ring Weld	UT	600-15/42 Dev. 7	300522	0°L, 0°W, 45° 45°T, 60°, 60°T				Limited UT from the extension ring side due to proximity of weld 2-C-3. 7-CSCL-7-FCL
B3.1	B-B	2-C-3 Extension Ring-to-Tube Sheet Weld	UT	600-15/42 Dev. 7	300523	0°L, 0°W, 45° 45°T, 60°, 60°T				Limited UT due to the proximity of support lug and weld 2-C-2. No UT on weld due to weld configuration. 7-CSCL-7-FCL
		MERIDIONAL WELDS								
B3.1	B-B	2-M-1	UT	600-15/42 Dev. 7	300524	0°L, 0°W, 45° 45°T, 60°, 60°T				10% (7") of weld length examined. 7-CSCL-7-FCL
B3.1	B-B	2-M-3	UT	600-15/42 Dev. 7	300525	0°L, 0°W, 45° 45°T, 60°, 60°T				10% (7") of weld length examined. 7-CSCL-7-FCL
		NOZZLE WELDS								
B3.2	B-D	2-N-3 Head-to-Outlet Nozzle	UT	600-15/42 Dev. 7	300526	0°L, 45° 45°T, 60°, 60°T				No UT on weld due to weld configuration. 7-CSCL-7-FCL
B3.2	B-D	2-N-3-IRS Inside Radiused Section	UT	600-11/30 Dev. 10	300527	29°RL				IR-CSCL-2-FCL
B3.2	B-D	2-N-5 Inlet Nozzle-to-Head	UT	600-15/42 Dev. 7	300528	0°L, 45° 45°T, 60°, 60°T				No UT on weld due to weld configuration. 7-CSCL-7-FCL
B3.2	B-D	2-N-5-IRS Inside Radiused Section	UT	600-11/30 Dev. 10	300529	29°				IR-CSCL-2-FCL

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STEAM GENERATOR NO. 2 (See Figures A-6 and A-9) (Cont'd)

ASME SEC XI ITEM NO	ASME SEC XI CATGY	EXAMINATION AREA IDENTIFICATION	EXAM METHOD	Swfll PROCEDURE NO./REV.	WELD EXAM. SUM SHEET NO.	INDICATIONS				REMARKS
						NO RECORDABLE	INSIGNIFICANT	GEOMETRIC	OTHER	
		NOZZLE-TO-SAFE END WELDS								
B3.3	B-F	Safe End-to-Inlet Nozzle (RC-20-6)	PT UT	200-1/51 600-3/55	300930	X 0°L, 0°W, 45°T, 60°	45°			Examinations limited due to proximity of weld No. 5, and nozzle configuration. 32-SSCL-3.125-9-FCL and 3-CSCS-8-FCL
B3.3	B-F	Outlet Nozzle-to-Safe End (RC-21-7)	PT	200-1/51	300942				X	PT indications removed, reexamined and accepted by OPPD personnel. See CNF 81-507.
B3.3	B-F	Outlet Nozzle-to-Safe End (RC-23-19)	PT UT	200-1/51 600-3/55	300944	0°L, 0°W, 45° 45°T		60°	X	PT indications removed, reexamined and accepted by OPPD personnel. See CNF 81-508. 24-SSCL-2.406-10-FCL and 3-CSCL-8-FCL
		OTHER COMPONENTS								
B3.8	B-I-2	Cladding, Inlet Manway	VT	900-1/48 Dev. 1	300532	X				6" square patch 6" above manway examined.
B3.8	B-I-2	Cladding, Outlet Manway	VT	900-1/48 Dev. 1	300533	X				6" square patch 6" above manway to bottom edge of patch was examined.

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REGENERATIVE HEAT EXCHANGER (See Figure A-7)

ASME SEC XI ITEM NO.	ASME SEC XI CATGY	EXAMINATION AREA IDENTIFICATION	EXAM. METHOD	SwRI PROCEDURE NO./REV.	WELD EXAM. SUM SHEET NO.	INDICATIONS				REMARKS
						NO RECORDABLE	INSIGNIFICANT	GEOMETRIC	OTHER	
B3.1	B-B	No. 12 Circumferential Weld	UT	600-30/10 Dev. 485	300534	0°L, 0°W, 45°T	45°, 60°	45°, 60°		No UT from the tube sheet side due to the tube sheet configuration. 10-SS-X-1.0-25-FCL
B3.1	B-B	No. 20 Longitudinal Weld	UT	600-30/10 Dev. 485	300535	0°L, 0°W, 45° 45°T				10-SS-X-1.0-25-FCL
B3.2	B-D	No. 11 Shell-to-Nozzle Weld (Letdown Line 2"-LL-2)	UT	600-30/10 Dev. 485	300536	0°L, 0°W, 45° 45°T				10-SS-X-1.0-25-FCL

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ASME SEC XI ITEM NO	ASME SEC XI CATGY	EXAMINATION AREA IDENTIFICATION	EXAM METHOD	SwRI PROCEDURE NO./REV.	WELD EXAM SUM SHEET NO.	INDICATIONS				REMARKS
						NO RECORDABLE	INSIGNIFICANT	GEOMETRIC	OTHER	
		RC LOOP 1 (See Figure A-8)								
B4.6	B-J	32-RC-10-3B 10" RC-to-PS-1	UT	800-17/21	300927	0°L, 45°				No UT on weld due to weld configuration
B4.5	B-J	32-RC-10-4 Pipe-to-Elbow	UT	800-17/21	300928	0°L, 0°W, 45°, 45°T				32-2501-S.160
		RC LOOP 2 (See Figure A-9)								
B4.5	B-J	24-RC-21-10 Pipe-to-Elbow	UT	800-17/21	300539	0°L, 0°W, 45°, 45°T				Limited UT from the upstream side due to the configuration of weld No. 9. 24-2501-S.160
B4.7	B-J	24-RC-22-14A 2" RC-to-CL-22	PT	200-1/51	300540	X				
B4.5	B-J	24-RC-23-25 Elbow-to-Pump	UT	800-17/21	300541	0°L, 45°				Limited UT due to weld area configuration. No 0°W scan due to weld configuration. 24-2501-S.160
		2" DRAIN LINE (See Figure A-12)								
B4.8	B-J	2-DL-13-8 Pipe-to-RC-130	PT	200-1/51	300542	X				
		10" SURGE LINE (See Figure A-14)								
B4.5	B-J	10-PSL-10-13 Elbow-to-Pipe	UT	600-3/55	300544	0°L, 45°	45°	45°, 60°,		10-2507-1-S.160
B4.10	B-K-2	10-PSL-10-13-PR-1 Pipe Restraint	VT	900-4/22 Dev. 1&2	300545	X				
B4.5	B-J	10-PSL-10-16 Pipe-to-Nozzle	UT	600-3/55	300543	0°L, 0°W, 45° 45°T	60°			10-2507-1-S.160

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ASME SEC XI ITEM NO	ASME SEC XI CATGY	EXAMINATION AREA IDENTIFICATION	EXAM METHOD	Swrii PROCEDURE NO./REV.	WELD EXAM SUM SHEET NO.	INDICATIONS				REMARKS
						NO RECORDABLE	INSIGNIFICANT	GEOMETRIC	OTHER	
		4" PRESSURIZER SPRAY (See Figure A-15)								
B4.10	B-K-2	4-PSS-1-2A-PR Pipe Restraint	VT	900-4/22 Dev. 1&2	300546	X				Gauge reading: bottom of scale.
B4.10	B-K-2	4-PSS-1-4-PR-1 Pipe Restraint	VT	900-4/22 Dev. 1&2	300547	X				Gauge reading: 1/16 scale.
B4.10	B-K-2	4-PSS-1-4-PR-2 Pipe Restraint	VT	900-4/22 Dev. 1&2	300548	X				Gauge reading: 1 mark from "EXT."
B4.10	B-K-2	4-PSS-1-4-PR-3 Pipe Restraint	VT	900-4/22 Dev. 1&2	300549	X				Gauge reading: 2 marks from "EXT."
		4" PRESSURIZER SAFETY (See Figure A-16)								
B4.10	B-K-2	4-PSL-1-6-PR Pipe Restraint	VT	900-4/22 Dev. 1&2	300550	X				Gauge reading: 7/8 scale
B4.5	B-J	4-PSL-1-6A Pipe-to-Reducing Elbow	UT	600-3/55	300551	0°L, 45°T	45°, 60°	60°		4-2507-2-S.160
B4.10	B-K-2	4-PSL-2-6-PR Pipe Restraint	VT	900-4/22 Dev. 1&2	300552	X				Gauge reading: 3/4 scale
		3" PRESSURIZER SPRAY (See Figure A-17)								
B4.5	B-J	3-PSS-14-9 Pipe-to-Elbow	UT	600-3/55	300553	0°L, 0°W, 45°T, 60°	45°			3-2507-3-S.160
B4.10	B-K-2	3-PSS-14-15-PR-1 Pipe Restraint	VT	900-4/22 Dev. 1&2	300555	X				Gauge reading: 4 marks from "EXT."
B4.10	B-K-2	3-PSS-14-15-PR-2 Pipe Restraint	VT	900-4/22 Dev. 1&2	300556				X	Gauge reading: 3 marks from "EXT." Loose bolting tightened and accepted by OPPD personnel. See CNF 81-511.
B4.5	B-J	3-PSS-14-26 Pipe-to-Elbow	UT	600-3/55	300557	0°L, 0°W, 45° 45°T		60°		Limited UT from the downstream side due to the elbow configuration. 3-2507-3-S.160

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ASME SEC XI ITEM NO	ASME SEC XI CATGY	EXAMINATION AREA IDENTIFICATION	EXAM METHOD	SWRI PROCEDURE NO./REV	WELD EXAM SUM SHEET NO.	INDICATIONS				REMARKS
						NO RECORDABLE	INSIGNIFICANT	GEOMETRIC	OTHER	
		3" PRESSURIZER SPRAY (Cont'd) (See Figure A-18)								
B4.5	B-J	3-PSS-22-15 Pipe-to-Elbow	UT	600-3/55	300558	0°L, 45° 45°T, 60°				3-2507-3-S.160
B4.5	B-J	3-PSS-22-21 Pipe-to-Elbow	UT	600-3/55	300559	0°L, 0°W, 45° 45°T, 60°				Limited UT from the downstream side due to the elbow configuration. 3-2507-3-S.160
B4.5	B-J	3-PSS-22-29 Pipe-to-Elbow	UT	600-3/55	300560	0°L, 0°W, 45° 45°T		60°		Limited UT from the downstream side due to the elbow configuration. 3-2507-3-S.160
		3" PRESSURIZER RELIEF (See Figure A-19)								
B4.10	B-K-2	3-PRL-1-5-PR-1 Pipe Restraint	VT	900-4/22 Dev. 1&2	300561				X	Loose bolt tightened and accepted by OPPD personnel. See CNF 81-505
B4.10	B-K-2	3-PRL-1-5-PR-2 Pipe Restraint	VT	900-4/22 Dev. 1&2	300861				X	Loose bolt tightened and accepted by OPPD personnel. See CNF 81-505.
B4.10	B-K-2	3-PRL-1-7-PR Pipe Restraint	VT	900-4/22 Dev. 1&2	300562	X				Gauge reading: 1/2 scale
B4.5	B-J	3-PRL-1-9 Tee-to-Reducer	UT	600-3/55	300563	0°L, 0°W, 45° 45°T		60°		Limited UT from the upstream side due to the tee configuration. 3-2507-3-S.160
		2-1/2" PRESSURIZER RELIEF (See Figure A-20)								
B4.5	B-J	2-1/2-PRL-2-10 Pipe-to-Elbow	UT	800-36/24 Dev. 16	300565	0°L, 45°, 45°T				2.5-SS-160-.375-14-FCL
B4.10	B-K-2	2-1/2-PRL-3-12-PR Pipe Restraint	VT	900-4/22 Dev. 1&2	300567	X				Gauge readings: 1-1/8 and 169

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						NO RECORDABLE	INSIGNIFICANT	GEOMETRIC	OTHER	
		2-1/2" PRESSURIZER RELIEF (See Figure A-20) (Cont'd)								
B4.10	B-K-2	2-1/2-PRL-3-18-PR Pipe Restraint	VT	900-4/22 Dev. 1&2	300568	See Remarks				No examination due to pipe restraint being in process of modification.
B4.5	B-J	2-1/2-PRL-3-21 Pipe-to-Elbow	UT	800-36/24 Dev. 16	300569	0°L, 45°, 45°T				2.5-SS-160-.375-14-FCL
		2" AUXILIARY SPRAY (See Figure A-21)								
B4.8	B-J	2-AS-1-3 CH-205-to-Pipe	PT	200-1/51	300572				X	PT indication repaired, reexamined and accepted by OPPD personnel. See CNF 81-506
		12" SAFETY INJECTION (See Figure A-22)								
B4.10	B-K-2	12-SI-12-15-PR Pipe Restraint	VT	900-4/22 Dev. 1&2	300573	X				Gauge reading: 1 mark from "EXT."
B4.5	B-J	12-SI-12-17 Elbow-to-Pipe	UT	600-3/55	300574	0°L, 45°T	60°	45°, 60°,		No UT from the upstream side due to the wall penetration configuration. 12-2501-1-S.160
		(See Figure A-23)								
B4.5	B-J	12-SI-14-14 Pipe-to-Tee	UT	600-3/55	300575	0°L, 45°T 0°W	45°, 60°	45°,60°		No UT from the downstream side due to the tee configuration. 12-2501-1-S.160
		(See Figure A-24)								
B4.10	B-K-2	12-SI-22-17-PR Pipe Restraint	VT	900-4/22 Dev. 1&2	300876	X				
B4.5	B-J	12-SI-22-20 Elbow-to-Pipe	UT	600-3/55	300577	0°L, 45°T	45°, 60°	45°, 60°		12-2501-1-S.160

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ASME SEC XI ITEM NO	ASME SEC XI CATGY	EXAMINATION AREA IDENTIFICATION	EXAM METHOD	SWRI PROCEDURE NO./REV.	WELD EXAM SUM SHEET NO.	INDICATIONS				REMARKS
						NO RECORDABLE	INSIGNIFICANT	GEOMETRIC	OTHER	
		12" SAFETY INJECTION (Cont'd) (See Figure A-25)								
B4.5	B-J	12-SI-24-11 Tee-to-Pipe	UT	600-3/55	300978	0°L, 45°T	45°, 60°	45°, 60°		12-25-1-S.160
		6" SAFETY INJECTION (See Figure A-26)								
B4.10	B-K-2	6-SI-12-7-PR-1 Pipe Restraint SIS-140	VT	900-4/22 Dev. 1&2	300579	X				Gauge reading: 4 marks from "EXT."
B4.10	B-K-2	6-SI-12-7-PR-2 Pipe Restraint	VT	900-4/22 Dev. 1&2	300580	X				
B4.5	B-J	6-SI-12-8 Pipe-to-Elbow	UT	600-3/55	300881	0°L, 45°T	45°, 60°	45°, 60°		6-2501-2-S.160
		(See Figure A-27)								
B4.5	B-J	6-SI-14-7 Elbow-to-Pipe	UT	600-3/55	300582	0°L, 45°T	45°, 60°	45°, 60°		6-2501-2-S.160
B4.10	B-K-2	6-SI-14-11-PR-1 Pipe Restraint	VT	900-4/22 Dev. 1&2	300583				X	Loose bolting tightened and accepted by OPPD personnel. See CNF 81-511.
B4.10	B-K-2	6-SI-14-11-PR-2 Pipe Restraint	VT	900-4/22 Dev. 1&2	300585	X				Gauge reading: 3 marks from "EXT."
B4.5	B-J	6-SI-14-13 Elbow-to-Pipe	UT	600-3/55	300586	0°L, 45°T		45°, 60°		6-2501-2-S.160
		(See Figure A-28)								
B4.10	B-K-2	6-SI-22-4-PR Pipe Restraint SIS-127A	VT	900-4/22 Dev. 1&2	300587	X				Gauge reading: 2 marks from "EXT."
B4.10	B-K-2	6-SI-22-6-PR-1 Pipe Restraint SIH-152	VT	900-4/22 Dev. 1&2	300588	X				

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						NO RECORDABLE	INSIGNIFICANT	GEOMETRIC	OTHER	
		6" SAFETY INJECTION (See Figure A-28) (Cont'd)								
B4.10	B-K-2	6-SI-22-6-PR-2 Pipe Restraint	VT	900-4/22 Dev. 1&2	300589	X				
B4.5	B-J	6-SI-22-14 Elbow-to-Pipe (See Figure A-29)	UT	600-3/55	300590	0°L, 45°T	45°	45°, 60°		6-2501-2-S.160
B4.5	B-J	6-SI-24-5 Elbow-to-Pipe	UT	600-3/55	300591	0°L, 45°T	45°	45°, 60°		UT limited by proximity of branch connection. 6-2501-2-S.160
B4.10	B-K-2	6-SI-24-7-PR-1 Pipe Restraint SIS-150	VT	900-4/22 Dev. 1&2	300594	X				Gauge reading: 2-1/2 marks from "EXT."
B4.10	B-K-2	6-SI-24-7-PR-2 Pipe Restraint	VT	900-4/22 Dev. 1&2	300595	X				
B4.5	B-J	6-SI-24-8 Pipe-to-Elbow	UT	600-3/55	300896	0°L, 45°T	45°, 60°	45°, 60°T		6-2501-2-S.160
		3" HIGH PRESSURE HEADER (See Figure A-30)								
B4.5	B-J	3-HPH-12-6 Pipe-to-Elbow (See Figure A-31)	UT	600-3/55	300598	0°L, 45°, 45°T, 60°				3-2501-3-S.160
B4.5	B-J	3-HPH-14-8 Elbow-to-Pipe	UT	600-3/55	300599	0°L, 45°, 45°T, 60°				3-2507-3-S.160
B4.5	B-J	3-HPH-14-14 Elbow-to-Pipe	UT	600-3/55	300900	0°L, 45° 45°T		60°		3-2507-3-S.160

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						NO RECORDABLE	INSIGNIFICANT	GEOMETRIC	OTHER	
		3" HIGH PRESSURE HEADER (Cont'd) (See Figure A-33)								
B4.5	B-J	3-HPH-24-10 Pipe-to-Nozzle	UT	600-3/55	300601	0°L, 0°W, 45° 45°T		60°		No UT from the downstream side due to the nozzle configuration. 3-2507-3-S.160
		2" HIGH PRESSURE HEADER (See Figure A-34)								
B4.10	B-K-2	2-HPH-1.14-25-PR Pipe Restraint	VT	900-4/22 Dev. 1&2	300602	X				
B4.8	B-J	2-HPH-1.14-31 Elbow-to-Pipe (See Figure A-35)	PT	200-1/51	300603	X				
B4.8	B-J	2-HPH-1.12-15 Pipe-to-Elbow (See Figure A-36)	PT	200-1/51	300604	X				
B4.8	B-J	2-HPH-1.22-13 Pipe-to-Elbow	PT	200-1/51	300605				X	PT indication repaired, reexamined and accepted by OPPD personnel. See CNF 81-510.
B4.10	B-K-2	2-HPH-1.22-18-PR-1 Pipe Restraint	VT	900-4/22 Dev. 1&2	300606	X				
B4.10	B-K-2	2-HPH-1.22-18-PR-2 Pipe Restraint	VT	900-4/22 Dev. 1&2	300607	X				
B4.10	B-K-2	2-HPH-1.22-22-PR-1 Pipe Restraint	VT	900-4/22 Dev. 1&2	300608	X				
B4.10	B-K-2	2-HPH-1.22-22-PR-2 Pipe Restraint	VT	900-4/22 Dev. 1&2	300610	X				
B4.8	B-J	2-HPH-1.22-25 Pipe-to-Elbow	PT	200-1/51	300611	X				

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						NO RECORDABLE	INSIGNIFICANT	GEOMETRIC	OTHER	
		2" HIGH PRESSURE HEADER (Cont'd) (See Figure A-37)								
B4.8	B-J	2-HPH-1.24-16 Pipe-to-Tee (See Figure A-38)	PT	200-1/51	300612	X				
B4.8	B-J	2-HPH-2.12-18 Pipe-to-Elbow (See Figure A-39)	PT	200-1/51	300613	X				
B4.8	B-J	2-HPH-2.14-23 SI-204-to-Pipe	PT	200-1/51	300914	X				
B4.10	B-K-2	2-HPH-2.14-23-PR Pipe Restraint	VT	900-4/22 Dev. 1&2	300615	X				
B4.8	B-J	2-HPH-2.14-32 Coupling-to-Pipe (See Figure A-40)	PT	200-1/51	300616	X				
B4.10	B-K-2	2-HPH-2.22-18-PR Pipe Restraint	VT	900-4/22 Dev. 1&2	300617	X				
B4.8	B-J	2-HPH-2.22-28 Elbow-to-Pipe (See Figure A-41)	PT	200-1/51	300618	X				
B4.8	B-J	2-HPH-2.24-11 SI-198-to-Pipe	PT	200-1/51	300619	X				
		12" SHUTDOWN COOLANT (See Figure A-42)								
B4.10	B-K-2	12-SDC-20-8-PR-1 Pipe Restraint	VT	900-4/22 Dev. 1&2	300621	X				
B4.10	B-K-2	12-SDC-20-8-PR-2 Pipe Restraint SIS-123	VT	900-4/22 Dev. 1&2	300622	X				Gauge reading: 3-1/2 marks from "EXT."
B4.10	B-K-2	12-SDC-20-8-PR-3 Pipe Restraint SIH-148	VT	900-4/22 Dev. 1&2	300623	X				

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						NO RECORDABLE	INSIGNIFICANT	GEOMETRIC	OTHER	
		2" LETDOWN LINE (See Figure A-45)								
B4.8	B-J	2-LL-1-3 Elbow-to-Pipe	PT	200-1/51	300635	X				
B4.10	B-K-2	2-LL-1-3-PR Pipe Restraint	VT	900-4/22 Dev. 1&2	300636	X				Gauge reading: 4 marks from "EXT."
B4.8	B-J	2-LL-1-27 Coupling-to-Pipe	PT	200-1/51	300947	X				
		(See Figure A-46)								
B4.8	B-J	2-LL-2-4-A Pipe-to-Coupling	PT	200-1/51	300638	X				
B4.8	B-J	2-LL-2-16 Elbow-to-Pipe	PT	200-1/51	300639	X				
B4.10	B-K-2	2-LL-2-37-PR-2 Pipe Restraint	VT	900-4/22 Dev. 1&2	300640	X				
B4.8	B-J	2-LL-2-38 Pipe-to-Elbow	PT	200-1/51	300641	X				
		(See Figure A-47)								
B4.8	B-J	2-LL-21-3 Elbow-to-Pipe	PT	200-1/51	300642	X				

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REACTOR COOLANT PUMPS

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						NO RECORDABLE	INSIGNIFICANT	GEOMETRIC	OTHER	
		PUMP RC-3A								
B5.3	B-G-1	Case Bolting In Place	VT	900-1/48 Dev. 1&2	300643				X	Boric acid buildup removed and corroded studs replaced and accepted by OPPD personnel. See CNF 8.-504.
		PUMP RC-3B								
B5.3	B-G-1	Case Bolting In Place	VT	900-1/48 Dev. 1&2	300644				X	Boric acid buildup removed and corroded studs replaced and accepted by OPPD personnel. See CNF 81-504.
		PUMP RC-3C								
B5.1	B-G-1	Case Bolting Studs In Place	UT	800-71/0 Dev. 1	300945	0°				16 studs examined in place. 3.5-X-8-CS-24-FCL.
B5.3	B-G-1	Case Bolting In Place	VT	900-1/48 Dev. 1&2	300646	X				16 studs and 16 nuts examined in place.
B5.5	B-K-2	Support Components	VT	900-4/22 Dev. 1&2	300647	X				
B5.9	B-G-2	Flange Bolting	VT	900-1/48 Dev. 1&2	300648	X				16 bolts examined in place.
		PUMP RC-3D								
B5.1	B-G-1	Case Bolting Studs In Place	UT	800-71/0 Dev. 1	300649	0°				16 studs examined in place. 3.5-X-8-CS-24-FCL.
B5.3	B-G-1	Case Bolting In Place	VT	900-1/48 Dev. 1	300650				X	Boric acid buildup removed and studs accepted "as is" by OPPD personnel. See CNF 81-504.
B5.4	B-K-1	Integrally Welded Support Lugs	UT	600-38/1	300651	0°L, 0°W		45°, 60°		Lugs 1, 2 & 3 examined from the lug surface on pump RC-3D. Geometric indications due to weld interface reflectors observed on all lugs. No UT on the weld due to the weld configuration. No UT from the pump body due to the pump configuration and (cast) material. PL-SS-1.515-59.

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REACTOR COOLANT PUMPS (Cont'd)

ASME SEC. XI ITEM NO.	ASME SEC. XI CATGY.	EXAMINATION AREA IDENTIFICATION	EXAM. METHOD	SwRI PROCEDURE NO./REV.	WELD EXAM. SUM SHEET NO.	INDICATIONS				REMARKS
						NO RECORDABLE	INSIGNIFICANT	GEOMETRIC	OTHER	
		PUMP RC-3D (Cont'd)								
B5.5	B-K-2	Support Components	VT	900-4/22 Dev. 1&2	300652	X				
B5.9	B-G-2	Flange Bolting	VT	900-1/48 Dev. 1	300653	X				16 bolts examined in place.

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VALVES

ASME SEC. XI ITEM NO.	ASME SEC. XI CATGY	EXAMINATION AREA IDENTIFICATION	EXAM. METHOD	SwRI PROCEDURE NO./REV.	WELD EXAM. SUM. SHEET NO.	INDICATIONS				REMARKS
						NO RECORDABLE	INSIGNIFICANT	GEOMETRIC	OTHER	
B6.5	B-K-2	HCV-151-SC Support Components (2-1/2"-PRL-3, See Figure A-20)	VT	900-4/22 Dev. 1&2	300654	X				
B6.5	B-K-2	HCV-240-PR-1 Valve Restraint (2"-AS-1, See Figure A-21)	VT	900-4/22 Dev. 1&2	300655	X				
B6.5	B-K-2	HCV-240-PR-2 Valve Restraint (2"-AS-1, See Figure A-21)	VT	900-4/22 Dev. 1&2	300656	X				
B6.5	B-K-2	TCV-202-PR-1 Valve Restraint (2"-LL-21, See Figure A-47)	VT	900-4/22 Dev. 1&2	300657	X				
B6.5	B-K-2	TCV-202-PR-2 Valve Restraint (2"-LL-21, See Figure A-47)	VT	900-4/22 Dev. 1&2	300658	X				

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VESSELS

ASME SEC. XI ITEM NO.	ASME SEC. XI CATGY	EXAMINATION AREA IDENTIFICATION	EXAM. METHOD	SWRI PROCEDURE NO./REV.	WELD EXAM. SUM SHEET NO.	INDICATIONS				REMARKS
						NO RECORDABLE	INSIGNIFICANT	GEOMETRIC	OTHER	
		REGENERATIVE HEAT EXCHANGER (See Figure B-43)								
C1.1	C-A	No. 16 Head-to-Shell	UT	800-17/21 600-30/10 Dev. 4&5	300959	0°L, 0°W, 45°T, 45°RL, 60°	45°	45°		10-SS-X-1.0-25-FCL and B-2922-001
		SHUTDOWN HEAT EXCHANGER (See Figure B-44)								
C1.1	C-A	No. 1 Head-to-Channel	UT	600-30/10 Dev. 4&5	300660	0°L, 0°W, 45°T	45°, 60°	45°, 60°		Limited UT from the channel side due to the proximity of branch connections. PL-SS-.765-63
		LETDOWN HEAT EXCHANGER (See Figure B-45)								
C1.1	C-A	No. 1 Head Flange-to-Shell	VT UT	900-1/48 600-30/10 Dev. 4&5	300661	0°L, 0°W	45°, 60°	45°, 60°	X	VT indication repaired, reexamined and accepted by OPPD Personnel. See CNF 81-503. No 45°T and no UT from the flange side due to the flange configuration. 20-SS-30-.500-29-FCL
		VOLUME CONTROL TANK (See Figure B-46)								
C1.1	C-A	No. 1 Lower Head-to-Shell	UT	600-26/2 Dev. 3	300662	0°L, 45°, 45°T				20% of weld length examined in 3 equally spaced 20" segments. PL-SS-.375-30-FCL
C1.3	C-C	No. 2 Leg Weld	PT	200-1/51	300863	X				

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						NO RECORDABLE	INSIGNIFICANT	GEOMETRIC	OTHER	
		MAIN STEAM - LOOP A (See Figure B-3)								
C2.6	C-E-2	28-MS-2001-7-PR Pipe Restraint MSS-7	VT	900-4/22 Dev. 1	300663	X				Gauge reading: 3 marks from "EXT."
C2.6	C-E-2	28-MS-2001-11-SC-1, -2, -3, and -4 Support Components	VT	900-4/22 Dev. 1&2	300664	X				
		MAIN STEAM - LOOP B (See Figures B-5 and B-6)								
C2.6	C-E-2	28-MS-2002-6-PR-1 Pipe Restraint	VT	900-4/22 Dev. 1&2	300669	X				Gauge reading: 5 marks from "EXT." VT limited to bolting and load scale due to inaccessibility of pipe clamp.
C2.6	C-E-2	28-MS-2002-6-PR-2 Pipe Restraint	VT	900-4/22 Dev. 1&2	300670	X				Gauge reading: 5 (mid-scale). VT limited to bolting and load setting due to inaccessibility of pipe clamp.
C2.6	C-E-2	28-MS-2002-7-PR Pipe Restraint MSS-3	VT	900-4/22 Dev. 1&2	300671				X	Loose nut evaluated and accepted "as is" by OPPD personnel. See CNF 81-513.
C2.5	C-E-1	28-MS-2002-11-SW Seal Weld	MT	300-1/21	300672	X				
C2.5	C-E-1	28-MS-2002-11-PL-2 Pipe Lug	MT	300-1/21	300673	X				
C2.5	C-E-1	28-MS-2002-11-PL-3 Pipe Lug	MT	300-1/21	300674	X				
C2.6	C-E-2	28-MS-2002-11-SC-1, -2, -3, and -4 Support Components	VT	900-4/22 Dev. 1&2	300675	X				
C2.6	C-E-2	28-MS-2002-15-PR-4 Pipe Restraint	VT	900-4/22 Dev.1&2	300676	X				Limited VT due to the safety shield configuration.
C2.6	C-E-2	28-MS-2002-15-PR-5 Pipe Restraint	VT	900-4/22 Dev.1&2	300677	X				Limited VT due to the safety shield configuration.

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						NO RECORDABLE	INSIGNIFICANT	GEOMETRIC	OTHER	
		FEEDWATER - LOOP A (See Figure B-7)								
C2.5	C-E-1	16-FW-2001-2-PL-1 Pipe Lug	MT	300-1/21	300977	X				
C2.5	C-E-1	16-FW-2001-2-PL-2 Pipe Lug	MT	300-1/21	300979	X				
C2.6	C-E-2	16-FW-2001-3-PR-1 Pipe Restraint FWH-56	VT	See	Remarks					No examination due to pipe restraint being in process of modification.
C2.6	C-E-2	16-FW-2001-3-PR-2-1B Pipe Restraint FWS-1-B	VT	900-4/22 Dev. 1&2	300981				X	Gauge reading: 3-1/2 marks from "EXT." Loose bolting tightened and accepted by OPPD personnel. See CNF 81-514.
C2.6	C-E-2	16-FW-2001-3-PR-2-1C Pipe Restraint FWS-1-C	VT	900-4/22 Dev. 1&2	300982	X				Gauge reading: 2 marks from "EXT."
C2.6	C-E-2	16-FW-2001-7-PR Pipe Restraint	VT	See	Remarks					No examination due to pipe restraint being in process of modification.
		FEEDWATER - LOOP B (See Figure B-8)								
C2.5	C-E-1	16-FW-2002-1-PS Pipe Support	MT	See	Remarks					No examination due to the safety shield configuration.
C2.6	C-E-2	16-FW-2002-1-SC Support Components	VT	900-4/22 Dev. 1&2	300685	X				
C2.6	C-E-2	16-FW-2002-1-PR-1 Pipe Restraint	VT	900-4/22 Dev. 1&2	300686	X				Limited VT due to safety shield configuration.
C2.6	C-E-2	16-FW-2002-10-PR-1 Pipe Restraint FWS-2	VT	900-4/22 Dev. 1&2	300687	X				Gauge readings: Top - 4 marks from "EXT." Bottom - 4 marks from "EXT."
C2.6	C-E-2	16-FW-2002-10-PR-2 Pipe Restraint FWS-2A	VT	900-4/22 Dev. 1&2	300688	X				Gauge reading: 2 marks from "EXT."

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						NO RECORDABLE	INSIGNIFICANT	GEOMETRIC	OTHER	
		LOW PRESSURE SAFETY INJECTION (See Figure B-9)								
C2.6	C-E-2	14-LPSI-2001-2-PR-2 Pipe Restraint SIS-27B	VT	See Remarks						Examined by OPPD personnel in accordance with Surveillance Test ST-HSS-3.
		(See Figure B-10)								
C2.6	C-E-2	14-LPSI-2002-A4-PR-2 Pipe Restraint SIS-28-A	VT	900-4/22 Dev. 1&2	300689	X				Gauge reading: 2-1/2 marks from "EXT."
		SHUTDOWN COOLANT (See Figure B-11)								
C2.1	C-F	12-SDC-2020-12 Elbow-to-Pipe	VT	900-1/48 Dev. 1	300690				X	Indication removed by OPPD personnel. See DAR 81-132 in data package. 12-SS-40S-.375-18-FCL
			VT	900-1/48 Dev. 1		X				
			PT	200-1/51		X				
			UT	800-36/24 Dev. 16		0°L, 45°T	45°			
C2.6	C-E-2	12-SDC-2020-16-PR-1 Pipe Restraint	VT	900-4/22 Dev. 1&2	300691	X				
C2.6	C-E-2	12-SDC-2020-16-PR-2A Pipe Restraint SIS-24	VT	900-4/22 Dev. 1&2	300692	X				Gauge reading: 3-2/3 marks from "EXT."
C2.6	C-E-2	12-SDC-2020-16-PR-2B Pipe Restraint SIS-24	VT	See Remarks						Examined by OPPD personnel in accordance with Surveillance Test ST-HSS-3.
C2.1	C-F	12-SDC-2020-20 Pipe-to-Tee	UT	800-36/24 Dev. 16	300693	0°L, 45°, 45°T				12-SS-40S-.375-13-FCL
		LOW PRESSURE SAFETY INJECTION (See Figure B-12)								
C2.6	C-E-2	12-LPSI-2012-2-PR-1 Pipe Restraint	VT	900-4/22 Dev. 1&2	300694	X				Gauge reading: 0
C2.6	C-E-2	12-LPSI-2012-2-PR-2 Pipe Restraint SIS-166	VT	900-4/22 Dev. 1&2	300695	X				Gauge reading: 3-1/2 marks from "EXT."

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						NO RECORDABLE	INSIGNIFICANT	GEOMETRIC	OTHER	
		LOW PRESSURE SAFETY INJECTION (Cont'd) (See Figure B-13)								
C2.6	C-E-2	12-LPSI-2014-5-PR Pipe Restraint	VT	900-4/22 Dev. 1&2	300697	X				
C2.5	C-E-1	12-LPSI-2014-11-PS Pipe Support	PT VT	See Remarks 900-4/22 Dev. 1&2	300898	X				VT performed in lieu of PT due to inaccessibility of weld.
C2.6	C-E-2	12-LPSI-2014-11-SC Support Components SIH-129 & SIH-155 (See Figure B-14)	VT	900-4/22 Dev. 1&2	300899	X				Gauge readings: Spring, 0 and snubber, 2-1/2 marks from "EXT."
C2.6	C-E-2	12-LPSI-2022-6-PR-2 Pipe Restraint	VT	900-4/22 Dev. 1&2	300699	X				
C2.6	C-E-2	12-LPSI-2022-6-PR-4 Pipe Restraints SIS-121 & SIH-144 (See Figure B-15)	VT	900-4/22 Dev. 1&2	300700	X				Gauge reading: 3 marks from "EXT."
C2.6	C-E-2	12-LPSI-2024-6-PR-2 Pipe Restraint	VT	900-4/22 Dev. 1&2	300701	X				
		LOWER PRESSURE HEADER (See Figure B-16)								
C2.1	C-F	12-LPH-2001-4 Pipe-to-Elbow	UT	800-36/24 Dev. 16	300704	0°L, 45°T	45°			12-SS-40S-.375-18-FCL
C2.1	C-F	12-LPH-2001-16 Elbow-to-Pipe	UT	800-36/24 Dev. 16	300905	0°L, 45°, 45°T				12-SS-40S-.375-18-FCL
C2.6	C-E-2	12-LPH-2001-19-SC Support Components	VT	900-4/22 Dev. 1&2	300706	X				
C2.1	C-F	12-LPH-2001-30 Elbow-to-Reducer	UT	800-36/24 Dev. 16	300707	0°L, 45°	45°T			12-SS-40S-.375-18-FCL

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						NO RECORDABLE	INSIGNIFICANT	GEOMETRIC	OTHER	
		LOW PRESSURE SAFETY INJECTION (See Figure B-17)								
C2.6	C-E-2	12-LPSI-2002-1-PR-3 Pipe Restraint SIH-81	VT	900-4/22 Dev. 1&2	300708	X				Gauge reading: 0
C2.6	C-E-2	12-LPSI-2002-13-PR-1 Pipe Restraint SIS-10	VT	900-4/22 Dev. 1&2	300709	X				Gauge reading: 2-2/3 marks from "EXT."
C2.6	C-E-2	12-LPSI-2002-13-PR-2 Pipe Restraint SIH-50 (See Figure B-18)	VT	900-4/22 Dev. 1&2	300710	X				
C2.1	C-F	12-LPSI-2003-8 Pipe-to-Elbow	UT	800-36/24 Dev. 16	300711	0°L, 45°T	45°			12-SS-40S-.375-18-FCL
C2.6	C-E-2	12-LPSI-2003-15-PR-1 Pipe Restraint	VT	900-4/22 Dev. 1&2	300712	X				
C2.6	C-E-2	12-LPSI-2003-15-PR-2 Pipe Restraint SIS-71A	VT	See Remarks						Examined by OPPD personnel in accordance with Surveillance Test ST-HSS-3.
C2.6	C-E-2	12-LPSI-2003-23-PR-1 Pipe Restraint SIS-89	VT	900-4/22 Dev. 1&2	300713	X				Gauge reading: 3-1/2 marks from "EXT."
C2.6	C-E-2	12-LPSI-2003-23-PR-2 Pipe Restraint SIH-16	VT	900-4/22 Dev. 1&2	300714	X				
C2.6	C-E-2	12-LPSI-2003-23-PR-3 Pipe Restraint SIS-89A	VT	900-4/22 Dev. 1&2	300715	X				Gauge reading: 2-1/4 marks from "EXT."
C2.1	C-F	12-LPSI-2003-26 Elbow-to-Pipe	UT	800-36/24 Dev. 16	300716	0°L, 45° 45°T				12-SS-40S-.375-18-FCL
		CONTAINMENT SPRAY (See Figure B-19)								
C2.1	C-F	12-CSS-2001-6 Pipe-to-Pipe	UT	800-36/24 Dev. 16	300717	0°L, 45°T	45°			12-SS-40S-.375-18-FCL
C2.6	C-E-2	12-CSS-2001-14-PR-1 Pipe Restraint SIS-96	VT	See Remarks						Examined by OPPD personnel in accordance with Surveillance Test ST-HHS-3.

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						NO RECORDABLE	INSIGNIFICANT	GEOMETRIC	OTHER	
		CONTAINMENT SPRAY (See Figure B-19) (Cont'd)								
C2.6	C-E-2	12-CSS-2001-14-PR-2 Pipe Restraint SIS-96A	VT	900-4/22 Dev. 1&2	300718	X				Gauge reading: 2-1/2 marks from "EXT."
C2.6	C-E-2	12-CSS-2001-14-PR-3 Pipe Restraint SIH-19	VT	See Remarks						Examined by OPPD personnel in accordance with Surveillance Test ST-HSS-3.
C2.1	C-F	12-CSS-2001-22 Elbow-to-Pipe	UT	800-36/24 Dev. 16	300719	0°L, 45°, 45°T				12-SS-40S-.375-18-FCL
		(See Figure B-20)								
C2.1	C-F	12-CSS-2002-9 Pipe-to-Tee	UT	800-36/24 Dev. 16	300720	0°L, 45°, 45°T				12-SS-40S-.375-18-FCL
		SHUTDOWN COOLANT (See Figure B-21)								
C2.1	C-F	12-SDC-2001-17 Tee-to-Pipe	UT	800-36/24 Dev. 16	300721	0°L, 45°, 45°T				No examination from the upstream side due to tee configuration. 12-SS-40S-.375-18-FCL
C2.6	C-E-2	12-SDC-2001-19-PR-1 Pipe Restraint SIS-69	VT	900-4/22 Dev. 1&2	300722	X				Gauge reading: 2 marks from "EXT."
C2.6	C-E-2	12-SDC-2001-19-PR-2 Pipe Restraint SIH-10	VT	900-4/22 Dev. 1&2	300723	X				
		(See Figure B-22)								
C2.5	C-E-1	12-SDC-2002-9-PS Pipe Support	PT	200-1/51	300725	X				
C2.6	C-E-2	12-SDC-2002-9-SC Support Components	VT	900-4/22 Dev. 1&2	300726	X				Gauge readings: Top, 2-1/2 marks from "EXT." Bottom, 2 marks from "EXT."
C2.1	C-F	12-SDC-2002-15 Pipe-to-Elbow	UT	800-36/24 Dev. 16	300729	0°L, 45°, 45°T				12-SS-40S-.375-18-FCL
C2.1	C-F	12-SDC-2002-20 Elbow-to-Pipe	UT	800-36/24 Dev. 16	300730	0°L, 45°T	45°			12-SS-40S-.375-18-FCL

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						NO RECORDABLE	INSIGNIFICANT	GEOMETRIC	OTHER	
		SHUTDOWN COOLANT (Cont'd) (See Figure B-22a)								
C2.1	C-F	12-SDC-2003-9 Elbow-to-Pipe	UT	800-36/24 Dev. 16	300731	0°L, 45°, 45°T				12-SS-40S-.375-18-FCL
C2.6	C-E-2	12-SDC-2003-9A-PR-1 Pipe Restraint SIH-15	VT	900-4/22 Dev. 1&2	300932	X				
C2.6	C-E-2	12-SDC-2003-9A-PR-2 Pipe Restraint SIS-83	VT	900-4/22 Dev. 1&2	300933	X				Gauge reading: 3 marks from "EXT."
C2.6	C-E-2	12-SDC-2003-9B-PR Pipe Restraint	VT	900-4/22 Dev. 1&2	300934	X				
C2.6	C-E-2	12-SDC-2003-11-PR-1 Pipe Restraint SIS-84	VT	900-4/22 Dev. 1&2	300935	X				Gauge reading: 3 marks from "EXT."
C2.6	C-E-2	12-SDC-2003-11-PR-2 Pipe Restraint SIH-15	VT	900-4/22 Dev. 1&2	300936	X				
C2.6	C-E-2	12-SDC-2003-14-PR-1 Pipe Restraint SIS-85A	VT	900-4/22 Dev. 1&2	300937	X				Gauge reading: 2-1/2 marks from "EXT."
C2.6	C-E-2	12-SDC-2003-14-PR-2 Pipe Restraint SIS-85	VT	900-4/22 Dev. 1&2	300938	X				Gauge reading: 2 marks from "EXT."
C2.6	C-E-2	12-SDC-2003-14-PR-3 Pipe Restraint	VT	900-4/22 Dev. 1&2	300939	X				
C2.6	C-E-2	12-SDC-2003-15-PR-1 Pipe Restraint SIH-247	VT	900-4/22 Dev. 1&2	300940	X				
C2.6	C-E-2	12-SDC-2003-15-PR-2 Pipe Restraint	VT	900-4/22 Dev. 1&2	300941	X				
		LOW PRESSURE HEADER (See Figure B-21)								
C2.1	C-F	10-LPH-2001-39 Elbow-to-Pipe	UT	800-36/24 Dev. 16	300733	0°L, 45°, 45°T				10-SS-40S-.375-19-FCL
C2.5	C-E-1	10-LPH-2001-39-PS Pipe Support	PT	200-1/51	300734	X				
C2.6	C-E-2	10-LPH-2001-39-SC Support Components	VT	900-4/22 Dev. 1&2	300735	X				

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						NO RECORDABLE	INSIGNIFICANT	GEOMETRIC	OTHER	
		LOW PRESSURE SAFETY INJECTION (See Figure B-24)								
C2.6	C-E-2	10-LPSI-2001-5-PR-1 Pipe Restraint SIS-26	VT	900-4/22 Dev. 1&2	300736	X				Gauge reading: 2-1/2 marks from "EXT."
		(See Figure B-25)								
C2.1	C-F	10-LPSI-2002-19 Pipe-to-Elbow	UT	800-36/24 Dev. 16	300737	0°L, 45°, 45°T				10-SS-40S-.375-19-FCL
C2.6	C-E-2	10-LPSI-2002-22-PR Pipe Restraint SIH-109	VT	See Remarks						Examined by OPPD personnel in accordance with Surveillance Test ST-HSS-3.
C2.6	C-E-2	10-LPSI-2002-28-PR-A and -B Pipe Restraints SIS-29 and SIH-110	VT	900-4/22 Dev. 1&2	300738	X				Gauge reading: 4 marks from "EXT."
		CONTAINMENT SPRAY (See Figure B-26)								
C2.6	C-E-2	8-CSS-2001-5-PR-3 Pipe Restraint SIH-84	VT	900-4/22 Dev. 1&2	300739	X				Gauge reading: 1/2
C2.6	C-E-2	8-CSS-2001-8-PR Pipe Restraint SIS-2	VT	See Remarks						Examined by OPPD personnel in accordance with Surveillance Test ST-HSS-3.
		(See Figure B-27)								
C2.6	C-E-2	8-CSS-2002-6-PR Pipe Restraint SIS-3	VT	900-4/22 Dev. 1&2	300740	X				Gauge reading: 3-1/2 marks from "EXT."
		(See Figure B-28)								
C2.1	C-F	8-CSS-2003-2 Elbow-to-Pipe	UT	800-36/24 Dev. 16	300741	0°L, 45°, 45°T				8-SS-40S-.322-20-FCL
C2.6	C-E-2	8-CSS-2003-9-PR Pipe Restraint SIS-8	VT	See Remarks						Examined by OPPD personnel in accordance with Surveillance Test ST-HSS-3.

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						NO RECORDABLE	INSIGNIFICANT	GEOMETRIC	OTHER	
		CONTAINMENT SPRAY (See Figure B-28) (Cont'd)								
C2.5	C-E-1	8-CSS-2003-13-SW Seal Weld	PT	200-1/51	300742	X				
C2.6	C-E-2	8-CSS-2003-13-SW Support Components	VT	900-4/22 Dev. 1&2	300743	X				
		LOW PRESSURE SAFETY INJECTION (See Figure B-29)								
C2.6	C-E-2	8-LPSI-2001-12-PR-1 Pipe Restraint	VT	900-4/22 Dev. 1&2	300744	X				
C2.6	C-E-2	8-LPSI-2001-12-PR-2 Pipe Restraint SIS-6	VT	See Remarks						Examined by OPPD personnel in accordance with Surveillance Test ST-HSS-3.
C2.6	C-E-2	8-LPSI-2001-15-PR-3 Pipe Restraint SIS-186	VT	See Remarks						Examined by OPPD personnel in accordance with Surveillance Test ST-HSS-3.
C2.1	C-F	8-LPSI-2001-21 Elbow-to-Pipe (See Figure B-30)	UT	800-36/24 Dev. 16	300745	0°L, 45°, 45°T				8-SS-40S-.322-20-FCL
C2.6	C-E-2	8-LPSI-2002-10-PR-3 Pipe Restraint SIS-188	VT	See Remarks						Examined by OPPD personnel in accordance with Surveillance Test ST-HSS-3.
C2.6	C-E-2	8-LPSI-2002-10-PR-4 Pipe Restraint SIH-80	VT	See Remarks						Examined by OPPD personnel in accordance with Surveillance Test ST-HSS-3.
		LOW PRESSURE HEADER (See Figure B-31)								
C2.5	C-E-2	6-LPH-2022-3-PR Pipe Restraint SIS-159A	VT	900-4/22 Dev. 1&2	300747	X				Gauge reading: 2 marks from "EXT."
C2.6	C-E-2	6-LPH-2022-3D-PR Pipe Restraint SIH-199	VT	900-4/22 Dev. 1&2	300748	X				Gauge reading: 220

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						NO RECORDABLE	INSIGNIFICANT	GEOMETRIC	OTHER	
		SAFEY INJECTION (See Figure B-33)								
C2.6	C-E-2	6-SI-2012-2-PR-2 Pipe Restraint SIH-209	VT	900-4/22 Dev. 1&2	300749	X				Gauge reading: 3/8 scale.
		LOW PRESSURE HEADER (See Figure B-34)								
C2.5	C-E-1	6-LPH-2014-5-PS Pipe Support	PT VT	See Remarks 900-4/22 Dev. 1&2	300750	X				VT performed in lieu of PT due to inaccessibility of weld.
C2.6	C-E-2	6-LPH-2014-5-SC Support Components	VT	900-4/22 Dev. 1&2	300751	X				
C2.6	C-E-2	6-LPH-2014-11-PR-1 Pipe Restraint SIS-133	VT	900-4/22 Dev. 1&2	300752	X				Gauge reading: 2 marks from "EXT."
C2.6	C-E-2	6-LPH-2014-11-PR-2 Pipe Restraint SIH-159	VT	900-4/22 Dev. 1&2	300753	X				Gauge reading: 275
		CONTAINMENT SPRAY (See Figure B-35)								
C2.6	C-E-2	6-CSS-2001-5-PR-3 Pipe Restraint 76-A	VT	900-4/22 Dev. 1&2	300754	X				Gauge reading: 3 marks from "EXT."
C2.1	C-F	6-CSS-2001-9 Elbow-to-Pipe	UT	800-36/24 Dev. 16	300755	0°L, 45°, 45°T				Limited UT from the upstream side due to the elbow configuration. 6-SS-40S-.280-21-FCL
		SAFETY INJECTION (See Figure B-36)								
C2.6	C-E-2	24-SI-2001-12-PR-A Pipe Restraint SIS-40T	VT	900-4/22 Dev. 1&2	300756	X				Gauge reading: 2-1/2 marks from "EXT."
C2.6	C-E-2	24-SI-2001-12-PR-B Pipe Restraint SIS-40B	VT	900-4/22 Dev. 1&2	300757	X				Gauge reading: 3 marks from "EXT."
		(See Figure B-37)								
C2.1	C-F	24-SI-2002-1A Pipe-to-Pipe	UT	800-36/24 Dev. 16	300858	0°L, 45°T	45°			20-SS-STD-.375-23-FCL

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						NO RECORDABLE	INSIGNIFICANT	GEOMETRIC	OTHER	
		SAFETY INJECTION (See Figure B-37) (Cont'd)								
C2.5	C-E-1	24-SI-2002-8 Seal Weld	PT	200-1/51	300759	X				
C2.6	C-E-2	24-SI-2002-8-SC Support Components	VT	900-4/22 Dev. 1&2	300760	X				
C2.6	C-E-2	24-SI-2002-8-PR-A and -B Pipe Restraint SIS-33	VT	See Remarks						Examined by OPPD personnel in accordance with Surveillance Test ST-HSS-3.
C2.6	C-E-2	24-SI-2002-12-PR Pipe Restraint	VT	900-4/22 Dev. 1&2	300761	X				
C2.6	C-E-2	24-SI-2002-17-PR-A Pipe Restraint SI3-35T	VT	900-4/22 Dev. 1&2	300862	X				Gauge reading: 2-1/2 marks from "EXT."
C2.6	C-E-2	24-SI-2002-17-PR-B Pipe Restraint SIS-35B	VT	900-4/22 Dev. 1&2	300763	X				Gauge reading: 2 marks from "EXT."
C2.1	C-F	20-SI-2002-1 Tee-to-Pipe	UT	800-36/24 Dev. 16	300764	0°L, 45°T	45°			20-SS-STD-.375-23-FCL
		CONTAINMENT SPRAY (See Figure B-38)								
C2.1	C-F	12-CSS-2004-11 Pipe-to-Elbow	UT	800-36/24 Dev. 16	300765	0°L, 45°T	45°			No 45°T weld scan due to joint mismatch configuration. 12-SS-40S-.375-18-FCL
C2.6	C-E-2	12-CSS-2004-12-PR-2 Pipe Restraint SIS-172	VT	900-4/22 Dev. 1&2	300766	X				Gauge reading: 2-1/2 marks from "EXT."
C2.6	C-E-2	12-CSS-2004-12-PR-3 Pipe Restraint	VT	900-4/22 Dev. 1&2	300767				X	Loose bolting corrected and accepted by OPPD personnel. See CNF 81-512.
C2.6	C-E-2	12-CSS-2005-3-PR-3 Pipe Restraint SIS-173	VT	900-4/22 Dev. 1&2	300768	X				Gauge reading: 4 marks from "EXT."

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						NO RECORDABLE	INSIGNIFICANT	GEOMETRIC	OTHER	
		CONTAINMENT SPRAY (Cont'd) (See Figure B-39)								
C2.6	C-E-2	12-CSS-2011-2-PR-1 Pipe Restraint SIS-31A	VT	See Remarks						Examined by OPPD personnel in accordance with Surveillance Test ST-HSS-3.
C2.6	C-E-2	12-CSS-2012-3-PR Pipe Restraint SIH-88	VT	See Remarks						Examined by OPPD personnel in accordance with Surveillance Test ST-HSS-3.
C2.1	C-F	12-CSS-2013-1 Pipe-to-Elbow	UT	800-36/24 Dev. 16	300769	0°L, 45°T	45°	45°		Geometric indication due to crown geometry. 12-SS-40S-.375-18-FCL
C2.6	C-E-2	12-CSS-2013-4-PR-1 Pipe Restraint SIS-32A	VT	See Remarks						Examined by OPPD personnel in accordance with Surveillance Test ST-HSS-3.
C2.6	C-E-2	12-CSS-2013-4-PR-2 Pipe Restraint SIS-32B	VT	900-4/22 Dev. 1&2	300770	X				Gauge reading: 3 marks from "EXT."
		HIGH PRESSURE SAFETY INJECTION (See Figure B-40)								
C2.6	C-E-2	8-HPSI-2001-2-PR-3 Pipe Restraint	VT	900-4/22 Dev. 1&2	300771	X				Gauge reading: 3/4
C2.6	C-E-2	8-HPSI-2001-2-PR-4 Pipe Restraint SIS-21	VT	See Remarks						Examined by OPPD personnel in accordance with Surveillance Test ST-HSS-3.
		(See Figure B-41)								
C2.5	C-E-1	6-HPSI-2001-10-PS Pipe Support	PT	200-1/51	300772	X				
C2.6	C-E-2	6-HPSI-2001-10-SC Support Components	VT	900-4/22 Dev. 1&2	300773	X				
		(See Figure B-40)								
C2.1	C-F	6-HPSI-2003-1 Tee-to-Pipe	UT	800-36/24 Dev. 16	300974	0°L, 45°, 45°T				Limited UT from the upstream side due to the tee configuration. 6-SS-40S-.280-21-FCL

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						NO RECORDABLE	INSIGNIFICANT	GEOMETRIC	OTHER	
		SAFETY INJECTION (See Figure B-42)								
C2.1	C-F	6-SI-2002-9 Pipe-to-Elbow	UT	800-36/24 Dev. 16	300775	0°L, 45°T	45°			No 45°T weld scan due to weld mismatch configuration. 6-SS-40S-.280-21-FCL
C2.6	C-E-2	6-SI-2002-10-PR-1 Pipe Restraint SIS-248	VT	900-4/22 Dev. 1&2	300776	X				Gauge reading: 2 marks from "EXT."
C2.6	C-E-2	6-SI-2002-10-PR-2 Pipe Restraint	VT	900-4/22 Dev. 1&2	300777	X				
		AUXILIARY COOLANT (See Figure B-50)								
C2.1	C-G	10-AC-2001-3 Pipe-to-Tee	UT	800-36/24 Dev. 16	300778	0°L, 45°T	45°			10-CS-40-.365-28-FCL
C2.5	C-E-1	10-AC-2001-16-SW Seal Weld	MT	300-1/21	300781	X				
C2.6	C-E-2	10-AC-2001-16-SC Support Components	VT	900-4/22 Dev. 1&2	300782	X				
C2.1	C-G	10-AC-2001-18 Elbow-to-Pipe (See Figure B-51)	UT	800-36/24 Dev. 16	300783	0°L, 45°, 45°T				10-CS-40-.365-28-FCL
C2.1	C-G	10-AC-2002-6 Reducing Elbow-to-Pipe	UT	800-36/24 Dev. 16	300784	0°L, 45°, 45°T				10-CS-40-.365-28-FCL
C2.5	C-E-1	10-AC-2002-18-SW Seal Weld	MT	300-1/21	300788	X				
C2.6	C-E-2	10-AC-2002-18-SC Support Components	VT	900-4/22 Dev. 1&2	300789	X				
C2.1	C-G	10-AC-2002-29 Pipe-to-Elbow (See Figure B-56)	UT	800-36/24 Dev. 16	300790	0°L, 45°T	45°			10-CS-40-.365-28-FCL
C2.1	C-G	10-AC-2003-5 Pipe-to-Elbow	UT	800-36/24 Dev. 16	300791	0°L, 45°T	45°			10-CS-40-.365-28-FCL

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						NO RECORDABLE	INSIGNIFICANT	GEOMETRIC	OTHER	
		AUXILIARY COOLANT (See Figure B-56) (Cont'd)								
C2.5	C-E-1	10-AC-2003-20-SW Seal Weld	MT VT	See Remarks 900-4/22 Dev. 1&2	300792	X				VT performed in lieu of surface examination due to weld configuration at OPPD request.
C2.6	C-E-2	10-AC-2003-20-SC Support Components	VT	900-4/22 Dev. 1&2	300793	X				
C2.5	C-E-1	10-AC-2003-21-SW Seal Weld	MT	300-1/21	300794	X				
C2.6	C-E-2	10-AC-2003-21-SC Support Components	VT	900-4/22 Dev. 1&2	300795	X				
C2.1	C-G	10-AC-2003-21 Pipe-to-Pipe (See Figure B-57)	UT	800-36/24 Dev. 16	300796	0°L, 45°, 45°T				10-CS-40-.365-28-FCL
C2.1	C-G	10-AC-2004-23 Elbow-to-Pipe	UT	800-36/24 Dev. 16	300797	0°L, 45°, 45°T				10-CS-40-.365-28-FCL
C2.5	C-E-1	10-AC-2004-24-SW Seal Weld	MT VT	See Remarks 900-1/22 Dev. 1&2	300798	X				VT performed in lieu of surface examination due to seal configuration at OPPD request.
C2.6	C-E-2	10-AC-2004-24-SC Support Components	VT	900-4/22 Dev. 1&2	300799	X				
C2.5	C-E-1	10-AC-2004-25-SW Seal Weld	MT	300-1/21	300800	X				
C2.6	C-E-2	10-AC-2004-25-SC Support Components	VT	900-4/22 Dev. 1&2	300801	X				
C2.1	C-G	10-AC-2004-34 Pipe-to-Reducing Elbow (See Figure B-52)	UT	800-36/24 Dev. 16	300802	0°L, 45°, 45°T				10-CS-40-.365-28-FCL
C2.1	C-G	8-AC-2001-1 6" Flange-to-Reducer (Valve HCV-402E)	UT	800-36/24 Dev. 16	300803	0°L, 45°, 45°T				No UT from the upstream side due to the flange configuration. 8-CS-40-.322-27-FCL

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1981 INSERVICE EXAMINATION - CLASS 2
SUMMARY OF NONDESTRUCTIVE EXAMINATIONS

PIPING (Cont'd)

ASME SEC XI ITEM NO.	ASME SEC XI CATGY	EXAMINATION AREA IDENTIFICATION	EXAM METHOD	SwRI PROCEDURE NO./REV	WELD EXAM SUM SHEET NO.	INDICATIONS				REMARKS
						NO RECORDABLE	INSIGNIFICANT	GEOMETRIC	OTHER	
		AUXILIARY COOLANT (See Figure B-52) (Cont'd)								
C2.5	C-E-1	8-AC-2001-14-SW Seal Weld	MT	300-1/21	300806	X				
C2.6	C-E-2	8-AC-2001-14-SC Support Components	VT	900-4/22 Dev. 1&2	300807	X				
C2.1	C-G	8-AC-2001-15 Pipe-to-Elbow (See Figure B-53)	UT	800-36/24 Dev. 16	300808	0°L, 45°, 45°T				8-CS-40-.322-27-FCL
C2.1	C-G	8-AC-2002-16 Pipe-to-Pipe	UT	800-36/24 Dev. 16	300809	0°L, 45°, 45°T				8-CS-40-.322-27-FCL
C2.5	C-E-1	8-AC-2002-17-SW Seal Weld	MT	300-1/21	300812	X				
C2.6	C-E-2	8-AC-2002-17-SC Support Components	VT	900-4/22 Dev. 1&2	300813	X				
C2.1	C-G	8-AC-2002-18 Pipe-to-Elbow (See Figure B-54)	UT	800-36/24 Dev. 16	300814	0°L	45°	45°T		8-CS-40-.322-27-FCL
C2.1	C-G	8-AC-2003-2 Pipe-to-Pipe	UT	800-36/24 Dev. 16	300815	0°L, 45°, 45°T				8-CS-40-.322-27-FCL
C2.5	C-E-1	8-AC-2003-20-SW Seal Weld	MT VT	See Remarks 900-4/22 Dev. 1&2	300816	X				VT performed in lieu of surface examination due to seal configuration at OPPD request.
C2.6	C-E-2	8-AC-2003-20-SC Support Components	VT	900-4/22 Dev. 1&2	300817	X				
C2.5	C-E-1	8-AC-2003-21-SW Seal Weld	MT	300-1/21	300818	X				
C2.6	C-E-2	8-AC-2003-21-SC Support Components	VT	900-4/22 Dev. 1&2	300819				X	VT indication removed, reexamined and accepted by OPPD personnel. See CNF 81-501.

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SUMMARY OF NONDESTRUCTIVE EXAMINATIONS

PIPING (Cont'd)

ASME SEC XI ITEM NO.	ASME SEC XI CATGY.	EXAMINATION AREA IDENTIFICATION	EXAM. METHOD	SWRI PROCEDURE NO./REV.	WELD EXAM. SUM. SHEET NO.	INDICATIONS				REMARKS
						NO RECORDABLE	INSIGNIFICANT	GEOMETRIC	OTHER	
		AUXILIARY COOLANT (See Figure B-54) (Cont'd)								
C2.1	C-G	8-AC-2003-21 Pipe-to-Pipe	UT	800-36/24 Dev. 16	300821	0°L, 45°, 45°T				8-CS-40-.322-27-FCL
		(See Figure B-55)								
C2.1	C-G	8-AC-2004-18 Pipe-to-Pipe	UT	800-36/24 Dev. 16	300822	0°L, 45°, 45°T				8-CS-40-.322-27-FCL
C2.5	C-E-1	8-AC-2004-18-SW Seal Weld	MT VT	See Remarks 900-4/22 Dev. 1&2	300823	X				VT performed in lieu of surface examination due to seal configuration at OPPD request.
C2.6	C-E-2	8-AC-2004-18-SC Support Components	VT	900-4/22 Dev. 1&2	300824	X				
C2.5	C-E-1	8-AC-2004-19-SW Seal Weld	MT	300-1/21	300826	X				
C2.6	C-E-2	8-AC-2004-19-SC Support Components	VT	900-4/22 Dev. 1&2	300827				X	Tool marks evaluated and accepted "as is" by OPPD personnel. See CNF 81-502.
C2.1	C-G	8-AC-2004-28 Reducing Elbow-to-6" Flange (Valve HCV-402D)	UT	800-36/24 Dev. 16	300829	0°L, 45°, 45°T				No UT from the downstream side due to the flange configuration. 6-CS-40-.280-26-FCL
		(See Figure B-48)								
C2.1	C-G	6-AC-2001-5 Pipe-to-Elbow	UT	800-36/24 Dev. 16	300831	0°L, 45°, 45°T				6-CS-40-.280-26-FCL
C2.5	C-E-1	6-AC-2001-9-SW Seal Weld	MT	300-1/21	300834	X				
C2.6	C-E-2	6-AC-2001-9-SC Support Components	VT	900-4/22 Dev. 1&2	300835	X				
		(See Figure B-49)								
C2.5	C-E-1	6-AC-2002-13-SW Seal Weld	MT	300-1/21	300851	X				

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ASME SEC. XI ITEM NO	ASME SEC. XI CATGY	EXAMINATION AREA IDENTIFICATION	EXAM. METHOD	SwRI PROCEDURE NO./REV.	WELD EXAM. SUM SHEET NO.	INDICATIONS				REMARKS
						NO RECORDABLE	INSIGNIFICANT	GEOMETRIC	OTHER	
		AUXILIARY COOLANT (See Figure B-49) (Cont'd)								
C2.6	C-E-2	6-AC-2002-13-SC Support Components	VT	900-4/22 Dev. 1&2	300837	X				
C2.5	C-E-1	6-AC-2002-14-SW Seal Weld	VT	300-1/21	300838	X				
C2.6	C-E-2	6-AC-2002-14-SC Support Components	VT	900-4/22 Dev. 1&2	300839	X				
C2.1	C-G	6-AC-2002-16 Elbow-to-Pipe	UT	800-36/24 Dev. 16	300840	0°L, 45°, 45°T				6-CS-40-.280-26-FCL
		(See Figure B-50)								
C2.1	C-G	6-AC-2003-2 Elbow-to-Pipe	UT	800-36/24 Dev. 16	300841	0°L, 45°, 45°T				6-CS-40-.280-26-FCL
C2.1	C-G	6-AC-2004-1 Reducer-to-Pipe	UT	800-36/24 Dev. 16	300842	0°L, 45°, 45°T				Limited examination from the upstream side due to the reducer configuration. 6-CS-40-.280-26-FCL
		(See Figure B-51)								
C2.1	C-G	6-AC-2005-2 Elbow-to-Pipe	UT	800-36/24 Dev. 16	300843	0°L, 45°T	45°			6-CS-40-.280-26-FCL
C2.1	C-G	6-AC-2006-1 Reducer-to-Pipe	UT	800-36/24 Dev. 16	300844	0°L, 45°, 45°T				Limited examination from the upstream side due to the reducer configuration. 6-CS-40-.280-26-FCL
		(See Figure B-54)								
C2.1	C-G	6-AC-2009-2 Pipe-to-Elbow	UT	800-36/24 Dev. 16	300845	0°L, 45°, 45°T				No UT from the upstream side due to the configuration and proximity of Cool Air Filtering Unit. 6-CS-40-.280-26-FCL

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PIPING (Cont'd)

ASME SEC. XI ITEM NO.	ASME SEC. XI CATGY	EXAMINATION AREA IDENTIFICATION	EXAM. METHOD	SwRI PROCEDURE NO./REV.	WELD EXAM. SUM. SHEET NO.	INDICATIONS				REMARKS
						NO RECORDABLE	INSIGNIFICANT	GEOMETRIC	OTHER	
		AUXILIARY COOLANT (Cont'd) (See Figure B-55)								
C2.1	C-G	6-AC-2010-2 Pipe-to-Elbow	UT	800-36/24 Dev. 16	300846	0°L, 45°, 45°T				No 45° or 45°T UT from the upstream due to proximity of flange weld. 6-CS-40-.280-26-FCL
		(See Figure B-56)								
C2.1	C-G	6-AC-2011-8 Pipe-to-Elbow	UT	800-36/24 Dev. 16	300847	0°L, 45°, 45°T				6-CS-40-.280-26-FCL
C2.1	C-G	6-AC-2012-7 Elbow-to-Pipe	UT	800-36/24 Dev. 16	300848	0°L, 45°, 45°T				6-CS-40-.280-26-FCL
		(See Figure B-57)								
C2.1	C-G	6-AC-2013-8 Pipe-to-Elbow	UT	800-36/24 Dev. 16	300849	0°L, 45° 45°T				6-CS-40-.280-26-FCL
C2.1	C-G	6-AC-2014-9 Pipe-to-Reducer	UT	800-36/24 Dev. 16	300850	0°L, 45°, 45°T				Limited examination from the downstream side due to the reducer configuration. 6-CS-40-.280-26-FCL

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