2RE04 INSERVICE INSPECTION SUMMARY REPORT FOR WELDS, STEAM GENERATOR TUBES, AND COMPONENT SUPPORTS

of the

SOUTH TEXAS PROJECT

ELECTRIC GENERATING STATION - UNIT 2

P.O. Box 289

Wadsworth, Texas 77483

Owner: Houston Lighting and Power Company
City Public Service Board of San Antonio
Central Power and Light Company
City of Austin

Address: P.O. Box 1700
Houston, Texas 77001

Commercial Operation: JUNE 19, 1989

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2RE04 INSERVICE INSPECTION SUMMARY REPORT

FOR WELDS, STEAM GENERATOR TUBES, AND

COMPONENT SUPPORTS

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SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION

UNIT NO. 2

USNRC DOCKET NO.: 50-499

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1.0 2RE04 SUMMARY REPORT

1.1 Introduction

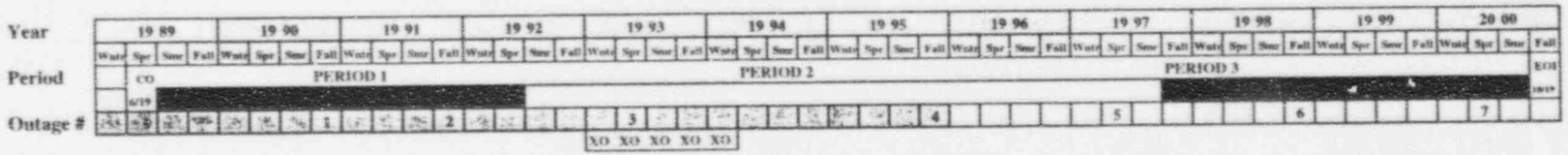
This Summary Report describes Houston Lighting & Power Company's (HL&P) inservice inspection (ISI) of selected Class 1, 2, and 3 components of the South Texas Project Electric Generating Station, Unit 2 (STPEGS-2) performed prior to and during the fourth refueling outage (2RE04) of STPEGS-2 during the time period between August 8, 1995 and October 26, 1995. The STPEGS ISI program for welds and component supports is scheduled in accordance with Program B of the American Society of Mechanical Engineers (ASME) Section XI Code "Inservice Inspection of Nuclear Power Plant Components". The STPEGS ISI Program for steam generator tubes is scheduled in accordance with STPEGS Technical Specification 3/4.4.5. The first ten year inspection interval of STPEGS-2 began June 19,1989. Because STPEGS-2 was out of service continuously for 16 months, the inspection interval was extended for an equivalent period in accordance with IWA-2400(c) of ASME Section XI. This extended the inspection interval to October 19, 2000. The second inspection period began June 20, 1992 and extends to October 19, 1997. The ISI summarized herein constitutes the fourth ISI performed during the first ten year inspection interval and the second ISI of the second inspection period of STPEGS-2. Figure 1 of this Section depicts the first ten year interval and Periods 1 through 3 for STPEGS-2. The percentages completion of examinations performed through 2RE04 for STPEGS-2 welds and component supports are also summarized in Figure 1.

The STPEGS-2 ISI program for the first inspection interval is described in the Ten Year ISI Plan previously filed with the Nuclear Regulatory Commission (NRC) and the State of Texas. The STPEGS-2 ISI program was developed and is being implemented in accordance with 10CFR50.55a, the 1983 Edition of Section XI Code with the Summer 1983 Addenda, and other regulatory and Code bases as specified in the Ten Year ISI Plan. This Summary Report satisfies the reporting requirements of IWA-6000 of the Section XI Code for welds, steam generator tubing, and component supports.

1.2 Scope of Summary Report

This Summary Report describes the ISI examinations performed up through 2RE04 on welds (Section 2), steam generator tubes (Section 3), and component supports (Section 4). Each of these sections describes the scope of examinations performed; describes the personnel, procedures, and equipment utilized for the examinations; provides a summary of the examinations, examination results, and corrective actions; and includes copies of the examination certification (NIS-1) forms. The ISI examinations performed on Class 1 and 2 welds and other examination areas (e.g., bolting) are described in Section 2 of this Summary Report. These examinations were performed in accordance with Subsections IWB and IWC of Section XI and other bases as specified in the Ten Year ISI Plan. ISI examinations performed on steam generator tubes are described in Section 3. These examinations were performed in accordance with IWB (Examination Category B-Q), STPEGS Technical Specifications 4.4.5, and other bases as specified in the Ten Year ISI Plan. The ISI examinations performed on Class 1, 2, and 3 component supports and Class 3 integral attachments are described in Section 4. These examinations were performed in accordance with Subsection IWF (Class 1, 2, and 3 supports) and Subsection IWD (Class 3 integral attachments) of Section XI and other bases as specified in the Ten Year ISI Plan.

ISI WELDS AND COMPONENT SUPPORTS PROGRAMS
FIRST 10-YEAR INSPECTION INTERVAL CALENDAR
UNIT 2



CO - Commercial Operation
EOI - End of Interval
XO - Extended outage from February 3, 1993 to May 30, 1994
Note: Some percentage completion data, for outages prior to 2RE04, have been corrected to document only those examinations performed for Section XI credit.

PERIOD 1 Minimun 16 %
PERIOD 1 Maximum 34 %

PERIOD 1 SUMMARY	% Comp.
Welds Program	29 %
Comp. Spts Program	25 %

PERIOD 2 Minimun 50 %
PERIOD 2 Maximum 67 %

Refueling Outage	3	4	5	Cum
PERIOD 2 (In Progress)	% Comp.	% Comp.	% Comp.	% Comp.
Welds Program	12 %	13 %	0 %	54 %
Supports Program	13 %	13 %	0 %	51 %

FIGURE 1

2.0 WELD EXAMINATIONS

2.1 Introduction

ISI of STPEGS-2 Class 1 and 2 welds and components within the Welds Examination Program was performed between October 3, 1995 and October 24, 1995. These examinations constitute the fourth ISI (the second ISI of the second period) of the first inspection interval for the Welds Examination Program for STPEGS-2.

This section of the Summary Report documents the examinations performed by HL&P Quality Control (QC) and contractor nondestructive examination (NDE) personnel in accordance with the following documents:

(1) "First 10-Year Long-Term Inservice Examination Plan for the South Texas Project Electric Generating Station, Unit 2" (LTP),

(2) "Examination Plan for the 1995 - 2RE04 Inservice Inspection of Welds and Component Supports at the South Texas Project Electric Generating Station, Unit 2", including changes made during the outage (Outage Plan).

The Long-Term Plan (LTP) provides a detailed description of the rules for exemption, selection, allocation, and scheduling of Class 1 and 2 welds and examination areas for ISI. The 1995-2RE04 Examination Plan is an individual Outage Plan for implementing ISI weld examinations as scheduled in the LTP. The Outage Plan references the applicable NDE procedures used for the examinations.

2.2 Scope of Examinations

NDE was performed on a total of one hundred and twenty-two (122) selected Class 1 and Class 2 components and examination areas as contained in the Outage Plan. Any deviations or changes were documented as Examination Plan Changes to the Outage Plan. Selection of these components and examination areas was based on the LTP allocation and scheduling requirements for the fourth refueling outage.

Class 1

A total of sixty (60) examinations were performed on the following Class 1 components and examination areas. Fifty-eight (58) of these components/areas were examined for Section XI credit. Additionally, baseline examinations were performed on one replacement nut and one replacement washer of the RPV Closure bolting.

Vessels
Reactor Vessel
Pressurizer

Piping
Reactor Coolant System
Residual Heat Removal System
Safety Injection System

Pumps
Reactor Coolant Pump 2A

Valves
Reactor Coolant System

Class 2

A total of sixty-two (62) examinations were performed on the following Class 2 components and examination areas. Twenty-two (22) of these components/areas were examined for ASME Section XI credit. Another fourteen (14) Class 2 piping longitudinal welds, located adjacent to selected circumferential welds, were examined. Additionally, twenty-six (26) welds were examined under the Augmented ISI-BEZ program.

Vessels
RHR Heat Exchanger 2A

Piping
Containment Spray System
Main Steam System
Residual Heat Removal System

Pumps
Containment Spray Pump 2A
High Head Safety Injection Pump 2A
Low Head Safety Injection Pump 2A

A complete list of the components and examination areas is contained in Appendix 2-A. Class 1 and Class 2 weld identification figures for the above components and examination areas are contained in the LTP.

These examinations constitute the following percentages of completion for Class 1 and Class 2 components during the first inspection interval:

	2RE04	Cumulative (1st Interval)
Class 1(IWB)	**14**	**57**
Class 2(IWC)	**11**	**49**

2.3 Personnel, Procedures, and Equipment

2.3.1 Personnel Qualifications

Component welds and other examination areas were nondestructively examined by HL&P QC and contractor NDE personnel. HL&P NDE personnel were certified in accordance with ASME Section XI (IWA-2300) and HL&P Nondestructive Examination Procedure 0PQP05-ZA-0001 (Rev. 0), "Qualification and Certification of Nondestructive Examination Personnel". Contractor NDE personnel were certified in accordance with ASME Section XI (IWA-2300) and their employer's written practice, which was approved by HL&P. In addition, Level II examiners performing ultrasonic examinations on austenitic piping welds have been qualified by Electric Power Research Institute in detection of intergranular stress corrosion cracking. A list of all personnel who performed examinations during 2RE04 and their NDE certification level for each applicable examination technique is contained in Appendix 2-B.

2.3.2 Examination Procedures

NDE activities were performed using visual (VT), liquid penetrant (PT), magnetic particle (MT), and ultrasonic (UT) techniques in accordance with HL&P QC NDE procedures. The NDE procedures were written to conform to the requirements of the applicable sections of the ASME Code. A list of applicable NDE procedures is provided in Appendix 2-C.

2.3.3 Equipment

Various equipment was used during the ISI to perform the examinations of the selected component welds and examination areas. Major equipment consisted of the following:

Krautkramer Branson ultrasonic instruments
Ultrasonic transducers
AC electromagnetic yokes
MT calibration block
Pyrometers/Thermometers

2.3.4 Materials

NDE materials utilized during 2RE04 weld examinations included penetrant and magnetic particle materials, and ultrasonic couplant. All materials contacting an austenitic examination surface were tested and certified to be within acceptable sulfur and halogen limits specified in the STPEGS Expendable Material Control Program.

2.3.5 Calibration Blocks

Pipe and vessel calibration blocks were utilized to calibrate the UT instruments prior to examination of the selected welds. Applicable calibration blocks are noted in the Examination Summary Tables (Appendix 2-A). Drawings for calibration blocks are included in the LTP.

2.4 Summary of Examinations

2.4.1 Examination Methods

The following examination methods were conducted in accordance with HL&P QC NDE procedures:

VT Examinations
VT-1 examinations were performed on bolting.
VT-3 examinations were performed on valve internal surfaces.

PT Examinations
PT examinations were performed on Pressurizer nozzle welds, piping welds, pump welds, and integrally welded attachments.

MT Examinations
MT examinations were performed on the RV Closure nuts and piping welds.

UT Examinations
UT examinations were performed on Class 1 and 2 components, including vessels, RV Closure nuts, and piping. Various techniques were used to perform the UT examinations, depending on classification, material type, and weld thickness.

2.4.2 Augmented Examinations

In addition to the ISI requirements of Section XI for Class 1 piping and ASME Code Case N-408 for Class 2 piping, the following augmented ISI program was implemented during this outage:

Augmented ISI - Break Exclusion Zone
Augmented ISI - IEB 79-17

These augmented programs are described in the LTP and the affected examination areas are noted in the "Remarks" column of the Examination Summary Tables.

2.4.3 Data Comparison

In accordance with IWB-3121 of Section XI, the examination results were compared with the recorded NDE results of the preservice inspection (PSI). There were no prior inservice examinations on the areas examined during this outage.

If flaws were recorded in the selected component weld or examination area during previous examinations and dispositioned as acceptable, these flaws were verified during this ISI. All such flaws were observed and verified during this ISI.

2.4.4 Additional and Successive Examinations

If examinations reveal indications that exceed allowable indications standards, additional examinations are required as prescribed in IWB-2430 and IWC-2430. No additional examinations (IWB-2430 or IWC-2430) were required during this outage.

Successive examinations are required if flaw indications are evaluated in accordance with IWB-3122.4 and the component qualifies as acceptable for continued service. No successive examinations (IWB-2420 or IWC-2420) will be scheduled as a result of examinations performed during this outage.

2.5 Examination Results and Corrective Actions

Examination area coverage was provided, to the extent practical, in accordance with the requirements of ASME Section XI and Code Case N-408. In those cases where physical conditions of the component restricted examination of the required area, the amount of coverage achieved was assessed. Examination limitations of applicable Section XI examinations are documented in the Remarks column of Appendix 2-A. Additionally, Appendix 2-D, ISI Examination Limitations, contains a detailed account of examination limitations (UT, PT, and MT) encountered during 2RE04 weld examinations for limitations that were 10% or greater.

All UT indications determined to be recordable, regardless of signal amplitude, were investigated to determine the nature of the reflector. Indications determined to be other than geometry were evaluated to ASME Section XI criteria. The UT examinations revealed Code-allowable laminations in two Main Steam System piping welds.

No reportable indications were detected by volumetric (UT), surface (PT and MT), or visual (VT) examinations.

2.6 Certification of Inspections

ASME Section XI NIS-1 forms, "Owner's Report for Inservice Inspections", have been prepared to certify the STPEGS-2 weld ISI examinations described in this section of the Summary Report. The STPEGS-2 weld ISI examinations have been certified by our ANII, Arkwright Mutual Insurance Company, on the NIS-1 forms included in Appendix 2-E.

APPENDIX 2-A

SUMMARY OF EXAMINATIONS

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION UNIT 2
INSERVICE INSPECTION REPORT - 2RE04 (WELDS)
FIRST INTERVAL, SECOND PERIOD, SECOND OUTAGE (95RF)
CLASS 1 SECTION XI COMPLETE COMPONENTS

REACTOR PRESSURE VESSEL

SUMMARY NUMBER	EXAMINATION AREA IDENTIFICATION	ASME SEC. XI CATGY ITEM NO	EXAM METHOD	PROCEDURE	N O R C	G E O M	O T H R	REMARKS **CALIBRATION BLOCK**
	CLOSURE HEAD BOLTING (FIG NO A-RPV-3A,B)							
005302	2B CLOSURE NUT	B-G-1 B6.10	MT UT	NDEP 7.2 R0 UTI-011 R1	C X	-	- -	MT EXAM COMPLETED DURING 2RE03. PERFORMED UT ON THE THREADED AREA OF THE NUT IN LIEU OF MT IN THIS AREA PER RR-ENG-012. UT EXAM COVERAGE WAS LIMITED TO 91% DUE TO SPANNER WRENCH SLOTS ON NUT. **CS-46R**
005305	5B CLOSURE NUT	B-G-1 B6.10	MT UT	NDEP 7.2 R0 UTI-011 R1	C X	-	- -	MT EXAM COMPLETED DURING 2RE03. PERFORMED UT ON THE THREADED AREA OF THE NUT IN LIEU OF MT IN THIS AREA PER RR-ENG-012. UT EXAM COVERAGE WAS LIMITED TO 91% DUE TO SPANNER WRENCH SLOTS ON NUT. **CS-46R**
005308	8B CLOSURE NUT	B-G-1 B6.10	MT UT	NDEP 7.2 R0 UTI-011 R1	C X	-	- -	MT EXAM COMPLETED DURING 2RE03. PERFORMED UT ON THE THREADED AREA OF THE NUT IN LIEU OF MT IN THIS AREA PER RR-ENG-012. UT EXAM COVERAGE WAS LIMITED TO 91% DUE TO SPANNER WRENCH SLOTS ON NUT. **CS-46R**
005311	11B CLOSURE NUT	B-G-1 B6.10	MT UT	NDEP 7.2 R0 UTI-011 R1	C X	-	- -	MT EXAM COMPLETED DURING 2RE03. PERFORMED UT ON THE THREADED AREA OF THE NUT IN LIEU OF MT IN THIS AREA PER RR-ENG-012. UT EXAM COVERAGE WAS LIMITED TO 91% DUE TO SPANNER WRENCH SLOTS ON NUT. **CS-46R**
005314	14B CLOSURE NUT	B-G-1 B6.10	MT UT	NDEP 7.2 R0 UTI-011 R1	C X	-	- -	MT EXAM COMPLETED DURING 2RE03. PERFORMED UT ON THE THREADED AREA OF THE NUT IN LIEU OF MT IN THIS AREA PER RR-ENG-012. UT EXAM COVERAGE WAS LIMITED TO 91% DUE TO SPANNER WRENCH SLOTS ON NUT. **CS-46R**

REACTOR PRESSURE VESSEL

SUMMARY NUMBER	EXAMINATION AREA IDENTIFICATION	ASME SEC. XI CATGY ITEM NO	EXAM METHOD	PROCEDURE	NOR	GEO	OTHER	REMARKS **CALIBRATION BLOCK**
	CLOSURE HEAD BOLTING (FIG NO A-RPV-3A,B)							
005317	17B CLOSURE NUT	B-G-1 B6.10	MT UT	NDEP 7.2 R0 UTI-011 R1	C X	- -	- -	MT EXAM COMPLETED DURING 2RE03. PERFORMED UT ON THE THREADED AREA OF THE NUT IN LIEU OF MT IN THIS AREA PER RR-ENG-012. UT EXAM COVERAGE WAS LIMITED TO 91% DUE TO SPANNER WRENCH SLOTS ON NUT. **CS-46R**
005320	20B CLOSURE NUT	B-G-1 B6.10	MT UT	NDEP 7.2 R0 UTI-011 R1	C X	- -	- -	MT EXAM COMPLETED DURING 2RE03. PERFORMED UT ON THE THREADED AREA OF THE NUT IN LIEU OF MT IN THIS AREA PER RR-ENG-012. UT EXAM COVERAGE WAS LIMITED TO 91% DUE TO SPANNER WRENCH SLOTS ON NUT. **CS-46R**
005323	23B CLOSURE NUT	B-G-1 B6.10	MT UT	NDEP 7.2 R0 UTI-011 R1	C X	- -	- -	MT EXAM COMPLETED DURING 2RE03. PERFORMED UT ON THE THREADED AREA OF THE NUT IN LIEU OF MT IN THIS AREA PER RR-ENG-012. UT EXAM COVERAGE WAS LIMITED TO 91% DUE TO SPANNER WRENCH SLOTS ON NUT. **CS-46R**
005326	26B CLOSURE NUT	B-G-1 B6.10	MT UT	NDEP 7.2 R0 UTI-011 R1	C X	- -	- -	MT EXAM COMPLETED DURING 2RE03. PERFORMED UT ON THE THREADED AREA OF THE NUT IN LIEU OF MT IN THIS AREA PER RR-ENG-012. UT EXAM COVERAGE WAS LIMITED TO 91% DUE TO SPANNER WRENCH SLOTS ON NUT. **CS-46R**
005329	29B CLOSURE NUT	B-G-1 B6.10	MT UT	NDEP 7.2 R0 UTI-011 R1	C X	- -	- -	MT EXAM COMPLETED DURING 2RE03. PERFORMED UT ON THE THREADED AREA OF THE NUT IN LIEU OF MT IN THIS AREA PER RR-ENG-012. UT EXAM COVERAGE WAS LIMITED TO 91% DUE TO SPANNER WRENCH SLOTS ON NUT. **CS-46R**

REACTOR PRESSURE VESSEL

SUMMARY NUMBER	EXAMINATION AREA IDENTIFICATION	ASME SEC. XI CATGY ITEM NO	EXAM METHOD	PROCEDURE	NOR	OGE	OTH	REMARKS **CALIBRATION BLOCK**
	CLOSURE HEAD BOLTING (FIG NO A-RPV-3A,B)							
005332	32B CLOSURE NUT	B-G-1 B6.10	MT UT	NDEP 7.2 R0 UTI-011 R1	C X	- -	- -	MT EXAM COMPLETED DURING 2RE03. PERFORMED UT ON THE THREADED AREA FO THE NUT IN LIEU OF MT IN THIS AREA PER RR-ENG-012. UT EXAM COVERAGE WAS LIMITED TO 91% DUE TO SPANNER WRENCH SLOTS ON NUT. **CS-46R**
005333	33B CLOSURE NUT	B-G-1 B6.10	MT UT	NDEP 7.2 R0 UTI-011 R1	X X	- -	- -	NO. 33B NUT WAS REPLACED DURING 2RE04 OUTAGE. PERFORMED BASELINE EXAMINATIONS ON REPLACEMENT NUT. UT EXAM COVERAGE WAS LIMITED TO 91% DUE TO SPANNER WRENCH SLOTS ON NUT. **CS-46**
005335	35B CLOSURE NUT	B-G-1 B6.10	MT UT	NDEP 7.2 R0 UTI-011 R1	C X	- -	- -	MT EXAM COMPLETED DURING 2RE03. PERFORMED UT ON THE THREADED AREA OF THE NUT IN LIEU OF MT IN THIS AREA PER RR-ENG-012. UT EXAM COVERAGE WAS LIMITED TO 91% DUE TO SPANNER WRENCH SLOTS ON NUT. **CS-46R**
005633	33B CLOSURE WASHER	B-G-1 B6.50	VT-1	ZA-0024 R1	X	-	-	NO. 33B WASHER WAS REPLACED DURING 2RE04 OUTAGE. PERFORMED BASELINE EXAMINATION ON REPLACEMENT WASHER.

PRESSURIZER

SUMMARY NUMBER	EXAMINATION AREA IDENTIFICATION	ASME SEC. XI CATGY ITEM NO	EXAM METHOD	PROCEDURE	N O R E C	G E O M	O T H E R	REMARKS **CALIBRATION BLOCK**
	CIRCUMFERENTIAL WELDS (FIG NO A-PRZ-1)							
010200	PRZ-2-C7 SHELL F TO LOWER HEAD	B-B B2.11	UT UT	UTI-004 R3 UTI-017 R2	X X	- -	- -	EXAMINED 100% OF WELD LENGTH. REVIEWED FABRICATION DRAWINGS TO VERIFY WELD LOCATION. UT EXAM LIMITATIONS (>90% COVERAGE) WERE THE SAME AS PSI. **CSCL-89**
	LONGITUDINAL WELDS (FIG NO A-PRZ-1)							
010400	PRZ-2-L6 SHELL F LONGITUDINAL SEAM WELD	B-B B2.12	UT UT	UTI-004 R3 UTI-017 R2	X X	- -	- -	EXAMINED 1 FT. OF LONG. WELD ADJACENT TO CIRC. WELD PRZ-2-C7. **CSCL-89**
	NOZZLE TO SHELL AND SHELL TO NOZZLE WELDS (FIG NO A-PRZ-1)							
010600	PRZ-2-N2 SPRAY NOZZLE	B-D B3.110	UT UT	UTI-004 R3 UTI-017 R2	X X	- -	- -	UT EXAM LIMITATIONS (79% COVERAGE) DUE TO NOZZLE CONFIGURATION. **CSCL-56**
010900	PRZ-2-N4B SAFETY NOZZLE	B-D B3.110	UT UT	UTI-004 R3 UTI-017 R2	X X	- -	- -	UT EXAM LIMITATIONS (79% COVERAGE) DUE TO NOZZLE CONFIGURATION. **CSCL-56**
011000	PRZ-2-N4C SAFETY NOZZLE	B-D B3.110	UT UT	UTI-004 R3 UTI-017 R2	X X	- -	- -	UT EXAM LIMITATIONS (61% COVERAGE) WERE THE SAME AS PSI. **CSCL-56**
	NOZZLE INSIDE RADIUS SECTION (FIG NO A-PRZ-1)							
011200	PRZ-2-N2-IR SPRAY NOZZLE	B-D B3.120	UT	UTI-016 R1	X	-	-	**CSCL-42**

PRESSURIZER

SUMMARY NUMBER	EXAMINATION AREA IDENTIFICATION	ASME SEC. XI CATGY ITEM NO	EXAM METHOD	PROCEDURE	N O R E C	G E O M	O T H E R	REMARKS **CALIBRATION BLOCK**
	NOZZLE INSIDE RADIUS SECTION (FIG NO A-PRZ-1)							
011500	PRZ-2-N4B-IR SAFETY NOZZLE	B-D B3.120	UT	UTI-016 R1	X	-	-	**CSCL-42**
011600	PRZ-2-N4C-IR SAFETY NOZZLE	B-D B3.120	UT	UTI-016 R1	X	-	-	**CSCL-42**
	NOZZLE TO SAFE-END AND SAFE-END TO NOZZLE WELDS (FIG NO A-PRZ-1)							
012100	PRZ-2-N4B-SE SAFETY NOZZLE	B-F B5.40	PT UT UT	ZA-0012 R1 UTI-001 R3 UTI-005 R3	X X X	- - -	- - -	USED UT45RL/UT45TRL ON SAFE-END AND WELD WITH CALIB. BLOCK SS-70. USED UT45RS ON NOZZLE WITH CALIB. BLOCK CSCL-69. **CSCL-69/SS-70**
012200	PRZ-2-N4C-SE SAFETY NOZZLE	B-F B5.40	PT UT UT	ZA-0012 R1 UTI-001 R3 UTI-005 R3	X X X	- - -	- - -	USED UT45RL/UT45TRL ON SAFE-END AND WELD WITH CALIB. BLOCK SS-70. USED UT45RS ON NOZZLE USING CALIB. BLOCK CSCL-69. **CSCL-69/SS-70**
	MANWAY BOLTING (FIG NO A-PRZ-1)							
012300	BOLTING	B-G-2 B7.20	VT-1	ZA-0024 R1	X	-	-	EXAMINED BOLT NOS. 1-16 IN PLACE.
	INTEGRAL ATTACHMENTS (FIG NO A-PRZ-1)							
012440	PRZ-2-3A,3B SUPPORT BRACKET	B-H B8.20	PT	ZA-0012 R1	X	-	-	PT EXAM LIMITATIONS (>90% COVERAGE) DUE TO PROXIMITY OF SUPPORT BRACKET.

REACTOR COOLANT SYSTEM

SUMMARY NUMBER	EXAMINATION AREA IDENTIFICATION	ASME SEC. XI CATGY ITEM NO	EXAM METHOD	PROCEDURE	NOR EXC	GEO MAN	OTH ER	REMARKS **CALIBRATION BLOCK**
	27.5-RC-2103-NSS - LOOP 1 (FIG NO A-RC-1)							
101270	1	B-J	PT	ZA-0012 R1	X	-	-	USED 45RL/45TRL ON THE PIPE SIDE AND
	REACTOR COOLANT PUMP TO PIPE	B9.11	UT	UTI-018 R1	-	X	-	WELD USING CCSS-17. USED 45RL/45TRL ON THE PUMP SIDE USING CSS-80. MANDATORY ISI - TE. UT EXAM LIMITATIONS (51% COVERAGE) WERE THE SAME AS PSI. **CCSS-17/CSS-80**
	27.5-RC-2203-NSS - LOOP 2 (FIG NO A-RC-2)							
101430	1	B-J	PT	ZA-0012 R1	X	-	-	USED 45RL/45TRL ON THE PIPE SIDE AND
	REACTOR COOLANT PUMP TO PIPE	B9.11	UT	UTI-018 R1	-	X	-	WELD USING CCSS-17. USED 45RL/45TRL ON THE PUMP SIDE USING CSS-80. MANDATORY ISI - TE. UT EXAM LIMITATIONS (37% COVERAGE) WERE THE SAME AS PSI. **CCSS-17/CSS-80**
	27.5-RC-2303-NSS - LOOP 3 (FIG NO A-RC-3)							
101570	1	B-J	PT	ZA-0012 R1	X	-	-	USED 45RL/45TRL ON THE PIPE SIDE AND
	REACTOR COOLANT PUMP TO PIPE	B9.11	UT	UTI-018 R1	X	-	-	WELD USING CCSS-17. USED 45RL/45TRL ON THE PUMP SIDE USING CSS-80. MANDATORY ISI - TE. UT EXAM LIMITATIONS (40% COVERAGE) WERE THE SAME AS PSI. **CCSS-17/CSS-80**
	27.5-RC-2403-NSS - LOOP 4 (FIG NO A-RC-4)							
101720	1	B-J	PT	ZA-0012 R1	X	-	-	USED 45RL/45TRL ON THE PIPE SIDE AND
	REACTOR COOLANT PUMP TO PIPE	B9.11	UT	UTI-018 R1	X	-	-	WELD USING CCSS-17. USED 45RL/45TRL ON THE PUMP SIDE USING CSS-80. MANDATORY ISI - TE. UT EXAM LIMITATIONS (55% COVERAGE) WERE THE SAME AS PSI. **CCSS-17/CSS-80**

REACTOR COOLANT SYSTEM

SUMMARY NUMBER	EXAMINATION AREA IDENTIFICATION	ASME SEC. XI CATGY ITEM NO	EXAM METHOD	PROCEDURE	NOR EC	GEO MR	OTH ER	REMARKS **CALIBRATION BLOCK**
	12-RC-2212-BB1 (FIG NO A-RC-10)							
102470	3 ELBOW TO PIPE	B-J B9.11	PT UT	ZA-0012 R1 UTI-001 R3	X -	- X	- -	PERFORMED EXAMINATIONS CONCURRENTLY WITH WELD NO. 4 WHEN PIPE SUPPORT/RESTRAINT WAS REMOVED TO ALLOW EXAMINATION ACCESS. **SS-21**
102480	4 PIPE TO ELBOW	B-J B9.11	PT UT	ZA-0012 R1 UTI-001 R3	X -	- X	- -	**SS-21**
102490	5 ELBOW TO PIPE	B-J B9.11	PT UT UT	ZA-0012 R1 UTI-001 R3 UTI-005 R3	X - -	- X X	- - -	SCAN LIMITATION ON PIPE SIDE DUE TO PIPE SUPPORT. UT EXAM LIMITATIONS (>90% COVERAGE) WERE THE SAME AS PSI. USED UT45RS ON ELBOW SIDE WITH CALIB. BLOCK SS-20 TO ENSURE TWO DIRECTIONAL COVERAGE ON PIPE SIDE. USED UT45RL/UT45TRL ON ELBOW AND PIPE WITH CALIB. BLOCK SS-21. USED CALIB.BLOCK SS-21 FOR UT45RL ON
102530	8 PIPE TO VALVE	B-J B9.11	PT UT UT	ZA-0012 R1 UTI-001 R3 UTI-005 R3	X - -	- X X	- - -	USED UT45RL/UT45TRL ON PIPE AND VALVE. USED UT60RS ON PIPE SIDE FOR ADDITIONAL COVERAGE. MANDATORY ISI-HS-UF. UT EXAM LIMITATIONS (>90% COVERAGE) WERE THE SAME AS PSI. **SS-21**
	12-RC-2221-BB1 (FIG NO A-RC-9)							
102630	1 VALVE TO PIPE	B-J B9.11	PT UT UT	ZA-0012 R1 UTI-001 R3 UTI-005 R3	X - -	- X X	- - -	USED UT45RL/UT45TRL ON PIPE AND VALVE. USED UT60RS ON PIPE SIDE FOR ADDITIONAL COVERAGE. MANDATORY ISI-HS-UF. **SS-21**

REACTOR COOLANT SYSTEM

SUMMARY NUMBER	EXAMINATION AREA IDENTIFICATION	ASME SEC. XI CATGY ITEM NO	EXAM METHOD	PROCEDURE	N O R C	G E O M	O T E R	REMARKS **CALIBRATION BLOCK**
	12-RC-2221-BB1 (FIG NO A-RC-9)							
102680	6	B-J	PT	ZA-0012 R1	X	-	-	
	PIPE TO ELBOW	B9.11	UT	UTI-001 R3	-	X	-	
								SS-21
102710	9	B-J	PT	ZA-0012 R1	X	-	-	
	PIPE TO ELBOW	B9.11	UT	UTI-001 R3	-	X	-	
								SS-21
	6-RC-2004-NSS (FIG NO A-RC-6)							
103950	7FB	B-G-2	VT-1	ZA-0024 R1	X	-	-	BOLTING EXAMINED IN PLACE.
	FLANGE BOLTING	B7.50						
	6-RC-2009-NSS (FIG NO A-RC-6)							
104040	1	B-J	PT	ZA-0012 R1	X	-	-	USED UT60RS ON ELBOW SIDE FOR ADDITIONAL
	SAFE END TO ELBOW	B9.11	UT	UTI-001 R3	X	-	-	COVERAGE. MANDATORY ISI-TE. UT EXAM
			UT	UTI-005 R3	X	-	-	LIMITATIONS (86% COVERAGE) WERE THE SAME AS PSI.
								SS-9
104060	3	B-J	PT	ZA-0012 R1	X	-	-	
	PIPE TO RETURN	B9.11	UT	UTI-001 R3	X	-	-	
								SS-9
104130	9FB	B-G-2	VT-1	ZA-0024 R1	X	-	-	EXAMINED ALL BOLTING PRIOR TO
	FLANGE BOLTING	B7.50						INSTALLATION.

REACTOR COOLANT SYSTEM

SUMMARY NUMBER	EXAMINATION AREA IDENTIFICATION	ASME SEC. XI CATGY ITEM NO	EXAM METHOD	PROCEDURE	N O R E C	G O M	T H R	REMARKS **CALIBRATION BLOCK**
	6-RC-2012-NSS (FIG NO A-RC-6)							
104220	1 SAFE END TO ELBOW	B-J B9.11	PT UT	ZA-0012 R1 UTI-001 R3	X -	- X	- -	MANDATORY ISI-TE. **SS-9**
104240	3 PIPE TO ELBOW	B-J B9.11	PT UT	ZA-0012 R1 UTI-001 R3	X X	- -	- -	**SS-9**
104320	11 RETURN TO FLANGED VALVE	B-J B9.11	PT UT	ZA-0012 R1 UTI-001 R3	X X	- -	- -	**SS-9**
104330	11FB FLANGE BOLTING	B-G-2 B7.50	VT-1	ZA-0024 R1	X	-	-	EXAMINED ALL BOLTING PRIOR TO INSTALLATION.

RESIDUAL HEAT REMOVAL SYSTEM

SUMMARY NUMBER	EXAMINATION AREA IDENTIFICATION	ASME SEC. XI CATGY ITEM NO	EXAM METHOD	PROCEDURE	N O R C	G E O M	O T H E R	REMARKS **CALIBRATION BLOCK**
	12-RH-2201-BB1 (FIG NO A-RH-2)							
200520	2	B-J	PT	ZA-0012 R1	X	-	-	
	PIPE TO ELBOW	B9.11	UT	UTI-001 R3	-	X	-	
								SS-21
200560	4	B-J	PT	ZA-0012 R1	X	-	-	
	PIPE TO ELBOW	B9.11	UT	UTI-001 R3	-	X	-	
								SS-21
200700	10	B-J	PT	ZA-0012 R1	X	-	-	
	PIPE TO ELBOW	B9.11	UT	UTI-001 R3	-	X	-	
								SS-21

SAFETY INJECTION SYSTEM

SUMMARY NUMBER	EXAMINATION AREA IDENTIFICATION	ASME SEC. XI CATGY ITEM NO	EXAM METHOD	PROCEDURE	N O R E C	G O M	T H E R	REMARKS **CALIBRATION BLOCK**
	12-SI-2218-BB1 (FIG NO A-SI-2)							
230260	1 VALVE TO PIPE	B-J B9.11	PT UT UT	ZA-0012 R1 UTI-001 R3 UTI-005 R3	X - -	- X X	- - -	USED UT60RS ON PIPE SIDE FOR ADDITIONAL COVERAGE. ONE SIDE EXAM. UT EXAM LIMITATIONS (79% COVERAGE) WERE THE SAME AS PSI. **SS-21**
230300	3 REDUCING TEE TO PIPE	B-J B9.11	PT UT	ZA-0012 R1 UTI-001 R3	X -	- X	- -	 **SS-21**
	8-SI-2208-BB1 (FIG NO A-SI-4)							
231220	4 PIPE TO VALVE	B-J B9.11	PT UT UT	ZA-0012 R1 UTI-001 R3 UTI-005 R3	X - -	- X X	- - -	USED UT60RS ON PIPE SIDE FOR ADDITIONAL COVERAGE. USED UT45RL ON BOTH SIDES. **SS-11**
	6-SI-2208-BB1 (FIG NO A-SI-4)							
232300	2 PIPE TO ELBOW	B-J B9.11	PT UT	ZA-0012 R1 UTI-001 R3	X -	- X	- -	 **SS-9**
	6-SI-2211-BB1 (FIG NO A-SI-4)							
232540	1 VALVE TO PIPE	B-J B9.11	PT UT UT	ZA-0012 R1 UTI-001 R3 UTI-005 R3	X - -	- X X	- - -	USED UT60RS ON PIPE SIDE FOR ADDITIONAL COVERAGE. USED UT45RL ON BOTH SIDES. MANDATORY ISI - HS - UF. UT EXAM LIMITATIONS (>90% COVERAGE) WERE THE SAME AS PSI. **SS-8**

REACTOR COOLANT PUMP 2A

SUMMARY NUMBER	EXAMINATION AREA IDENTIFICATION	ASME SEC. XI CATGY ITEM NO	EXAM METHOD	PROCEDURE	N O R C	G E O M	O T H E R	REMARKS **CALIBRATION BLOCK**
	PUMP BOLTING (FIG NO A-RCP-1)							
260130	RCP-2A-SHB SEAL HOUSING BOLTS	B-G-2 B7.60	VT-1	ZA-0024 R1	X	-	-	EXAMINED BOLT NOS. 1-16 IN PLACE.

VALVES

SUMMARY NUMBER	EXAMINATION AREA IDENTIFICATION	ASME SEC. XI CATGY ITEM NO	EXAM METHOD	PROCEDURE	NOREC	OGOM	OTHER	REMARKS **CALIBRATION BLOCK**
	VALVE GROUP 1							
261100	PSV 3452-VB ON 6-RC-2004 FIG. NO. A-RC-6	B-G-2 B7.70	VT-1	ZA-0024 R1	X	-	-	EXAMINED BOLTING PRIOR TO INSTALLATION.
261120	PSV 3452-VIS ON 6-RC-2004 FIG. NO. A-RC-6	B-M-2 B12.50	VT-3	ZA-0024 R1	X	-	-	EXAMINED ALL INTERNAL PRESSURE BOUNDARY SURFACES TO THE EXTENT PRACTICAL.
261160	PSV 3451-VB ON 6-RC-2009 FIG. NO. A-RC-6	B-G-2 B7.70	VT-1	ZA-0024 R1	X	-	-	EXAMINED BOLTING PRIOR TO INSTALLATION.
261180	PSV 3451-VIS ON 6-RC-2009 FIG. NO. A-RC-6	B-M-2 B12.50	VT-3	ZA-0024 R1	X	-	-	EXAMINED ALL INTERNAL PRESSURE BOUNDARY SURFACES TO THE EXTENT PRACTICAL.
261200	PSV 3450-VB ON 6-RC-2012 FIG. NO. A-RC-6	B-G-2 B7.70	VT-1	ZA-0024 R1	X	-	-	EXAMINED BOLTING PRIOR TO INSTALLATION.
261220	PSV 3450-VIS ON 6-RC-2012 FIG. NO. A-RC-6	B-M-2 B12.50	VT-3	ZA-0024 R1	X	-	-	EXAMINED ALL INTERNAL PRESSURE BOUNDARY SURFACES TO THE EXTENT PRACTICAL.

RESIDUAL HEAT REMOVAL HEAT EXCHANGER 2A

SUMMARY NUMBER	EXAMINATION AREA IDENTIFICATION	ASME SEC. XI CATGY ITEM NO	EXAM METHOD	PROCEDURE	N O R E C	G E O M	O T H E R	REMARKS **CALIBRATION BLOCK**
	INTEGRAL ATTACHMENTS (FIG NO B-RHX-1)							
305600	RHAHRS-2A-SK SUPPORT SKIRT	C-C C3.10	PT	ZA-0012 R1	X	-	-	

CONTAINMENT SPRAY SYSTEM

SUMMARY NUMBER	EXAMINATION AREA IDENTIFICATION	ASME SEC. XI CATGY ITEM NO	EXAM METHOD	PROCEDURE	N C R	G E C	O T H E R	REMARKS **CALIBRATION BLOCK**
	12-CS-2201-UB2 (FIG NO B-CS-2)							
401480	6LU LONGITUDINAL WELD	C-F-1-L C5.12	PT UT	ZA-0012 R1 UTI-012 R2	X X	- -	- -	EXAMINED 2.5T AT THE INTERSECTING CIRC. WELD. **SS-12**
401500	6 PIPE T/ ELBOW	C-F-1 C5.11	PT UT	ZA-0012 R1 UTI-012 R2	X -	- X	- -	**SS-12**
401520	6LD LONGITUDINAL WELD	C-F-1-L C5.12	PT UT	ZA-0012 R1 UTI-012 R2	X X	- -	- -	EXAMINED 2.5T AT THE INTERSECTING CIRC. WELD. **SS-12**
	8-CS-2202-PB2 (FIG NO B-CS-3)							
413710	9LU LONGITUDINAL WELD	C-F-1-L --	PT UT	ZA-0012 R1 UTI-012 R2	X -	- X	- -	AUGMENTED ISI - IEB 79-17. EXAMINED 2.5T AT THE INTERSECTING CIRC. WELD. WELD ROOT GEOMETRY WAS NOT PREVIOUSLY RECORDED. **SS-87**
413720	9 PIPE TO FLANGE	C-F-1 --	PT UT	ZA-0012 R1 UTI-012 R2	X X	- -	- -	AUGMENTED ISI - IEB 79-17. **SS-87**
	6-CS-2203-PB2 (FIG NO B-CS-7)							
423066	5LU LONGITUDINAL WELD	C-F-1-L --	PT UT	ZA-0012 R1 UTI-012 R2	X X	- -	- -	AUGMENTED ISI - IEB 79-17. EXAMINED 2.5T AT THE INTERSECTING CIRC. WELD. **SS-85**

CONTAINMENT SPRAY SYSTEM

SUMMARY NUMBER	EXAMINATION AREA IDENTIFICATION	ASME SEC. XI CATGY ITEM NO	EXAM METHOD	PROCEDURE	N O R C	G E O M	O T H E R	REMARKS **CALIBRATION BLOCK**
	6-CS-2203-PB2 (FIG NO B-CS-7)							
423070	5	C-F-1	PT	ZA-0012 R1	X	-	-	AUGMENTED ISI - IEB 79-17.
	ELBOW TO PIPE	--	UT	UTI-012 R2	-	X	-	
								SS-85
423080	SLD	C-F-1-L	PT	ZA-0012 R1	X	-	-	AUGMENTED ISI - IEB 79-17. EXAMINED
	LONGITUDINAL WELD	--	UT	UTI-012 R2	X	-	-	2.5T AT THE INTERSECTING CIRC. WELD.
								SS-85

MAIN STEAM SYSTEM

SUMMARY NUMBER	EXAMINATION AREA IDENTIFICATION	ASME SEC. XI CATGY ITEM NO	EXAM METHOD	PROCEDURE	N O R E C	G E M	O T H E R	REMARKS **CALIBRATION BLOCK**
	30-MS-2002-GA2 (FIG NO B-MS-3, 4)							
553760	19LUI LONGITUDINAL WELD	C-F-2-L C5.52	MT UT	ZA-0018 R1 UTI-002 R3	X -	- X	- -	EXAMINED 2.5T AT THE INTERSECTING CIRC. WELD. **CS-5**
553780	19LUO LONGITUDINAL WELD	C-F-2-L C5.52	MT UT	ZA-0018 R1 UTI-002 R3	X -	- X	- -	EXAMINED 2.5T AT THE INTERSECTING CIRC. WELD. **CS-5**
553800	19 ELBOW TO PIPE	C-F-2 C5.51	MT UT UT	ZA-0018 R1 UTI-002 R3 UTI-004 R3	X - -	- X -	- - X	VERIFIED TWO CODE ALLOWABLE LAMINATIONS IN BASE METAL WITH UTO SCAN. NO CHANGE IN DIMENSIONS WAS OBSERVED. **CS-5**
553820	19LD LONGITUDINAL WELD	C-F-2-L C5.52	MT UT	ZA-0018 R1 UTI-002 R3	X X	- -	- -	EXAMINED 2.5T AT THE INTERSECTING CIRC. WELD. **CS-5**
554020	24 PIPE TO PENETRATION	BEZ C5.51	MT UT	ZA-0018 R1 UTI-002 R3	X X	- -	- -	AUGMENTED ISI-BEZ/TE. **CS-5**
554080	25 PIPE TO PIPE	BEZ C5.51	MT UT	ZA-0018 R1 UTI-002 R3	X X	- -	- -	AUGMENTED ISI-BEZ. **CS-5**
554100	25LD LONGITUDINAL WELD	BEZLONG C5.52	MT UT	ZA-0018 R1 UTI-002 R3	X X	- -	- -	AUGMENTED ISI-BEZ. EXAMINED 100% OF THE WELD LENGTH. **CS-33**

MAIN STEAM SYSTEM

SUMMARY NUMBER	EXAMINATION AREA IDENTIFICATION	ASME SEC. XI CATGY ITEM NO	EXAM METHOD	PROCEDURE	NOR	OGE	OTH	REMARKS **CALIBRATION BLOCK**
	30-MS-2002-GA2 (FIG NO B-MS-3, 4)							
554120	26LU LONGITUDINAL WELD	BEZLONG C5.52	MT UT	ZA-0018 R1 UTI-002 R3	X X	- -	- -	AUGMENTED ISI-BEZ. EXAMINED 100% OF THE WELD LENGTH. **CS-33**
554140	26 PIPE TO PIPE	BEZ C5.51	MT UT	ZA-0018 R1 UTI-002 R3	X X	- -	- -	AUGMENTED ISI-BEZ. **CS-33**
554160	26LD LONGITUDINAL WELD	BEZLONG C5.52	MT UT	ZA-0018 R1 UTI-002 R3	X -	- X	- -	AUGMENTED ISI-BEZ. EXAMINED 100% OF THE WELD LENGTH. **CS-35**
554162	27LU LONGITUDINAL WELD	BEZLONG C5.52	MT UT	ZA-0018 R1 UTI-002 R3	X X	- -	- -	AUGMENTED ISI-BEZ. EXAMINED 100% OF THE WELD LENGTH. **CS-35**
554164	27 PIPE TO PIPE	BEZ C5.51	MT UT	ZA-0018 R1 UTI-002 R3	X X	- -	- -	AUGMENTED ISI-BEZ. **CS-35**
554166	27LD LONGITUDINAL WELD	BEZLONG C5.52	MT UT	ZA-0018 R1 UTI-002 R3	X X	- -	- -	AUGMENTED ISI-BEZ. EXAMINED 100% OF THE WELD LENGTH. **CS-35**
554168	28LU LONGITUDINAL WELD	BEZLONG C5.52	MT UT	ZA-0018 R1 UTI-002 R3	X X	- -	- -	AUGMENTED ISI-BEZ. EXAMINED 100% OF THE WELD LENGTH. **CS-35**

MAIN STEAM SYSTEM

SUMMARY NUMBER	EXAMINATION AREA IDENTIFICATION	ASME SEC. XI CATGY ITEM NO	EXAM METHOD	PROCEDURE	N O R E C	G O M	T H E R	REMARKS **CALIBRATION BLOCK**
	30-MS-2002-GA2 (FIG NO B-MS-3, 4)							
554170	28 PIPE TO PIPE	BEZ C5.51	MT	ZA-0018 R1	X	-	-	AUGMENTED ISI-BEZ.
			UT	UTI-002 R3	X	-	-	
								CS-35
554172	28LD LONGITUDINAL WELD	BEZLONG C5.52	MT	ZA-0018 R1	X	-	-	AUGMENTED ISI-BEZ. EXAMINED 100% OF THE
			UT	UTI-002 R3	X	-	-	WELD LENGTH.
								CS-35
554180	29LU LONGITUDINAL WELD	BEZLONG C5.52	MT	ZA-0018 R1	X	-	-	AUGMENTED ISI-BEZ. EXAMINED 100% OF THE
			UT	UTI-002 R3	X	-	-	WELD LENGTH.
								CS-35
554200	29 PIPE TO VALVE	C-F-2 C5.51	MT	ZA-0018 R1	X	-	-	
			UT	UTI-002 R3	X	-	-	
								CS-5
554220	30 VALVE TO PIPE	BEZ C5.51	MT	ZA-0018 R1	X	-	-	AUGMENTED ISI-BEZ.
			UT	UTI-002 R3	-	X	-	
								CS-5
554240	30LD LONGITUDINAL WELD	BEZLONG C5.52	MT	ZA-0018 R1	X	-	-	AUGMENTED ISI-BEZ. EXAMINED 100% OF THE
			UT	UTI-002 R3	X	-	-	WELD LENGTH. VERIFIED PSI LAMINATION IN
			UT	UTI-004 R3	-	-	X	BASE METAL. NO CHANGE IN DIMENSIONS WAS OBSERVED.
								CS-34
554245	30PL1-30PL8 PIPE LUGS	C-C C3.20	MT	ZA-0018 R1	X	-	-	MT EXAM LIMITATIONS (>90% COVERAGE) WERE THE SAME AS PSI.
								CS-34

MAIN STEAM SYSTEM

SUMMARY NUMBER	EXAMINATION AREA IDENTIFICATION	ASME SEC. XI CATGY ITEM NO	EXAM METHOD	PROCEDURE	N O R C	G E O M	O T H E R	REMARKS **CALIBRATION BLOCK**
	30-MS-2002-GA2 (FIG NO B-MS-3, 4)							
554260	31LU LONGITUDINAL WELD	BEZLONG C5.52	MT UT	ZA-0018 R1 UTI-002 R3	X X	-	-	AUGMENTED ISI-BEZ. EXAMINED 100% OF THE WELD LENGTH. **CS-34**
554280	31 PIPE TO PIPE	BEZ C5.51	MT UT	ZA-0018 R1 UTI-002 R3	X X	-	-	AUGMENTED ISI-BEZ. **CS-33**
554300	31LD LONGITUDINAL WELD	BEZLONG C5.52	MT UT	ZA-0018 R1 UTI-002 R3	X X	-	-	AUGMENTED ISI-BEZ. EXAMINED 100% OF THE WELD LENGTH. **CS-34**
554320	32LU LONGITUDINAL WELD	BEZLONG C5.52	MT UT	ZA-0018 R1 UTI-002 R3	X X	-	-	AUGMENTED ISI-BEZ. EXAMINED 100% OF THE WELD LENGTH. **CS-34**
554340	32 PIPE TO PIPE	BEZ C5.51	MT UT	ZA-0018 R1 UTI-002 R3	X X	-	-	AUGMENTED ISI-BEZ. **CS-5**
	16-MS-2002-GA2 (FIG NO B-MS-4)							
560040	1 EXTRUSION TO PIPE	BEZ C5.51	MT UT	ZA-0018 R1 UTI-002 R3	X X	-	-	AUGMENTED ISI-BEZ. **CS-15**
560060	2 PIPE TO WELD CAP	BEZ C5.51	MT UT	ZA-0018 R1 UTI-002 R3	X X	-	-	AUGMENTED ISI-BEZ. **CS-15**

MAIN STEAM SYSTEM

SUMMARY NUMBER	EXAMINATION AREA IDENTIFICATION	ASME SEC. XI CATGY ITEM NO	EXAM METHOD	PROCEDURE	NOR EXAM	NOG EXAM	OTH EXAM	REMARKS **CALIBRATION BLOCK**
	12-MS-2105-GA2 (FIG NO B-MS-11)							
562780	4	C-F-2	MT	ZA-0018 R1	X	-	-	
	PIPE TO REDUCER	C5.51	UT	UTI-002 R3	-	X	-	
								CS-14
	8-MS-2105-GA2 (FIG NO B-MS-11)							
565220	6	C-F-2	MT	ZA-0018 R1	X	-	-	
	PIPE TO ELBOW	C5.51	UT	UTI-002 R3	X	-	-	
								CS-2
	6-MS-2002-GA2(A) (FIG NO B-MS-4)							
566900	1	BEZ	MT	ZA-0018 R1	X	-	-	AUGMENTED ISI-BEZ.
	EXTRUSION TO FLANGE	C5.51	UT	UTI-002 R3	X	-	-	
								CS-75
	6-MS-2002-GA2(B) (FIG NO B-MS-4)							
567000	1	BEZ	MT	ZA-0018 R1	X	-	-	AUGMENTED ISI-BEZ.
	EXTRUSION TO FLANGE	C5.51	UT	UTI-002 R3	X	-	-	
								CS-75
	6-MS-2002-GA2(C) (FIG NO B-MS-4)							
567100	1	BEZ	MT	ZA-0018 R1	X	-	-	AUGMENTED ISI-BEZ.
	EXTRUSION TO FLANGE	C5.51	UT	UTI-002 R3	X	-	-	
								CS-75
	6-MS-2002-GA2(D) (FIG NO B-MS-4)							
567200	1	BEZ	MT	ZA-0018 R1	X	-	-	AUGMENTED ISI-BEZ.
	EXTRUSION TO FLANGE	C5.51	UT	UTI-002 R3	X	-	-	
								CS-75

MAIN STEAM SYSTEM

SUMMARY NUMBER	EXAMINATION AREA IDENTIFICATION	ASME SEC. XI CATGY ITEM NO	EXAM METHOD	PROCEDURE	N O R C	G E O M	O T H E R	REMARKS **CALIBRATION BLOCK**
	6-MS-2002-GA2(E) (FIG NO B-MS-4)							
567300	1	C-F-2	MT	ZA-0018 R1	X	-	-	
	EXTRUSION TO FLANGE	C5.51	UT	UTI-002 R3	X	-	-	
								CS-75

RESIDUAL HEAT REMOVAL SYSTEM

SUMMARY NUMBER	EXAMINATION AREA IDENTIFICATION	ASME SEC. XI CATGY ITEM NO	EXAM METHOD	PROCEDURE	N O R E C	G O M -	T H E R	REMARKS **CALIBRATION BLOCK**
	14-RH-2202-KB2 (FIG NO B-RH-2)							
600680	2LU LONGITUDINAL WELD	C-F-1-L C5.12	PT UT	ZA-0012 R1 UTI-005 R3	X X	- -	- -	EXAMINED 2.5T AT THE INTERSECTING CIRC. WELD. **SS-29**
600700	2 PIPE TO FLANGE	C-F-1 C5.11	PT UT	ZA-0012 R1 UTI-005 R3	X X	- -	- -	 **SS-29**
	12-RH-2104-KB2 (FIG NO B-RH-7)							
603480	3LU LONGITUDINAL WELD	C-F-1-L C5.12	PT UT	ZA-0012 R1 UTI-012 R2	X X	- -	- -	EXAMINED 2.5T AT THE INTERSECTING CIRC. WELD. **SS-13**
603520	3 ELBOW TO PIPE	C-F-1 C5.11	PT UT	ZA-0012 R1 UTI-012 R2	X X	- -	- -	 **SS-13**
	12-RH-2202-KB2 (FIG NO B-RH-2)							
604200	4LU LONGITUDINAL WELD	C-F-1-L C5.12	PT UT	ZA-0012 R1 UTI-012 R2	X X	- -	- -	EXAMINED 2.5T AT THE INTERSECTING CIRC. WELD. **SS-13**
604240	4 ELBOW TO FLANGE	C-F-1 C5.11	PT UT	ZA-0012 R1 UTI-012 R2	X X	- -	- -	 **SS-13**

RESIDUAL HEAT REMOVAL SYSTEM

SUMMARY NUMBER	EXAMINATION AREA IDENTIFICATION	ASME SEC. XI CATGY ITEM NO	EXAM METHOD	PROCEDURE	N O R C	G E M	O T H E R	REMARKS **CALIBRATION BLOCK**
	12-RH-2202-KB2 (FIG NO B-RH-2)							
604260	5 FLANGE TO PIPE	C-F-1 C5.11	PT UT	ZA-0012 R1 UTI-012 R2	X X	-	-	UT EXAM LIMITATIONS (>90% COVERAGE) WERE THE SAME AS PSI. **SS-13**
604280	6 PIPE TO ELBOW	C-F-1 C5.11	PT UT	ZA-0012 R1 UTI-012 R2	X X	-	- -	 **SS-13**
604300	6LD LONGITUDINAL WELD	C-F-1-L C5.12	PT UT	ZA-0012 R1 UTI-012 R2	X X	-	-	EXAMINED 2.5T AT THE INTERSECTING CIRC. WELD. **SS-13**
	12-RH-2203-KB2 (FIG NO B-RH-8)							
605000	2 PIPE TO ELBOW	C-F-1 C5.11	PT UT	ZA-0012 R1 UTI-012 R2	X -	- X	- -	 **SS-13**
605020	2LD LONGITUDINAL WELD	C-F-1-L C5.12	PT UT	ZA-0012 R1 UTI-012 R2	X X	-	-	EXAMINED 2.5T AT THE INTERSECTING CIRC. WELD. **SS-13**
605060	3LU LONGITUDINAL WELD	C-F-1-L C5.12	PT UT	ZA-0012 R1 UTI-012 R2	X X	-	-	EXAMINED 2.5T AT THE INTERSECTING CIRC. WELD. **SS-13**
605100	3 ELBOW TO PIPE	C-F-1 C5.11	PT UT	ZA-0012 R1 UTI-012 R2	X -	- X	- -	 **SS-13**

RESIDUAL HEAT REMOVAL SYSTEM

SUMMARY NUMBER	EXAMINATION AREA IDENTIFICATION	ASME SEC. XI CATGY ITEM NO	EXAM METHOD	PROCEDURE	N O R E C	G E O M	O T H E R	REMARKS **CALIBRATION BLOCK**
	8-RH-2111-BB2 (FIG NO 8-RH-7)							
614600	2 PIPE TO ELBOW	C-F-1 C5.11	PT UT UT	ZA-0012 R1 UTI-001 R3 UTI-004 R3	X X X	- - -	- - -	NO BASELINE EXAMINATION WAS PERFORMED DURING PSI. PERFORMED SUPPLEMENTAL ZERO DEGREE LAMINATION AND WELD VOLUME EXAMINATION DURING 2RE04. **SS-11**
614660	4 PIPE TO VALVE	C-F-1 C5.11	PT UT UT	ZA-0012 R1 UTI-001 R3 UTI-005 R3	X - -	- X X	- - -	USED UT60RS ON PIPE SIDE FOR ADDITIONAL COVERAGE. **SS-10**

CONTAINMENT SPRAY PUMPS

SUMMARY NUMBER	EXAMINATION AREA IDENTIFICATION	ASME SEC. XI CATGY ITEM NO	EXAM METHOD	PROCEDURE	NOREC	GEOM	OTHER	REMARKS **CALIBRATION BLOCK**
	PUMP 2A (FIG NO B-CSP-1)							
750135	CIAPCS-2A-PCW4 NOZZLE TO UPPER CASE	C-G C6.10	PT	ZA-0012 R1	X	-	-	

HIGH HEAD SAFETY INJECTION PUMPS

SUMMARY NUMBER	EXAMINATION AREA IDENTIFICATION	ASME SEC. XI CATGY ITEM NO	EXAM METHOD	PROCEDURE	N O R E C	G E O M	O T H E R	REMARKS **CALIBRATION BLOCK**
	PUMP 2A (FIG NO B-HHSIP-1)							
751035	SIPHH-2A-PCW4 NOZZLE TO UPPER CASE	C-G C6.10	PT	ZA-0012 R1	X	-	-	

LOW HEAD SAFETY INJECTION PUMPS

SUMMARY NUMBER	EXAMINATION AREA IDENTIFICATION	ASME SEC. XI CATGY ITEM NO	EXAM METHOD	PROCEDURE	N O R C	G E O M	O T H E R	REMARKS **CALIBRATION BLOCK**
	PUMP 2A (FIG NO B-LHSIP-1)							
751335	SIAPLH-2A-PCW4 NOZZLE TO UPPER CASE	C-G C6.10	PT	ZA-0012 R1	X	-	-	

APPENDIX 2-B

PERSONNEL

APPENDIX 2-B

PERSONNEL

Name	Company	UT	MT	PT	VT
Brown, T.D.	SSI	*	II	II	*
Garcia, D.	SSI	II	*	II	*
Harry, A.J.	SSI	II	*	II	*
Herbelin, F.	SSI	*	*	*	II
Jackson, T.E.	SSI	II	II	II	II
Magruder, C.	SSI	I	*	It	*
Miles, D.	SSI	II	*	II	*
Miles, J.	SSI	II	II	II	*
Tauchen, R.J.	SSI	I	It	It	*
Hubbard, S. K.	HL&P	III	III	III	III
Spiess, L. D.	HL&P	III	II	II	II

Company
SSI - Sonic Systems International, Inc.
HL&P - Houston Lighting & Power Company

* - This NDE method not performed for ISI by these personnel during this refueling outage.

APPENDIX 2-C

HL&P PROCEDURES

APPENDIX 2-C

HL&P PROCEDURES

Procedure No.	Rev.	Title
NDEP 7.2	0	Wet Fluorescent Magnetic Particle for ASME Section XI PSI/ISI
0PQP05-ZA-0001	0	Qualification and Certification of Nondestructive Examination Personnel
0PQP05-ZA-0004	1	General Ultrasonic Examination
0PQP05-ZA-0009	0	Recording Data from Direct Visual, Liquid Penetrant, and Magnetic Particle Examinations
0PQP05-ZA-0012	1	Color Contrast Solvent Removable Liquid Penetrant Examination for ASME XI PSI/ISI
0PQP05-ZA-0018	1	Dry Powder Magnetic Particle Examination for ASME XI PSI/ISI
0PQP05-ZA-0018	2	Dry Powder Magnetic Particle Examination for ASME XI PSI/ISI
0PQP05-ZA-0024	1	ASME XI Examination for VT-1 and VT-3
UTI-001	3	Manual Ultrasonic Examination of Austenitic and Dissimilar Metal Pressure Piping Welds Using Refracted Longitudinal Technique
UTI-002	3	Manual Ultrasonic Examination of Ferritic Pressure Piping Welds
UTI-004	3	Manual Ultrasonic Examination Using Longitudinal Wave Straight-Beam Technique
UTI-005	3	Manual Ultrasonic Examination of Austenitic Pressure Piping Welds
UTI-006	1	Manual Ultrasonic Indication Sizing
UTI-007	0	Recording Indications During Ultrasonic Examinations
UTI-008	0	Weld Joint Identification Marking
UTI-011	1	Manual Ultrasonic Examination of Reactor Vessel Closure Head Round Nuts
UTI-012	2	Manual Ultrasonic Examination of Thin Wall Piping Welds

APPENDIX 2-C

HL&P PROCEDURES

Procedure No.	Rev.	Title
UTI-016	1	Manual Ultrasonic Examination of Vessel-to-Nozzle Inner Radius Sections
UTI-017	2	Manual Ultrasonic Examination of Ferritic Pressure Vessel Welds (Greater Than 2 to 12 Inches in Thickness)
UTI-018	1	Manual Ultrasonic Examination of Centrifugally Cast and Static Cast Stainless Steel Piping Welds
UTI-022	2	Manual Ultrasonic Examination of Pressure Vessel Welds (0.4 to 2.0 Inches in Diameter)
UTI-023	0	Transducer Analysis

APPENDIX 2-D

ISI EXAMINATION LIMITATIONS

APPENDIX 2-D

ISI EXAMINATION LIMITATIONS

Table of Contents

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION, UNIT 2
SUMMARY OF INSERVICE EXAMINATION LIMITATIONS

The following tables provide details on the limitations which were encountered during the ISI examinations at the South Texas Project Electric Generating Station, Unit 2 (STPEGS-2). Each table of this summary provides the following information as described:

Column 1 - Class/Category/Item No./Examination Requirement

Identifies the ASME Section XI Code Class, Category, Item Number, and Examination Requirement (volumetric or surface) for the specific examination area listed in Column 2. This information is derived from Tables IWB-2500-1 and IWC-2500-1 of the 1983 Edition of ASME Section XI (with Addenda through Summer 1983), and Tables 1 and 2 of Code Case N-408.

Column 2 - Line No./Subassembly
Weld Identification
Weld ID Figure
Weld Configuration
Examination Method

Provides information for each examination area by line number (piping) or subassembly number (vessel), unique weld identification number, weld ID figure reference, weld configuration (pipe-to-tee, head-to-shell, etc.), and examination method (UT, UT/PT, or UT/MT).

Column 3 - Exam Type

Lists the Methods of Examinations used for each area by specific angles for UT (0, 45, 45T, 60, 60T) and surface technique (MT or PT), if required.

Column 4 - % Coverage

The extent of coverage for each exam type is expressed in percentages based on the examination volume/area required in Section XI. Depending on method, the percentage coverage may be represented in more than one way.

Surface methods are the simplest and are expressed as a percentage of the required surface area receiving no coverage and the remaining balance from 100% as the total coverage.

Ultrasonic coverage is first expressed for each exam type as a percentage of the volume receiving no coverage, angle-beam coverage in one direction only, and angle-beam coverage in two directions. These percentages are then used to compute the effective coverage for that exam type. In the case of 0 degree, the effective coverage is equal to the balance of 100% minus the percentage receiving no coverage. The effective coverage for angle beam is calculated from the following formula:

$$c = \frac{a + 2*b}{2}$$ (effective coverage formula, angle beam)

where a = one direction only percentage
b = two direction percentage

Examples:

(1) none 1 dir 2 dir
0% 0% 100%

$$c = \frac{0 + 2*100}{2}$$ = 100% effective coverage

(2) none 1 dir 2 dir
0% 100% 0%

$$c = \frac{100 + 2*0}{2}$$ = 50% effective coverage

(3) none 1 dir 2 dir
50% 50% 0%

$$c = \frac{50 + 2*0}{2}$$ = 25% effective coverage

The total UT coverage is then expressed as the average of the effective coverage percentages for each UT exam type. Each UT exam type is considered as equal weight in the calculation of the average.

Column 5 - Limitation

A description of the type of limitation and primary reason for why the coverage was limited is provided in this section.

ASME SECTION XI CODE COVERAGE LIMITATIONS

1995 2RE04 ISI

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION, UNIT 2

ASME CATEGORY B-D

SYSTEM: PRESSURIZER (CLASS 1)

CLASS CATGY ITEM NO. EXM RQT	- WELD IDENTIFICATION - WELD ID FIGURE - EXAMINATION METHOD	EXAM TYPE	% COVERAGE NONE	1 DIR ONLY	2 DIR	EFF. COV.	TOTAL	LIMITATION
1	PRZ-2	0	16	-	-	84		EXAMINATION LIMITED TO W=2.0 INCHES ON THE NOZZLE SIDE DUE TO COMPONENT CONFIGURATION.
B-D	N2	45	2	43	55	77		
B3.110	FIGURE NO. A-PRZ-1	60	2	62	36	67		
VOL		45T	16	0	84	84		
	NOZZLE-TO-SHELL	60T	16	0	84	84		
	UT						79	

CLASS CATGY ITEM NO. EXM RQT	- LINE NO./SUBASSEMBLY - WELD IDENTIFICATION - WELD ID FIGURE - EXAMINATION METHOD	EXAM TYPE	% COVERAGE NONE	1 DIR ONLY	2 DIR	EFF. COV.	TOTAL	LIMITATION
1	PRZ-2	0	16			84		EXAMINATION LIMITED TO W=2.0 INCHES ON THE NOZZLE SIDE DUE TO COMPONENT CONFIGURATION.
B-D	N4B	45	2	43	55	77		
B3.110	FIGURE NO. A-PRZ-1	60	2	62	36	67		
VOL		45T	16	0	84	84		
	SHELL TO NOZZLE	60T	16	0	84	84		
	UT						79	

CLASS CATGY ITEM NO. EXM RQT	- LINE NO./SUBASSEMBLY - WELD IDENTIFICATION - WELD ID FIGURE - EXAMINATION METHOD	EXAM TYPE	% COVERAGE NONE	1 DIR ONLY	2 DIR	EFF. COV.	TOTAL	LIMITATION
1	PRZ-2	0	34	-	-	66		NO UT FROM THE NOZZLE SIDE DUE TO NOZZLE CONFIGURATION. LIMITED UT FROM THE SHELL SIDE DUE TO PROXIMITY OF 2 INCH NOZZLE.
B-D	N4C	45/60	6	94	0	47		
B3.110	FIGURE NO. A-PRZ-1	45T	32	4	64	66		
VOL		60T	32	4	64	66		
	SHELL TO NOZZLE							
	UT						61	

ASME SECTION XI CODE COVERAGE LIMITATIONS

1995 2RE04 ISI
SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION, UNIT 2

ASME CATEGORY B-J

SYSTEM: REACTOR COOLANT - MAIN LOOPS (CLASS 1)

CLASS CATGY ITEM NO. EXM RQT	- WELD IDENTIFICATION - WELD ID FIGURE - EXAMINATION METHOD	EXAM TYPE	% COVERAGE NONE	1 DIR ONLY	2 DIR	EFF. COV.	TOTAL	LIMITATION
1 B-J B9.11 VOL/SURF	27.5-RC-2103 1 FIGURE NO. A-RC-1 PUMP TO PIPE	45 45T	0 90	16 0	84 10	92 10	51	LIMITED UT45 ON BOTH SIDES AND NO UT45T ON THE WELD AND PIPE SIDE DUE TO WELD CONFIGURATION AND SIZE OF SEARCH UNIT.
	UT/PT	PT	0	-	-	-	100	

CLASS CATGY ITEM NO. EXM RQT	- WELD IDENTIFICATION - WELD ID FIGURE - EXAMINATION METHOD	EXAM TYPE	% COVERAGE NONE	1 DIR ONLY	2 DIR	EFF. COV.	TOTAL	LIMITATION
1 B-J B9.11 VOL/SURF	27.5-RC-2203 1 FIGURE NO. A-RC-2 PUMP TO PIPE	45 45T	0 90	74 0	26 10	63 10	37	LIMITED UT45 ON BOTH SIDES AND NO UT45T ON THE WELD AND PIPE SIDE DUE TO WELD CONFIGURATION AND SIZE OF SEARCH UNIT.
	UT/PT	PT	0	-	-	-	100	

CLASS CATGY ITEM NO. EXM RQT	- LINE NO./SUBASSEMBLY - WELD IDENTIFICATION - WELD ID FIGURE - EXAMINATION METHOD	EXAM TYPE	% COVERAGE NONE	1 DIR ONLY	2 DIR	EFF. COV.	TOTAL	LIMITATION
1 B-J B9.11 VOL/SURF	27.5-RC-2303 1 FIGURE NO. A-RC-3 PUMP TO PIPE	45 45T	0 100	42 0	58 0	79 0	40	LIMITED UT45 ON BOTH SIDES AND NO UT45T DUE TO WELD CONFIGURATION AND SIZE OF SEARCH UNIT.
	UT/PT	PT	0	-	-	-	100	

CLASS CATGY ITEM NO. EXM RQT	- WELD IDENTIFICATION - WELD ID FIGURE - EXAMINATION METHOD	EXAM TYPE	% COVERAGE NONE	1 DIR ONLY	2 DIR	EFF. COV.	TOTAL	LIMITATION
1 B-J B9.11 VOL/SURF	27.5-RC-2403 1 FIGURE NO. A-RC-4 PUMP TO PIPE	45 45T	0 77	26 0	74 23	87 23	55	LIMITED UT45 ON BOTH SIDES AND NO UT45T ON THE WELD DUE TO WELD CONFIGURATION AND SIZE OF SEARCH UNIT.
	UT/PT	PT	0	-	-	-	100	

ASME SECTION XI CODE COVERAGE LIMITATIONS

1995 2RE04 ISI
SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION, UNIT 2

ASME CATEGORY B-J (CONT'D)

SYSTEM: REACTOR COOLANT (CLASS 1 PIPING)

CLASS CATGY ITEM NO. EXM RQT	- WELD IDENTIFICATION - WELD ID FIGURE - EXAMINATION METHOD	EXAM TYPE	% COVERAGE NONE	1 DIR ONLY	2 DIR	EFF. COV.	TOTAL	LIMITATION
1 B-J B9.11 VOL/SURF	6-RC-2009 1 FIGURE NO. A-RC-6 SAFE END TO ELBOW	45/60 45T	0 0	57 0	43 100	72 100	86	LIMITED UT45 / UT60 ON BOTH SIDES DUE TO WELD CONFIGURATION.
	UT/PT	PT	0	-	-	-	100	

SYSTEM: SAFETY INJECTION SYSTEM (CLASS 1 PIPING)

CLASS CATGY ITEM NO. EXM RQT	- LINE NO./SUBASSEMBLY - WELD IDENTIFICATION - WELD ID FIGURE - EXAMINATION METHOD	EXAM TYPE	% COVERAGE NONE	1 DIR ONLY	2 DIR	EFF. COV.	TOTAL	LIMITATION
1 B-J B9.11 VOL/SURF	12-SI-2218 1 FIGURE NO. A-SI-2 VALVE TO PIPE	45/60 45T	13 14	29 0	58 86	73 86	79	LIMITED UT45 / UT60 AND NO UT45T ON THE VALVE SIDE DUE TO VALVE CONFIGURATION.
	UT/PT	PT	0	-	-	-	100	

APPENDIX 2-E

OWNER'S REPORT FOR INSERVICE INSPECTIONS
NIS-1 FORMS

FORM NIS-1 OWNER'S REPORT FOR INSERVICE INSPECTIONS
As required by the Provisions of the ASME Code Rules

1. Owner Houston Lighting & Power Company; Electric Tower; P.O. Box 1700; Houston, Texas 77001
(Name and Address of Owner)

2. Plant South Texas Project Electric Generating Station; P.O. Box 289; Wadsworth, Texas 77483
(Name and Address of Plant)

3. Plant Unit 2 4. Owner and Certificate of Authorization (if required) N.A.

5. Commercial Service Date 06/19/89 6. National Board Number for Unit N.A.

7. Components Inspected **ASME Code Class 1 (IWB) Items - Welds Program**

Component or Appurtenance	Manufacturer or Installer	Manufacturer or Installer Serial No.		National Board No.
Reactor Pressure Vessel	Combustion Engineering / Westinghouse (M)	12173		22391
Pressurizer	Westinghouse (M)	2161		19
Class 1 Piping	Ebasco (I)	N.A.		N.A.
Reactor Coolant Pump 2A	Westinghouse (I)	1080-1163E26G01-14		N.A.
Class 1 Valves	Westinghouse (I)	N.A.		N.A.

HL&P by R.L.Beverly Date 1-17-96 Arkwright Mutual Insurance Co. by B.R.Russell,ANII Date 1-17-96

FORM NIS-1 (Back)

8. Examination Dates 10/10/95 to 10/24/95 9. Inspection Interval from 06/19/89 to 10/19/00
10. Abstract of Examinations. Include a list of examinations and a statement concerning status of work required for current interval. **(ASME Code Class 1 (IWB) Items - Welds Program)**

See Section 2.4 and Appendix 2-A of 2RE04 Summary Report for list of examinations performed. The examinations performed this outage constitute 14% of the required examinations for the current interval. The cumulative percentage completed for the interval is 57%.

11. Abstract of Conditions Noted.

None.

12. Abstract of Corrective Measures Recommended and Taken.

None.

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

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

Date 1-17 19 96 Signed Houston Lighting & Power Co. By R. L. Beverly
Owner

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Texas and employed by Arkwright Mutual Insurance Co. of Norwood, Mass have inspected the components described in this Owner's Report during the period 10/10/95 to 10/24/95, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the inspection plan and as required by the ASME Code, Section XI.

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

B. R. Russell Commissions Tex 826
Inspector's Signature National Board, State, Province, and Endorsements
B. R. Russell

Date 1-17 19 96

FORM NIS-1 OWNER'S REPORT FOR INSERVICE INSPECTIONS
As required by the Provisions of the ASME Code Rules

1. Owner Houston Lighting & Power Company; Electric Tower; P.O. Box 1700; Houston, Texas 77001
(Name and Address of Owner)

2. Plant South Texas Project Electric Generating Station; P.O. Box 289; Wadsworth, Texas 77483
(Name and Address of Plant)

3. Plant Unit 2 4. Owner and Certificate of Authorization (if required) N.A.

5. Commercial Service Date 06/19/89 6. National Board Number for Unit N.A.

7. Components Inspected **ASME Code Class 2 (IWC) Items - Welds Program**

Component or Appurtenance	Manufacturer or Installer	Manufacturer or Installer Serial No.		National Board No.
Resid. Heat Removal Heat Exchanger 2A	Joseph Oat Corp. (M)	2312-4D		993
Class 2 Piping	Ebasco (I)	N.A.		N.A.
CS Pump 2A	Pacific Pumps (M)	51710		454
HHSI Pump 2A	Pacific Pumps (M)	51698		400
LHSI Pump 2A	Pacific Pumps (M)	51704		460

HL&P by R.L.Beverly Date 1·17·96 Arkwright Mutual Insurance Co. by B.R.Russell,ANII Date 1-17-96

FORM NIS-1 (Back)

8. Examination Dates 10/03/95 to 10/24/95 9. Inspection Interval from 06/19/89 to 10/19/00

10. Abstract of Examinations. Include a list of examinations and a statement concerning status of work required for current interval. **(ASME Code Class 2 (IWC) Items - Welds Program)**

See Section 2.4 and Appendix 2-A of 2RE04 Summary Report for list of examinations performed. The examinations performed this outage constitute 11% of the required examinations for the current interval. The cumulative percentage completed for the interval is 49%.

11. Abstract of Conditions Noted.

None.

12. Abstract of Corrective Measures Recommended and Taken.

None.

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

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

Date 1-17 19 96 Signed Houston Lighting & Power Co. By R.L.Beverly
Owner

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Texas and employed by Arkwright Mutual Insurance Co. of Norwood, Mass have inspected the components described in this Owner's Report during the period 10/03/95 to 10/24/95, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the inspection plan and as required by the ASME Code, Section XI.

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

Commissions Tex 826
Inspector's Signature National Board, State, Province, and Endorsements
B. R. Russell

Date 1-17- 19 96

3.0 STEAM GENERATOR TUBE EXAMINATIONS

3.1 Introduction

This section of the summary report addresses the eddy current testing (ET) ISI of the tubing in Steam Generators A, B, C and D performed during the 2REO4 outage. It is intended to answer to the reporting requirements of ASME Code Section XI, IWA-6000 and 4.4.5.5 (b) of the STPEGS Technical Specification.

The STPEGS-1 plant design contains four (4) Westinghouse recirculating design model E2 steam generators. Each model E2 steam generator was designed and fabricated by Westinghouse Electric Corporation of Tampa, Florida. Each steam generator contains 4851 tubes. The tubing material is low temperature mill annealed ASTM SB-163 Inconel having a nominal outer diameter (OD) of .750 inches and nominal wall thickness of .043 inches. The nominal thickness of the tubesheet is 22.65 inches.

The examination agency for the 2REO4 ET of steam generator tubing was B&W Nuclear Technologies (BWNT). They acquired the first ET data on October 16, 1995. The last ET data analysis was concluded on October 21, 1995.

3.2 Scope of Examinations

The STPEGS-2 ten year ISI plan, previously filed with the NRC, describes the ISI program for examination of steam generator tubing. Additionally, an auxiliary ISI plan (ISI Outage Plan) entitled, "1995 Outage Plan for the In-service Inspection of Steam Generator Tubing at the South Texas Project Electric Generating Station Unit 2" was prepared by BWNT and approved by HL&P. The ISI Outage Plan identified the steam generator tube areas expected to be examined by ET and the ET procedures expected to be used during the ISI. Prior to the beginning of the ISI, tubes were selected in accordance with 4.4.5.2 of the STPEGS technical specifications (NUREG 1346) and assigned to the first, second, and third samples in each of the four (4) steam generators to be examined. The first, second, and third samples consisted of 201, 300 and 586 tubes, respectively. These first, second, and third samples were listed in the ISI Outage Plan.

The initial scope consisted of the following planned examinations:

The tubes of the first, second, and third samples examined concurrently by bobbin coil ET over their full length (from tube end to tube end). These comprised more than twenty-two (22) percent of the in-service tubes.

Motorized Rotating Pancake Coil (MRPC) ET of 100% of the hot leg top of the tubesheet (TSH) for each inservice tube in each steam generator. The area of interest to be examined extends one (1) inch above to two (2) inches below the secondary face of the tubesheet.

MRPC of 201 selected tubes consisting of random locations across all four (4) steam generators. These random locations consisted of top of the tubesheets, tube support plates, tight radius U-bends, baffle plates in the pre-heater region and free span regions where experience indicated a higher potential for degradation and would be examined over an approximate length of four (4) inches.

This scope exceeded the requirements for the first ISI sample of tubes specified in 4.4.5.2 of the STPEGS technical specification (NUREG - 1346). Because the results of the initial examinations identified by the ISI Outage Plan could have identified a situation where additional examinations of other tube areas or the same tube areas (with different nondestructive examination techniques or methods) would be required or advisable, a method to quickly change the outage plan was developed by instituting an Outage Plan Change Form. One (1) change was made to the ISI Outage Plan during the examinations. The change form is included as Appendix 3-A. The ISI Outage Plan is consistent with the requirements of the Ten Year ISI Plan.

3.3 Personnel, Procedures, and Equipment

3.3.1 Personnel Qualifications

The personnel who performed the ET acquisition and analysis during the 2REO4 outage were employed by BWNT, Rockridge Technologies (RT) and Zetec. They were certified in accordance with the requirements of IWA-2300 of ASME Code Section XI and the certification practices of their respective employers. Over ninety-five (95) percent of the ET analysts were certified as Qualified Data Analysts (QDA's) for the steam generator work performed. A QDA is a Level IIA or III who has passed rigorous testing of his ability to analyze a random selection of expertly-judged indications, from the EPRI NP-6201 Appendix G Performance Demonstration Database for various steam generator designs and all types of known defects.

Before the 2REO4 examinations were performed all ET data analysts were required to successfully complete a STPEGS plant site specific steam generator ET data analysis training program. The analyst training program consisted of (1) ET data analysis course and (2) site specific laboratory or practical training. The ET data analysis course consisted of a four (4) hour classroom lecture covering the specific STP steam generator design, operating history, previous ET results, and the data acquisition procedure and analysis guideline to be used for the STPEGS Unit 2 ET examinations. The site specific laboratory or practical training included hands on review of the flaw indications of the types that have been identified at STPEGS or at other plants of similar design to STPEGS.

Successful completion of the site specific course required the passing of the written and practical (hands on) test . The ET data analysis training program was administered by Mr. Steve Brown of Aptech Engineering Services, Inc..

For the BWNT, RT and Zetec personnel who performed the ET acquisition and/or data analysis, their certification levels, and identification numbers are listed in Appendix 3-B. The identification numbers of the personnel that acquired or analyzed the ET data for a specific examination are

recorded on the optical disks as a permanent record. The identification number consists of the first letter of the persons last name and the last four digits of their social security number.

3.3.2 Examination and Analysis Procedures

Bobbin coil probe ET was performed in accordance with the BWNT procedure ISI-424, Revision 22 entitled, "Multifrequency Eddy Current Examination of .750" OD x .043" Wall RSG Tubing for ASME Exam and Wear at Tube Support Plates" with Change Authorization No. HL&P-95-001. This procedure, with the change authorization, is STPEGS document no. ST401280-00018-B2U. The bobbin coil examination technique was performed using inspection frequencies of 550, 300, 130, and 10 kHz in both the differential and absolute modes for each tube. The BWNT bobbin coil procedure is an alternative to the technique described in ASME Code Section V, Article 8, I-42, which requires that the probe pull speed not exceed 14 inches per second. A maximum pull speed of 40 inches per second with a digital signal sampling rate of 1230 samples per second was used during the 2REO4 ET examination. BWNT ISI-424 paragraph 8.2 permitted the higher pull speed with the approval of a BWNT ET Level III and concurrence of a STPEGS representative. A BWNT form entitled "ECT INSPECTION DATA SHEET" authorizes the higher pull speed and was signed by the BWNT Level III and the STPEGS representative. The faster probe pull speed was demonstrated to the satisfaction of the Authorized Nuclear Inservice Inspection (ANII) in accordance with IWA-2240 of Section XI.

MRPC probe ET was performed in accordance with the BWNT procedure ISI-510 Revision 15 entitled, "RPC System Operating Procedure" with Change Authorization No. HL&P-95-002. This procedure is STPEGS document no. ST401280-00022-B2U.

The MRPC ET examination technique was performed using the examination frequencies of 300, 200, 100, and 10 kHz in the absolute mode.

The ET data analysts performed the examinations to HL&P Engineering Instruction EI-8.01, entitled, "Steam Generator Eddy Current Data Analysis Guidelines", Revision 3 including the Analysis Guideline Change Forms. Change Form Numbers 1, 2, 3, and 4 were generated and used during the ET examinations.

The data for each steam generator tube was subjected to two (2) separate independent analyses in accordance with HL&P Engineering Instruction EI-8.02, entitled "Steam Generator Eddy Current Data Control", Revision 1. The bobbin coil probe ET data was performed by a primary and secondary evaluation. The primary evaluation was performed manually by an analyst using the Zetec Inc. Eddynet software. The secondary evaluation was performed using the Zetec Inc. Eddynet Computer Data Screening (CDS) software. The MRPC ET data was evaluated manually by two independent analysts using the Eddynet software. The ET primary and secondary data analysis was performed in separate facilities. The primary analysts were located at BWNT in Lynchburg, Virginia and at RT in Benecia, California. The secondary analysts were located at Zetec Inc. in Issaquah, Washington.

Results of all of the eddy current examinations were recorded on a digital rewritable optical disk and data sheets. The data sheets for each examination are stored as records. Each disk contains the raw ET signals, primary, secondary, and resolution results for each calibration group. The optical disks also contain the system calibration and calibration verification with the dates and times for each calibration and verification. The unique number of the digital rewritable optical disk, the calibration group number have been recorded on the data sheets and optical disks. Therefore, the system calibration and calibration verification of the raw signals for each tube examined can be easily recalled.

3.3.3 Equipment

BWNT used the MIZ-30 ET instruments. BWNT also used the Eddynet computer software, Eddynet '95 (Version 1.3), to acquire and analyze the ET data. The MIZ-30 instruments and Eddynet software are manufactured and produced by Zetec, Inc. The MIZ-30 instrument and software store and process the ET data in a digital format and have a significantly improved dynamic range and signal-to-noise ratio as compared to analog systems. The MIZ-30 is capable of being operated at locations remote from the steam generators (e.g., in low radiation areas).

The ASME Boiler and Pressure Vessel Code, Nuclear Components Code Case N-401, "Eddy Current Examination-Section XI, Division 1", was used after the digital equipment and the ET technique used were demonstrated to the STPEGS representative in accordance with Case N-401.

The bobbin coil probe examination was the primary ET examination. Tubes in rows 1, 2, 3, and 4 were examined from the cold leg tube end using the .590 inch diameter magnetic-bias probe to the uppermost hot leg support plate and from the hot leg tube end using the .610 inch diameter magnetic-bias probe to the same uppermost support plate, to complete the full length examination. For all other tubes, the bobbin ET examinations were performed with a .610 inch diameter probe. All available tubes in each steam generator were examined with the bobbin probe full length from tube end to tube end. For conducting MRPC ET in the straight sections of tubing, BWNT used 0.610 inch diameter three (3) coil MRPC probes. The MRPC probe contained one 0.115 inch diameter pancake coil, one coil sensitive to axially oriented flaws, and one coil sensitive to circumferentially oriented flaws.

3.3.4 Calibration Standards

The ET calibration standards used were guide tube standards. The design incorporated both flat bottom holes and electro discharge machined (EDM) notches to calibrate the bobbin coil probe and the MRPC probe for the ET examinations. The standards were fabricated from UNS Alloy N06600 of the same material specification and same nominal size as that of the tubes examined in the steam generators. The U-bend areas of the Row 1 and 2 tubes in each steam generator have received an in situ heat treatment to improve their resistance to stress corrosion cracking. The ET calibration standards used were not subjected to that heat treatment. ASME Boiler and Pressure Vessel Code, Nuclear Components Code Case N-402-1, "Eddy Current Calibration Standards, Section XI, Division 1" was used. Otherwise, the design and material of the ET calibration standards used meet the requirements of the ASME Code Section XI.

3.4 Summary of Examinations

Bobbin coil ET testing techniques were performed on twenty-two (22) percent of all in-service tubes in each of Steam Generators A, B, C, and D. All of these tubes were examined over their full length (from tube end to tube end). The numbers of tubes which were examined by the bobbin coil ET technique are as follows:

Steam Generator	Number Examined (Planned Scope)	Number Examined In Addition To Planned Scope
A	1087	25
B	1087	2
C	1087	2
D	1087	4

All distorted and non-quantifiable bobbin coil ET indications of possible flaws were examined by MRPC. The MRPC probe was used to verify whether or not degradation existed at the locations of many bobbin coil ET indications. MRPC was also used to characterize tube degradation.

MRPC ET examinations were conducted at all of the hot leg top of the tubesheet (TSH) tube areas in all steam generators during 2REO4. MRPC ET was also conducted at various other tube locations listed in Appendix 3-C.

3.5 Examination Results and Corrective Actions

The location of the indications were recorded relative to the adjacent tube support and baffle plates and anti-vibration bars. The tube support plates and baffle plates were numbered consecutively from 01H to 10H (on the hot leg) and from 11C to 23C (on the cold leg) starting on the hot leg side, over the U-bends, and down the cold leg side of the steam generator. The anti-vibration bars were numbered AV1, AV2, AV3, and AV4 from the hot leg to the cold leg side, respectively. Indications in the tubesheet area were recorded relative to TEH or TSH (hot leg) or TEC or TSC (cold leg) depending on whether the indications were at the tube end (E) or secondary face (S). In addition, the vertical distances from these landmarks to flaws were recorded.

ET indications reported in this report were assigned three letter codes. The indication codes reflect the suspected nature of the discontinuity. Some of the indications used are as follows:

DNG - ding
DNT - dent
DSI - distorted support with possible flaw indication
MAI - multiple axial indication
MBM - manufacturing burnishing marks
MCI - multiple circumferential indications
MVI - multiple volumetric indication
NQI - non-quantifiable indication
NQS - non-quantifiable signal
ODI - outer diameter indication
SAI - single axial indication
SCI - single circumferential indication
SVI - single volumetric indication

Lists, including the locations and depths, of all flaw indications which were characterized as reductions in the tube wall thickness are included in Appendix 3-D. Included in Appendix 3-D are the SAI indications detected by MRPC ET. No MAI, SCI, or MCI indications were detected. SAI indications are expected to be the result of cracks which may be considered to be reductions in the tube wall thickness. All SAI indications were plugged regardless of depth.

151 SVI and MVI indications were detected by the MRPC ET inspection. Of these, 148 were also tested by the bobbin coil inspections of twenty-two (22) percent of the in-service tubes. The majority of these locations contained no detectable indications by the bobbin coil ET method or manufacturing burnishing marks. The bobbin coil ET method is especially good at detecting volumetric flaws twenty (20) percent through wall or greater. The bobbin coil ET method was used to report these types of imperfections. The few locations with measurable depths are included in Appendix 3-D.

Lists of all dents and dings detected in each steam generator are included in Appendix 3-E.

The total numbers of degraded and defective tubes detected by the three (3) bobbin coil ET samples and MRPC ET are as follows:

3.5.1 Steam Generator A

Three (3) areas of tube degradation, as defined by the Technical Specifications in 4.4.5.4, were detected in three (3) tubes. Of these indications of degradation, three (3) areas of three (3) tubes were defective as defined by the Technical Specification 4.4.5.4.

Steam Generator A had three (3) areas of degradation detected by bobbin coil/MRPC at locations other than TSH in three (3) tubes. Of these

indications of degradation detected by bobbin coil/MRPC at locations other than TSH, three (3) were considered to be defective. Steam Generator A had no areas of degradation or defective tubes detected by MRPC at TSH.

3.5.2 Steam Generator B

Four (4) areas of tube degradation, as defined by the Technical Specifications in 4.4.5.4, were detected in four (4) tubes. Of these indications of degradation, three (3) areas of three (3) tubes were defective as defined by the Technical Specification 4.4.5.4.

Steam Generator B had four (4) areas of degradation detected by bobbin coil/MRPC at locations other than TSH in four (4) tubes. Of these indications of degradation detected by bobbin coil/MRPC at locations other than TSH, three (3) were considered to be defective. Steam Generator B had no areas of degradation or defective tubes detected by MRPC at TSH.

3.5.3 Steam Generator C

Four (4) areas of tube degradation, as defined by the Technical Specifications in 4.4.5.4, were detected in four (4) tubes. Of these indications of degradation, two (2) areas of two (2) tubes were defective as defined by the Technical Specification 4.4.5.4.

Steam Generator C had four (4) areas of degradation detected by bobbin coil/MRPC at locations other than TSH in four (4) tubes. Of these indications of degradation detected by bobbin coil/MRPC at locations other than TSH, two (2) were considered to be defective. Steam Generator C had no areas of degradation or defective tubes detected by MRPC at TSH.

3.5.4 Steam Generator D

Two (2) areas of tube degradation, as defined by the Technical Specifications in 4.4.5.4, were detected in two (2) tubes. Of these indications of degradation, one (1) area of one (1) tube was defective as defined by the Technical Specification 4.4.5.4.

Steam Generator D had one (1) area of degradation detected by bobbin coil/MRPC at locations other than TSH in one (1) tube. Of these indications of degradation detected by bobbin coil/MRPC at locations other than TSH, none were considered to be defective. Steam Generator D had one (1) area of degradation detected by MRPC at TSH in one (1) tube. Of these indications of degradation detected by MRPC at TSH, one (1) area in one (1) tube was considered to be defective.

The numbers of tubes examined in each inspection sample and by MRPC at the TSH which contain degradation and/or defects are summarized as follows:

	Tubes Examined	Degraded Tubes	Defective Tubes
Steam Generator A			
1st Sample ET	201	2	2
2nd Sample ET	300	1	1
3rd Sample ET	611	0	0
TSH MRPC	4846	0	0
Steam Generator B			
1st Sample ET	201	2	1
2nd Sample ET	300	0	0
3rd Sample ET	588	2	2
TSH MRPC	4851	0	0
Steam Generator C			
1st Sample ET	201	2	0
2nd Sample ET	300	1	1
3rd Sample ET	588	1	1
TSH MRPC	4842	0	0
Steam Generator D			
1st Sample ET	201	1	0
2nd Sample ET	300	0	0
3rd Sample ET	590	0	0
TSH MRPC	4847	1	1

The minimum required size of the initial ISI sample is defined in Technical Specification 3/4.4.5 Table 4.4-2. It requires that the minimum initial sample for inspecting four (4) steam generators be three (3) percent of the total tubes installed in each generator. The "1995 Outage Plan for the In-service Inspection of Steam Generator Tubing at the South Texas Project Electric Generating Station Unit 2" required four (4) percent of the tubes be examined by the bobbin coil method of eddy current testing in the initial sample. Since four (4) percent of the steam generator tubes in-service were inspected, the initial sample requirements were met.

Category C-3 is defined in the Technical Specification as follows:

"More than 10% of the total tubes inspected are degraded tubes or more than 1% of the inspected tubes are defective."

None of the examination results, considered by samples or cumulatively, should be categorized as Category C-3.

Category C-2 is defined in the Technical Specification as follows:

"One or more tubes, but not more than 1% of the total tubes inspected are defective, or between 5% and 10% of the total tubes inspected are degraded tubes."

Some, but not all, of the examination results for the first, second or third sample should be categorized as Category C-2. Should all of the initial and subsequent examination results have been conservatively categorized as C-2, the consequence, according to Table 4.4-2 of the Technical Specification, is the addition to the initial sample of eighteen (18) percent additional tubes to be inspected. Bobbin coil ET was performed on more than twenty-two (22) percent of the in-service tubes in each Steam Generator. MRPC ET was performed on all in-service tubes of each Steam Generator at the TSH. Therefore, the Technical Specification requirements for additional examinations required in response to examination results were met.

The tubes which were removed from service by plugging prior to this ISI are as follows:

Tubes Plugged Prior to 2REO4 ISI				
Steam Generator	A	B	C	D
	3-20	3-20	3-20	3-20
	21-20	21-20	21-20	21-20
	31-20	31-20	31-20	31-20
	34-20	21-34	31-21	48-27
	35-20	31-34	3-24	21-34
	21-34	3-40	21-34	31-34
	31-34	3-60	31-34	3-40
	3-40	3-81	3-40	46-59
	3-61	21-87	40-40	3-60
	9-66	31-87	3-49	3-81
	3-81	3-101	4-49	21-87
	21-87	21-101	5-49	31-87
	31-87	31-101	3-50	2-95
	3-101		4-50	3-101
	21-101		5-50	21-101
	31-101		3-61	31-101
	44-62		3-81	45-59
	46-62		21-87	
			31-87	
			3-101	
			21-101	
			31-101	

The tubes that were removed from service by plugging as a result of the eddy current ISI performed during this outage are as follows:

Tubes Removed from Service During 2REO4				
Steam Generator	A	B	C	D
	24-79	27-63	22-75	19-80
	25-64	35-24	25-102	29-68
	44-47	37-82		
		47-62		

No corrective actions were performed as a result of dings or dents detected during this ISI.

3.6 Certification of Inspections

A Section XI NIS-1 form, "Owner's Report for Inservice Inspections," has been prepared to certify the STPEGS Unit 2 ISI examinations described in this Summary Report. The STPEGS Unit 2 ISI examinations have been certified by our ANII, Arkwright Mutual Insurance Company, on the NIS-1 form included in Appendix 3-F.

APPENDIX 3-A

CHANGES TO THE ISI OUTAGE PLAN

APPENDIX 3-A

CHANGES TO THE ISI OUTAGE PLAN

DISCRIPTION OF CHANGE (ADDITION OR DELETION):

Delete tube 5-66 from the Steam Generator "C" hot leg Special Interest list of tube areas to be examined as indicated on the attached pages.

REASON FOR CHANGE:

This tube has an indication which was detected during the 2REO2 and 2REO3 outages. MRPC has determined that it is volumetric rather than linear crack-like. It is not necessary or required that it be re-examined at this outage. It's examination at this time would require a probe change and the associated radiation dose.

TECHNICAL BASIS:

An MBM indication was detected at 10H + 19.33 during 2REO2.
A SVI indication was detected at 10H + 21.03 during 2REO4.

SCHEDULE IMPACT:

Shortens schedule.

APPENDIX 3-B

LIST OF EXAMINATION AND DATA ANALYSIS PERSONNEL

APPENDIX 3-B

LIST OF EXAMINATION AND DATA ANALYSIS PERSONNEL

EDDY CURRENT TESTING DATA ACQUISITION PERSONNEL

COMPANY	NAME	ET CERT. LEVEL	ID NO.
BWNT	Blankinship, M.B.	II	B6768
ZETEC	Burris, K.S.	I	B9205
RT	Campbell, A.O.	II	C7897
RT	Canton, P.E.	I	C2176
BWNT	Cecil, W.R.	II	C3697
BWNT	Close, D.R.	I	C1407
BWNT	Colado, L.E.	IIA	C9318
BWNT	Duffield, T.S.	II	D6502
BWNT	Griffin, G.R.	IT	G7081
RT	Hillary, L.M.	II	H3794
ZETEC	Horochiwsky, A.J.	IIA	H4599
ZETEC	Huff, W.A.	II	H3267
RT	Johnson, L.W.	II	J0872
BWNT	Johnson, K.L.	IIA	J6276
RT	Kleinfeld, S.J.	II	K1861
BWNT	Knox, B.L.	II	K6388
BWNT	Kovalesky, T.L.	II	K2858
RT	Lambright, M.L.	II	L4227
BWNT	Lareau, K.S.	IIA	L2157
RT	Largy, C.H.	II	L4692
BWNT	Lee, R.E.	II	L7773
BWNT	Martin, A.C.	IIA	M2421
BWNT	Martin, J.C.	II	M7160
BWNT	Mason, J.R.	II	M8048
BWNT	McMillan, W.P.	II	M9460
BWNT	Morgan, J.A.	I	M8632
BWNT	Munsterman, T.H.	II	M8912
ZETEC	Niemi, K.D.	II	N9369
BWNT	Perkins, W.R.	IIA	P2952
BWNT	Petty, D.R.	II	P2272
BWNT	Quick, J. E.	I	Q1089
RT	Rubio, J.G.	II	R3710
BWNT	Smith, R.S.	II	S2086
BWNT	Taylor, S.C.	I	T3351

RT	Waters, J.R.	I	W1373
BWNT	Wingfield, J.R.	II	W9419

APPENDIX 3-B

LIST OF EXAMINATION AND DATA ANALYSIS PERSONNEL

EDDY CURRENT TESTING DATA ANALYSIS PERSONNEL

COMPANY	NAME	ET CERT. LEVEL	ID NO.
ZETEC	Alspaugh, S.A.	IIA	A9574
ZETEC	Anderson, P.A.	IIA	A9608
BWNT	Barnes, R.M.	III	B0690
BWNT	Bridgeforth, W.D.	IIA	B1055
RT	Caperello, M.M.	IIA	C1115
RT	Carrick, R.M.	IIA	C7651
BWNT	Cooper, L.R.	IIA	C9813
ZETEC	Crittenden, J.	III	C5184
BWNT	Deddens, J.C.	IIA	D7949
BWNT	Downs, M.W.	IIA	D1953
ZETEC	Driessen, N.L.	IIA	D5318
RT	Degas, K.D.	IIA	D4503
BWNT	Everett, B.L.	IIA	E2448
ZETEC	Farenbaugh, N.J.	III	F1726
ZETEC	Ferdinard, M.	IIA	F0075
RT	Funanich, J.J.	III	R3453
ZETEC	Ginther, C.E.	IIA	G5937
ZETEC	Gray, W.A.	III	G9427
RT	Harris, M.L.	III	H2131
RT	Herrera, G.S.	IIA	H3464
BWNT	Korkowski, E.M.	IIA	K7060
ZETEC	Larsen, N.R.	IIA	L8267
RT	Lofgren, R.H.	IIA	L0211
ZETEC	Manley, M.G.	III	M0950
ZETEC	McCelland, D.D.	IIA	M0728
RT	Mchale, K.B.	IIA	M2823
ZETEC	Merriam, S.P.	IIA	M2655
RT	Merriman, R.H.	III	M7006
RT	Miller, M.W.	IIA	M6643
RT	Mitchell, J.F.	IIA	M9459
RT	Mui, C.	IIA	M9082
ZETEC	Nelson, D.L.	III	N7035
ZETEC	Olson, B.D.	IIA	O2461

APPENDIX 3-B

LIST OF EXAMINATION AND DATA ANALYSIS PERSONNEL

EDDY CURRENT TESTING DATA ANALYSIS PERSONNEL

COMPANY	NAME	ET CERT. LEVEL	ID NO.
BWNT	Parrish, J.M.	IIA	P5436
BWNT	Pendergrass, R.A.	IIA	P2201
BWNT	Porter, M.P.	IIA	P1790
BWNT	Richards, T.A.	III	R9615
ZETEC	Roberts, K.R.	IIA	R6319
ZETEC	Schmitz, K.J.	IIA	S5339
BWNT	Schwenn, J.S.	IIA	S1848
BWNT	Story, M.M.	III	S4373
ZETEC	Sumrall, W.O.	IIA	S1008
RT	Thompson, G.R.	III	T1089
ZETEC	Webb, G.L.	IIA	W2218

APPENDIX 3-C

TUBES EXAMINED BY MRPC AT LOCATIONS OTHER THAN TSH

AREAS EXAMINED BY MRPC AT LOCATIONS OTHER THAN TSH STEAM GENERATOR A STP-2 10/95 2RE04					
Row	Column	Leg	Extent 1	Extent 2	Probe
1	21	TEC	10H	11C	5801C
1	46	TEC	10H	11C	5801C
1	80	TEC	10H	11C	5801C
1	95	TEC	10H	11C	5801C
1	112	TEC	10H	11C	5801C
1	118	TEH	02H	02H	6103C
2	21	TEC	10H	11C	5801C
2	46	TEC	10H	11C	5801C
2	80	TEC	10H	11C	5801C
2	95	TEC	10H	11C	5801C
2	112	TEC	10H	11C	5801C
3	9	TEC	17C	18C	6103C
3	21	TEC	10H	11C	5801C
3	46	TEC	10H	11C	5801C
3	80	TEC	10H	11C	5801C
3	95	TEH	02H	02H	6103C
3	95	TEC	10H	11C	5801C
3	112	TEC	10H	11C	5801C
4	21	TEC	10H	11C	5801C
4	46	TEC	10H	11C	5801C
4	80	TEC	10H	11C	5801C
4	95	TEC	10H	11C	5801C
4	95	TEC	12C	13C	6103C
4	112	TEC	10H	11C	5801C
5	18	TEH	08H	07H	6103C
8	17	TEH	02H	02H	6103C
8	83	TEH	09H	09H	6103C
9	32	TEC	22C	TSC	6103C
10	29	TEC	20C	21C	6103C
10	68	TEH	02H	02H	6103C
16	103	TEH	03H	03H	6103C
17	59	TEH	05H	05H	6103C

AREAS EXAMINED BY MRPC AT LOCATIONS OTHER THAN TSH STEAM GENERATOR A STP-2 10/95 2RE04					
Row	Column	Leg	Extent 1	Extent 2	Probe
23	40	TEC	19C	20C	6103C
24	79	TEH	03H	02H	6103C
25	64	TEH	03H	03H	6103C
36	59	TEC	21C	22C	6103C
40	67	TEH	03H	03H	6103C
40	67	TEH	03H	02H	6103C
44	47	TEH	02H	02H	6103C
45	45	TEH	06H	06H	6103C
46	58	TEC	21C	21C	6103C
46	64	TEC	21C	21C	6103C
46	64	TEC	22C	22C	6103C
47	49	TEC	21C	22C	6103C
47	49	TEC	22C	22C	6103C
47	52	TEC	21C	22C	6103C
48	30	TEC	21C	22C	6103C
48	47	TEC	21C	22C	6103C
48	82	TEC	21C	21C	6103C
48	82	TEC	22C	22C	6103C
48	85	TEC	21C	21C	6103C
48	85	TEC	22C	22C	6103C
48	90	TEC	21C	21C	6103C
48	90	TEC	22C	22C	6103C

AREAS EXAMINED BY MRPC AT LOCATIONS OTHER THAN TSH STEAM GENERATOR B STP-2 10/95 2RE04					
Row	Column	Leg	Extent 1	Extent 2	Probe
1	15	TEC	10H	11C	5801C
1	30	TEC	10H	11C	5801C
1	45	TEC	10H	11C	5801C
1	80	TEC	10H	11C	5801C
1	100	TEC	10H	11C	5801C
2	15	TEC	10H	11C	5801C
2	30	TEC	10H	11C	5801C
2	45	TEC	10H	11C	5801C
2	46	TEH	10H	10H	6103C
2	54	TEC	10H	11C	5801C
2	80	TEC	10H	11C	5801C
2	89	TEH	10H	10H	6103C
2	100	TEC	10H	11C	5801C
3	15	TEC	10H	11C	5801C
3	30	TEC	10H	11C	5801C
3	44	TEH	04H	03H	6103C
3	45	TEC	10H	11C	5801C
3	61	TEH	10H	10H	6103C
3	80	TEC	10H	11C	5801C
3	100	TEC	10H	11C	5801C
4	15	TEC	10H	11C	5801C
4	30	TEC	10H	11C	5801C
4	45	TEC	10H	11C	5801C
4	80	TEC	10H	11C	5801C
4	100	TEC	10H	11C	5801C
5	40	TEH	05H	05H	6103C
5	54	TEC	15C	15C	6103C
7	78	TEC	12C	13C	6103C
7	102	TEC	20C	21C	6103C
8	34	TEC	13C	14C	6103C
8	34	TEC	13C	14C	6103C

AREAS EXAMINED BY MRPC AT LOCATIONS OTHER THAN TSH STEAM GENERATOR B STP-2 10/95 2RE04					
Row	Column	Leg	Extent 1	Extent 2	Probe
8	34	TEC	13C	14C	6103C
8	34	TEC	14C	15C	6103C
9	111	TEH	07H	07H	6103C
9	111	TEH	09H	08H	6103C
10	68	TEC	17C	18C	6103C
10	89	TEH	01H	01H	6103C
10	89	TEH	02H	02H	6103C
11	24	TEH	03H	03H	6103C
11	63	TEC	17C	18C	6103C
12	50	TEH	04H	03H	6103C
13	15	TEH	02H	02H	6103C
17	68	TEH	04H	04H	6103C
17	91	TEH	01H	01H	6103C
17	108	TEC	19C	19C	6103C
20	68	TEC	18C	19C	6103C
23	97	TEH	01H	TSH	6103C
23	107	TEH	02H	02H	6103C
24	44	TEH	04H	04H	6103C
27	63	TEH	03H	03H	6103C
28	50	TEH	01H	TSH	6103C
28	112	TEH	02H	TEH	6103C
29	16	TEC	20C	20C	6103C
29	47	TEH	02H	02H	6103C
30	55	TEH	01H	01H	6103C
31	10	TEH	03H	03H	6103C
31	74	TEC	12C	12C	6103C
31	82	TEC	23C	TSC	6103C
32	80	TEH	02H	02H	6103C
33	72	TEC	18C	18C	6103C
35	24	TEH	02H	02H	6103C
37	82	TEH	03H	03H	6103C
38	44	TEH	06H	06H	6103C

AREAS EXAMINED BY MRPC AT LOCATIONS OTHER THAN TSH STEAM GENERATOR B STP-2 10/95 2RE04					
Row	Column	Leg	Extent 1	Extent 2	Probe
38	44	TEC	16C	17C	6103C
39	62	TEC	21C	21C	6103C
39	62	TEC	22C	22C	6103C
40	39	TEH	02H	02H	6103C
40	74	TEH	10H	10H	6103C
41	41	TEH	01H	01H	6103C
41	41	TEH	02H	02H	6103C
41	62	TEC	21C	21C	6103C
41	62	TEC	22C	22C	6103C
45	62	TEC	21C	21C	6103C
45	62	TEC	22C	22C	6103C
46	25	TEC	21C	22C	6103C
46	53	TEC	21C	21C	6103C
46	53	TEC	22C	22C	6103C
47	56	TEC	22C	22C	6103C
48	27	TEC	21C	22C	6103C
48	41	TEC	21C	21C	6103C
48	41	TEC	22C	22C	6103C
48	77	TEC	21C	21C	6103C
48	77	TEC	22C	23C	6103C
48	83	TEC	21C	21C	6103C
48	83	TEC	22C	22C	6103C
48	86	TEC	21C	21C	6103C
48	86	TEC	22C	22C	6103C

AREAS EXAMINED BY MRPC AT LOCATIONS OTHER THAN TSH STEAM GENERATOR C STP-2 10/95 2RE04					
Row	Column	Leg	Extent 1	Extent 2	Probe
3	67	TEH	06H	06H	6103C
4	64	TEH	06H	06H	6103C
10	99	TEC	12C	12C	6103C
10	117	TEH	07H	07H	6103C
11	17	TEC	13C	13C	6103C
11	47	TEH	08H	08H	6103C
11	98	TEH	08H	08H	6103C
14	75	TEH	01H	01H	6103C
15	29	TEH	03H	03H	6103C
15	102	TEC	16C	16C	6103C
17	74	TEH	02H	02H	6103C
18	39	TEH	07H	07H	6103C
18	76	TEH	09H	09H	6103C
19	11	TEC	12C	12C	6103C
22	75	TEH	03H	03H	6103C
22	77	TEH	03H	03H	6103C
25	102	TEH	03H	03H	6103C
25	105	TEH	06H	06H	6103C
30	22	TEC	21C	21C	6103C
34	27	TEC	14C	14C	6103C
34	101	TEC	20C	20C	6103C
35	52	TEC	12C	13C	6103C
38	86	TEH	10H	09H	6103C
39	59	TEC	21C	21C	6103C
39	59	TEC	22C	22C	6103C
42	73	TEC	14C	14C	6103C
42	73	TEC	15C	15C	6103C
42	73	TEC	14C	15C	6103C
44	29	TEC	16C	18C	6103C
44	59	TEC	21C	21C	6103C
44	59	TEC	22C	22C	6103C

AREAS EXAMINED BY MRPC AT LOCATIONS OTHER THAN TSH STEAM GENERATOR C STP-2 10/95 2RE04					
Row	Column	Leg	Extent 1	Extent 2	Probe
45	62	TEC	17C	17C	6103C
46	46	TEC	19C	19C	6103C
47	29	TEC	21C	21C	6103C
47	45	TEC	TSC	TSC	6103C
47	47	TEC	21C	21C	6103C
47	47	TEC	22C	22C	6103C
47	55	TEC	21C	21C	6103C
47	55	TEC	22C	22C	6103C
47	63	TEC	21C	21C	6103C
47	63	TEC	22C	22C	6103C
48	44	TEC	21C	21C	6103C
48	44	TEC	22C	22C	6103C
48	63	TEC	21C	21C	6103C
48	63	TEC	22C	22C	6103C
48	69	TEC	21C	21C	6103C
48	69	TEC	22C	22C	6103C
48	81	TEC	21C	21C	6103C
48	81	TEC	22C	22C	6103C
48	89	TEC	21C	21C	6103C
48	89	TEC	22C	22C	6103C
48	91	TEC	21C	21C	6103C

AREAS EXAMINED BY MRPC AT LOCATIONS OTHER THAN TSH STEAM GENERATOR D STP-2 10/95 2RE04					
Row	Column	Leg	Extent 1	Extent 2	Probe
1	1	TEC	19C	20C	6103C
1	10	TEC	10H	11C	5801C
1	24	TEC	20C	21C	6103C
1	97	TEC	14C	15C	6103C
1	97	TEC	16C	17C	6103C
6	24	TEH	02H	02H	6103C
10	29	TEC	22C	23C	6103C
11	20	TEC	22C	23C	6103C
11	64	TEH	01H	TSH	6103C
12	74	TEC	20C	20C	6103C
12	94	TEC	23C	TSC	6103C
13	7	TEH	01H	TSH	6103C
13	72	TEH	01H	TSH	6103C
15	94	TEH	01H	TSH	6103C
16	94	TEC	17C	17C	6103C
17	19	TEH	01H	TSH	6103C
19	76	TEH	03H	03H	6103C
23	82	TEC	20C	20C	6103C
24	14	TEC	19C	20C	6103C
26	11	TEH	04H	04H	6103C
29	63	TEH	07H	07H	6103C
29	81	TEC	20C	20C	6103C
32	11	TEH	01H	TSH	6103C
32	82	TEH	04H	04H	6103C
33	19	TEC	20C	21C	6103C
34	47	TEH	01H	TSH	6103C
34	81	TEC	12C	12C	6103C
34	81	TEC	11C	12C	6103C
38	82	TEH	04H	04H	6103C
40	59	TEC	21C	21C	6103C
40	59	TEC	22C	22C	6103C

AREAS EXAMINED BY MRPC AT LOCATIONS OTHER THAN TSH STEAM GENERATOR D STP-2 10/95 2RE04					
Row	Column	Leg	Extent 1	Extent 2	Probe
46	71	TEC	21C	21C	6103C
46	71	TEC	22C	22C	6103C
46	87	TEH	02H	TSH	6103C
46	96	TEC	20C	21C	6103C
46	96	TEC	22C	22C	6103C
47	52	TEC	21C	21C	6103C
47	52	TEC	22C	22C	6103C
47	56	TEC	21C	21C	6103C
47	56	TEC	22C	22C	6103C
47	65	TEC	21C	21C	6103C
47	65	TEC	22C	22C	6103C
47	71	TEC	21C	21C	6103C
47	71	TEC	22C	22C	6103C
47	82	TEC	19C	19C	6103C
48	45	TEC	21C	21C	6103C
48	45	TEC	22C	22C	6103C
48	71	TEC	21C	21C	6103C
48	71	TEC	22C	22C	6103C
48	77	TEC	21C	21C	6103C
48	77	TEC	22C	22C	6103C

APPENDIX 3-D

FLAWS WITH TUBE WALL THICKNESS REDUCTION

FLAWS WITH TUBE WALL THICKNESS REDUCTION ALL STEAM GENERATORS STP-2 10/95 2RE04							
Steam Generator	Row	Column	% TW	Indication	Location		Tape Number
S/G A	2	42	12	ODI	05H	+43.54	1
S/G A	3	9	9	ODI	18C	+14.96	60
S/G A	20	73	12	ODI	03H	+1.25	43
S/G A	25	64	-	SAI	03H	+ 0.13	104
S/G A	34	64	15	ODI	19C	+14.24	44
S/G A	34	73	10	ODI	12C	+16.60	43
S/G A	37	64	11	ODI	13C	+4.84	43
S/G A	44	47	-	SAI	02H	+ 0.12	106
S/G A	45	62	11	ODI	AV1	+0.00	44
S/G B	6	115	19	ODI	16C	+24.24	48
S/G B	8	15	14	ODI	16C	+18.45	10
S/G B	8	34	9	ODI	15C	+24.70	6
S/G B	8	34	10	ODI	14C	+17.05	6
S/G B	8	34	13	ODI	15C	+36.06	6
S/G B	8	34	15	ODI	14C	+25.91	6
S/G B	8	34	17	ODI	14C	+9.60	6
S/G B	8	34	19	ODI	14C	+12.77	6
S/G B	8	34	19	ODI	15C	+31.73	6
S/G B	9	87	13	ODI	05H	+28.95	39
S/G B	12	89	18	ODI	09H	+42.83	40
S/G B	14	89	6	ODI	22C	+8.76	40
S/G B	20	68	16	ODI	19C	+15.03	31
S/G B	22	89	13	ODI	05H	+14.56	40
S/G B	27	63	-	SAI	03H	+ 0.00	124
S/G B	29	16	23	ODI	21C	+15.48	11

FLAWS WITH TUBE WALL THICKNESS REDUCTION ALL STEAM GENERATORS STP-2 10/95 2RE04						
Steam Generator	Row	Column	% TW	Indication	Location	Tape Number
S/G B	35	24	-	SAI	02H + 0.00	124
S/G B	37	82	-	SAI	03H + 0.00	124
S/G B	40	55	21	ODI	AV3 +0.00	16
S/G B	40	55	23	ODI	AV2 -0.23	16
S/G B	42	34	17	ODI	18C +6.40	6
S/G B	42	55	17	ODI	AV3 -0.03	16
S/G B	42	55	21	ODI	AV2 +0.00	16
S/G B	44	59	20	ODI	AV2 +0.14	23
S/G B	47	62	11	ODI	AV1 -0.03	24
S/G B	47	62	32	ODI	AV2 +0.00	24
S/G B	47	62	33	ODI	AV3 +0.09	24
S/G C	5	75	28	ODI	01H +13.34	33
S/G C	11	17	16	ODI	13C +23.73	45
S/G C	14	73	22	ODI	16C +41.38	28
S/G C	18	76	15	ODI	02H +30.18	33
S/G C	19	11	29	ODI	12C +1.37	45
S/G C	22	75	-	SAI	03H + 0.07	89
S/G C	30	22	15	ODI	21C +10.78	50
S/G C	41	102	13	ODI	AV1 +0.00	41
S/G C	44	35	12	ODI	AV4 +0.20	1
S/G C	44	59	16	ODI	AV1 -0.09	25
S/G C	45	62	7	ODI	17C +17.37	28
S/G C	47	29	8	ODI	21C +0.13	63
S/G C	48	64	15	ODI	12C +4.51	29
S/G D	5	20	2	ODI	06H +4.73	8

FLAWS WITH TUBE WALL THICKNESS REDUCTION ALL STEAM GENERATORS STP-2 10/95 2RE04							
Steam Generator	Row	Column	% TW	Indication	Location		Tape Number
S/G D	5	20	29	ODI	07H	+20.43	8
S/G D	5	30	17	ODI	17C	+43.00	8
S/G D	6	19	5	ODI	08H	+35.85	7
S/G D	6	19	11	ODI	13C	+1.48	7
S/G D	6	19	11	ODI	13C	+32.92	7
S/G D	11	20	4	ODI	09H	+32.66	7
S/G D	16	72	5	ODI	02H	+2.52	46
S/G D	23	76	6	ODI	19C	+1.97	46
S/G D	23	76	16	ODI	21C	+7.01	46
S/G D	26	11	22	ODI	04H	+23.71	11
S/G D	41	46	18	ODI	AV2	-0.31	13
S/G D	41	46	22	ODI	AV3	-0.09	13
S/G D	43	59	7	ODI	AV4	+0.00	28
S/G D	43	59	12	ODI	AV3	+0.20	28
S/G D	43	59	12	ODI	AV1	-0.09	28
S/G D	43	59	16	ODI	AV2	+0.15	28
S/G D	44	59	15	ODI	AV3	+0.00	29
S/G D	45	58	12	ODI	AV2	+0.00	28
S/G D	45	58	15	ODI	AV3	+0.00	28

APPENDIX 3-E

DINGS AND DENTS

DENTS AND DINGS - ALL STEAM GENERATORS
STP-2 10/95 2RE04

Steam Generator	Row	Column	Indication	Location	Tape Number
S/G A	1	72	DNT	10H +0.85	71
S/G A	1	72	DNT	10H +0.60	1
S/G A	1	114	DNG	08H +37.62	96
S/G A	2	3	DNG	02H +30.93	1
S/G A	2	72	DNT	11C +0.64	71
S/G A	2	81	DNG	10H +15.89	71
S/G A	2	84	DNG	02H +18.32	1
S/G A	3	41	DNG	10H +12.28	65
S/G A	4	41	DNG	10H +14.78	65
S/G A	4	90	DNG	TSC +2.36	71
S/G A	4	90	DNG	10H +11.12	71
S/G A	5	14	DNG	09H +23.58	26
S/G A	7	31	DNG	15C +25.91	6
S/G A	7	91	DNT	AV1 -0.06	56
S/G A	8	31	DNG	10H +2.91	6
S/G A	8	97	DNG	11C +2.35	56
S/G A	8	97	DNT	11C +0.44	56
S/G A	9	18	DNG	09H +34.85	26
S/G A	9	18	DNG	09H +36.18	26
S/G A	9	25	DNG	AV2 +3.52	25
S/G A	9	29	DNG	10H +14.86	6
S/G A	9	85	DNG	04H +14.59	52
S/G A	10	68	DNG	02H +1.25	43
S/G A	12	56	DNG	AV4 +12.64	88
S/G A	14	29	DNG	10H +10.83	6

DENTS AND DINGS - ALL STEAM GENERATORS
STP-2 10/95 2RE04

Steam Generator	Row	Column	Indication	Location	Tape Number
S/G A	16	29	DNG	10H +8.65	6
S/G A	16	103	DNG	02H +28.14	59
S/G A	17	97	DNG	16C +9.05	56
S/G A	19	60	DNG	22C +8.74	40
S/G A	20	62	DNT	09H +0.00	44
S/G A	20	62	DNT	10H -0.73	44
S/G A	22	47	DNG	10H +3.52	33
S/G A	23	64	DNG	14C +2.75	43
S/G A	23	85	DNG	09H +43.47	52
S/G A	24	57	DNG	17C +2.20	33
S/G A	31	40	DNG	19C +9.27	30
S/G A	32	58	DNG	01H +26.20	33
S/G A	33	25	DNT	10H +0.50	6
S/G A	33	79	DNG	13C +23.18	43
S/G A	34	79	DNT	11C +0.40	52
S/G A	40	62	DNG	02H +10.50	43
S/G A	42	36	DNG	20C +4.73	5
S/G A	43	25	DNT	10H +0.47	6
S/G A	48	57	DNG	10H +166.90	33
S/G A	48	58	DNG	AV4 +28.02	33
S/G B	1	79	DNT	03H -0.09	5
S/G B	2	100	DNG	13C +11.95	68
S/G B	2	100	DNG	12C -1.38	68
S/G B	2	100	DNG	13C +31.83	68
S/G B	2	100	DNG	13C +37.92	68

DENTS AND DINGS - ALL STEAM GENERATORS STP-2 10/95 2RE04					
Steam Generator	Row	Column	Indication	Location	Tape Number
S/G B	2	100	DNG	13C +25.74	68
S/G B	2	100	DNG	12C +4.66	68
S/G B	2	100	DNG	12C +10.65	68
S/G B	2	100	DNG	12C +29.00	68
S/G B	2	100	DNG	12C +17.10	68
S/G B	2	100	DNG	12C +23.29	68
S/G B	2	100	DNG	13C +33.26	68
S/G B	4	34	DNG	10H +9.95	53
S/G B	4	101	DNG	10H +6.79	4
S/G B	8	84	DNG	01H +5.17	38
S/G B	9	101	DNG	01H +13.98	44
S/G B	9	102	DNG	10H +30.25	44
S/G B	10	87	DNG	AV3 +11.57	38
S/G B	10	101	DNG	TSC +0.75	45
S/G B	11	24	DNG	05H +40.64	7
S/G B	11	24	DNT	13C -0.46	7
S/G B	13	3	DNG	12C +43.03	11
S/G B	13	3	DNG	04H +2.99	11
S/G B	13	3	DNG	12C +44.19	11
S/G B	15	9	DNG	23C +6.11	10
S/G B	15	9	DNG	TSC +3.29	10
S/G B	18	9	DNG	12C +14.75	11
S/G B	18	15	DNG	17C +44.64	10
S/G B	20	61	DNT	10H +0.32	25
S/G B	23	107	DNT	AV4 +22.39	48

DENTS AND DINGS - ALL STEAM GENERATORS STP-2 10/95 2RE04					
Steam Generator	Row	Column	Indication	Location	Tape Number
S/G B	25	62	DNT	10H +0.41	25
S/G B	26	79	DNG	01H +15.73	41
S/G B	27	63	DNG	04H +24.88	25
S/G B	27	97	DNG	21C +15.36	45
S/G B	28	84	DNG	10H +6.48	39
S/G B	28	112	DNG	09H +38.04	48
S/G B	29	39	DNG	04H +2.99	13
S/G B	29	39	DNG	03H +32.90	13
S/G B	32	82	DNT	11C +0.40	39
S/G B	33	42	DNT	11C +0.44	13
S/G B	33	80	DNG	05H +4.13	39
S/G B	33	80	DNG	22C +1.40	39
S/G B	34	44	DNG	09H +43.37	13
S/G B	35	63	DNG	10H +2.83	24
S/G B	35	64	DNG	12C +42.12	24
S/G B	35	64	DNG	10H +2.55	24
S/G B	35	72	DNG	09H +43.54	39
S/G B	35	72	DNG	12C +43.27	39
S/G B	35	101	DNT	AV4 +26.73	44
S/G B	36	34	DNT	21C +0.09	6
S/G B	38	29	DNG	14C +26.13	6
S/G B	39	38	DNT	11C +0.43	6
S/G B	39	39	DNT	11C +0.44	13
S/G B	40	44	DNG	22C +16.82	13
S/G B	40	44	DNG	22C +15.47	13

DENTS AND DINGS - ALL STEAM GENERATORS STP-2 10/95 2RE04					
Steam Generator	Row	Column	Indication	Location	Tape Number
S/G B	40	44	DNG	22C +14.14	13
S/G B	40	44	DNT	11C +0.44	13
S/G B	40	62	DNG	05H +11.86	99
S/G B	40	62	DNG	06H +5.88	99
S/G B	40	64	DNT	19C +0.43	25
S/G B	40	84	DNT	10H +0.15	39
S/G B	40	101	DNT	10H +0.58	45
S/G B	42	50	DNG	02H +7.34	12
S/G B	42	64	DNG	TSH +7.46	25
S/G B	43	53	DNG	14C +42.61	13
S/G B	43	63	DNG	12C +42.94	24
S/G B	44	58	DNG	15C +1.38	22
S/G B	46	59	DNT	11C +0.38	23
S/G C	6	66	DNG	09H +20.28	28
S/G C	6	66	DNG	12C +21.11	28
S/G C	6	66	DNG	09H +23.24	28
S/G C	6	66	DNG	09H +18.22	28
S/G C	6	66	DNG	09H +22.31	28
S/G C	6	66	DNG	09H +24.35	28
S/G C	6	66	DNG	09H +19.38	28
S/G C	6	66	DNG	09H +22.08	28
S/G C	6	66	DNG	09H +21.44	28
S/G C	7	3	DNT	22C -0.37	45
S/G C	8	39	DNG	10H +34.63	16
S/G C	8	41	DNG	10H +35.56	16

DENTS AND DINGS - ALL STEAM GENERATORS STP-2 10/95 2RE04					
Steam Generator	Row	Column	Indication	Location	Tape Number
S/G C	8	47	DNG	10H +35.33	16
S/G C	8	69	DNG	07H +19.33	28
S/G C	9	14	DNG	10H +36.61	7
S/G C	9	14	DNG	10H +2.11	7
S/G C	10	69	DNG	01H +20.57	28
S/G C	12	47	DNT	21C +17.16	16
S/G C	12	102	DNG	13C +39.10	41
S/G C	13	81	DNG	10H +3.34	33
S/G C	18	14	DNG	22C +10.43	6
S/G C	18	58	DNG	03H +11.87	24
S/G C	18	58	DNG	03H +23.86	24
S/G C	18	58	DNG	03H +17.96	24
S/G C	18	58	DNT	04H -0.12	24
S/G C	19	58	DNG	AV4 +15.94	24
S/G C	19	58	DNG	10H +4.68	24
S/G C	19	60	DNG	10H +5.04	24
S/G C	19	69	DNG	AV4 +15.15	29
S/G C	19	81	DNG	04H +23.33	33
S/G C	19	81	DNG	04H +30.04	33
S/G C	20	14	DNG	14C +43.27	6
S/G C	20	58	DNG	06H +34.91	25
S/G C	20	61	DNG	18C +10.39	28
S/G C	21	41	DNG	17C +37.31	17
S/G C	23	8	DNG	09H +28.55	45
S/G C	23	8	DNT	10H +0.45	45

DENTS AND DINGS - ALL STEAM GENERATORS STP-2 10/95 2RE04					
Steam Generator	Row	Column	Indication	Location	Tape Number
S/G C	23	47	DNT	11C +0.48	17
S/G C	23	52	DNG	09H +19.79	20
S/G C	24	8	DNG	10H +3.08	6
S/G C	24	19	DNG	02H +28.16	6
S/G C	24	58	DNG	04H +3.88	25
S/G C	26	14	DNT	11C +0.60	6
S/G C	26	14	DNT	10H +0.39	6
S/G C	26	105	DNT	10H +0.45	40
S/G C	26	105	DNT	11C +0.41	40
S/G C	27	14	DNT	11C +0.65	45
S/G C	27	14	DNT	10H -0.59	45
S/G C	27	14	DNT	10H +0.54	45
S/G C	27	75	DNG	18C +7.00	33
S/G C	27	96	DNG	TSC +3.43	38
S/G C	27	105	DNT	11C +0.62	41
S/G C	29	19	DNG	10H +11.28	50
S/G C	29	59	DNG	23C +2.42	25
S/G C	29	59	DNG	10H +41.22	25
S/G C	29	59	DNG	22C +13.49	25
S/G C	29	59	DNT	22C -0.52	25
S/G C	29	96	DNT	10H +0.48	38
S/G C	30	73	DNG	10H +10.93	58
S/G C	30	77	DNG	20C +7.41	32
S/G C	30	96	DNG	22C +13.22	39
S/G C	30	96	DNG	21C +1.28	39

DENTS AND DINGS - ALL STEAM GENERATORS
STP-2 10/95 2RE04

Steam Generator	Row	Column	Indication	Location	Tape Number
S/G C	30	96	DNG	21C +13.33	39
S/G C	32	57	DNG	10H +19.83	21
S/G C	33	45	DNG	14C +26.12	17
S/G C	33	59	DNG	10H +12.45	25
S/G C	33	59	DNG	10H +77.56	25
S/G C	33	91	DNG	16C +12.60	39
S/G C	33	102	DNG	10H +58.40	41
S/G C	34	41	DNT	09H -0.43	16
S/G C	34	101	DNT	11C -0.68	40
S/G C	34	101	DNT	10H +0.57	40
S/G C	34	101	DNT	11C +0.41	40
S/G C	35	86	DNG	01H +21.4	39
S/G C	36	64	DNG	16C +41.71	29
S/G C	36	64	DNG	19C +16.20	29
S/G C	36	64	DNG	18C +15.96	29
S/G C	36	64	DNG	16C +12.14	29
S/G C	36	64	DNG	14C +9.68	29
S/G C	36	64	DNG	15C +13.08	29
S/G C	36	64	DNG	16C +18.02	29
S/G C	36	64	DNG	15C +43.30	29
S/G C	36	64	DNG	17C +9.85	29
S/G C	36	64	DNG	17C +21.22	29
S/G C	36	64	DNG	17C +33.51	29
S/G C	36	64	DNG	16C +29.93	29
S/G C	36	64	DNG	14C +21.14	29

DENTS AND DINGS - ALL STEAM GENERATORS STP-2 10/95 2RE04					
Steam Generator	Row	Column	Indication	Location	Tape Number
S/G C	37	86	DNT	11C +0.42	39
S/G C	39	41	DNG	10H +120.38	17
S/G C	39	47	DNG	10H +115.31	17
S/G C	39	102	DNG	20C +8.16	41
S/G C	39	102	DNT	18C -0.28	41
S/G C	40	64	DNG	01H +8.60	29
S/G C	40	68	DNG	16C +34.24	29
S/G C	40	68	DNG	16C +32.50	29
S/G C	40	68	DNG	16C +33.39	29
S/G C	41	19	DNG	07H +30.6	45
S/G C	41	39	DNG	01H +18.4	17
S/G C	42	86	DNG	12C +40.77	38
S/G C	42	86	DNG	21C +0.93	38
S/G C	43	68	DNG	14C +7.79	28
S/G C	43	75	DNG	AV1 +11.12	33
S/G C	44	29	DNT	10H +0.46	50
S/G C	45	29	DNG	10H +1.08	50
S/G C	45	29	DNT	10H +0.71	50
S/G C	45	29	DNT	10H +0.43	50
S/G C	45	62	DNT	11C +0.35	28
S/G C	45	75	DNG	05H +39.06	33
S/G C	46	81	DNG	AV4 +25.07	32
S/G C	48	41	DNG	AV4 -0.15	16
S/G C	48	64	DNG	AV1 +1.38	29
S/G D	1	3	DNG	16C +3.92	68

DENTS AND DINGS - ALL STEAM GENERATORS STP-2 10/95 2RE04						
Steam Generator	Row	Column	Indication	Location		Tape Number
S/G D	7	76	DNG	01H	+2.05	46
S/G D	8	64	DNG	05H	+22.74	72
S/G D	8	64	DNG	05H	+28.74	72
S/G D	10	20	DNG	19C	+10.39	8
S/G D	10	20	DNG	05H	+3.91	8
S/G D	10	24	DNG	20C	+15.63	7
S/G D	13	3	DNG	22C	+2.21	12
S/G D	13	3	DNG	22C	+3.36	12
S/G D	13	51	DNG	01H	+20.02	61
S/G D	13	104	DNG	10H	+3.10	50
S/G D	14	15	DNG	06H	+3.72	7
S/G D	14	19	DNG	01H	+10.84	7
S/G D	14	81	DNG	10H	+53.75	41
S/G D	15	3	DNG	06H	+3.58	12
S/G D	15	19	DNG	01H	+1.58	8
S/G D	15	19	DNG	12C	+44.50	8
S/G D	15	19	DNT	11C	-0.41	8
S/G D	15	111	DNG	10H	+15.05	54
S/G D	16	3	DNG	02H	+2.95	11
S/G D	16	3	DNG	02H	+8.89	11
S/G D	16	3	DNT	10H	+0.39	11
S/G D	16	117	DNT	12C	-0.53	54
S/G D	17	15	DNG	09H	+42.96	8
S/G D	17	117	DNT	12C	-0.49	55
S/G D	18	74	DNG	04H	+9.09	46

DENTS AND DINGS - ALL STEAM GENERATORS
STP-2 10/95 2RE04

Steam Generator	Row	Column	Indication	Location	Tape Number
S/G D	18	74	DNG	04H +8.76	47
S/G D	19	47	DNG	18C +4.62	14
S/G D	23	15	DNT	10H +0.39	8
S/G D	23	36	DNG	10H +6.01	7
S/G D	23	57	DNG	TSH +2.39	22
S/G D	23	72	DNG	TSH +2.46	47
S/G D	23	111	DNG	09H +33.47	54
S/G D	24	47	DNG	02H +11.69	13
S/G D	24	94	DNG	07H +13.95	50
S/G D	25	24	DNT	01H +0.67	8
S/G D	27	14	DNT	10H +0.43	7
S/G D	27	42	DNG	01H +7.79	14
S/G D	27	42	DNG	01H +8.86	14
S/G D	27	42	DNG	01H +19.25	14
S/G D	27	42	DNT	11C -0.72	14
S/G D	27	42	DNT	10H +0.51	14
S/G D	27	46	DNG	14C +4.29	13
S/G D	29	19	DNT	11C +0.48	8
S/G D	30	11	DNG	12C +41.72	11
S/G D	30	14	DNT	10H +0.45	8
S/G D	30	15	DNT	10H +0.07	7
S/G D	31	36	DNG	05H +32.34	7
S/G D	31	51	DNG	11C +7.88	13
S/G D	31	57	DNG	TSC +6.31	60
S/G D	31	57	DNT	11C +0.48	60

DENTS AND DINGS - ALL STEAM GENERATORS STP-2 10/95 2RE04					
Steam Generator	Row	Column	Indication	Location	Tape Number
S/G D	34	15	DNG	20C +9.24	7
S/G D	34	64	DNT	10H +0.64	35
S/G D	35	24	DNT	11C +0.47	8
S/G D	36	15	DNG	16C +3.36	7
S/G D	36	15	DNG	16C +3.55	7
S/G D	36	15	DNG	20C +11.52	7
S/G D	36	15	DNG	16C +2.65	7
S/G D	38	19	DNT	11C +0.36	7
S/G D	39	24	DNT	10H +0.42	8
S/G D	40	24	DNG	12C +30.99	7
S/G D	40	24	DNG	12C +27.69	7
S/G D	40	24	DNT	11C -0.69	7
S/G D	40	30	DNG	17C +16.30	7
S/G D	40	76	DNT	10H +0.44	34
S/G D	41	24	DNG	12C +37.25	8
S/G D	41	24	DNT	11C -0.40	8
S/G D	41	42	DNT	04H +0.00	13
S/G D	42	24	DNT	11C -0.65	7
S/G D	42	66	DNG	05H +4.42	35
S/G D	43	24	DNT	10H +0.33	8
S/G D	43	24	DNT	11C -0.54	8
S/G D	43	36	DNG	15C +24.72	7
S/G D	43	100	DNT	AV4 +0.00	50
S/G D	44	24	DNT	11C +0.39	7
S/G D	44	24	DNT	11C -0.72	7

DENTS AND DINGS - ALL STEAM GENERATORS STP-2 10/95 2RE04					
Steam Generator	Row	Column	Indication	Location	Tape Number
S/G D	44	72	DNG	12C +41.24	35
S/G D	45	24	DNT	11C +0.56	8
S/G D	45	24	DNT	11C -0.56	8
S/G D	46	24	DNT	11C +0.26	7
S/G D	46	24	DNT	11C -0.81	7
S/G D	46	72	DNG	12C +32.25	35
S/G D	47	81	DNG	AV4 +27.21	34
S/G D	47	81	DNT	10H +0.38	34
S/G D	47	82	DNG	AV4 +26.94	42

APPENDIX 3-F

OWNER'S REPORT FOR INSERVICE INSPECTIONS
NIS-1 FORM

FORM NIS-1 OWNER'S REPORT FOR INSERVICE INSPECTIONS
As required by the Provisions of the ASME Code Rules

1. Owner Houston Lighting & Power Company; Electric Tower; P.O. Box 1700; Houston, Texas 77001
(Name and Address of Owner)

2. Plant South Texas Project Electric Generating Station; P.O. Box 289; Wadsworth, Texas 77483
(Name and Address of Plant)

3. Plant Unit 2 4. Owner and Certificate of Authorization (if required) N.A.

5. Commercial Service Date 06/19/89 6. National Board Number for Unit N.A.

7. Components Inspected **ASME Code Class 1 (IWB) Items - Steam Generator Tubes**

Component or Appurtenance	Manufacture or Installer	Manufacturer or Installer Serial No.		National Board No.
Steam Generator 2A	Westinghouse (M)	2151		29
Steam Generator 2B	Westinghouse (M)	2152		30
Steam Generator 2C	Westinghouse (M)	2153		31
Steam Generator 2D	Westinghouse (M)	2154		32

HL&P by A C McIntyre Date 1-15-96 A. C. McIntyre

Arkwright Mutual Insurance Co. by B. R. Russell, ANII Date 1-18-96

FORM NIS-1 (Back)

8. Examination Dates 10-16-95 to 10-26-95 9. Inspection Interval from 6-19-89 to 10-19-00

10. Abstract of Examinations. Include a list of examinations and a statement concerning status of work required for current interval. (ASME Code Class 1 (IWB) Items - Steam Generator Tubes)
See Section 3.4 of the 2RE04 Inservice Inspection Summary Report for Welds, Steam Generator Tubing, and Component Supports.

11. Abstract of Conditions Noted.
See Section 3.5 of the 2RE04 Inservice Inspection Summary Report for Welds, Steam Generator Tubing, and Component Supports.

12. Abstract of Corrective Measures Recommended and Taken.
See Section 3.5 of the 2RE04 Inservice Inspection Summary Report for Welds, Steam Generator Tubing, and Component Supports.

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

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

Date Jan 15 1996 Signed Houston Lighting & Power Co. By A C McIntyre
Owner

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Texas and employed by Arkwright Mutual Insurance Co. of Norwood, Mass have inspected the components described in this Owner's Report during the period 10-16-95 to 10-26-95, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the inspection plan and as required by the ASME Code, Section XI.

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

B Russell Commissions Tex 826
Inspector's Signature National Board, State, Province, and Endorsements
B. R. Russell

Date 1-18- 1996

4.0 COMPONENT SUPPORT EXAMINATIONS

4.1 Introduction

ISI of Class 1, 2, and 3 component supports and Class 3 integral attachments of STPEGS-2 was performed between August 8, 1995 and October 24, 1995. These examinations constitute the fourth ISI (the second ISI of the second period) of the first inspection interval for the Component Supports Examination Program for STPEGS-2.

This Section of the Summary Report documents the examinations of component supports performed by HL&P QC and contractor NDE personnel in accordance with the following documents:

(1) HL&P Specification 5U036JS0004, "Inservice Inspection Examination of Component Supports of South Texas Project Electric Generating Station, Unit 2, First Inspection Interval",

(2) "Examination Plan for the 1995 - 2RE04 Inservice Inspection of Welds and Component Supports at the South Texas Project Electric Generating Station, Unit 2 ", including changes made during the outage (Outage Plan).

The HL&P Specification provides a detailed description of the rules for exemption and selection of Class 1, 2, and 3 component supports for ISI. The 1995 Examination Plan is an individual Outage Plan for implementing ISI component support examinations as designated in the HL&P Specification.

4.2 Scope of Examinations

A total of seventy-nine (79) component supports were visually examined during 2RE04.

Class 1

Seven (7) Class 1 piping supports and three (3) Class 1 equipment support were examined in the following systems:

	Piping	Equipment
Chemical & Volume Control (CV)	1	0
Reactor Coolant (RC)	4	3
Residual Heat Removal (RH)	2	0

Class 2

Twenty-five (25) Class 2 piping supports and two (2) Class 2 equipment support were examined in the following systems:

	Piping	Equipment
Auxiliary Feedwater (AF)	2	0
Containment Spray (CS)	2	0
Feedwater (FW)	1	0
Main Steam (MS)	1	0
Residual Heat Removal (RH)	6	2
Safety Injection (SI)	13	0

Class 3

Thirty-six (36) Class 3 piping supports and six (6) Class 3 equipment supports were examined in the following systems:

	Piping	Equipment
Auxiliary Feedwater (AF)	6	1
Component Cooling (CC)	25	1
Diesel Generator Jacket Water (JW)	0	1
Diesel Generator Lube Oil (LU)	0	2
Diesel Oil (DO)	0	1
Essential Cooling Water (EW)	5	0

A complete list of component supports examined during 2RE04 is contained in Appendix 4-A.

These examinations constitute the following percentages of completion for Class 1, 2, and 3 component supports:

	2RE04	Cumulative (1st Interval)
Class 1(IWF)	**12%**	**46%**
Class 2(IWF)	**12%**	**51%**
Class 3(IWF)	**14%**	**53%**

4.3 Personnel and Procedures

4.3.1 Personnel Qualifications

Component supports were visually examined (VT-3 and VT-4) by HL&P QC and contractor NDE personnel. HL&P NDE personnel were certified in accordance with ASME Section XI (IWA-2300) and HL&P Nondestructive Examination Procedure 0PQP05-ZA-0001 (Rev. 0), "Qualification and Certification of Nondestructive Examination Personnel". Contractor NDE personnel were certified in accordance with ASME Section XI (IWA-2300) and their employer's written practice, which was approved by HL&P. A listing of the personnel who performed visual examinations of component supports, including their certification level, is included in Appendix 4-B.

4.3.2 Examination Procedure

Visual (VT-3 and VT-4) examinations of component supports were performed in accordance with 0PQP05-ZA-0023 (Rev. 0 or Rev. 1, as applicable), "Visual Examination of Component Supports for ASME XI Inservice Inspection".

4.4 Summary of Examinations

Sixty-eight (68) piping supports and eleven (11) equipment supports were examined during 2RE04 as shown in Appendix 4-A.

4.4.1 Examination Results and Corrective Actions

One relevant condition was found as shown in Table 4-1. The support was analyzed to substantiate its integrity for its intended service and found to be acceptable. Therefore, no additional examinations (sample expansion) were required. The support was reworked, including replacement of some portions, and then re-examined with no relevant conditions found.

Table 4-1
Summary of Component Support Visual Indication Disposition

Component ID	Condition	CR No.	Disposition
SI-2105-RR24	Rigid Restraint: strut clamp was rotated and paddle plate was bent	95-11585	Rework (Completed)

4.4.2 Additional and Successive Examinations

The results of the visual examinations of component supports performed during 2RE04 did not require that any additional examinations (IWF-2430) be performed or any successive examinations (IWF-2420) be scheduled.

4.5 Certification of Inspections

Section XI NIS-1 forms, "Owner's Report for Inservice Inspections", have been prepared to certify the STPEGS-2 component support ISI examinations described in this section of the Summary Report. The STPEGS-2 component support ISI examinations have been certified by our ANII, Arkwright Mutual Insurance Company, on the NIS-1 forms included in Appendix 4-C.

APPENDIX 4-A

SUMMARY OF EXAMINATIONS

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION UNIT 2
INSERVICE INSPECTION REPORT - 2RF04 (SUPPORTS)
FIRST INTERVAL, SECOND PERIOD, SECOND OUTAGE (95RF)
CLASS 1 SECTION XI COMPLETE COMPONENTS

CHEMICAL&VOLUME CONTROL 1

SUMMARY NUMBER	EXAMINATION AREA IDENTIFICATION	ASME SEC. XI CATGY ITEM NO	EXAM METHOD	PROCEDURE	NOR EC	NOG EM	OTH ER	REMARKS **CALIBRATION BLOCK**
	2-CV-2121-BB1-B1A1							
100600	CV-2121-HS5006 RR	PIPING-1 -	VT-3	ZA-0023 R1	X	-	-	

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION UNIT 2
INSERVICE INSPECTION REPORT - 2RE04 (SUPPORTS)
FIRST INTERVAL, SECOND PERIOD, SECOND OUTAGE (95RF)
CLASS 1 SECTION XI COMPLETE COMPONENTS

REACTOR COOLANT 1

SUMMARY NUMBER	EXAMINATION AREA IDENTIFICATION	ASME SEC. XI CATGY ITEM NO	EXAM METHOD	PROCEDURE	NOR CE	GEN OM	OTH ER	REMARKS **CALIBRATION BLOCK**
	4-RC-2123-BB1-D							
107500	RC-2123-HL5005	PIPING-1	VT-3	ZA-0023 R1	X	-	-	
	RR	-						
107600	RC-2123-HL5006	PIPING-1	VT-3	ZA-0023 R1	X	-	-	
	RR	-						
	2-RC-2419-BB1-A-A1							
111300	RC-2419-HS5006	PIPING-1	VT-3	ZA-0023 R1	X	-	-	EXAMINED WHEN FILLED.
	SH-V	-	VT-4	ZA-0023 R1	X	-	-	
	2-RC-2419-BB1-B-A1							
111400	RC-2419-HS5001	PIPING-1	VT-3	ZA-0023 R1	X	-	-	EXAMINED WHEN FILLED.
	SH-V	-	VT-4	ZA-0023 R1	X	-	-	

RESIDUAL HEAT REMOVAL 1

SUMMARY NUMBER	EXAMINATION AREA IDENTIFICATION	ASME SEC. XI CATGY ITEM NO	EXAM METHOD	PROCEDURE	NOR CEC	GE OM	OTH ER	REMARKS **CALIBRATION BLOCK**
	12-RH-2201-BB1-A							
112200	RH-2201-RR05 RR	PIPING-1 -	VT-3	ZA-0023 R1	X	-	-	
	12-RH-2201-BB1-E							
112900	RH-2201-HL5004 RR	PIPING-1 -	VT-3	ZA-0023 R1	X	-	-	

REACTOR COOLANT 1

SUMMARY NUMBER	EXAMINATION AREA IDENTIFICATION	ASME SEC. XI CATGY ITEM NO	EXAM METHOD	PROCEDURE	NOREC	GEOM	OTHER	REMARKS **CALIBRATION BLOCK**
	1R112NPZ101A							
116900	PRU2 RC PRES UPPR	EQUIP-1 -	VT-3	ZA-0023 R1	X	-	-	PRU2 IS THE SUPPORT IMMEDIATELY CLOCKWISE (CW) FROM PRU1 AS VIEWED FROM ABOVE. PRU1 IS THE UPPER PRESSURIZER SUPPORT LOCATED NEAREST THE RPV. REF. DWG. NOS.: 1C01-9-S-1532 AND 0957-00010.
	1R132NPP101B							
120300	RPC2B RC PUMP COL	EQUIP-1 -	VT-3	ZA-0023 R1	X	-	-	RPC2B IS LOCATED IMMEDIATELY CLOCKWISE (CW) FROM RPC1B AS VIEWED FROM ABOVE. RPC1B IS THE REACTOR COOLANT PUMP SUPPORT COLUMN NEAREST THE STEAM GENERATOR SUPPORT COLUMN ON S/G 101B. REF. DWG. NO.: 0957-00002.
120400	RPC3B RC PUMP COL	EQUIP-1 -	VT-3	ZA-0023 R1	X	-	-	RCP3B IS LOCATED IMMEDIATELY CLOCKWISE (CW) FROM RPC2B AS VIEWED FROM ABOVE. REF. DWG. NO.: 0957-00003.

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION UNIT 2
INSERVICE INSPECTION REPORT - 2RE04 (SUPPORTS)
FIRST INTERVAL, SECOND PERIOD, SECOND OUTAGE (95RF)
CLASS 2 SECTION XI COMPLETE COMPONENTS

AUXILIARY FEEDWATER 2

SUMMARY NUMBER	EXAMINATION AREA IDENTIFICATION	ASME SEC. XI CATGY ITEM NO	EXAM METHOD	PROCEDURE	NOR EC	GEO M	OTHER R	REMARKS **CALIBRATION BLOCK**
	B-AF-2012-GA2-G							
205800	AF-2012-HL5022 RR	PIPING-2 -	VT-3	ZA-0023 R1	X	-	-	
205900	AF-2012-HL5010 RR	PIPING-2 -	VT-3	ZA-0023 R1	X	-	-	

CONTAINMENT SPRAY 2

SUMMARY NUMBER	EXAMINATION AREA IDENTIFICATION	ASME SEC. XI CATGY ITEM NO	EXAM METHOD	PROCEDURE	NOREC	GOM	OTHER	REMARKS **CALIBRATION BLOCK**
	8-CS-2302-PB2-B							
214400	CS-2302-HL5002 RR	PIPING-2 -	VT-3	ZA-0023 R0	X	-	-	
214500	CS-2302-HL5003 RR	PIPING-2 -	VT-3	ZA-0023 R0	X	-	-	

FEED WATER 2

SUMMARY NUMBER	EXAMINATION AREA IDENTIFICATION	ASME SEC. XI CATGY ITEM NO	EXAM METHOD	PROCEDURE	NOR CEC	GEO MEM	OTH ER	REMARKS **CALIBRATION BLOCK**
	18-FW-2016-GA2-F							
22D400	FW-2016-HL5002 RR	PIPING-2 -	VT-3	ZA-0023 R1	X	-	-	

MAIN STEAM 2

SUMMARY NUMBER	EXAMINATION AREA IDENTIFICATION	ASME SEC. XI CATGY ITEM NO	EXAM METHOD	PROCEDURE	N O R E C	G E O M	O T H E R	REMARKS **CALIBRATION BLOCK**
	30-MS-2003-GA2-F							
226300	MS-2003-HL5002 RR	PIPING-2 -	VT-3	ZA-0023 R1	X	-	-	

RESIDUAL HEAT REMOVAL 2

SUMMARY NUMBER	EXAMINATION AREA IDENTIFICATION	ASME SEC. XI CATGY ITEM NO	EXAM METHOD	PROCEDURE	N O R E C	G E O M	O T H E R	REMARKS **CALIBRATION BLOCK**
	12-RH-2103-KB2-H							
229700	RH-2103-HL5004 RR	PIPING-2 -	VT-3	ZA-0023 R1	X	-	-	
	8-RH-2204-KB2-F							
236300	RH-2204-HL5011 GUIDE	PIPING-2 -	VT-3	ZA-0023 R1	X	-	-	
	8-RH-2205-KB2-A							
236900	RH-2205-HL5007 SH-V	PIPING-2 -	VT-3 VT-4	ZA-0023 R0 ZA-0023 R0	X X	- -	- -	EXAMINED WHEN FILLED.
	8-RH-2205-KB2-C							
237400	RH-2205-RR05 RR	PIPING-2 -	VT-3	ZA-0023 R0	X	-	-	
237500	RH-2205-RR06 RR	PIPING-2 -	VT-3	ZA-0023 R0	X	-	-	
	8-RH-2205-KB2-D							
237800	RH-2205-RR04 RR	PIPING-2 -	VT-3	ZA-0023 R0	X	-	-	

SAFETY INJECTION 2

SUMMARY NUMBER	EXAMINATION AREA IDENTIFICATION	ASME SEC. XI CATGY ITEM NO	EXAM METHOD	PROCEDURE	NOR EXC	GEN OMI	OTH ER	REMARKS **CALIBRATION BLOCK**
	24-SI-2101-UB2-A							
243900	SI-2101-HL5026 RR	PIPING-2	VT-3 -	ZA-0023 R0	X	-	-	
	16-SI-2101-UB2-AE							
245600	SI-2101-HL5004 RR	PIPING-2	VT-3 -	ZA-0023 R0	X	-	-	
	12-SI-2101-UB2-AB							
249600	SI-2101-HL5013 RR	PIPING-2	VT-3 -	ZA-0023 R0	X	-	-	
249700	SI-2101-RR26 RR	PIPING-2	VT-3 -	ZA-0023 R0	X	-	-	
	8-SI-2105-KB2-B							
255500	SI-2105-RH01 RR	PIPING-2	VT-3 -	ZA-0023 R0	X	-	-	
	8-SI-2105-KB2-E							
255800	SI-2105-RR21 RR	PIPING-2	VT-3 -	ZA-0023 R1	X	-	-	
	8-SI-2105-KB2-F							
255900	SI-2105-RR23 RR	PIPING-2	VT-3 -	ZA-0023 R1	X	-	-	

SAFETY INJECTION 2

SUMMARY NUMBER	EXAMINATION AREA IDENTIFICATION	ASME SEC. XI CATGY ITEM NO	EXAM METHOD	PROCEDURE	NOR EC	OGE OM	OTH ER	REMARKS **CALIBRATION BLOCK**
	8-SI-2105-KB2-F							
256000	SI-2105-RR24 RR	PIPING-2	VT-3 -	ZA-0023 R1	X	-	-	STRUT CLAMP WAS ROTATED AND PADDLE PLATE WAS BENT. CR # 95-11585 WAS INITIATED BY QC NDE GROUP. SUPPORT WAS DETERMINED TO BE OPERABLE BY ENGR. EVALUATION AND NO ADDITIONAL EXAMS WERE REQUIRED. SUPPORT WAS REWORKED AND REEXAMINED WITH NO RELEVANT CONDITIONS.
256200	SI-2105-RR22 RR	PIPING-2	VT-3 -	ZA-0023 R1	X	-	-	
	8-SI-2105-KB2-G							
256300	SI-2105-RR25 RR	PIPING-2	VT-3 -	ZA-0023 R1	X	-	-	
	8-SI-2105-KB2-N							
257300	SI-2105-RH35 SLIDE-S	PIPING-2	VT-3 -	ZA-0023 R1	X	-	-	
	2-SI-2139-DB2-C-A1							
278500	SI-2139-HF5003 GUIDE	PIPING-2	VT-3 -	ZA-0023 R0	X	-	-	
278600	SI-2139-HF5004 GUIDE	PIPING-2	VT-3 -	ZA-0023 R0	X	-	-	

RESIDUAL HEAT REMOVAL 2

SUMMARY NUMBER	EXAMINATION AREA IDENTIFICATION	ASME SEC. XI CATGY ITEM NO	EXAM METHOD	PROCEDURE	NOR CEC OEM OTH ER	REMARKS **CALIBRATION BLOCK**
	2R162NHX101A					
283100	RHU2A RH HTX SUPT	EQUIP-2 -	VT-3	ZA-0023 R1	X - -	RHU2A IS THE SHORTER UPPER SUPPORT ON RHR HX 101A. REF. DWG. NO.: 3C01-9-S-1600.
283200	RHX1A RH HTX SUPT	EQUIP-2 -	VT-3	ZA-0023 R1	X - -	RHX1A IS THE SINGLE BASE SUPPORT ON RHR HX 101A. REF. DWG. NO.: 3C01-1-C-1569.

AUXILIARY FEEDWATER 3

SUMMARY NUMBER	EXAMINATION AREA IDENTIFICATION	ASME SEC. XI CATGY ITEM NO	EXAM METHOD	PROCEDURE	NOR EXAM	OG EXAM	OTHER EXAM	REMARKS **CALIBRATION BLOCK**
	4-AF-2047-GA3-Q							
313200	AF-2047-HL5013 RR	PIPING-3	VT-3 -	ZA-0023 R0	X	-	-	
	3-AF-2086-GA3-A							
315100	AF-2086-HL5001 GUIDE	PIPING-3	VT-3 -	ZA-0023 R0	X	-	-	
315200	AF-2086-HL5002 GUIDE	PIPING-3	VT-3 -	ZA-0023 R0	X	-	-	
	1.5-AF-2086-CA3-AA01							
318700	AF-2086-HF5002 GUIDE	PIPING-3	VT-3 -	ZA-0023 R0	X	-	-	
318800	AF-2086-HF5003 U-BOLT	PIPING-3	VT-3 -	ZA-0023 R0	X	-	-	
	1.5-AF-2086-CA3-BA01							
318900	AF-2086-HF5004 GUIDE	PIPING-3	VT-3 -	ZA-0023 R0	X	-	-	

COMPONENT COOLING 3

SUMMARY NUMBER	EXAMINATION AREA IDENTIFICATION	ASME SEC. XI CATGY ITEM NO	EXAM METHOD	PROCEDURE	NOREC	GEOM	OTHER	REMARKS **CALIBRATION BLOCK**
	20-CC-2103-WA3-D							
325800	CC-2103-HL5006 GUIDE	PIPING-3	VT-3 -	ZA-0023 R0	X	-	-	
	20-CC-2103-WA3-E							
325900	CC-2103-HL5007 GUIDE	PIPING-3	VT-3 -	ZA-0023 R0	X	-	-	
	20-CC-2103-WA3-F							
326000	CC-2103-HL5010 GUIDE	PIPING-3	VT-3 -	ZA-0023 R1	X	-	-	
	20-CC-2106-WA3-A							
326100	CC-2106-HL5009 RR	PIPING-3	VT-3 -	ZA-0023 R1	X	-	-	
	16-CC-2106-WA3-C							
334200	CC-2106-HL5010 RR	PIPING-3	VT-3 -	ZA-0023 R1	X	-	-	
334300	CC-2106-HL5018 RR	PIPING-3	VT-3 -	ZA-0023 R1	X	-	-	
334400	CC-2106-RR05 RR	PIPING-3	VT-3 -	ZA-0023 R1	X	-	-	

COMPONENT COOLING 3

SUMMARY NUMBER	EXAMINATION AREA IDENTIFICATION	ASME SEC. XI CATGY ITEM NO	EXAM METHOD	PROCEDURE	NOR CEC	GEN OME	OTH ER	REMARKS **CALIBRATION BLOCK**
	16-CC-2106-WA3-D							
334600	CC-2106-RR06 RR	PIPING-3 -	VT-3	ZA-0023 R1	X	-	-	
	16-CC-2106-WA3-E							
334800	CC-2106-HL5006 RR	PIPING-3 -	VT-3	ZA-0023 R1	X	-	-	
	16-CC-2106-WA3-G							
335000	CC-2106-HL5013 RR	PIPING-3 -	VT-3	ZA-0023 R1	X	-	-	
335100	CC-2106-RH12 RR	PIPING-3 -	VT-3	ZA-0023 R1	X	-	-	
335200	CC-2106-RH13 RR	PIPING-3 -	VT-3	ZA-0023 R1	X	-	-	
	16-CC-2106-WA3-H							
335400	CC-2106-HL5002 RR	PIPING-3 -	VT-3	ZA-0023 R1	X	-	-	
335500	CC-2106-HL5014 RR	PIPING-3 -	VT-3	ZA-0023 R1	X	-	-	

COMPONENT COOLING 3

SUMMARY NUMBER	EXAMINATION AREA IDENTIFICATION	ASME SEC. XI CATGY ITEM NO	EXAM METHOD	PROCEDURE	NOREC	GEOM	OTHER	REMARKS **CALIBRATION BLOCK**
	16-CC-2106-WA3-H							
335600	CC-2106-HL5015 RR	PIPING-3 -	VT-3	ZA-0023 R1	X	-	-	
335700	CC-2106-RR14 RR	PIPING-3 -	VT-3	ZA-0023 R1	X	-	-	
	16-CC-2106-WA3-J							
335900	CC-2106-HL5001 SH-V	PIPING-3 -	VT-3 VT-4	ZA-0023 R1 ZA-0023 R1	X X	- -	- -	EXAMINED WHEN FILLED.
336000	CC-2106-RR17 RR	PIPING-3 -	VT-3	ZA-0023 R1	X	-	-	
336100	CC-2106-RR18 RR	PIPING-3 -	VT-3	ZA-0023 R1	X	-	-	
336200	CC-2106-RR19 RR	PIPING-3 -	VT-3	ZA-0023 R1	X	-	-	
	14-CC-2111-WA3-C							
344200	CC-2111-HL5002 SH-V	PIPING-3 -	VT-3 VT-4	ZA-0023 R0 ZA-0023 R0	X X	- -	- -	EXAMINED WHEN FILLED.

COMPONENT COOLING 3

SUMMARY NUMBER	EXAMINATION AREA IDENTIFICATION	ASME SEC. XI CATGY ITEM NO	EXAM METHOD	PROCEDURE	NOREC	GEOM	OTHER	REMARKS **CALIBRATION BLOCK**
	14-CC-2120-WA3-C							
345300	CC-2120-RR02 RR	PIPING-3 -	VT-3	ZA-0023 R0	X	-	-	
345400	CC-2120-RR04 RR	PIPING-3 -	VT-3	ZA-0023 R0	X	-	-	
	14-CC-2120-WA3-D							
345500	CC-2120-RR01 RR	PIPING-3 -	VT-3	ZA-0023 R0	X	-	-	
	10-CC-2115-WA3-W							
355400	CC-2115-HL5002 GUIDE	PIPING-3 -	VT-3	ZA-0023 R1	X	-	-	

ESSENTIAL COOLING WATER 3

SUMMARY NUMBER	EXAMINATION AREA IDENTIFICATION	ASME SEC. XI CATGY ITEM NO	EXAM METHOD	PROCEDURE	NOR EC	GEO MR	OTH ER	REMARKS **CALIBRATION BLOCK**
	6-EW-2107-WT3-A							
417200	EW-2107-HL5006 RR	PIPING-3	VT-3	ZA-0023 R0	X	-	-	
	6-EW-2125-WT3-A1							
418000	EW-2125-HL5006 GUIDE	PIPING-3	VT-3	ZA-0023 R0	X	-	-	
418100	EW-2125-HL5007 GUIDE	PIPING-3	VT-3	ZA-0023 R0	X	-	-	
	6-EW-2125-WT3-AC							
418200	EW-2125-HL5008 GUIDE	PIPING-3	VT-3	ZA-0023 R0	X	-	-	
	6-EW-2128-WT3-C							
419400	EW-2128-HL5003 RR	PIPING-3	VT-3	ZA-0023 R0	X	-	-	

AUXILIARY FEEDWATER 3

SUMMARY NUMBER	EXAMINATION AREA IDENTIFICATION	ASME SEC. XI CATGY ITEM NO	EXAM METHOD	PROCEDURE	NOR CEC	GEN OMI	OTH ER	REMARKS **CALIBRATION BLOCK**
	3S142MPA03							
427100	AFM1C AF MTR PUMP	EQUIP-3 -	VT-3	ZA-0023 R0	X	-	-	AFM1C IS THE SINGLE BASE SUPPORT ON AF MOTOR DRIVEN PUMP 03. REF. DWG. NO.: 3M01-9-C-4145.

COMPONENT COOLING 3

SUMMARY NUMBER	EXAMINATION AREA IDENTIFICATION	ASME SEC. XI CATGY ITEM NO	EXAM METHOD	PROCEDURE	NOR CEC	OGE OME	OTH ORE	REMARKS **CALIBRATION BLOCK**
	3R202NHX201A							
428700	CCX2A CC CLG HTX	EQUIP-3 -	VT-3	ZA-0023 R1	X	-	-	CCX2A IS THE SUPPORT LOCATED IN THE MIDDLE OF CCW HX 201A. REF. DWG. NO.: 3M01-9-C-4014.

DIESEL JACKET WATER 3

SUMMARY NUMBER	EXAMINATION AREA IDENTIFICATION	ASME SEC. XI CATGY ITEM NO	EXAM METHOD	PROCEDURE	NOR	GEO	OTHER	REMARKS **CALIBRATION BLOCK**
	3Q152MSA0134							
432200	JWS1A JW STND PIPE	EQUIP-3 -	VT-3	ZA-0023 R0	X	-	-	JWS1A IS THE SINGLE BASE SUPPORT ON JW STAND PIPE 0134.

DIESEL LUBE OIL 3

SUMMARY NUMBER	EXAMINATION AREA IDENTIFICATION	ASME SEC. XI CATGY ITEM NO	EXAM METHOD	PROCEDURE	NOR	GEO	OTH	REMARKS **CALIBRATION BLOCK**
	30152MHX0136							
4333DD	LHX1A LU HEAT EXCH	EQUIP-3 -	VT-3	ZA-0023 R0	X	-	-	LHX1A IS THE SUPPORT CLOSEST TO THE ENGINE ON LU HX 0136.
4334DD	LHX2A LU HEAT EXCH	EQUIP-3 -	VT-3	ZA-0023 R0	X	-	-	LHX2A IS THE REMAINING SUPPORT ON LU HX 0136.

DIESEL OIL 3

SUMMARY NUMBER	EXAMINATION AREA IDENTIFICATION	ASME SEC. XI CATGY ITEM NO	EXAM METHOD	PROCEDURE	N O R C	G E O M	O T H E R	REMARKS **CALIBRATION BLOCK**
	30152MTF0137							
436600	DOST1A DO STG TANK	EQUIP-3 -	VT-3	ZA-0023 01	X	-	-	DOST1A IS THE SINGLE BASE SUPPORT ON DO STORAGE TANK 0137. REF. DWG. NOS.: 0226-01025 AND 3D05-9-C-5019.

APPENDIX 4-B

PERSONNEL

APPENDIX 4-B

PERSONNEL

Name	Company	Level
S. K. Hubbard	HL&P	III
L. D. Spiess	HL&P	II
C. D. Suhler	HL&P	II
D. Garcia	SSI	II
A. J. King	SSI	II

APPENDIX 4-C

OWNER'S REPORT FOR INSERVICE INSPECTIONS
NIS-1 FORMS

FORM NIS-1 OWNER'S REPORT FOR INSERVICE INSPECTIONS
As required by the Provisions of the ASME Code Rules

1. Owner Houston Lighting & Power Company; Electric Tower; P.O. Box 1700; Houston, Texas 77001
(Name and Address of Owner)

2. Plant South Texas Project Electric Generating Station; P.O. Box 289; Wadsworth, Texas 77483
(Name and Address of Plant)

3. Plant Unit 2 4. Owner and Certificate of Authorization (if required) N.A.

5. Commercial Service Date 06/19/89 6. National Board Number for Unit N.A.

7. Components Inspected **ASME Code Class 1 - Component Supports Program**

Component or Appurtenance	Manufacturer or Installer	Manufacturer or Installer Serial No.		National Board No.
Pressurizer	Westinghouse (M)	2161		19
Reactor Coolant Pump 2B	Westinghouse (I)	1081-1163E26G01-14		N.A.
Class 1 Piping Supports	Ebasco (I)	N.A.		N.A.

HL&P by R.L.Beverly Date 1-17-96 Arkwright Mutual Insurance Co. by B.R.Russell,ANII Date 1-17-96

FORM NIS-1 (Back)

8. Examination Dates 10/11/95 to 10/13/95 9. Inspection Interval from 06/19/89 to 10/19/00

10. Abstract of Examinations. Include a list of examinations and a statement concerning status of work required for current interval. **(ASME Code Class 1 Component Supports - Piping and Equipment)**

See Section 4.4 and Appendix 4-A of 2RE04 Summary Report for list of examinations performed. The examinations performed this outage constitute 12% of the required examinations for the current interval. The cumulative percentage completed for the interval is 46%.

11. Abstract of Conditions Noted.

None.

12. Abstract of Corrective Measures Recommended and Taken.

None.

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

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

Date 1-17 1996 Signed Houston Lighting & Power Co. By R.L.Beverly
Owner

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Texas and employed by Arkwright Mutual Insurance Co. of Norwood, Mass have inspected the components described in this Owner's Report during the period 10/11/95 to 10/13/95, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the inspection plan and as required by the ASME Code, Section XI.

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

B. R. Russell Commissions Tex 826
Inspector's Signature National Board, State, Province, and Endorsements
B. R. Russell

Date 1-17-1996

FORM NIS-1 OWNER'S REPORT FOR INSERVICE INSPECTIONS
As required by the Provisions of the ASME Code Rules

1. Owner Houston Lighting & Power Company; Electric Tower; P.O. Box 1700; Houston, Texas 77001
(Name and Address of Owner)

2. Plant South Texas Project Electric Generating Station; P.O. Box 289; Wadsworth, Texas 77483
(Name and Address of Plant)

3. Plant Unit 2 4. Owner and Certificate of Authorization (if required) N.A.

5. Commercial Service Date 06/19/89 6. National Board Number for Unit N.A.

7. Components Inspected **ASME Code Class 2 - Component Supports Program**

Component or Appurtenance	Manufacturer or Installer	Manufacturer or Installer Serial No.		National Board No.
RHR Heat Exchanger 2A	Joseph Oat Corp. (M)	2312-4D		993
Class 2 Piping Supports	Ebasco (I)	N.A.		N.A.

HL&P by R.L.Beverly Date 1-17-96 Arkwright Mutual Insurance Co. by B.R.Russell,ANII Date 1-17-96

FORM NIS-1 (Back)

8. Examination Dates 08/08/95 to 10/24/95 9. Inspection Interval from 06/19/89 to 10/19/00

10. Abstract of Examinations. Include a list of examinations and a statement concerning status of work required for current interval. **(ASME Code Class 2 Component Supports - Piping and Equipment)**

See Section 4.4 and Appendix 4-A of 2RE04 Summary Report for list of examinations performed. The examinations performed this outage constitute 12% of the required examinations for the current interval. The cumulative percentage completed for the interval is 51%.

11. Abstract of Conditions Noted.

Support number SI-2105-RR24 was found to have a rotated strut clamp and a bent paddle plate. The support was analyzed to substantiate its integrity for its intended service and was found to be acceptable. See Section 4.4.1 of the 2RE04 Summary Report.

12. Abstract of Corrective Measures Recommended and Taken.

Support number SI-2105-RR24 was reworked, with replacement of some portions of the support, and reexamined. See Section 4.4.1 of the 2RE04 Summary Report.

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

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

Date 1-17 1996 Signed Houston Lighting & Power Co. By R.L.Beverly
Owner

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Texas and employed by Arkwright Mutual Insurance Co. of Norwood, Mass have inspected the components described in this Owner's Report during the period 08/08/95 to 10/24/95, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the inspection plan and as required by the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, express or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector no. 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.

B. R. Russell Commissions Tex 826
Inspector's Signature National Board, State, Province, and Endorsements
B. R. Russell

Date 1-16-1996

FORM NIS-1 OWNER'S REPORT FOR INSERVICE INSPECTIONS
As required by the Provisions of the ASME Code Rules

1. Owner Houston Lighting & Power Company; Electric Tower; P.O. Box 1700; Houston, Texas 77001
(Name and Address of Owner)

2. Plant South Texas Project Electric Generating Station; P.O. Box 289; Wadsworth, Texas 77483
(Name and Address of Plant)

3. Plant Unit 2 4. Owner and Certificate of Authorization (if required) N.A.

5. Commercial Service Date 06/19/89 6. National Board Number for Unit N.A.

7. Components Inspected **ASME Code Class 3 - Component Supports Program**

Component or Appurtenance	Manufacturer or Installer	Manufacturer or Installer Serial No.		National Board No.
Aux. FW Motor Driven Pump	Ebasco(I)	N.A.		N.A.
Comp. Cooling Water Heat Exch. 2A	Ebasco(I)	N.A.		N.A.
Jacket Water Stand Pipe	Ebasco(I)	N.A.		N.A.
Lube Oil Heat Exch.	Ebasco(I)	N.A.		N.A.
Diesel Oil Storage Tank	Ebasco(I)	N.A.		N.A.

HL&P by R.L.Beverly Date 1-17-96 Arkwright Mutual Insurance Co. by B.R.Russell,ANII Date 1-17-96

FORM NIS-1 (Back)

8. Examination Dates 08/24/95 to 10/10/95 9. Inspection Interval from 06/19/89 to 10/19/00

10. Abstract of Examinations. Include a list of examinations and a statement concerning status of work required for current interval. **(ASME Code Class 3 Component Supports - Piping and Equipment)**

See Section 4.4 and Appendix 4-A of 2RE04 Summary Report for list of examinations performed. The examinations performed this outage constitute 14% of the required examinations for the current interval. The cumulative percentage completed for the interval is 53%.

11. Abstract of Conditions Noted.

None.

12. Abstract of Corrective Measures Recommended and Taken.

None.

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

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

Date 1-17 19 96 Signed Houston Lighting & Power Co. By R.L.Beverly
Owner

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Texas and employed by Arkwright Mutual Insurance Co. of Norwood, Mass have inspected the components described in this Owner's Report during the period 08/24/95 to 10/10/95, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the inspection plan and as required by the ASME Code, Section XI.

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

B. Russell Commissions Tex 826
Inspector's Signature National Board, State, Province, and Endorsements
B. R. Russell

Date 1-17- 19 96