# COVER SHEET

2RE04 INSERVICE INSPECTION SUMMARY REPORT

FOR SYSTEM PRESSURE TESTS

(CLASS 1 AND 2)

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION, UNIT 2

P. O. BOX 289

WADSWORTH, TEXAS 77483

USNRC DOCKET NO: 50-499 OPERATING LICENSE NO: NPF-80 COMMERCIAL OPERATION DATE: JUNE 19, 1989

Prepared	by:	A. P. Pathak, Consulting Engineer
Reviewed	by:_	M. S. Lashley, Supervising Engineer
Approved	by:	CPOLI . talac

A. P. Kent, Manager - Reliability Engineering Division

9602060129 960130 PDR ADOCK 05000499 Q PDR

# SCOPE 2RE04 SYSTEM PRESSURE TESTS

The examinations summarized in this report were performed in accordance with the 1983 Edition through Summer 1983 Addenda of the ASME Code Section XI which is applicable to the South Texas Project Electric Generating Station Unit 2.

This report covers selected ASME Code Class 1 and 2 systems and components. Examinations and tests required by the Code are scheduled in accordance with "Inspection Program B" as defined in IWB-2412 and IWC-2412 for ASME Code Class 1 and 2 systems/components respectively. All ASME code Class 1 components were examined as prescribed by table IWB-2500-1, Examination Category B-P which established the examination frequency at each refueling outage. The ASME Code Class 2 systems/components were selected on a prorated basis. This selection process will continue until all ASME Code Class 2 systems/components are examined in accordance with Table IWC-2500-1, Examination Category C-H for ASME Code Class 2 systems/components. This examination category establishes the frequency at each inspection period. These pressure tests are performed in the second period of examination. The remaining second period examinations are anticipated to be completed by the end of the second inspection period time frame.

The System Leakage Test [IWA-5200(a)] conducted on Class 1 systems/components in accordance with Examination Category B-P, also satisfied the system pressure test required by IWA-5214(e) subsequent to the disassembly and reassembly of mechanical joints in ASME Code Class 1 components. 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, T	X 77001		
(Name and Address of Owner)					

2. Plant South Texas Project Electric Generating Station P.O. Box 289, Wadsworth, TX 77483

(Name and Address of Owner)

- 3. Plant Unit \_\_\_\_\_\_ 4. Owner 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 PIPING AND COMPONENTS

Component or Appurtenance	Manufacturer or Installer	Manufacturer or Installer Serial No.	State or Province No.	National Board No.
REACTOR VESSEL 1R102NRV201A	COMBUSTION ENGINEERING/ WESTINGHOUSE (M)	11073	N/A	22190
M. GENERATOR R122NSG201A	WESTINGHOUSE (M)	2131	N/A	W18691
STM. GENERATOR 1R122NSG201B	WESTINGHOUSE (M)	2132	N/A	W18692
STM. GENERATOR 1R122NSG201C	WESTINGHOUSE (M)	2133	N/A	W18693
STM. GENERATOR 1R122NSG201D	WESTINGHOUSE (M)	2134	N/A	W18694
PRESSURIZER 1R112NPZ201A	WESTINGHOUSE (M)	2141	N/A	W18590
RC PUMP 1R132NPP201A	WESTINGHOUSE (M)	1-115E580G01	N/A	28
RC PUMP 1R132NPP201B	WESTINGHOUSE (M)	2-115E580G01	N/A	29
RC PUMP 1R132NPP201C	WESTINGHOUSE (M)	3-115E580G01	N/A	30
RC PUMP 1R132NPP201D	WESTINGHOUSE (M)	4-115E580G01	N/A	31
CLASS 1 PIPING	EBASCO (I)	N/A	N/A	N/A
CLASS 1 VALVES	VARIOUS N/A	N/A	N/A	

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 in. X 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

- 8. Examination Dates 05/31/94 to 11/15/95 9. Inspection Interval from 06/19/89 to 10/19/2000.
- Abstract of Examinations. Include a list of examinations and a statement concerning status of work required for current interval. Refer to Supplemental Sheet Page 3 of 3.
- Abstract of Conditions Noted No relevant conditions affecting pressure retaining boundaries were noted.
- 12. Abetract of Corrective Measures Recommended and Taken Reter to Supplemental Sheet Page 3 of 3.

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

Certificate of Authorization No. (if applicable) \_\_\_\_\_ N/A **Expiration Date** N/A Date 1996 Signed Houston Lighting & Power Co. By Owner T.J.Jordan Systems Engineering Manager 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 <u>Texas</u> and employed by <u>Arkwright Mutual Insurance Co.</u> of <u>Norwood. MASS</u>, have inspected the components described in this Owner's Report during the period 4-10-95 to 1-10-96, 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, expressed 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.

-FACTORY MUTUAL ENGINEERING ASSOCIATION

Commissions TX-826

B.R. Russell, Inspector's Signature

National Board, State, Province, and Endorsements

19.96 Date

22

# SUPPLEMENTAL FOR ASME CODE CLASS 1 PIPING AND COMPONENTS

۰.	Owner Houston Lighting & Power Company Electric Tower, P.O. Box 1700, Houston, TX 77001
	(Name and Address of Owner)
2.	Plant South Texas Project Electric Generating Station P.O. Box 289, Wadsworth, TX 77483
	(Name and Address of Owner)
3.	Plant Unit 4. Owner Certificate of Authorization (if required) N/A

### 10. ABSTRACT OF EXAMINATIONS

A System Leakage Test as prescribed by IWA 5211 (a) for all ASME Code Class 1 Pressure Retaining Components was conducted in accordance with Table IWB-2500-1, Examination Category B-P, Item Nos. B15.10, B15.20, B15.30, B15.40, B15.50, B15.60 and B15.70.

The Pressure Test and VT-2 visual examinations were conducted in accordance with Plant Surveillance Pressure Test Procedure, 0PSP15-RC-0001, Reactor Coolant System Leakage Pressure Test (Rev. 2) at the conclusion of the fourth refueling outage. ASME Code Class 1 piping and valves are specifically identified in the above referenced procedure.

In addition, the above System Leakage Test also satisfied the requirement for a System Pressure Test subsequent to the disassembly and reassembly of mechanical joints in ASME Code Class 1 components as prescribed by IWA-5214 (e).

Also, System Pressure Tests subsequent to the disassembly and reassembly of mechanical joints in ASME Code Class 1 components as prescribed by IWA-5214 (e) were conducted in accordance with 0PGP03-ZE-0027, ASME Section XI Post-Maintenance Pressure Test (Rev. 9) for individual work items performed outside the scope of the fourth refueling outage.

#### 12. ABSTRACT OF CORRECTIVE MEASURES RECOMMENDED AND TAKEN

The Visual Examinations (VT-2) performed during these Pressure Tests found minor leakage at mechanical joints such as valve stems and flanged connections. These leaks were evaluated and determined acceptable for continued system operation. Appropriate corrective action was initiated to correct these leaks.

FORM NIS-1 OWNER'S REPORT FOR INSERVICE INSPECTIONS

Page 1 of 3

As required by the Provisions of the ASME Code Rules

1.	Owner Houston Lighting & Power Company Electric Tower, P.O. Box 1700, Houst (Name and Address of Owner)	on. TX 77001		
2.	Plant South Texas Project Electric Generating Station P.O. Box 289. Wadsworth, TX 77483			
з.	(Name and Address of Owner) Plant Unit 4. Owner Certificate of Authorization (if required)	N/A		
5.	Commercial Service Date06/19/896. National Board Number for Unit	N/A		

7. Components Inspected ASME CODE CLASS 2 PIPING AND COMPONENTS

Component or Appurtenance	Manufacturer or Installer	Manufacturer or Installer Serial No.	State or Province No.	National Board No.
CLASS 2 PIPING	EBASCO	N/A	N/A	N/A
CLASS 2 VALVES	VARIOUS	N/A	N/A	N/A

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 in. X 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

2.1

- 8. Examination Dates 05/31/94 to 11/15/95 9. Inspection Interval from 06/19/89 to 10/19/2000
- Abstract of Examinations. Include a list of examinations and a statement concerning status of work required for current interval. Refer to Supplemental Sheet Page 3 of 3.
- Abstract of Conditions Noted No relevant conditions affecting pressure retaining boundaries were noted.
- 12. Abstract of Corrective Measures Recommended and Taken Refer to Supplemental Sheet Page 3 of 3.

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

Certificate of Authorization No. (if applicable) N/A Expiration Date 19.96 Signed Houston Lighting & Power Co. By Date Owner T.J.Jordan ystems Engineering Manager

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 <u>Texas</u> and employed by <u>Arkwright Mutual insurance Co.</u> of <u>Norwood</u>. <u>MASS</u> have inspected the components described in this Owner's Report during the period <u>A-lo-45</u> to <u>I-17-96</u>, 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, expressed 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.

#### FACTORY MUTUAL ENGINEERING ACCOGIATION

B.R. Russell, Inspector's Signature

1-17- 1996

Commissions TX-826

National Board, State, Province, and Endorsements

Date

#### SUPPLEMENTAL FOR ASME CODE CLASS 2 PIPING AND COMPONENTS

	Owner Houston Lighting & Power Company Electric Tower. P.O. Box 1700. Houst (Name and Address of Owner)	<u>xIII. 177. 1.1 x x 1</u>	
2.			
	(Name and Address of Owner)		
3.	Plant Unit 4. Owner Certificate of Authorization (if required)	N/A	
5.	Commercial Service Date 06/19/89 6. National Board Number for Unit	N/A	

#### 10. ABSTRACT OF EXAMINATIONS

System Inservice Tests as prescribed by IWA-5211 (c) were conducted on selected ASME Code Class 2 Pressure Retaining Components in accordance with Table IWC-2500-1, Examination Category C-H, item Nos. C7.30 and C7.70.

The Pressure Tests and VT-2 visual examinations were conducted during the second period of examination in accordance with the following Plant Surveillance Pressure Test Procedures:

0PSP15-CM-0001-RCB H2 Monitoring Functional Pressure Test, (Rev. 5)0PSP15-FW-0001-Feedwater System Inservice Pressure Test (Rev. 0)0PSP15-RC-0001-Reactor Coolant System Leakage Pressure Test, (Rev. 1)

ASME Code Class 2 piping and valves are specifically identified in the above referenced procedures. These test procedures were conducted during the time period of May 31, 1994 to November 15, 1995.

## 12. ABSTRACT OF CORRECTIVE MEASURES RECOMMENDED AND TAKEN

The Visual Examinations (VT-2) performed during these Pressure Tests found only minor leakage at mechanical joints such as valve stems and flanged connections. These leaks were evaluated and determined acceptable for continued system operation. Appropriate corrective action was initiated to correct these leaks.