

COVER SHEET

2RE02 INSERVICE INSPECTION SUMMARY REPORT
FOR SYSTEM PRESSURE TESTS

AT THE

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* 3-12-92
A. P. Pathak Consulting Engineer - Codes & Standards

Reviewed by: *S. Timmaraju* 3-12-92
S. Timmaraju Sr. Consulting Engineer - Codes & Standards

Approved by: *R. R. Hernandez* 3/13/92
R. R. Hernandez Manager - Design Engineering Department

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2RE02 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/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 Systems/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 random basis. This random 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. This examination category for ASME Code Class 2 Systems/Components established the examination frequency at each inspection period. The remaining first period examinations are anticipated to be completed by the end of the first inspection period (6-19-92) and will be reported after the Unit-2 third refueling outage (2RE03).

The System Leakage Test [IWA-5211 (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, 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 Plant)
3. Plant Unit 2 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 1R102RV201A	COMBUSTION ENGINEERING/ WESTINGHOUSE (M)	12173	N/A	22391
SIM. GENERATOR 1R122NSG201A	WESTINGHOUSE (M)	2151	N/A	29
SIM. GENERATOR 1R122NSG201B	WESTINGHOUSE (M)	2152	N/A	30
SIM. GENERATOR 1R122NSG201C	WESTINGHOUSE (M)	2153	N/A	31
SIM. GENERATOR 1R122NSG201D	WESTINGHOUSE (M)	2154	N/A	32
PRESSURIZER 1R122NPZ201A	WESTINGHOUSE (M)	2161	N/A	19
RC PUMP 1R132NPP201A	WESTINGHOUSE (M)	1-115E580G02	N/A	46
RC PUMP 1R132NPP201B	WESTINGHOUSE (M)	2-115E580G02	N/A	47
RC PUMP 1R132NPP201C	WESTINGHOUSE (M)	3-115E580G02	N/A	48
RC PUMP 1R132NPP201D	WESTINGHOUSE (M)	4-115E580G02	N/A	49
CLASS 1 PIPING	BRASCO (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.

FORM NIS-1 (Back)

8. Examination Dates 12/15/90 to 12/18/91 9. Inspection Interval from 06/19/89 to 06/19/99
10. 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.
11. 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 and 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 3-3 1992 Signed Houston Lighting & Power Co. by D.C. Leazer
Owner D. H. Leazer
Manager, Plant Engineering

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 9-14-91 to 12-18-91, 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 SYSTEM

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

Date 3-12-1992

FORM NIS-1 (Back)

8. Examination Dates 12/12/90 to 12/16/91 9. Inspection Interval from 06/19/89 to 06/19/99
10. 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.
11. 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 and 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 3-3 1992 Signed Houston Lighting & Power Co. By D.C. Ligon
Owner D. C. Ligon
Manager, Plant Engineering

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 9-14-91 to 12-18-91, 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 SYSTEM

B. R. Russell
B. R. Russell, Inspector's Signature

Commissions TX-826

National Board, State, Province, and Endorsements

Date 3-12- 1992

SUPPLEMENTAL
FOR
ASME CODE CLASS 1 PIPING AND COMPONENTS

1. 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 280, Wadsworth, TX 77483
(Name and Address of Plant)
3. Plant Unit 2 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

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, QPSP15-RC-0001, Reactor Coolant System Leakage Pressure Test (Rev. D) at the conclusion of the second 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 QUGP03-ZE-0027, ASME Section XI Post-Maintenance Pressure Tests (Rev. 3) for individual work items performed outside the scope of the second refueling outage.

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.

HL&P by D. C. Leger
D. A. Leger
Manager, Plant Engineering

Date 3-3-92 Factory Mutual by B. R. Russell
B. R. Russell, ANII

Date 3-12-92

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, 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 Plant)
3. Plant Unit 2 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 2 PIPING AND COMPONENTS

Component or Appurtenance	Manufacturer or Installer	Manufacturer or Installer Serial No.	State or Province No.	National Board No.
R/R Pump 2A 2R162NPA201A	Pacific Pump	51734	N/A	363
R/R Pump 2B 2R162NPA201B	Pacific Pump	51735	N/A	364
R/R Pump 2C 2R162NPA201C	Pacific Pump	51736	N/A	365
R/R Hx 2A 2R162NHC201A	Joseph Oat Corp.	2312-4D	N/A	993
R/R Hx 2B 2R162NHC201B	Joseph Oat Corp.	2312-4E	N/A	994
R/R Hx 2C 2R162NHC201C	Joseph Oat Corp.	2312-4F	N/A	995
RCFC Coil 21A 2V142VH001	American Air Filter	906796-C1	N/A	865
RCFC Coil 21A 2V142VH001	American Air Filter	906796-C2	N/A	866
RCFC Coil 21A 2V142VH001	American Air Filter	906796-C3	N/A	867
RCFC Coil 21A 2V142VH001	American Air Filter	906796-C4	N/A	868
RCFC Coil 21A 2V142VH001	American Air Filter	906796-C5	N/A	869
RCFC Coil 21A 2V142VH001	American Air Filter	906796-D1	N/A	895
RCFC Coil 21A 2V142VH001	American Air Filter	906796-D2	N/A	896
RCFC Coil 21A 2V142VH001	American Air Filter	906796-D3	N/A	897
RCFC Coil 21A 2V142VH001	American Air Filter	906796-D4	N/A	898
RCFC Coil 21A 2V142VH001	American Air Filter	906796-D5	N/A	899

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.

FORM NIS-1 (Back)

8. Examination Dates 12/12/90 to 12/18/91 9. Inspection Interval from 06/19/89 to 06/19/99
10. Abstract of Examinations. Include a list of examinations and a statement concerning status of work required for current interval. Refer to Supplemental Sheet Page 7 of 7.
11. 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 7 of 7.

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

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

Date 3-3 1992 Signed Houston Lighting & Power Co. By D. G. Leazer
Owner D. A. Leazer
Plant 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 Texas and employed by _____ of _____ have inspected the components described in this Owner's Report during the period 12-12-90 to 12-18-91, 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 SYSTEM

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

Date 3-12-1992

SUPPLEMENTAL
FOR
ASME CODE CLASS 2 PIPING AND COMPONENTS

1. 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 Plant)
3. Plant Unit 2 4. Owner Certificate of Authorization (if required) N/A
5. Commercial Service Date 06/19/89 6. National Board Number for Unit N/A

Component or Appurtenance	Manufacturer or Installer	Manufacturer or Installer Serial No.	State or Province No.	National Board No.
RCFC Coil 22A 2V142VHX002	American Air Filter	906796-C6	N/A	870
RCFC Coil 22A 2V142VHX002	American Air Filter	906796-C7	N/A	871
RCFC Coil 22A 2V142VHX002	American Air Filter	906796-C8	N/A	872
RCFC Coil 22A 2V142VHX002	American Air Filter	906796-C9	N/A	873
RCFC Coil 22A 2V142VHX002	American Air Filter	906796-C10	N/A	874
RCFC Coil 22A 2V142VHX002	American Air Filter	906796-D6	N/A	900
RCFC Coil 22A 2V142VHX002	American Air Filter	906796-D7	N/A	901
RCFC Coil 22A 2V142VHX002	American Air Filter	906796-D8	N/A	902
RCFC Coil 22A 2V142VHX002	American Air Filter	906796-D9	N/A	903
RCFC Coil 22A 2V142VHX002	American Air Filter	906796-D10	N/A	904
RCFC Coil 21B 2V142VHX003	American Air Filter	906796-C11	N/A	875
RCFC Coil 21B 2V142VHX003	American Air Filter	906796-C12	N/A	876
RCFC Coil 21B 2V142VHX003	American Air Filter	906796-C13	N/A	877
RCFC Coil 21B 2V142VHX003	American Air Filter	906796-C14	N/A	878
RCFC Coil 21B 2V142VHX003	American Air Filter	906796-C15	N/A	879
RCFC Coil 21B 2V142VHX003	American Air Filter	906796-D11	N/A	905
RCFC Coil 21B 2V142VHX003	American Air Filter	906796-D12	N/A	906
RCFC Coil 21B 2V142VHX003	American Air Filter	906796-D13	N/A	907

HL&P by D. A. Ledger
D. A. Ledger
Manager, Plant Engineering

Date 3-3-92 Factory Mutual by

B. R. Russell, ANII

Date 3-12-92

SUPPLEMENTAL
FOR
ASME CODE CLASS 2 PIPING AND COMPONENTS

1. 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 Plant)
3. Plant Unit 2 4. Owner Certificate of Authorization (if required) N/A
5. Commercial Service Date 06/19/89 6. National Board Number for Unit N/A

Component or Appurtenance	Manufacturer or Installer	Manufacturer or Installer Serial No.	State or Province No.	National Board No.
RCFC Coil 21B				
2V142VHX003	American Air Filter	906796-D14	N/A	908
RCFC Coil 21B				
2V142VHX003	American Air Filter	906796-D15	N/A	909
RCFC Coil 22B				
2V142VHX004	American Air Filter	906796-C16	N/A	880
RCFC Coil 22B				
2V142VHX004	American Air Filter	906796-C17	N/A	881
RCFC Coil 22B				
2V142VHX004	American Air Filter	906796-C18	N/A	882
RCFC Coil 22B				
2V142VHX004	American Air Filter	906796-C19	N/A	883
RCFC Coil 22B				
2V142VHX004	American Air Filter	906796-C20	N/A	884
RCFC Coil 22B				
2V142VHX004	American Air Filter	906796-D16	N/A	910
RCFC Coil 22B				
2V142VHX004	American Air Filter	906796-D17	N/A	911
RCFC Coil 22B				
2V142VHX004	American Air Filter	906796-D18	N/A	912
RCFC Coil 22B				
2V142VHX004	American Air Filter	906796-D19	N/A	913
RCFC Coil 22B				
2V142VHX004	American Air Filter	906796-D20	N/A	914
RCFC Coil 21C				
2V142VHX005	American Air Filter	906796-C21	N/A	885
RCFC Coil 21C				
2V142VHX005	American Air Filter	906796-C22	N/A	886
RCFC Coil 21C				
2V142VHX005	American Air Filter	906796-C23	N/A	887
RCFC Coil 21C				
2V142VHX005	American Air Filter	906796-C24	N/A	888
RCFC Coil 21C				
2V142VHX005	American Air Filter	906796-C25	N/A	889
RCFC Coil 21C				
2V142VHX005	American Air Filter	906796-D21	N/A	915

HL&P by D. G. Leazer
D. A. Leazer
Manager, Plant Engineering

Date 3-3-92 Factory Mutual by B. R. Russell
B. R. Russell, ANII

Date 3-12-92

SUPPLEMENTAL
FOR
ASME CODE CLASS 2 PIPING AND COMPONENTS

1. 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 Plant)
3. Plant Unit 2 4. Owner Certificate of Authorization (if required) N/A
5. Commercial Service Date 06/19/89 6. National Board Number for Unit N/A

Component or Appurtenance	Manufacturer or Installer	Manufacturer or Installer Serial No.	State or Province No.	National Board No.
RCFC Coil 21C 2V142VHX005	American Air Filter	906796-D22	N/A	916
RCFC Coil 21C 2V142VHX005	American Air Filter	906796-D23	N/A	917
RCFC Coil 21C 2V142VHX005	American Air Filter	906796-D24	N/A	918
RCFC Coil 21C 2V142VHX005	American Air Filter	906796-D25	N/A	919
RCFC Coil 22C 2V142VHX006	American Air Filter	906796-C26	N/A	890
RCFC Coil 22C 2V142VHX006	American Air Filter	906796-C27	N/A	891
RCFC Coil 22C 2V142VHX006	American Air Filter	906796-C28	N/A	892
RCFC Coil 22C 2V142VHX006	American Air Filter	906796-C29	N/A	893
RCFC Coil 22C 2V142VHX006	American Air Filter	906796-C30	N/A	894
RCFC Coil 22C 2V142VHX006	American Air Filter	906796-D26	N/A	920
RCFC Coil 22C 2V142VHX006	American Air Filter	906796-D27	N/A	921
RCFC Coil 22C 2V142VHX006	American Air Filter	906796-D28	N/A	922
RCFC Coil 22C 2V142VHX006	American Air Filter	906796-D29	N/A	923
RCFC Coil 22C 2V142VHX006	American Air Filter	906796-D30	N/A	924
Regen. Hx 2A 2R172NHQ201A	Joseph Oat Corp.	2380-1B	N/A	2052
Excess L.D. Hx 2A 5R172NHQ203A	Joseph Oat Corp.	2312-3B	N/A	989
L.D. Hx 2A 5R172NHQ202A	Joseph Oat Corp.	2312-1B	N/A	987
Seal Wtr. Hx 2A 4R172NHQ204A	Joseph Oat Corp.	832	N/A	255

HL&P by D. A. Yeager
D. A. Yeager
Manager, Plant Engineering

Date 7-3-92 Factory Mutual by B. R. Russell
B. R. Russell, ANII

Date 3-12-92

Date 3-2-92

SUPPLEMENTAL
FOR
ASME CODE CLASS 2 PIPING AND COMPONENTS

1. 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 Plant)
3. Plant Unit 2 4. Owner Certificate of Authorization (if required) N/A
5. Commercial Service Date 06/18/89 5. National Board Number for Unit N/A

10. ABSTRACT OF EXAMINATIONS

System Inservice Tests and System Functional Tests as prescribed by IWA-5211(c) and (d) were conducted on selected ASME Code Class 2 Pressure Retaining Components in accordance with Table TWC-2500-1, Examination Category C-H, Item Nos. C7.10, C7.30, C7.50 and C7.70.

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

- 2PSP15-CC-0001 - Component Cooling Water System Inservice Pressure Test (Rev. 1)
- OPSP15-CM-0001 - Containment Hydrogen Monitoring System Functional Pressure Test (Rev. 2)
- 2PSP15-CV-0001 - Chemical and Volume Control System Inservice Pressure Test (Rev. 0)
(inside the RCB only)
- 2PSP15-FW-0001 - Feedwater System Inservice (Rev. 1) (Selected components examined on 2-22-91)
- OPSP15-RC-0001 - Reactor Coolant System Leakage Pressure Test (Rev. 0)
- 2PSP15-RH-0001 - Residual Heat Removal System Inservice 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 December 12, 1990 to December 16, 1991.

12. ABSTRACT OF CORRECTIVE MEASURES RECOMMENDED AND TAKEN

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

ELAP by W. H. Humble Jr. Date 3/1/92 Factory Mutual by B. R. Russell Date 3-12-92
W. H. Humble Jr.
Manager, Plant Programs
B. R. Russell, AMI