



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
611 RYAN PLAZA DRIVE, SUITE 1000
ARLINGTON, TEXAS 76011

72 C
SN-50498-205

July 6, 1977

In Reply Refer To:
RIV
Docket No. 50-498/Rpt. 77-07

Houston Lighting and Power Company
ATTN: Mr. G. W. Oprea, Jr.
Executive Vice President
Post Office Box 1700
Houston, Texas 77001

Gentlemen:

This refers to the inspection conducted by Messrs. R. E. Hall and R. A. Hermann of our staff during the period June 20-22, 1977, of activities authorized by NRC Construction Permit No. CPPR-128 for the South Texas Project, Unit No. 1, and to the discussion of our findings with Mr. W. N. Phillips and other members of your staff at the conclusion of the inspection.

Areas examined during the inspection and our findings are discussed in the enclosed inspection report. Within these areas, the inspection consisted of selective examination of procedures and representative records, interviews with personnel, and observations by the inspectors.

Within the scope of this inspection, no items of noncompliance were identified.

We have also examined actions you have taken with regard to previously identified inspection findings. The status of these items is identified in paragraph 2 of the enclosed report.

One new unresolved item is identified in paragraph 5 of the enclosed report.

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and the enclosed inspection report will be placed in the NRC's Public Document

400 700 3370

Houston Lighting and Power Co.

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July 6, 1977

Room. If the report contains any information that you believe to be proprietary, it is necessary that you submit a written application to this office, within 20 days of the date of this letter, requesting that such information be withheld from public disclosure. The application must include a full statement of the reasons why it is claimed that the information is proprietary. The application should be prepared so that any proprietary information identified is contained in an enclosure to the application, since the application without the enclosure will also be placed in the Public Document Room. If we do not hear from you in this regard within the specified period, the report will be placed in the Public Document Room.

Should you have any questions concerning this inspection, we will be pleased to discuss them with you.

Sincerely,


for W. C. Seidle, Chief
Reactor Construction and
Engineering Support Branch

Enclosure:
IE Inspection Report No. 50-498/77-07

U. S. NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT

REGION IV

Report No. 50-498/77-07

Docket No. 50-498

Category A2

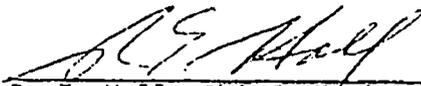
Licensee: Houston Lighting and Power Company
Post Office Box 1700
Houston, Texas 77001

Facility Name: South Texas Project, Unit No. 1

Inspection at: South Texas Project, Matagorda County, Texas

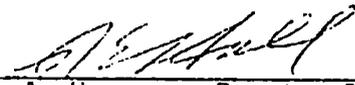
Inspection conducted: June 20-22, 1977

Inspectors:



R. E. Hall, Chief, Engineering Support Section
(Paragraphs 1, 2, 3, 4, 7 & 8)

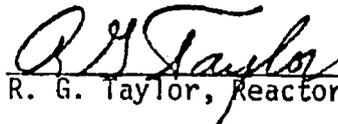
7/6/77
Date



R. A. Hermann, Reactor Inspector, Engineering Support
Section (Paragraphs 5 & 6)

7/6/77
Date

Reviewed:



R. G. Taylor, Reactor Inspector, Projects Section

7/6/77
Date

Approved:



W. A. Crossman, Chief, Projects Section

7/6/77
Date

Inspection Summary:

Inspection on June 20-22, 1977 (Report 50-498/77-07)

Areas Inspected: Routine, announced inspection of previously identified enforcement matters; reinforcing steel Cadwelding activities; licensee response to Westinghouse identified problem; welding of the containment steel liner; and Quality Assurance plans for fabrication of pool liners. The inspection involved thirty-four inspector-hours on site by two NRC inspectors.
Results: No items of noncompliance or deviations were identified.

DETAILS

1. Persons Contacted

Principal Licensee Employees

- *S. A. Viaclovsky, Site QA Supervisor
- *T. K. Logan, Lead QA Engineer
- *F. D. Asbeck, Construction Supervisor
- *W. N. Phillips, Project QA Manager
- *L. D. Wilson, Lead QA Specialist
- D. C. Douglas, QA Specialist

Other Personnel

Brown & Root (B&R)

- *C. L. Crane, Construction Project Manager
- G. Wilson, Quality Control
- J. Lacy, Quality Control
- J. W. Pettit, Supervisor Cadwelding
- *T. Schreeder, Jr., QC Supervisor
- J. E. Enfinger, QA Surveillance Specialist

Pittsburg-Des Moines Steel Co. (PDM)

- *J. S. Newmeister, Field Manager
- T. J. Foley, Site QA Manager

Other licensee and contractor personnel were also contacted as appropriate to facilitate the inspection.

*denotes those present at the exit interview.

2. Licensee Action on Previous Inspection Findings

(Closed) Infraction (50-498/77-05): Cadweld Procedure Conformance. Corrective action taken to improve conformance of Cadwelding activities with established procedural controls was inspected. Records of training conducted by the responsible contractor indicated that all Cadwelder personnel had received retraining in the Cadweld process. Field observations failed to reveal any further cases of failure to follow procedures.

A change to the contract specification and applicable procedure has been made, which permits acceptance of the prior test frequencies relative to Cadwelder No. 7.

(Closed) Infraction (50-498/77-05): Cadweld Inspection Failure. Deviation Report S-161 was reviewed to confirm rejection and repair of Cadweld 5BV158. Records of a follow-up inspection by the licensee and his contractor were reviewed which indicated an additional three previously accepted Cadwelds with excessive voids. Records of additional training provided Cadweld inspectors were inspected. A revised inspection procedure was reviewed.

3. Cadwelding of Reinforcing Steel

As a follow up to inspection 77-05, work activities related to Cadwelding of reinforcing steel were observed to verify conformance with B&R Procedure A-040-KP-CCP-11, "Reinforcing Steel Mechanical Splicing (Cadwelding)." Activities of three teams of Cadwelders were specifically inspected; and the function of the B&R QA Inspector was observed. A retraining class for Cadwelders was monitored.

The inspector observed that QC inspection records are now being completed as inspections are made, resolving an area of concern identified in inspection 77-05. Records in the QC vault were reviewed, and from appearances, it was confirmed that field records are now being permanently filed.

No items of noncompliance or deviations were identified.

4. Licensee Response to Westinghouse Letter

The licensee response to a Westinghouse letter concerning the evaluation of the consequences of a fuel handling accident inside containment was examined. In summary, the Westinghouse letter entitled, "Fuel Handling Accident Inside Containment," dated September 17, 1976, was received by the HL&P Project Manager on September 20, 1976. The Architect Engineer was requested to evaluate the consequences of the postulated accident and provide a hazards evaluation for inclusion in Section 15.7.4 of the forthcoming FSAR.

No items of noncompliance or deviations were identified.

5. Containment Steel Structures

The inspector reviewed work activities related to storage, installation, erection and welding of containment liner segments and penetration assemblies. The inspector examined selected weldments, NDE test reports, welder qualification tests, repair reports, receiving reports, material test reports and vendor manufacturing and test reports as follows:

Field Weldments

Submerged Arc per PDM Procedure 73-127
Circumferential Seams 121, 106

Shielded Metal Arc per PDM Procedure 67-61
Circumferential Seams 134, 130, 128
Vertical Seams 449
Penetration Assembly 93 RRI

Weld Repair per PDM-RP-02
Circumferential Seams 121, 106

Welder Qualifications per ASME B&PV Code, Section IX
8 welders including SMAW and SAW processes

Fit up and alignment per PDM WS-13
Circumferential Seams 146, 146
Penetration Assembly 94 RRI

Spot Radiography per CRT-04, Rev. 8
Circumferential Seam 121 (SAW) - original, 2 tracers and
8 films of 100% of increment
Repair 1 - 4 films
Repair 2 - 2 films
Circumferential Seams 128, 130, 135 (SMAW) - originals
Vertical Seam 445 (SMAW) - original

Receiving reports per PDM QA Manual, Section 3.0
Containment Liner Segments 22S-10-4, 22S-10-2, 22S-10-12
Penetration Assemblies 31-P2, 94-RRI

Material Test Reports - same as receiving reports

Shop Fabrication Checklists including NDE and Heat Treating
reports for
Penetration Assembly 94-RRI (FCL 94.1)
Penetration Assembly 31-P2 (FCL 27.1)

In observing the work in progress, the inspector noted that the reinforcement of some segments of the circumferential seams, especially those fabricated by submerged arc welding, exceeded the requirement of 3/32" maximum. The inspector discussed the matter with the Licensee, Brown & Root, and PDM QA personnel and was informed that a bridging type (two legs) device was initially used to measure reinforcement. The contractor, PDM, had subsequently changed to a single leg gage and was now measuring from both sides of the weldment. Measuring in this manner appeared more satisfactory since distortion between plates would not affect the measurement of weld reinforcement height. The Licensee Site QA Supervisor committed to assess the measurement techniques and the previous measurements performed. The item is considered unresolved and will be inspected during subsequent inspections.

No items of noncompliance or deviations were identified.

6. Spent Fuel Pool Liner

The inspector reviewed the PDM QA program to be utilized by the Southern Division for the fabrication, erection and testing described by Brown & Root Specification 3A019SS008-D, "Stainless Steel Pool Liner System." The PDM QA program is basically the same as the program utilized for the containment liners. The definition of "critical items," those covered by the program, is by the PDM Project Engineer with the concurrence of B&R in accordance with the B&R Specification. All items not designated "non-critical" are to be considered "critical." The inspector performed a preliminary review of the PDM General Erection Procedure - 1 and applicable welding, NDE and inspection procedures.

No items of noncompliance or deviations were identified.

7. Unresolved Items

Unresolved items are matters about which more information is required in order to ascertain whether they are acceptable items, items of noncompliance, or deviations. An unresolved item disclosed during this inspection regarding excessive weld bead height on containment liner plate welds is discussed in paragraph 5 of this report.

8. Exit Interview

The inspectors met with licensee representatives (denoted in paragraph 1) at the conclusion of the inspection on June 22, 1977. The inspectors summarized the scope of the inspection and the findings. The licensee representatives acknowledged understanding the findings, but made no commitments. They did indicate their intent to obtain resolution of the weld bead height problem by reviewing measurement techniques.

END

DATE FILMED

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