

APPENDIX

U. S. NUCLEAR REGULATORY COMMISSION

REGION IV

NRC Inspection Report: 50-498/84-10  
50-499/84-10

Construction Permits: CPPR-128  
CPPR-129

Dockets: 50-498 and 50-499

Priority: A2

Licensee: Houston Lighting & Power  
P. O. Box 1700  
Houston, Texas 77001

Facility Name: South Texas Project

Inspection At: South Texas Project  
Matagorda County, Texas

Inspection Conducted: June 25-29, 1984

Inspector: Claude E. Johnson 7-17-84  
C. E. Johnson, Reactor Inspector  
Project Section A Date

Approved: S.H. Jaudon 8/2/84  
for J. Jaudon, Chief, Project Section A  
Project Branch 1 Date

Inspection Summary

Inspection Conducted June 25-29, 1984 (Report 50-498/84-10)

Areas Inspected: Routine, unannounced inspection of safety-related structural steel. The inspection involved 34 inspector-hours onsite by one NRC inspector.

Results: Within the area inspected, no violations or deviations were identified.

DETAILS

1. Persons Contacted

Houston Lighting & Power Company (HL&P)

- \*Jordon, T. J., Project Quality Assurance (QA) Manager
- \*Keating, D. R., Project QA General Supervisor
- \*Blewett, J. A., Supervisory Project Engineering-Site
- \*Dew, S. M., Manager Engineering
- \*McBurnett, M. A., Supervisor Engineering
- \*Barker, J. L., Site Engineering and Construction Manager
- \*Estella, J. W. Quality Systems Supervisor
- \*Williams, J., Site Manager
- \*Hawkins, R. L., Support Services Manager
- \*Wright, C. O., Supervisor Mechanical/NDE, Quality Engineering
- \*Beauers, C. R., Mechanical/Nuclear Engineer
- Von Nivenheim, A. C., QA Engineer, Structural
- Bednarceyk, D. F., Project QA Supervisor-Civil/Structural

Bechtel Power Corporation (Bechtel)

- \*Hurst, L. W., Project QA Manager
- \*Priest, A. K., Project Construction Manager
- \*Retana, R., PQCE
- \*Downs, J. R., Department Project Manager of Construction
- \*Krisha, D. T., QA Manager/Projects
- \*Miller, R. W., Site PQAE
- \*Senecal, J. L., Quality Control (QC) Supervisor
- \*Williams, J. M., Materials Engineer
- \*Futrell, W. A., APE Site
- Hayes, R., Lead Nuclear Engineer

Ebasco Services, Inc. (Ebasco)

- \*Crnick, J., Construction Manager
- \*Haun, C.L., Quality Program Site Manager
- \*Peck, R. G., QA Site Supervisor
- Davis, W., Lead Mechanical QC
- Kirovac, J. P., Unit 2, Field Engineer
- Hendrick, R., Assistant QA Inspector L-II

Westinghouse

- \*Hogarth, A., Site Manager

USNRC

- \*Carpenter, D. R., Resident Inspector
- \*Tomlinson, D. P., Senior Resident Inspector (STP)
- Chamberlain, D. D., Senior Resident Inspector (River Bend)

The NRC inspector also contacted other site personnel during the course of the inspection.

\*Denotes those attending the exit interview conducted June 29, 1984.

2. Site Tour

The NRC inspector toured the reactor building, Unit 1 and Unit 2, and the mechanical electrical auxiliary building (MEAB), Units 1 and 2, to observe construction in process and to inspect housekeeping.

No violations or deviations were identified.

3. Safety-Related Structures (Structural Steel)

a. Review of Procedures

The NRC inspector reviewed QA implementing procedures and specifications to ascertain whether QA plans, instructions, and procedures for structural steel and miscellaneous steel have been established in the facility QA manual, and whether these documents conform to the QA program as described in the FSAR. The NRC inspector reviewed three structural steel procedures and one structural steel specification.

Review of the structural steel specification by the NRC inspector indicated that safety-related structural welds were broken into separate categories such as category A, B, and C welds, category A being the most important welds. All category A welds received 100 percent inspection by QC. Category B structural welds were inspected also; however, fitup inspections by QC were done on a surveillance basis. The NRC inspector noted that the welding requirements are less stringent than those of AWS D1.1, however, they meet the licensee's commitment as contained in the FSAR (Amendment #35).

Review of QCP-9.5 by the NRC inspector indicated that QC did not check welder qualifications. Licensee representatives stated that Ebasco had previously identified this as a concern, and revision 3 to QCP-9.5 was being prepared to incorporate a method for QC to determine welder qualification. The NRC inspector reviewed this proposed revision and determined that it would satisfy his concern in this area.

Procedures and specifications reviewed are listed below:

- QCP-10.5, "Inspection of Structural Steel Erection and Bolting," Revision 3, dated April 9, 1984.
- CSP-10, "Erection and Boltup of Structural Steel," Revision 2, dated February 15, 1984.
- QCP-9.5, "Weld Inspection (AWS)," Revision 2, dated December 13, 1983.
- FSAR, Amendment No. 35.
- Specification No. 3A010SS0030, "Erection of Structural Steel and Miscellaneous Steel."

No violations or deviations were identified.

b. Observation of Work and Work Activities

The NRC inspector accompanied by a licensee representative, Bechtel representative, and an Ebasco QC engineer, observed and inspected work performed by construction in the control room, Unit 1. The work observed was framing steel for the drop ceiling over the control room at elevation 45'-6".

Structural members were installed by Ebasco construction. During the observation, there were no discrepancies observed. Additional steel added was documented by a field change request (FCR). Spot checks on torque of bolts were also performed by the NRC inspector. Structural members were aligned and located as the drawing indicated. The NRC inspector also observed the lower lateral supports for the Unit 2 steam generator (SG). There was one support where the structural beam plate connected to the wall brackets was warped. This was identified by Ebasco engineering on NCR HN00025. Review of Teledyne Brown drawing No. 22612, Sheet No. 1, gave flatness criteria. The plate was measured by Ebasco engineering and was within the tolerance given by drawing No. 22612.

Documents reviewed are listed below.

- NCR No. HN00025
- Drawing No. 77E1 (AFCO Steel)
- Drawing No. 3M01-9-S-34002, Revision 3 (Bechtel)
- Drawing No. 22612 (Teledyne)
- Drawing No. 24AB (Pittsburgh Des Moines Steel Co.)
- Drawing No. 14926-6026-01142-APB

c. Review of Records

The NRC inspector reviewed erection inspection reports, structural welding reports, and torque testing and boltup inspection reports for structural members observed in paragraph b. Records reviewed consisted of marked up drawings and inspection reports (IRs). There were no discrepancies observed in the review of records.

The NRC inspector also reviewed other documents generated for the structural members inspected, such as NCRs and a modification removal form.

Inspection reports reviewed:

<u>Welding IR No.</u>	<u>Boltup IR No.</u>	<u>Erection IR No.</u>
03103	00705B	00753-E (January 16, 1984)
03161	00739B	00753-E (January 17, 1984)
03162	00746B	
03164	00747B	
03165	00704B	
03180		
03184		
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04935		

No violations or deviations were identified.

d. Review of Craft/QC Qualification

The NRC inspector reviewed qualification records of 5 QC inspectors and 11 craft personnel. The QC inspectors and craft personnel selected for review were indicated on the IRs which had been generated during and after completion of structural steel work for the drop ceiling at elevation 45'-6" in the control room. The NRC inspector traced the qualifications of each QC inspector and craftsman



from the IRs during that time period to verify each individual's qualifications. All QC inspectors and craft personnel were qualified during the period of installation and inspection.

There were no violations or deviations identified.

4. Exit Interview

An exit interview was conducted on June 29, 1984, with those personnel denoted in paragraph 1 of this report. During the exit interview, the NRC inspector summarized the scope and findings of this inspection.