

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

REGION IV

Report No. 50-498/78-08; 50-499/78-08

Docket No. 50-498; 50-499

Category A2

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

Facility Name: South Texas Project, Units 1 & 2

Inspection at: South Texas Project, Matagorda County, Texas

Inspection conducted: May 16-19, 1978

Inspectors: *W. G. Hubacek* 5/26/78  
W. G. Hubacek, Reactor Inspector, Projects Section Date

*W. A. Crossman* 5/26/78  
W. A. Crossman, Chief, Projects Section Date

Approved: *W. A. Crossman* 5/26/78  
W. A. Crossman, Chief, Projects Section Date

Inspection Summary:

Inspection on May 16-19, 1978 (Report No. 50-498/78-08; 50-499/78-08)

Areas Inspected: Unannounced inspection of construction activities including review of the status of an item reported in accordance with 50.55(e), review of the status of quality procedure development, and review of records related to concrete placement in Unit 1 containment. The inspection involved twenty-four inspector-hours by two NRC inspectors.

Results: No items of noncompliance or deviations were identified.

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## DETAILS

### 1. Persons Contacted

#### Principal Licensee Employees

- \*W. N. Phillips, Project QA Manager
- \*S. A. Viaclovsky, QA Supervisor
- \*F. D. Asbeck, Construction Supervisor
- \*T. K. Logan, Lead Engineer
- \*M. H. Smith, Electrical QA Specialist
- \*L. D. Wilson, Lead Specialist
- D. G. Long, QA Engineer

#### Other Personnel

- \*J. R. Monroe, Construction Project Manager, Brown & Root (B&R)
- \*C. W. Vincent, Project QA Manager, B&R
- \*A. L. Smith, Construction Quality Engineer, B&R
- J. R. Rosso, QA Engineer, B&R

The IE inspectors also contacted other licensee and contractor personnel including members of the QA/QC staffs.

\*denotes those attending the exit interview.

### 2. Site Tour

The IE inspectors walked through various areas of the site to observe construction activities in progress and to inspect housekeeping and equipment storage.

No items of noncompliance or deviations were identified.

### 3. Voids in Slab in the Unit 1 Fuel Handling Building

The IE inspectors reviewed the status of the voids in the slab at EL +21'11" in the Unit 1 Fuel Handling Building which had been previously reported in accordance with the requirements of 10 CFR 50.55(e).

The major activity in progress was evaluation of the shielding capability of the void areas by Gamma Industries who have been contracted to perform radiation transmission measurements of the affected areas. Measurements were being made by means of a 200 curie cobalt 60 source placed on the top surface of the slab with a crystal detector placed directly below on the bottom surface. A grid system for the top and bottom surfaces has been developed to insure adequate coverage of the

void areas. Approximately 275 points on a 2'x 2' grid will be checked. Measurements are to be compared with those obtained using a step wedge fabricated from the same type of concrete mix used for the slab but without embedded reinforcing steel.

Sufficient data were not yet available to substantiate a conclusion regarding the shielding capability of the slab.

No items of noncompliance or deviations were identified.

4. Brown & Root Procedure Revisions

The IE inspector was informed, by a licensee representative, that the issuance of Quality Construction Procedures (QCPs) originally scheduled for April 30, 1978, has been delayed until May 31, 1978. Implementation of the procedures is scheduled to occur on June 19, 1978. A joint training program related to use of the procedures is planned for QC and construction personnel.

5. Review of Quality Records Related to Structural Concrete

The IE inspectors reviewed quality records related to placements of concrete on April 18-19, 1978, at EL +19.0 inside the Unit No. 1 containment. Records reviewed included the following:

- Curing Inspection Card
- Concrete Inspection Book
- Cadwelder Test Records (for 16 Cadwelds)
- Tests of Cement (for grind 164)
- Daily Aggregate Test Reports
- Daily Batch Plant Operation
- Batch Record Summary
- Batch Plant Equipment Inspection
- Concrete Test Load Ticket
- Moisture Content of Aggregates
- Moisture Adjustment and Batch Weights
- Batch Plant Surveillance Report
- Laboratory Surveillance Report
- Field Testing Summary
- Concrete Compressive Strength Reports

The IE inspectors also reviewed seven surveillance checklists related to concrete activities performed by the licensee and qualification records of seven QC inspectors involved with this placement.

No items of noncompliance or deviations were identified.

6. Exit Interview

The IE inspectors met with licensee representatives (denoted in paragraph 1) at the conclusion of the inspection on May 19, 1978. The inspectors summarized the purpose and scope of the inspection and the findings.