

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

REGION IV

Report No. 50-498/79-05; 50-499/79-05

Docket No. 50-498; 50-499

Category A2

Licensee: Houston Lighting & 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: April 2-6, 1979

Inspectors: W. G. Hubacek
W. G. Hubacek, Reactor Inspector, Projects Section
(Paragraphs 1, 3, 4 & 6)

4/25/79
Date

L. E. Martin
L. E. Martin, Reactor Inspector, Engineering Support
Section (Paragraph 2 & 5)

4/25/79
Date

Approved: W. A. Crossman
W. A. Crossman, Chief, Projects Section

4/25/79
Date

R. E. Hall
R. E. Hall, Chief, Engineering Support Section

4/25/79
Date

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Inspection Summary:

Inspection on April 2-6, 1979 (Report No. 50-493/79-05; 50-499/79-05)

Areas Inspected: Routine, unannounced inspection of construction activities including observation of housekeeping and storage for Units 1 and 2; review of HVAC activities for Units 1 and 2; review of procedures and records related to receiving, storage, and maintenance of Class 1E electrical equipment for Units 1 and 2; and review of previous inspection findings. The inspection involved fifty-eight inspector-hours by two NRC inspectors.

Results: Of the four areas inspected, two apparent items of noncompliance were identified in two areas (infraction - failure to follow procedures for storage of material - paragraph 3 and infraction - failure to follow procedures for preparation of nonconformance report - paragraph 5).

DETAILS

1. Persons Contacted

Principal Licensee Employees

T. D. Stanley, Project QA Supervisor
*L. D. Wilson, Site QA Supervisor
*D. G. Long, QA Lead Engineer
*T. J. Jordan, QA Lead Engineer
M. M. Johnson, Senior Engineer
D. Anderson, Engineer
*D. W. Bohner, QA Senior Specialist
*M. S. Monteith, QA Technician

Other Personnel

*C. W. Vincent, Project QA Manager, Brown & Root (B&R)
*G. T. Warnick, Site QA Manager, B&R
*J. M. Salvitti, Assistant Construction Project Manager, B&R
*L. E. Tolley, Chief Civil Engineer, B&R
D. McCauley, Electrical Engineer, B&R
B. Speers, Electrical Engineer, B&R
O. B. Russom, Electrical QC Supervisor, B&R
G. Ewert, QA Internal Surveillance Supervisor, B&R
K. Sibley, Electrical QC Inspector, B&R
L. W. Froelick, Projects Manager, Bowen Company, Inc. (Bowen)
B. Carr, Site QA Manager, Bowen

The IE inspectors also interviewed other licensee and contractor employees including members of the QA/QC and engineering staffs.

*denotes those attending the exit interview.

2. Licensee Action on Previous Inspection Findings

(Open) Infraction (50-498/78-16-2; 50-499/78-16-2): Failure to Provide Acceptance Criteria for Megger Testing of Class 1E Motors. The IE inspector reviewed the training records and surveillance records pertinent to Procedure A040KPEC-2, Rev. 0. These records indicate that the corrective action has been implemented. However, this item will remain open pending completion of the Brown & Root review of existing inspection plans and procedures for the inclusion of appropriate acceptance criteria, per recurrence control committed to in the licensee's letter of January 8, 1979. This action was to have been completed by February 1, 1979.

(Closed) Infraction (50-498/78-16-3; 50-499/78-16-3): Failure to Follow Approved Procedures for QC Surveillance of Maintenance on Class 1E Equipment. The IE inspector reviewed training records and HL&P and B&R surveillance reports pertinent to Procedure A040KPMCP-3, Rev. 4. The corrective action and surveillance of this action is appropriate. This item is considered closed.

(Open) Infraction (50-498/79-01; 50-499/79-01): Failure to Provide Procedure for a Quality Control Activity for Transcription of Cadwelding Examination Checklist Records. The IE inspector reviewed Site Work Instruction SWI 007-A and a subsequent revision SWI-007-B. The IE inspector advised the licensee's representative that SWI-007-A did not adequately provide the required control on transcription of data from working copies of ECs to record copies. A subsequent revision, SWI-007-B was immediately drafted and implemented including training. SWI-007-B does provide adequate instructions for completing and recopying Cadwelding Examination Checklists. This item will remain open pending issuance of a new Cadwelding inspection report as required by recurrence control specified in the licensee's response letter of March 12, 1979. This action was to have been completed by March 20, 1979.

(Open) Infraction (50-498/79-02; 50-499/79-02): Failure to Control Superseded Drawings. The IE inspector reviewed the surveillance reports for February and March. These reports indicate that there is a considerable problem with control of FREAs and DCNs and in one report, the IE inspector noted three incorrect drawing revisions were found in Control Record Copy 038 which was one of the files originally identified in the 79-02 NRC inspection report. This item will remain open pending results of the continued increased surveillance during April and the subsequent B&R evaluation and action on the results.

3. 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.

During the tour in the vicinity of the Unit 1 Reactor Containment Building on April 2, 1979, the IE inspector observed several instances where reinforcing steel stored in a laydown area was in contact with the ground. On the following day (April 3, 1979), additional instances of reinforcing steel stored in contact with the ground in Units 1 and 2 laydown areas were observed by the IE inspector and accompanying licensee representatives. Improper storage of reinforcing steel was previously identified as an item of noncompliance¹; however, the condition of the laydown storage areas had markedly deteriorated since the problem was first identified.

During the inspection of the Unit 1 Mechanical-Electrical Auxiliary Building (MEAB) on April 4, 1979, the IE inspector observed that the skid mounted Boron Recycle Evaporator, which was stored in place, was wet from apparent concrete curing water which was dripping from work areas located above the storage area. The equipment was covered by a temporary shelter; however, the shelter failed to provide adequate protection from the wet environment in the MEAB. Rust was observed on the surfaces of many carbon steel components mounted on the skid. In addition, the equipment was observed to be covered with a thin coating of sand and dust which apparently was caused by sandblasting operations which had occurred in the vicinity. The vendor's instructions for the equipment requires that for long-term storage, the unit be stored indoors in a warm, dry environment.

The IE inspector informed the licensee that the above item related to the Boron Recycle Evaporator is considered to be an item of non-compliance with the requirements of Criterion V of Appendix B to 10 CFR 50 in that procedures or instructions which prescribe storage of materials were not followed.

4. Review of Heating Ventilating and Air Conditioning (HVAC) Activities

The IE inspector was informed that Bowen Industries, Inc., the HVAC contractor, has not begun work on safety related systems. Safety related HVAC work is expected to commence in July or August 1979.

The IE inspector reviewed Specification No. 3V279VS007-E, "Safety Class Ductwork," and Subcontract No. 35-1197-0278, "Heating, Ventilating and Air Conditioning for Main Plant." The Bowen Quality Assurance Manual reviewed by the IE inspector was an uncontrolled copy pending completion of the licensee's review and approval of the manual for site use. The licensee stated that the QA Manual and implementing procedures would be issued prior to the beginning of safety related work.

No items of noncompliance or deviations were identified.

5. Electrical Components and Systems

a. Review of Procedures and Records

The IE inspector reviewed the following procedures and records pertaining to receiving, storage and maintenance of Class IE electrical equipment:

AO40KPECP-7, Rev. 3, April 4, 1979, "Receiving, Storage Installation and Maintenance of Class 1E and Nonclass 1E Lead Storage Batteries"

Purchase Order (P.O.) No. 35-1197-4100 for Class 1E Battery Chargers

Purchase Order (P.O.) No. 35-1197-4109 for Class 1E Batteries

WMC records for Class 1E Batteries EI-I and EI-II

WMC records for motors 2R161NPA101A, B & C

NCR S-E1137-A and NCR S-1137-B for RHR pump motor 2R161NPA101A

The IE inspector's review of the maintenance records for the Residual Heat Removal Pump motor and NCR S-E1137-A and NCR S-E1137-B indicate that the nonconformance report deficiency does not reflect the total scope of the nonconforming condition.

10 CFR 50, Appendix B, Criterion V requires that activities affecting quality shall be accomplished in accordance with approved instructions and procedures.

Brown & Root Quality Assurance Procedure ST-QAP-2.6, "Nonconformances," paragraph 5.1 requires that the description of the nonconforming condition provide sufficient detail establishing the sequence of events pertaining to the nonconformance and an accurate physical description of the nonconformance.

Contrary to the above:

NCR S-E1137-A and the subsequent revision to the NCR, NCR S-E1137-B, block No. 7 description of deficiency states:

"Questionable Megger Reading on Motor for RHR Pump, Equipment #2R161NPA-101A. ECP-2 and MCP-3.3.5 and 3.6 require 20 megohms on low voltage motors. The meg reading is 250,000 ohms."

Based on the IE inspector's review of notes on the back of the WMC record for motor No. 2R161NPA-101A and subsequent discussions with the responsible B&R Quality Control and Engineering personnel, it was found that the motor had been inadequately protected from

concrete curing water at the motor terminal connection box was full of water on February 9, 1979. This condition was witnessed by QC and later substantiated by the area engineer. The engineer responsible for initiating the proposed disposition on NCR S-E1137A told the IE inspector that he was not aware of the condition on the motor on February 9, 1979, and was not aware of possibility of there being water in the motor.

On March 28, 1979, NCR S-E1137-B was written transferring the responsibility of the resolution of this nonconformance to the Westinghouse site organization.

The megger reading for the RHR pump motor on April 4, 1979, was 0.5 megohms, almost two months after the nonconformance was originally identified.

The description of the deficiency on NCR S-E1137A and NCR S-E1137B does not provide sufficient detail establishing the sequence of events pertaining to, and an accurate physical description of the nonconformance to insure proper disposition and evaluation of impact on the condition of Class IE equipment.

b. Observation of Work

The IE inspector observed the start of the initial equalizing charge on Class IE batteries EI-I and EI-II.

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 April 6, 1979. The IE inspectors summarized the purpose and the scope of the inspection and the findings. A licensee representative acknowledged the statements of the IE inspectors concerning the items of noncompliance.