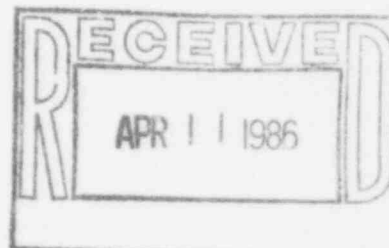


The Light company

Houston Lighting & Power P.O. Box 1700 Houston, Texas 77001 (713) 228-9211

April 8, 1986
ST-HL-AE-1647
File No.: G2.4, M22.3

Mr. Robert D. Martin
Regional Administrator, Region IV
U. S. Nuclear Regulatory Commission
611 Eyan Plaza Drive, Suite 1000
Arlington, Texas 76011



South Texas Project
Units 1 & 2
Docket Nos. STN 50-498, STN 50-499
Report on Bottom Mounted In-Core Instrument Tubes

Dear Mr. Martin:

Houston Lighting & Power Company would like to inform you of the resolution of a problem which was brought to our attention by Mr. C. E. Johnson, Resident Inspector at South Texas Project. Due to the nature of this concern, we thought it appropriate that you be provided with the attached report expeditiously.

If you should have any questions on this matter, please contact Mr. C. A. Ayala at (512) 972-8628.

Very truly yours,

A handwritten signature in cursive script that reads "J. H. Goldberg".

J. H. Goldberg
Group Vice President, Nuclear

CAA/aa

Attachment: Report on Bottom Mounted In-Core Instrument Tubes

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South Texas Project
Units 1 & 2
Docket Nos. STN 50-498, STN 50-499
Report on Bottom Mounted In-Core Instrument Tubes

I. Description of Problem

In June 1985, it was determined that two pairs of instrument tubes would cross if installed at their original design location on the seal table. A Construction Field Engineering "Request for Engineering Assistance (REA)" and a Westinghouse Field Deficiency Report (FDR) were prepared to document the drawing discrepancy and to request clarification of the drawings to show the correct location of in-core instrumentation tubes that appeared to be transposed.

The Westinghouse disposition of the FDR required the tubing to be interchanged and the appropriate NSSS drawings to be revised to reflect the correct core locations on the seal table. The engineering response to the REA referenced the FDR. Upon receipt of the response to the REA, the Constructor proceeded with installation utilizing the REA as the design document. This is in violation of approved site procedures that require construction activities to be performed using controlled design drawings, procedures and approved design change documents.

REA's and FDR's are not authorized to be used for construction activities at the South Texas Project.

The tubing connections to the seal plate were subsequently inspected and accepted by Quality Control although construction was not completed in accordance with the latest approved design documents.

Following turnover to the Startup organization, it was discovered that one pair of instrument tubes were installed at their original design location on the seal table resulting in these tubes being crossed. Further investigation determined that the seal plate hole numbers for both pairs of instrument tubes had been marked in accordance with the FDR as opposed to the latest design drawing, and the other pair of instrument tubes had been interchanged in accordance with the disposition of the FDR.

The following are the root causes of these deficiencies:

- o Construction performed work against an REA which is not proper design authorization.
- o The engineering response to the REA was not incorporated into approved Bechtel engineering design information and issued to construction for use.

- o The Quality Control Inspector improperly inspected the installation against the existing design documents. This Inspector is no longer on site.

II. Corrective Actions Taken and Results Achieved

The following investigations to determine if unauthorized documents were used for other construction or inspection activities were performed:

- o A review of additional Inspection Reports did not disclose any other situation where an FDR was referenced for acceptance. Discussion with inspection personnel indicated that none were aware of any other situation where unauthorized documents were used for inspection and acceptance of construction work. An inspection of the remaining in-core instrument tubes was performed to ensure they were installed in their correct location on the seal plate. No other deficiencies were identified.
- o A review of 100% of the closed Instrumentation and Controls (I&C) REA's and approximately 70% of the closed I&C Mechanical, Piping, Pipe Supports, Welding and "General" REA's which pertain to the Reactor Containment Building has been completed. All REA's directed Construction to perform work to an approved Bechtel design document.

A Nonconformance Report has been initiated to correct the seal plate and drawing discrepancy.

III. Corrective Steps Taken to Prevent Recurrence

The Quality Control Site Supervisor reinstructed all Inspectors to perform inspections using only the latest approved engineering design documents.

Craft Supervisors and Field Engineers were reinstructed that REA's and FDR's must not be used for construction.

All appropriate I&C Engineers and Supervisors have been reinstructed. The appropriate Mechanical, Piping and Pipe Support Engineers and Supervisors have also been reinstructed.

The Site Office Engineering Manager has reinstructed Site Engineers of the requirement that since an REA is not a design disclosure document, response to REA's should reference the appropriate project design document which will feature the change.

cc:

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Revised 12/2/85