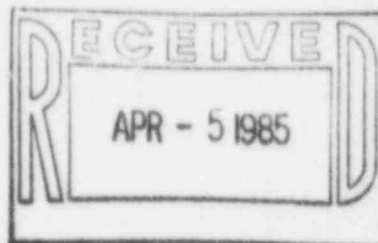


The Light company

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

April 1, 1985
ST-HL-AE-1195
File No.: G12.81

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



Dear Mr. Martin:

South Texas Project
Units 1 & 2
Docket Nos. STN 50-498, STN 50-499
Revised Final Report Concerning
Cable Tray Hanger Design

On December 5, 1980, Houston Lighting & Power Company (HL&P), pursuant to 10CFR50.55(e), notified your office of an item concerning the cable tray hanger design for the South Texas Project (STP). By letter dated May 18, 1981, HL&P submitted the final report concerning this item which stated that the previous architect-engineer's (A/E's) as-built safety-related cable tray hanger designs would be evaluated in accordance with the latest design control procedures and actual loading conditions. The connections would then be modified as necessary to meet project design requirements.

As a result of Bechtel's evaluation of the previous cable tray hanger design utilizing structural steel, Bechtel recommended a new design using cold formed strut. Accordingly, all cable tray supports and hangers based on the previous A/E's design were replaced except for the cable tray supports in the switchgear room. The deficiency identified in this report is not applicable to the cable tray supports in the switchgear room. They are of a different design. Bechtel's evaluation of these supports confirmed that the supports are acceptable.

Attachment 1 to this letter is a revised final report regarding this item.

85-147

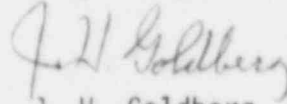
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If you should have any questions, please contact Mr. Michael E. Powell at
(713) 993-1328.

Very truly yours,

A handwritten signature in cursive script, appearing to read "J. H. Goldberg".

J. H. Goldberg
Group Vice President, Nuclear

MEP/cg

Attachment: Revised Final Report Concerning Cable Tray Hanger Design

cc:

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Docketing & Service Section
Office of the Secretary
U.S. Nuclear Regulatory Commission
Washington, DC 20555

South Texas Project
Units 1 & 2
Revised Final Report
Concerning Cable Tray
Hanger Design

I. Summary

On December 5, 1980 in accordance with the requirements of 10CFR50.55(e), Houston Lighting & Power Company (HL&P) notified your office of an item concerning the design of the safety-related cable tray hangers. During a routine Engineering review of the previous architect-engineer's safety-related cable tray hangers, it was identified that, in transcribing a design standard, the specific design connection detail was modified by field engineering. As the design calculation referenced a structural standard detail this modification was not identified in the Engineering design verification process. At the time that this item was identified the design connection had been verified, fabricated and erected.

Based on Bechtel's evaluation of the previous A/E's cable tray supports design utilizing structural steel, Bechtel recommended a new design using cold formed strut. Accordingly, all cable tray supports and hangers on STP have been replaced except for the cable tray supports in the switchgear room. The deficiency identified in this report is not applicable to the cable tray supports in the switchgear room. They are of a different design. Bechtel's evaluation of these supports confirmed that the supports are acceptable.

II. Description of the Incident

During a routine design review of the previous A/E, it was identified that a safety-related cable tray hanger connection between the hanger beam and vertical leg had been based in part on an improper cross reference to a cable tray hanger design standard. The specific connection involved a 2 1/2 inch wide plate which was welded on two sides of a connecting channel beam with a 1/4 inch weld. The design standard required a 3 inch wide plate with a 1/4 inch weld around the channel beam connection. At the time the design review identified the modified standard, the connection had been design verified, fabricated and erected.

III. Corrective Action

All cable tray supports and hangers designed by the previous A/E except those in the switchgear room have been replaced with a new hanger system. Hangers in the switchgear room are not based on the hanger design standard addressed in the report. Accordingly, the potential for using the deficient hanger design is no longer a concern.

IV. Recurrence Control

The responsibility for design and engineering of safety-related cable tray supports is now exclusively assigned to the Engineering Department/Group of the new A/E to preclude a recurrence of this condition.

Additionally, the importance of checking cross references has been re-emphasized to design verifiers. Further the design control process has been revised to allow safety-related cable tray hanger erection only on the basis of a documented and design verified drawing.

V. Safety Analysis

The potential for using the deficient hanger design is no longer a concern since this design is not being used on STP. Accordingly, no significant safety hazard exists.