

# The Light company

Houston Lighting & Power South Texas Project Electric Generating Station P. O. Box 289 Wadsworth, Texas 77483

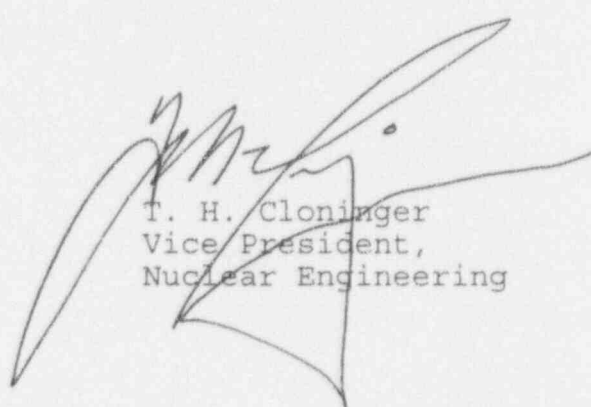
September 8, 1994  
ST-HL-AE-4879  
File No.: G02.04  
10CFR2.201

U. S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, DC 20555

South Texas Project  
Unit 1  
Docket No. STN 50-498  
Reply to Notice of Violation 9417-01  
Regarding Flow Rate Testing of an  
Essential Chiller Design Modification

Houston Lighting & Power has reviewed Notice of Violation 9417-01 dated August 10, 1994, regarding flow rate testing following a design modification to the essential chillers, and submits the attached reply.

If there are any questions regarding this matter, please contact Mr. S. M. Head at (512) 972-7136 or me at (512) 972-8787.



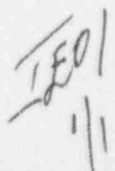
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Attachment: Reply to Notice of Violation 9417-01

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IR-94\94-241.001 Project Manager on Behalf of the Participants in the South Texas Project



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South Texas Project Electric Generating Station

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**Response to Notice of Violation 9417-01**

**I. Statement of Violation:**

During an NRC inspection conducted April 25 through June 4, 1994, a violation of NRC requirements was identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C, the violation is listed below:

- A. Technical Specification 6.8.1.a requires, in part, that written procedures shall be established, implemented, and maintained, including the applicable procedures recommended in Appendix A of Regulatory Guide 1.33, Revision 2, February 1978. Item 9.e of Appendix A states that general procedures for the control of modification work should be prepared before reactor operation is begun.

Plant General Procedure OPGP03-ZE-0031, Revision 9, "Design Change Implementation," implements this requirement. Step 4.2.5 states, in part, that it is the responsibility of the cognizant system engineer and cognizant section supervisor to identify all testing required to ensure compliance with regulatory requirements as well as any testing required to ensure operability consistent with the licensing basis of the South Texas Project.

Contrary to the above, on or about November 11, 1993, Modification Package 93-050 received final review and approval, and neither the cognizant system engineer nor the cognizant section supervisor identified that flow rate testing of the essential cooling water bypass line was required to ensure operability of the Unit 2 essential chillers. This resulted in Essential Chiller 22A being modified and returned to service on February 18, 1994, without first appropriately balancing the essential cooling water system to ensure that a minimum cooling water flow rate through the chiller would be available during cold weather operations.

This is a Severity Level IV violation (Supplement I) (498/94017-01).

**II. Houston Lighting & Power Position:**

Houston Lighting & Power concurs with the stated violation.

III. Reason for Violation:

The reason for the violation was that the system engineers involved in determining the required testing for Modification 93-050 did not check the Post-Modification Acceptance Testing Guidelines procedure. These guidelines required flow rate testing to be considered when a modification is associated with altering piping arrangements. If the system engineer had used the Post-Modification Acceptance Testing guidelines, a flow verification test would have been considered.

Modification 93-050 enhanced the ability to throttle essential cooling water flow during cold weather conditions. The post-modification testing did not include a verification that the design flow rate was achievable for the new bypass line around the existing condenser outlet valve for the 150 ton and 300 ton Essential Chillers.

Post-modification testing requirements are established during the impact assessment of a design change. The system engineer and the section supervisor were responsible for identifying all testing required to ensure compliance with regulatory requirements as well as any testing required to ensure operability. Impact assessments were performed by two sections in the Systems Engineering Department because the scope of modification 93-050 involved different systems. Neither impact assessment included a flow verification test for the new bypass line.

IV. Corrective Actions:

The required flow through the essential chiller essential cooling water outlet bypass valve was verified for the Unit 1 and Unit 2 150 ton and 300 ton Essential Chillers.

The following corrective actions have been or will be taken to prevent recurrence:

1. A training bulletin was provided to the system engineers on lessons learned. The bulletin discussed the purpose of the Post-Modification Acceptance Testing Guidelines procedure, stressed the necessity for adequate communication between applicable system engineers in a multi-system Plant Modification, and pointed out the importance of the procedures referenced on the impact assessment forms.
2. Plant modification procedures will be revised to improve post-modification testing identification and performance. This action will be completed by October 31, 1994.

V. Date of Full Compliance:

Houston Lighting & Power is in full compliance.