

September 12, 1997

Mr. William T. Cottle
Executive Vice-President &
General Manager, Nuclear
Houston Lighting & Power Company
South Texas Project Electric
Generating Station
P. O. Box 289
Wadsworth, TX 77483

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION (RAI) REGARDING GENERIC LETTER
(GL) 96-06, "ASSURANCE OF EQUIPMENT OPERABILITY AND CONTAINMENT
INTEGRITY DURING DESIGN-BASIS ACCIDENT CONDITIONS," SOUTH TEXAS
PROJECT, UNITS 1 AND 2 (STP) (TAC NOS. M96868 AND M96869)

Dear Mr. Cottle:

The Nuclear Regulatory Commission (NRC) staff is reviewing Houston Lighting & Power Company's (HL&P's) January 28, 1997, response to GL 96-06. HL&P's response addresses the issues of water hammer, two-phase flow and thermally-induced pressurization of piping runs penetrating the containment for STP. This letter concerns the issue of thermally-induced pressurization of piping runs penetrating the containment.

In its response, HL&P identified that ten pipe lines penetrating the containment in each unit are susceptible to thermally-induced pressurization. HL&P indicated that nine of these lines were found acceptable due to the inherent design features of the containment isolation valves. HL&P further indicated that thermal insulation was added to the remaining line.

In order to complete the thermally-induced pressurization portion of the review, the staff needs the additional information identified in the enclosure regarding HL&P's evaluation of these pipe lines. Please provide your response within 60 days from the date of this letter.

Sincerely,

ORIGINAL SIGNED BY:

Thomas W. Alexion, Project Manager
Project Directorate IV-1
Division of Reactor Projects III/IV
Office of Nuclear Reactor Regulation

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Docket Nos. 50-498 and 50-499

Enclosure: RAI

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

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Sincerely,

A handwritten signature in cursive script that reads "Thomas W. Alexion".

Thomas W. Alexion, Project Manager
Project Directorate IV-1
Division of Reactor Projects III/IV
Office of Nuclear Reactor Regulation

Docket Nos. 50-498 and 50-499

Enclosure: RAI

cc w/encl: See next page

Mr. William T. Cottle
Houston Lighting & Power Company

South Texas, Units 1 & 2

cc:

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REQUEST FOR ADDITIONAL INFORMATION (RAI)

GENERIC LETTER (GL) 96-06

SOUTH TEXAS PROJECT, UNITS 1 AND 2

1. The January 28, 1997, submittal, indicated that nine piping runs susceptible to thermally-induced overpressure were determined to be acceptable based on the valve design. These piping runs contained either spring-loaded valves that form isolation barriers or valves that will self-relieve through leakage that form isolation barriers. In the submittal, it was stated that these valves would relieve water to preclude an overpressure condition. Provide the following information for each piping run evaluated in this manner:
 - a. Describe the applicable design criteria for the piping and the valves. Include the required load combinations.
 - b. Provide a drawing of the valve. Provide the pressure at which the valve was determined to lift off its seat or leak and describe the method used to estimate this pressure. Discuss any sources of uncertainty associated with the estimated lift off pressure.
 - c. Provide the maximum-calculated stress in the piping run based on the estimated lift off or leakage pressure.
2. The January 28, 1997, submittal, indicated that the reactor coolant pump drain tank line was insulated in order to maintain piping stresses within the allowable limits. Provide the following information for this piping run:
 - a. Provide the applicable design criteria for the piping and the valves. Include the required load combinations.
 - b. Provide a drawing of the piping run between the isolation valves. Include the lengths and thicknesses of the piping segments and the type and thickness of the insulation.
 - c. Provide the maximum-calculated temperature and pressure for the pipe run. Describe, in detail, the method used to calculate these pressure and temperature values. This should include a discussion on the heat transfer model used in the analysis and the basis for the heat transfer coefficients used in the analysis.

ENCLOSURE