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March 20, 1996
ST-HL-AE-5322
File No.: G03.13
10 CFR 50.4
10 CFR 2.790

U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, DC 20555-0001

South Texas Project
Units 1 and 2
Docket Nos. STN 50-498, STN 50-499
Response to Resolution of NRC Bulletin 88-08,
"Thermal Stresses in Piping Connected to Reactor Coolant Systems,"
South Texas Project, Units 1 and 2 (STP) (TAC Nos. M93822 and M93823)

Reference: Correspondence Response to Resolution of NRC Bulletin 88-08, "Thermal Stresses in Piping Connected to Reactor Coolant Systems," South Texas Project, Units 1 and 2 (STP) (TAC Nos. M93822 and M93823), dated February 23, 1996, from Mr. Thomas Alexion, Project Manager, USNRC to Mr. William Cottle, Executive Vice President and General Manager, South Texas Project.

Pursuant to 10 CFR 50.4, the South Texas Project (STP) hereby submits a response to the referenced safety evaluation. STP has reviewed the safety evaluation as an attachment to the referenced resolution.

After review and discussions with Westinghouse (W) and the Electric Power Research Institute (EPRI) the principle providers of proprietary information from which the conclusion in the safety evaluation were based, STP believes the wording to section 2.0 Evaluation, item 6 and item 8 should be changed. This is based on the proprietary agreement and the notices on the cover and page ii and the acknowledgements on page v of EPRI TR-103581, Final Report, dated March 1994, "Thermal Stratification, Cycling, and Striping (TASCS)." The notices state "This report contains proprietary information that is the intellectual property of EPRI. Accordingly, it is available only under license from EPRI and may not be reproduced or disclosed, wholly or in part, by any Licensee to any other person or organization." The Acknowledgements on page v recognizes several contributions including the entity identified in items 6 and 8 of the NRC's safety evaluation. The thermal stratification testing results provided by these organizations played a significant role in the development and verification of the tools provided in this report. Reference 9 of the subject safety evaluation identifies

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EPRI TR-103581 as licensable material, proprietary, and confidential. With these items in mind, STP believes that item 6 and 8 of section 2.0, Evaluation, should be changed to read as follows:

6. "In Chapter 5.3 of the TASCS report, "Thermal Cycling-Background and Verification", it is stated that the tests were performed under conditions similar to those existing at Farley. Very little data on this test program has been presented in the reports. Figure 5.3-8 of the TASCS report shows the temperature-time histories measured at various locations along the bottom of the inside surface of a test configuration similar to the safety injection line at Farley. The corresponding temperature-time histories on the outside surface are not shown. Figure 5.3-2 of the TASCS report shows the temperature-time histories measured around the circumference of the outside pipe surface at Farley. No correlation is therefore possible between the test data and the Farley data."

8. "Equation 5.2-5 of Chapter 5.2 of the TASCS report, "Stratification Heat Transfer," is based on steady state flow conditions, which do not reflect actual transient temperature conditions in pipes with inleakage. This can be seen from the good correlation of calculated results with the WHT test results, and the poor correlation of the calculated results and the tests simulating the Farley cracking incident."

STP believes specific references to the other test source should be removed in accordance with 10 CFR 2.790 (b) (1) (i) and (ii) in the subject safety evaluation.

If there are any questions regarding this request, please contact Mr. H. R. Pate at (512) 972-7787 or me at (512) 972-7162.

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HRP/lf

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