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NSD-NRC-96-4708

May 2, 1996

50-498/499

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

Dear Mr. Thomas W. Alexion:

Subject: South Texas Safety Evaluation for NRCB 88-08 - Proprietary Aspects

References:

- 1) NRC letter of 02/23/96, "Resolution of 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)," T. W. Alexion to W. T. Cottle (HL&P).
- 2) NRC letter of 04/16/96, "Resolution of 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)," T. W. Alexion to N. J. Liparulo (Westinghouse).
- 3) HL&P letter ST-HL-AE-5322 of 03/20/96, "Response to Resolution of 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)," S. E. Thomas.
- 4) Electric Power Research Institute Report EPRI TR-103581, Project 3153-02, entitled "Thermal Stratification, Cycling, and Striping (TASCS)," March 1994, prepared by Westinghouse Electric Corporation, EPRI Proprietary Licensed Material.

On February 23, 1996, the NRC staff provided the Reference 1 letter and Safety Evaluation (SE) to HL&P (the licensee for South Texas Project Units 1 and 2), with copies to Westinghouse and EPRI. Although the NRC staff believed that the Reference 1 letter did not contain any proprietary information, they thought it prudent to delay placing the SE in the public document room for a period of thirty days from February 23, 1996, to allow the licensee, Westinghouse and EPRI the opportunity to comment on the proprietary aspects only, if any. The NRC staff had intended that all parties (licensee, Westinghouse and EPRI) would respond either by a combined response through the licensee, or separately. However, only HL&P responded to the letter (Reference 3), after conferring with Westinghouse and EPRI, the principle providers of the proprietary information from which the conclusions in the SE were based. This letter provided recommended wording for Section 2.0, items 6 and 8.

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Westinghouse believes the wording to Section 2.0 items 6 and 8 should be changed, based on the proprietary agreement and notices on the cover and page ii and the acknowledgements on page v of Reference 4. 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 recognize several contributions including the entity identified in items 6 and 8 of the NRC's SE. 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 SE identifies Reference 4 as licensable material, proprietary and confidential. With these items in mind, Westinghouse believes that items 6 and 8 of Section 2.0 should be changed to read as follows:

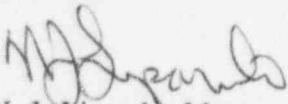
6. *"In Chapter 5.3 of the TASCs report, Thermal Cycling - Background and Verification", it is stated that the tests were performed under conditions similar to those existing at Farley. Very little data on this test program has been presented in the reports. Figure 5.3-8 of the TASCs report shows the 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 show 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."*

Westinghouse 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 SE.

If you have questions, please call me at (412) 374-5169.

Very truly yours,



N. J. Liparulo, Manager
Regulatory & Engineering Networks

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