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The Light company

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September 30, 1986
ST-HL-AE-1765
File No.: G9.18

Mr. Vincent S. Noonan, Project Director
PWR Project Directorate #5
U. S. Nuclear Regulatory Commission
Washington, DC 20555

South Texas Project
Units 1 and 2
Docket Nos. STN 50-498, STN 50-499-01
Boron Dilution Analysis
SER Open Item #15

Dear Mr. Noonan:

With regard to South Texas Project Safety Evaluation Report (SER) Open Item #15, the subject boron dilution analysis has been completed. Attachment 1 contains the final report prepared by Westinghouse while Attachment 2 includes revised portions of the FSAR which will be incorporated in a future amendment.

The results of the analysis demonstrate that at least 15 minutes are available for operator response in the event of a boron dilution transient in Modes 3, 4 and 5. (As discussed in the SER, all boron dilution initiators will be locked out during Mode 6 per Technical Specifications).

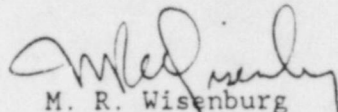
It should be noted that the solution technique used to calculate the amount of time from alarm to total loss of shutdown margin for this report is the same as that developed in support of the Westinghouse flux doubling system as accepted by the NRC. Although the solution technique was developed in support of the Westinghouse system, it has been determined that the Gamma-Metrics (G-M) flux multiplication system used at STP is at least as conservative and use of the G-M system is bound by the analysis.

Accordingly, based on the information provided in the attached, Houston Lighting & Power considers this item "closed".

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If you should have any questions on this matter, please contact
Mr. J. S. Phelps at (713) 993-1367.

Very truly yours,



M. R. Wisenburger
Manager, Nuclear Licensing

JSP/yd

Attachment 1: Probabilistic Boron Dilution Analysis
(Final Report)

2: Revised FSAR pages

Houston Lighting & Power Company

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cc:

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ATTACHMENT 1