The Light company

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

July 7, 1997 ST-HL-AE-5685 File No.: G03.08 10CFR50.54(f)

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

South Texas Project
Units 1 and 2
Docket Nos. STN 50-498, STN 40-499
Response to Request for Additional Information (RAI) Regarding
Thermo-Lag Related Ampacity Derating Issues

References:

- 1) Correspondence from Thomas W. Alexion, NRC, to William T. Cottle, South Texas Project, dated May 9, 1997
- Correspondence from T. H. Cloninger, South Texas Project, to NRC Document Control Desk, dated November 6, 1996 (ST-HL-AE-5508)

Pursuant to your request of May 9, 1997 (reference 1), the South Texas Project submits the attached additional information regarding Generic Letter 92-08, "Thermo-Lag 330-1 Fire Barriers." The response addresses the Nuclear Regulatory Commission reviewer's concerns regarding the effect of use of Thermo-Lag on ampacity of South Texas Project cables.

The South Texas Project previously identified a total of 24 cable trays that did not pass the "Step 1 Ampacity Analysis" (reference 2). A "Step 2 Heat Analysis" using the "Watts per foot" methodology was applied to these trays by the South Texas Project and determined the trays to be acceptable for current loads. Based on the reviewer concerns regarding the use of "Watts per foot" methodology, the South Texas Project has used alternate considerations to address the thirteen cable trays in Unit 1 and eleven cable trays in Unit 2 which failed the "Step 1 Ampacity Analysis." These alternate considerations consist of using a 1.0 load factor for the cable load values and the intermittent nature of the loads to show that use of Thermo-Lag material has not degraded the cable life. An Ampacity Derating Analysis reassessment for the cables involved is attached.

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If there are any questions, please contact either Mr. G. D. Manasco at (512) 972-8363 or me at (512) 972-8787.

I. H. Cloninger

Nuclear Engineering

PLW

Attachment: Reassessment of the Ampacity Derating Analysis for Remaining Gable

Trays