

South Texas Project Electric Generating Station P.O. Box 289 Wadsworth, Texas 77483

January 20, 2000 NOC-AE-00000181 File Nos.: G03.11, G03.17

M33.02

10CFR50.46

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

10CFR50.46 Annual Report of Essential Core Cooling System Model Revisions

- References: 1) Letter from D. A. Leazar to the NRC Document Control Desk, "10CFR50.46 Annual Report of ECC System Model Revisions," dated December 17, 1998 (NOC-AE-000390)
 - Letter from D. A. Leazar to the NRC Document Control Desk, "10CFR50.46 Thirty Day Report of Significant Changes to the Accepted Emergency Core Cooling System Model," dated October 19, 1999 (NOC-AE-000683)

Pursuant to 10CFR50.46(a)(3)(ii), the South Texas Project (STP) is submitting this annual report concerning revisions to the accepted Emergency Core Cooling System (ECCS) evaluation model at STP Units 1 and 2. There were no changes to the Small Break Loss of Coolant Accident (SBLOCA) evaluation model during 1999. As documented in Reference 2, the Large Break Loss of Coolant Accident (LBLOCA) Peak Cladding Temperature (PCT) increased from 2116 °F to 2192 °F as a result of the correction of errors in the LOCBART computer code. A detailed description of the LOCBART errors was provided in Reference 2.

Attached are the year end SBLOCA and LBLOCA PCT rackups for 1999. For the STP SBLOCA evaluation model the PCT is 1849 °F. For the LBLOCA evaluation model the PCT is 2192°F. The SBLOCA and revised LBLOCA evaluation models continue to meet the acceptance criteria identified in 10CFR50.46.

There are no new commitments contained in this letter. If you should have any questions concerning this matter, please contact Mr. Charles R. Albury at (361) 972-8901 or me at (361) 972-7795.

Director

Nuclear Fuel and Analysis

imw/

Attachment: 1999 YEAR END PEAK CLADDING TEMPERATURE RACKUPS

4001

NOC-AE-00000181

File No.: G03.11, G03.17

M33.02

Page 2

cc:

Ellis W. Merschoff Regional Administrator, Region IV U.S. Nuclear Regulatory Commission 611 Ryan Plaza Drive, Suite 400 Arlington, Texas 76011-8064

John A. Nakoski Project Manager, Mail Code 0-4D3 U. S. Nuclear Regulatory Commission Washington, DC 20555-0001

Cornelius F. O'Keefe c/o U. S. Nuclear Regulatory Commission P. O. Box 910 Bay City, TX 77404-0910

A. H. Gutterman, Esquire Morgan, Lewis & Bockius 1800 M. Street, N.W. Washington, DC 20036-5869

M. T. Hardt/W. C. Gunst City Public Service P. O. Box 1771 San Antonio, TX 78296

A. Ramirez/C. M. Canady City of Austin Electric Utility Department 721 Barton Springs Road Austin, TX 78704 Jon C. Wood Matthews & Branscomb One Alamo Center 106 S. St. Mary's Street, Suite 700 San Antonio, TX 78205-3692

Institute of Nuclear Power Operations - Records Center 700 Galleria Parkway Atlanta, GA 30339-5957

Richard A. Ratliff Bureau of Radiation Control Texas Department of Health 1100 West 49th Street Austin, TX 78756-3189

D. G. Tees/R. L. Balcom Houston Lighting & Power Co. P. O. Box 1700 Houston, TX 77251

Central Power and Light Company ATTN: G. E. Vaughn/C. A. Johnson P. O. Box 289, Mail Code: N5012 Wadsworth, TX 77483

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

NOC-AE-00000181 File No.: G03.11, G03.17

M33.02

Page 3

ATTACHMENT: 1999 YEAR END PEAK CLADDING TEMPERATURE RACKUPS

Unit 1 and Unit 2 SBLOCA:

1998 / 1999 Year End SBLOCA PCT (Reference 1)

1849 °F

Unit 1 and Unit 2 LBLOCA:

1998 Year End LBLOCA PCT (Reference 1)

2116 °F

Change in LBLOCA PCT based on the 1999 limiting case reanalysis following the correction of errors in the LOCBART code (Reference 2)

+ 76 °F

1999 Year End LBLOCA PCT

2192 °F