50-498/499



UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D.C. 20555-0001

October 24, 1995

Mr. William T. Cottle Group Vice-President, Nuclear Houston Lighting & Power Company South Texas Project Electric Generating Station P. O. Box 289 Wadsworth, TX 77483

SUBJECT: TECHNICAL EVALUATION REPORT FOR THE OFFSITE DOSE CALCULATION MANUAL (REVISION 6), SOUTH TEXAS PROJECT, UNITS 1 AND 2 (STP) (TAC NOS. M82726 AND M82727)

Dear Mr. Cottle:

Enclosed is the Technical Evaluation Report (TER) for Revision 6 of the South Texas Project (STP) Offsite Dose Calculation Manual (ODCM). This TER was prepared for the NRC by the Idaho National Engineering Laboratory (INEL) in partial fulfillment of the "Review of Radiological Issues" project. The objective of this TER is to evaluate how well the STP ODCM conforms with the methodology and guidance of the following NRC documents:

- NUREG-1302, "Offsite Dose Calculation Manual Guidance: Standard Radiological Effluent Controls for Pressurized Water Reactors"
- NUREG-0133, "Preparation of RETS for Nuclear Power Plants"
- Regulatory Guide 1.109, Revision 1, "Calculation of Annual Doses to Man from Routine Releases of Reactor Effluents for the Purpose of Evaluating Compliance with 10 CFR 50, Appendix I"

The staff has thoroughly reviewed INEL's TER and agrees with the findings. The overall evaluation is that Revision 6 of the STP ODCM uses documented and approved methods that are consistent with the methodology and guidance of the above NRC documents. However, the Technical Findings section of the TER identifies 10 primary deficiencies and 27 secondary deficiencies, omissions, and suggestions. These findings range in seriousness from the use of incomplete and vague equations to missing figures and unclear nomenclature. The ODCM should be a stand-alone document. It should contain all the necessary information (equations, definitions, sample calculations) to permit an NRC inspector to duplicate calculations used by the licensee to demonstrate conformance with the regulations related to radioactive effluents. Therefore, many of the findings suggest that the ODCM should be revised to clarify certain alarm/trip setpoint calculation methods, verify the sources of equations used to determine dose rates and doses, include sample calculations, and add additional figures showing effluent release points, paths, and alarm locations.

9510310057 951024 PDR ADOCK 05000498 P PDR

NRC FILE CENTER COPY

Mr. William T. Cottle

As stated above, the enclosed TER is based on Revision 6 of the STP ODCM. Since you have issued subsequent revisions to the ODCM since the TER was prepared, some of the comments and suggestions contained in the attached TER may no longer be applicable. However, the staff suggests that you review the TER comments against the most recent version of the STP ODCM and incorporate all suggested changes into the next revision of the ODCM. No additional response to this letter is requested.

Sincerely,

ORIGINAL SIGNED BY:

Thomas W. Alexion, Project Manager Project Directorate IV-1 Division of Reactor Projects III/IV Office of Nuclear Reactor Regulation

Docket Nos. 50-498 and 50-499

Enclosure: Technical Evaluation Report

cc w/encl: See next page

DISTRIBUTION: Docket File PUBLIC PDIV-1 r/f JRoe EAdensam (EM) WBeckner PNoonan TAlexion OGC ACRS (4) JDyer, RIV

Document Name: STP82726.LTR

OFC	LA/PD4-1	PM/204-17
NAME	PNoonancmty	TAlexion
DATE	10419195	10/24/95
COPY	YESNO	YESINO

OFFICIAL RECORD COPY

300019

Mr. William T. Cottle

As stated above, the enclosed TER is based on Revision 6 of the STP ODCM. Since you have issued subsequent revisions to the ODCM since the TER was prepared, some of the comments and suggestions contained in the attached TER may no longer be applicable. However, the staff suggests that you review the TER comments against the most recent version of the STP ODCM and incorporate all suggested changes into the next revision of the ODCM. No additional response to this letter is requested.

Sincerely,

Thomas W. allefin

Thomas W. Alexion, Project Manager Project Directorate IV-1 Division of Reactor Projects III/IV Office of Nuclear Reactor Regulation

Docket Nos. 50-498 and 50-499

Enclosure: Technical Evaluation Report

cc w/encl: See next page

Mr. William T. Cottle Houston Lighting & Power Company

cc:

Mr. David P. Loveless Senior Resident Inspector U.S. Nuclear Regulatory Commission P. O. Box 910 Bay City, TX 77414

Mr. J. C. Lanier/M. B. Lee City of Austin Electric Utility Department 721 Barton Springs Road Austin, TX 78704

Mr. K. J. Fiedler Mr. M. T. Hardt Central Public Service Board P. O. Box 1771 San Antonio, TX 78296

Mr. G. E. Vaughn/C. A. Johnson Central Power and Light Company P. O. Box 289 Mail Code: N5012 Wadsworth, TX 74483

INPO Records Center 700 Galleria Parkway Atlanta, GA 30339-3064

Regional Administrator, Region IV U.S. Nuclear Regulatory Commission 611 Ryan Plaza Drive, Suite 1000 Arlington, TX 76011

Mr. Joseph M. Hendrie 50 Bellport Lane Bellport, NY 11713

Judge, Matagorda County Matagorda County Courthouse 1700 Seventh Street Bay City, TX 77414

Mr. Lawrence E. Martin General Manager, Nuclear Assurance Licensing Houston Lighting and Power Company P. O. Box 289 Wadsworth, TX 77483

South Texas, Units 1 & 2

Jack R. Newman, Esq. Morgan, Lewis & Bockius 1800 M Street, N.W. Washington, DC 20036-5869

Licensing Representative Houston Lighting and Power Company Suite 610 Three Metro Center Bethesda, MD 20814

Rufus S. Scott Associate General Counsel Houston Lighting and Power Company P. O. Box 61867 Houston, TX 77208

Joseph R. Egan, Esq. Egan & Associates, P.C. 2300 N Street, N.W. Washington, DC 20037

Office of the Governor ATTN: Andy Barrett, Director Environmental Policy P. O. Box 12428 Austin, TX 78711

Arthur C. Tate, Director Division of Compliance & Inspection Bureau of Radiation Control Texas Department of Health 1100 West 49th Street Austin, TX 78756

J. W. Beck Little Harbor Consultants, Inc. 44 Nichols Road Cohasset, MA 02025-1166