

February 10, 1994

Docket Nos. 50-498  
and 50-499

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

Dear Mr. Cottle:

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION ON PERFORMANCE OF MAIN COOLING  
RESERVOIR AND ESSENTIAL COOLING POND DURING AND AFTER FILLING TO  
ELEVATION +45 FEET (TAC NOS. M86279 AND M86280)

The staff has completed its initial review of the licensee's February 22 and  
October 1, 1993, submittals on the performance of the main cooling reservoir  
(MCR) and the essential cooling pond (ECP) at South Texas Project. This  
review indicates that an unexpected high water table is present in the  
embankment sand core and that high seepage gradients exist at three locations  
in the MCR. In order to complete its review, the staff requires additional  
information regarding these issues.

We request your response to the enclosed questions within 45 days of the date  
of this letter to enable the staff to complete its review in a timely manner.

The reporting requirements contained in this letter affect fewer than ten  
respondents; therefore, OMB clearance is not required under Public Law 96-511.

Sincerely,  
Original Signed By  
Lawrence E. Kokajko, Senior Project Manager  
Project Directorate IV-2  
Division of Reactor Projects III/IV/V  
Office of Nuclear Reactor Regulation

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Docket File EAdensam BJohnson, R-IV  
NRC PDR EPeyton GBagchi  
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PDIV-2 R/F ACRS (10)  
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Enclosure:  
Request for Additional Information

cc w/enclosure:  
See next page

OFFICE	PDIV-2/LA	PDIV-2/INT	PDIV-2/PM	PDIV-2/D	
NAME	EPeyton	SWittenberg	Kokajko:mk	SBlack	
DATE	2/17/94	2/18/94	2/18/94	2/18/94	1/1

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Mr. William T. Cottle

-2-

cc w/enclosure:

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

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

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

Mr. G. E. Vaughn  
Mr. T. M. Puckett  
Central Power and Light Company  
P. O. Box 2121  
Corpus Christi, Texas 78403

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

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

Mr. Joseph M. Hendrie  
50 Bellport Lane  
Bellport, New York 11713

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

Mr. James J. Sheppard  
General Manager, Nuclear Licensing  
Houston Lighting and Power Company  
P. O. Box 289  
Wadsworth, Texas 77483

Jack R. Newman, Esq.  
Newman & Holtzinger, P.C.  
1615 L Street, N.W.  
Washington, D.C. 20036

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

Bureau of Radiation Control  
State of Texas  
1101 West 49th Street  
Austin, Texas 78756

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

Joseph R. Egan, Esq.  
Shaw, Pittman, Potts & Trowbridge  
2300 N. Street N.W.  
Washington, D.C. 20037

Enclosure

REQUEST FOR ADDITIONAL INFORMATION ON PERFORMANCE OF  
MAIN COOLING RESERVOIR AND ESSENTIAL COOLING POND  
SOUTH TEXAS PROJECT UNITS 1 & 2

A review of HL&P's submittals of February 22 and October 1, 1993, indicates that (1) a high water table is present in the embankment sand core of the main cooling reservoir (MCR), and (2) high seepage gradients exist at three locations in the MCR. Since these conditions are undesirable from the standpoint of safety of the MCR, HL&P is requested to provide the following additional information:

1. Perform necessary investigations to determine if the high water table in the MCR embankment sand core is a temporary phenomenon. If it is not a temporary phenomenon, plot the phreatic surface across the embankment section at a few representative locations, and compare them with that assumed in the original embankment stability analysis, and determine the factor of safety of the embankment against failure for the high water table condition.
2. Determine the cause for the high seepage gradients across the three cross sections of the MCR embankment, evaluate the effects of such high gradients on the stability of the embankment, and take suitable measures to reduce the high seepage gradients to acceptable levels.