

October 7, 2008

Mr. Scott Head, Manager  
Regulatory Affairs  
STP Nuclear Operating Company  
P. O. Box 289  
Wadsworth, TX 77483

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 62 RELATED TO  
THE SRP SECTION 2.5.4 FOR THE SOUTH TEXAS COMBINED LICENSE  
APPLICATION

Dear Mr. Head:

By letter dated September 20, 2007, STP Nuclear Operating Company (STPNOC) submitted for approval a combined license application pursuant to 10 CFR Part 52. The U. S. Nuclear Regulatory Commission (NRC) staff is performing a detailed review of this application to enable the staff to reach a conclusion on the safety of the proposed application.

The NRC staff has identified that additional information is needed to continue portions of the review. The staff's request for additional information (RAI) is contained in the enclosure to this letter.

To support the review schedule, you are requested to respond within 45 days of the date of this letter. If changes are needed to the safety analysis report, the staff requests that the RAI response include the proposed wording changes.

Mr. Scott Head

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If you have any questions or comments concerning this matter, you may contact me at 301-415-1146 or [Raj.Anand@nrc.gov](mailto:Raj.Anand@nrc.gov), or you may contact George Wunder at 301-415-1494 or [George.Wunder@nrc.gov](mailto:George.Wunder@nrc.gov).

Sincerely,

**/RA/**

Raj Anand, Project Manager  
ESBWR/ABWR Projects Branch 2  
Division of New Reactor Licensing  
Office of New Reactors

Docket Nos. 52-012  
52-013  
eRAI Tracking No: 1283

Enclosure:  
Request for Additional Information

cc: William Mookhoek

Mr. Scott Head

-2-

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**/RA/**

Raj Anand, Project Manager  
ESBWR/ABWR Projects Branch 2  
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Enclosure:  
Request for Additional Information

cc: William Mookhoek

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**NRO-002**

OFFICE	RGS1/TR	RGS2/BC	NGE2/PM	OGC	NGE1/L-PM
NAME	YLi*	CMunson*	RAnand*	SBrock*	GWunder*
DATE	9/23/08	9/23/08	10/7/08	9/29/08	9/29/08

\*Approval captured electronically in the electronic RAI system.

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Request for Additional Information No. 1283

South Texas Project Units 3 and 4  
South Texas Project Nuclear Operating Co.  
Docket No. 52-012 and 52-013

SRP Section: 02.05.04 - Stability of Subsurface Materials and Foundations  
Application Section: 2.5.4

02.05.04-13

FSAR Section 2.5S 4.10.4 describes potential settlement for STP 3 and 4. Please discuss the assumptions made to estimate the settlement and heave and provide a sample calculation of settlement and heave under STP 3 and 4.

02.05.04-14

FSAR Section 2.5S 4.10.5.2 describes the seismic lateral earth pressures. Please provide a sample calculation of the dynamic lateral stress computation.

02.05.04-15

FSAR Section 2.5S 4.11 describes the allowable bearing capacity. Please discuss the assumptions and soil properties used to compute the factor of safety against dynamic bearing capacity and provide a sample calculation of the dynamic bearing capacity determination.