

September 10, 2009

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

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 201 RELATED TO  
THE SRP SECTION 13.3 FOR THE SOUTH TEXAS COMBINED LICENSE  
APPLICATION

Dear Mr. Head:

By letter dated September 20, 2007, South Texas Project 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 30 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: 3427

Enclosure:  
Request for Additional Information

cc: William Mookhoek

Mr. Scott Head

-2-

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

cc: William Mookhoek

Distribution:  
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NGE 1/2 R/F  
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RidsNroDnrINge2

**ADAMS Accession No. ML092530384**

**NRO-002**

OFFICE	NSIR/TR	NSIR/BC	NGE2/PM	NGE2/L-PM
NAME	RMoody*	KWilliams*	RAnand*	GWunder*
DATE	5/20/09	5/20/09	5/20/09	5/06/09

**\*Approval captured electronically in the electronic RAI system.  
OFFICIAL RECORD COPY**

**Request for Additional Information No. 3427**

**South Texas Project Units 3 and 4  
South Texas Project Nuclear Operating Co  
Docket No. 52-012 and 52-013  
SRP Section: 13.03 - Emergency Planning  
Application Section: Part 5**

QUESTIONS for Licensing and Inspection Branch (NSIR/DPR/LIB) (EP)

**13.03-73**

Subject: Emergency facilities and equipment

Basis: 10 CFR 50, Appendix E.IV.E.8; 10 CFR 50, 10 CFR 50.47(b)(8); Evaluation Criterion H.1;  
Supplement 1 to NUREG-0737

SRP ACCEPTANCE CRITERIA: Requirements A and B; Acceptance Criteria 1 and 2

Section G.3, "Technical Support Center," of the STP 3 & 4 Emergency Plan states:

"Each Technical support Center is provided sufficient radiological protection and monitoring equipment to assure that radiation exposure to any person working in the activated Technical support Center will not exceed five (5) rem TEDE or twenty-five (25) rem thyroid CDE during the duration of a declared accident."

In accordance with Acceptance Criterion 3, "Technical Support Center Radiological Habitability," in SRP Section 15.0.3, "Design Basis Accident Radiological Consequence Analyses for Advanced Water Reactors," the staff reviews whether the total calculated radiological consequences in the TSC for the postulated fission product releases fall within the exposure acceptance criteria specified in GDC 19 of 5 rem TEDE (0.05 Sv) for the duration of the design basis accidents (DBAs). Provide the radiological consequence analyses that were performed for the South Texas Project TSCs for units 3 and 4 for the postulated DBAs. The DBAs are listed and evaluated in Chapter 15 of the certified ABWR DCD. The radiological analyses should include, but are not limited to, the following parameters:

1. TSC ventilation air inlet and recirculation flow rates
2. HEPA filter and charcoal adsorber fission product removal efficiencies
3. TSC unfiltered air in-leakage rate
4. Atmospheric dispersion factors ( $\chi/Q$  values) at TSC air intake
5. TSC occupancy factors
6. TSC free air volume
7. Occupant breathing rate
8. Description of the ventilation design

Enclosure