

April 1, 2010

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

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 328 RELATED TO
SRP SECTIONS 9.4.5 FOR THE SOUTH TEXAS PROJECT COMBINED
LICENSE APPLICATION

Dear Mr. Head:

By letter dated September 20, 2007, STP Nuclear Operating Company (STP) 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.

S. Head

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If you have any questions or comments concerning this matter, I can be reached at 301-415-8484 or by e-mail at Tom.Tai@nrc.gov you may contact George Wunder at 301-415-1494 or George.Wunder@nrc.gov.

Sincerely,

Tom M. Tai, Senior Project Manager
ABWR Projects Branch
Division of New Reactor Licensing
Office of New Reactors

Docket Nos. 52-012
52-013

eRAI Tracking No. 4544

Enclosure:
Request for Additional Information

cc: Mr. William Mookhoek
Mr. James Agles

S. Head

- 2 -

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OFFICE	SBVC	SBCV	NGE2/PM	NGE2/L-PM
NAME	SHaider	JMckirgan	TTai	GWunder
DATE	03/19/2010	03/20/2010	03/22/2010	03/29/2010

***Approval captured electronically in the electronic RAI system.**

OFFICIAL RECORD COPY

Request for Additional Information No. 4544 Revision 3

3/29/2010

South Texas Project Units 3 and 4
South Texas Project Nuclear Operating Co
Docket No. 52-012 and 52-013
SRP Section: 09.04.05 - Engineered Safety Feature Ventilation System
Application Section: 9.4.5 Reactor Building HVAC System

QUESTIONS for Containment and Ventilation Branch 2 (ESBWR/ABWR Projects) (SBCV)

09.04.05-1

Diesel Generator (DG) Room's Habitability:

The proposed departure STP DEP T1 2.15-2 RBSRDG HVAC revises DCD Tier 1 Subsection 2.15.5, and increases the maximum air temperature limit inside the Reactor Building Safety-Related Diesel Generator (DG) engine room during the DG operation, from 50°C (122°F) to 60°C (140°F). Please address the following:

1. Identify any safety-related equipment/instrumentation and cables located in the DG room, and document in the FSAR that they are qualified to reliably operate at the increased 140°F temperature environment;
2. Describe, if any, safety functions in the DG room that are required to be performed by the operator(s);
3. Provide assurance in the FSAR that the Diesel Generator room would be habitable enough to allow the operator's safe entry and access inside the 140°F and 90% relative humidity environment for any activities required;
4. Identify any additional provisions made to offset the high heat stresses on humans inside the DG room's elevated temperature environment. The provisions should duly account for the 90% design relative humidity in addition to 140° F dry-bulb temperature inside the DG room.

Enclosure