May 21, 2008

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

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 54 RELATED TO THE SRP SECTION 10.04.05 FOR THE SOUTH TEXAS COMBINED LICENSE APPLICATION

Dear Mr. Gibson:

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.

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

Sincerely,

/RA/

George F. Wunder, Senior 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. 181

Enclosure:
Request for Additional Information

cc: William Mookhoek

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

Sincerely,

/RA/

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Enclosure:
Request for Additional Information

cc: William Mookhoek

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

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Request for Additional Information
South Texas Project Units 3 and 4
South Texas Project Nuclear Operating Co.
Docket Nos. 52-012 and 52-013
SRP Section: 10.04.05 - Circulating Water System
Application Section: FSAR Section 10.4.5, "Circulating Water System."

QUESTION

10.04.05-1

The interface requirement for the circulating water system (CWS) in ABWR DCD, Tier 1, Section 2.10.23 states, “The parts of the CWS system (including the power cycle heat sink) which are not within the Certified Design shall meet the following requirements: (1) Design features shall be provided to limit flooding in the Turbine Building.” The staff reviewed the STP RCOL FSAR Section 10.4.5 for the CWS, which does not specifically address this interface requirement as specified in the DCD. Further, the staff noticed that in FSAR Sections 10.4.5.7.2 and 10.4.5.8.2, “Power Generation Design Basis (Interface Requirements),” the applicant characterized these items as COL information items, which is not clear as to which is interface item and which is COL information item. Furthermore, with respect to flooding, the “Acceptance Criteria,” in STP ITAAC Table 3.0-9,”Circulating Water System (CWS),” states that the circulating water condenser valves close and the CWS pumps are tripped following receipt of a system isolation signal from the condenser area level switches. However, the criteria do not include closure of the CW pump valves on receipt of the above signal. Therefore, the staff requests the applicant to provide additional information and clarifications as they relate to the circulating water system interface requirements and COL information items.