August 6, 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. 197 RELATED TO THE SRP SECTION 11.3 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.

If you have any questions or comments concerning this matter, you may contact me at 301-415-1146 or Raj.Anand@nrc.gov, or you may contact George Wunder at 301-415-1494 or 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: 3256

Enclosure:
Request for Additional Information

cc: William Mookhoek

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

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Enclosure:
Request for Additional Information

cc: William Mookhoek

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DATE	6/29/09	7/1/09	8/6/09	7/22/09	7/23/09

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

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Request for Additional Information No. 3256
South Texas Project Units 3 and 4
South Texas Project Nuclear Operating Co
Docket No. 52-012 and 52-013
SRP Section: 11.03 - Gaseous Waste Management System
Application Section: 11.3 - Gaseous Waste Management System

QUESTIONS for Balance of Plant Branch 1 (AP1000/EPR Projects) (SBPA)

11.03-3

In Technical Rationale Section 5 of the Standard Review Plan (SRP) Section 11.3, "Gaseous Waste Management System," it states, "Compliance with GDC 60 requires that design provisions be included in the nuclear power unit to control releases of radioactive materials in gaseous effluents to the environment during normal reactor operation, including anticipated operational occurrences."

STD DEP 10.4-5, Section 11.3.3.3, "Process Facility," proposes to remove the phrase, "If any of these conditions cannot be met with reactor condensate, the coolant should be supplied by a closed cooling water system of reliability and quality equal to that of reactor condensate." The staff notes that Section 11.3.3.3, "Process Facility," changes the coolant for the offgas condensers from reactor condensate to turbine building cooling water (TCW). In the FSAR, provide additional discussion on how the TCW provides equivalent reliability and quality as reactor condensate as a suitable coolant for the offgas condensers, and provide discussion on how the offgas condensers are cooled in the event TCW is not available.

11.03-4

In Standard Review Plan (SRP) Section 11.3, "Gaseous Waste Management System," Section 4 of SRP Acceptance Criteria, it states, "System designs should describe features that will minimize, to the extent practicable, contamination of the facility and environment; facilitate eventual decommissioning; and minimize, to the extent practicable, the generation of radioactive waste in accordance with Regulatory Guide 1.143, for gaseous wastes produced during normal operation and anticipated operational occurrences, and the requirements of 10 CFR 20.1406 or the DC application, update in the SAR, or the COL application to the extent not addressed in a referenced certified design."

- STD DEP 10.4-5, Table 11.3-3, "Equipment Malfunction Analysis," removes equipment from consideration and only includes the preheater, recombiner, and condenser. In the FSAR, provide justification or clarification on why the other equipment analyzed in Table 11.3-3 of the DCD are no longer included in Table 11.3-3, "Equipment Malfunction Analysis," of the FSAR.

- STD DEP 10.4-5 of the FSAR, Figures 11.3-1, "Offgas System PFD," and 11.3-2 "Offgas System P&ID," make substantial changes from the same figures given in the DCD. For example, Figure 11.3-2, "Offgas System P&ID," of the DCD, note 6 states, "After any valve closes due to high radiation signal, it shall remain closed until reset by manual switch." Note 6 is given with reference to the last valve before the final vent of the Gaseous Waste Management System (GWMS).

- In the FSAR, provide justification and clarification of the omission of these notes, including but not limited to note 6, annunciator alarms, piping specifications, and other design information that was provided in the DCD.