

April 16, 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. 12 RELATED TO
THE SRP SECTION 10.04.03 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.

Mr. Gregory Gibson

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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. 115

Enclosure:
Request for Additional Information

cc: William Mookhoek

Mr. Gregory Gibson

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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
South Texas Project Units 3 and 4
South Texas Project Nuclear Operating Co
Docket No. 52-012 and 52-013
SRP Section: 10.04.03 - Turbine Gland Sealing System
Application Section: Section 10.4.3 Gland Seal Steam System

QUESTIONS

10.04.03-1

The staff reviewed STP COL FSAR Section 10.4.3.2.2, "System Operation," which contains a modification to the ABWR DCD. The modification states, "The seal steam header pressure is regulated automatically by the sealing steam pressure regulator. Pressure is controlled at approximately 27.6 kPaG. Relief valves protect the sealing steam header from overpressure." The inclusion of a specific controller operating pressure of 27.6 kPaG is an addition to information provided in the ABWR DCD and is without basis or comment on how this approximate pressure was obtained. NUREG-800 Standard Review Plan (SRP) Section 10.4.3, Item III.1 specifies that the piping and instrumentation diagrams reflect the source of sealing steam and the disposition of steam and noncondensables vented from the gland seal. In conjunction, General Design Criteria (GDC) 60 from 10 CFR 50, Appendix A, "Control of Releases of Radioactive Materials to the Environment," requires control of liquid and gaseous radioactive effluents and handling of radioactive solid wastes. In order to comply with the SRP Section 10.4.3 criteria and the GDC 60 requirements, the staff requests the applicant to provide additional information sufficient to demonstrate the basis for the controller operating pressure of 27.6 kPaG and how this design objective controls the release of radioactive material from the turbine gland sealing system.