

July 19, 2011

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

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 380 RELATED TO
SRP SECTION 3.9.4 FOR THE SOUTH TEXAS PROJECT COMBINED
LICENSE APPLICATION

Dear Mr. Head:

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 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 or you may contact George Wunder at 301-415-1494 or George.Wunder@nrc.gov.

Sincerely,

/RA/

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. 5870

Enclosure:
Request for Additional Information

cc: William Mookhoek
John Price
Richard Scheide
Loree Elton

S. Head

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OFFICE	EMB1/TR	EMB1/BC	BWR/PM	OGC	NGE2/L-PM
NAME	TSpicher	JDHerrity	TTai	MSpencer	GWunder
DATE	6/24/11	6/24/11	6/27/11	6/29/11	6/29/11

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

OFFICIAL RECORD COPY

Request for Additional Information No. 5870 Revision 5

7/18/2011

South Texas Project Units 3 and 4
South Texas Project Nuclear Operating Co
Docket No. 52-012 and 52-013
SRP Section: 03.09.04 - Control Rod Drive Systems
Application Section: 3.9.4 and 3.9.1

QUESTIONS for Engineering Mechanics Branch 1 (AP1000/EPR Projects) (EMB1)

03.09.04-1

10 CFR 52.73(b) states, "The Commission will require, before granting a combined license that references a standard design certification, that information normally contained in certain procurement specifications and construction and installation specifications be completed and available for audit if the information is necessary for the Commission to make its safety determinations, including the determination that the application is consistent with the certification information."

During the April 4, 2011 and April 20, 2011 audits held to review procurement specification, the NRC staff found that the loads for the FMCRDM were not available. This was identified as an open item for the audit. As a result of discussions held to address this open item, staff understands that the following sections from the DCD are no longer valid for STP Units 3 and 4:

- Section 3.9.4.3, which states that the CRD system components are evaluated analytically and the design loading conditions are as given in Tables 3.9-1 and 3.9-2;
- Section 3.9.1.3.2, which states that the output of FMCRD01 is used in the dynamic analysis of both ASME Code and non-Code parts;
- Section 3D.2.1, which addresses the FMCRD01.

The FMCRD01 program is not available for use and as a result, the CRDM loads are going to be developed by the vendor using tests. Justify these changes from the design and methodology called out in the DCD.

The STP application claimed no departures from the DCD (Sections 3.9.4 and 3.9.1 and Appendix 3D are all incorporated by reference) for the CRDM design or for computer programs to be used in completing the component and piping designs. However, based on the above and observations made during the review of the vibration monitoring program, the CRDM design has changed from that described in DCD Section 3.9.4. There are two examples of computer programs required by the DCD to be used that are not available to the applicant (FMCRD01) or have been used, but not called out in the DCD (ACSTIC). Are there other changes that should be made to these sections as a result of the CRDM design changes or in response to unavailability of computer codes called out in the DCD or additional codes used that are not called out in Appendix 3D? Provide a complete description and revisions to the DCD to allow the staff to make its safety finding.