

April 6, 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. 330 RELATED TO
SRP SECTION 3.9.3 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

-2-

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. 4555

Enclosure:
Request for Additional Information

cc: William Mookhoek
John Price
Jim Tomkins

S. Head

-2-

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. 4555

Enclosure:
Request for Additional Information

cc: William Mookhoek
John Price
Jim Tomkins

Distribution:
PUBLIC
NGE 1/2 R/F
GWunder, NRO
BAbeywickrama, NRO
TLe, NRO
JDHerrity, NRO
SKirkwood, OGC
RidsNroDeEmb2
RidsNroDnrINge2

ADAMS Accession No.: ML100960288

NRO-002

OFFICE	EMB2/TR	EMB2/BC	NGE2/PM	NGE2/L-PM
NAME	TLe	JDHerrity	TTai	GWunder
DATE	3/24/10	3/25/10	4/6/10	3/31/10

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

OFFICIAL RECORD COPY

Request for Additional Information No. 4555 Revision 3

**South Texas Project Units 3 and 4
South Texas Project Nuclear Operating Co
Docket No. 52-012 and 52-013
SRP Section: 03.09.03 - ASME Code Class 1, 2, and 3 Components
Application Section: Section 3.9.3**

QUESTIONS for Engineering Mechanics Branch 2 (ESBWR/ABWR Projects) (EMB2)

03.09.03-5

This is the supplemental RAI of RAI 06.02.02-23 (Question 15946).

In response to RAI 06.02.02-23, a letter ([ML100141735](#)) dated January 13, 2010, the applicant stated that the STP 3 & 4 suction strainer hydrodynamic loads as well as loads due to debris accumulation were still being developed as part of the plant detailed design, and as such the analysis for the strainers had not yet been completed. In order to provide reasonable assurance that the STP 3 & 4 suction strainers can be designed to withstand these loads, the applicant referred to an analysis for these loads for the CCI cassette-type strainer (which will be used on STP 3 & 4) for a Japanese Reference ABWR.

The staff reviewed the stress reports and other supporting documents associated with HPCF and RHR strainer and found that the documents incompletely addressed the RAI 06.02.02-23. Therefore, the staff cannot make the safety determination of the strainer design. The staff requests that the applicant provide the following information:

- 1) Design and service level A-D loads and load combinations, including seismic with hydrodynamic of sloshing effect.
- 2) The principal construction code of the strainer design.
- 3) The pressure load on the strainer from sparger discharge and the basis for using this pressure load.
- 4) The classification of the strainer and its supports.

Enclosure