

January 20, 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. 011 RELATED TO  
SRP SECTION 14 FOR THE ABWR DESIGN CERTIFICATION RULE  
AMENDMENT APPLICATION

Dear Mr. Head

By letter dated June 20, 2009, STP Nuclear Operating Company (STPNOC) submitted for approval an application to amend the ABWR design certification rule (DCR) 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](mailto:Tom.Tai@nrc.gov).

Sincerely,

**/RA/**

Tom M. Tai, Senior Project Manager  
ABWR Projects Branch  
Division of New Reactor Licensing  
Office of New Reactors

Docket Nos. 52-001

eRAI Tracking No. 4276

Enclosures:  
Request for Additional Information

cc: William Mookhoek  
Coley Chappell  
Fred Puleo

S. Head

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NRO-002

OFFICE	CQVB/TR	CQVB /BC	NGE2/PM
NAME	FTalbot	JJacobson (for RR)	TTai
DATE	1/12/10	1/13/10	1/19/10

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

**OFFICIAL RECORD COPY**

**Request for Additional Information No. 4276 Revision 5**

**ABWR Design Certification Amendment Project  
South Texas Project Nuclear Operating Co**

**Docket No. 52-001**

**SRP Section: 14.02 - Initial Plant Test Program - Design Certification and New License  
Applicants**

**Application Section: Section 14.2**

QUESTIONS for Quality and Vendor Branch 2 (ESBWR/ABWR) (CQVB)

**14.02-1**

Your application to amend the design certification rule for the U.S. ABWR included the addition of a new alternate feedwater injection (AFI) system as described in DCD Tier 2 Section 9.5.14. In addition, Tier 2 Section 19S4.4 lists the AFI system as a key design feature for assuring core cooling following the impact of a large, commercial aircraft. In accordance with 10 CFR 52.47(b)(1), please provide the proposed inspections, tests, analyses, and acceptance criteria (ITAAC) for the AFI system that are necessary and sufficient to provide reasonable assurance that, if the ITAAC are met, a facility that incorporates this amended design certification has been constructed and will be operated in conformity with the design certification and NRC regulations. The NRC staff notes that DCD Tier 2 Section 14.2.12.1.78 provides for an AFI System Preoperational Test with a number of general test methods and acceptance criteria (e.g., flow test, NPSH test, I&C tests, etc). The staff believes that these test methods and acceptance criteria could be used to develop AFI system ITAAC. ITAAC may also be needed to ensure assumptions that the applicant made in its aircraft impact assessment are validated during construction.

Enclosure