

PMSTPCOL PEmails

From: Keith, Felicia
Sent: Thursday, August 27, 2009 5:14 PM
To: Scott Head; Bill Mookhoek; STPCOL; Chappell, Coley
Subject: Request for Additional Information Letter No. 261 Related To SRP SEction 6.2.2 For The south Texas Project Combined License Application
Attachments: ML092390533.pdf

TO: Scott Head

FROM: Stacy Joseph (A. Muniz for)

DATE: August 27, 2009

ADAMS Accession No. ML092390533

Felicia Keith, Secretary
ESBWR/ABWR Projects Branch 2
Division of New Reactor Licensing
Office of New Reactors
301-415-2950
Felicia.Keith@nrc.gov

Hearing Identifier: SouthTexas34Public_EX
Email Number: 2412

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Subject: Request for Additional Information Letter No. 261 Related To SRP Section 6.2.2
For The south Texas Project Combined License Application
Sent Date: 8/27/2009 5:13:41 PM
Received Date: 8/27/2009 5:13:44 PM
From: Keith, Felicia

Created By: Felicia.Keith@nrc.gov

Recipients:
"Scott Head" <smhead@stpegs.com>
Tracking Status: None
"Bill Mookhoek" <wemookhoek@stpegs.com>
Tracking Status: None
"STPCOL" <STP.COL@nrc.gov>
Tracking Status: None
"Chappell, Coley" <ccchappell@STPEGS.COM>
Tracking Status: None

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ML092390533.pdf	104355	

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Reply Requested: No
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August 27, 2009

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

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 261 RELATED TO
SRP SECTION 6.2.2 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

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If you have any questions or comments concerning this matter, I can be reached at 301-415-2849 or by e-mail at Stacy.Joseph@nrc.gov or you may contact George Wunder at 301-415-1494 or George.Wunder@nrc.gov.

Sincerely,

/RA - A. Muniz for/

Stacy K. Joseph, Project Manager
ABWR Projects Branch
Division of New Reactor Licensing
Office of New Reactors

Docket Nos. 52-012
52-013

eRAI Tracking Nos. 3392 and 3435

Enclosure:
Request for Additional Information (RAI 3392 and RAI 3435)

cc: William Mookhoek
James Tomkins

S. Head

-2-

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Docket Nos. 52-012
52-013

eRAI Tracking No. 3392 and 3435

Enclosure:
Request for Additional Information (RAI 3392 and RAI 3435)

cc: William Mookhoek
James Tomkins

Distribution:

PUBLIC	BAbeywickrama, NRO	RidsNroDsraSbcv	SJoseph, NRO
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GWunder, NRO	EMiller, NRO	SKirkwood, OGC	

ADAMS Accession No. ML092390533

NRO-002

OFFICE	SBCV/TR	SBCV/BC	NGE2/PM	OGC	NGE2/L-PM
NAME (3435)	HWagage	MSnodderly	SJoseph	SKirkwood	GWunder
DATE	7/31/09	8/4/09	8/27/09 (AMuniz for)	8/18/09	8/19/09
OFFICE	SBCV/TR	SBCV/BC	NGE2/PM	OGC	NGE2/L-PM
NAME (3392)	HWagage	MSnodderly	SJoseph (AMuniz for)	SKirkwood	GWunder
DATE	7/27/09	8/4/09	8/27/09	8/18/09	8/19/09

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

OFFICIAL RECORD COPY

Request for Additional Information No. 3392 Revision 2

**South Texas Project Units 3 and 4
South Texas Project Nuclear Operating Co
Docket No. 52-012 and 52-013
SRP Section: 06.02.02 - Containment Heat Removal Systems
Application Section: 6C**

QUESTIONS for Containment and Ventilation Branch 2 (ESBWR/ABWR Projects) (SBCV)

06.02.02-6

This is RAI 2042 Supplement 1.

During an audit conducted at Westinghouse Office in Rockville, MD, on June 30 and July 1, 2009, the staff reviewed a summary report of the analyses Toshiba prepared for the replacement of ECCS suction strainers at a Japanese ABWR as stated in STP response to RAI 2042. The staff reviewed the following documents, including the summary report (the first one listed):

- The Evaluation Report for Net Positive Suction Head of Pump in Emergency core Cooling System, Proprietary, STP Doc. U7-RHR-M-RPT-DESN-0001, Rev. A, May 27, 2009.
- The Supplementary Documentation for the Head Loss Evaluation Report of Japanese ABWR ECCS Suction Strainer, Proprietary, STP Doc. U7-RHR-M-RPT-DESN-0002, Rev. A, June 24, 2009.
- The Evaluation Example of the Head Loss of the ECCS Suction Strainer and Pipe in the ECCS Pump Run-out Flow Condition, Proprietary, STP Doc. U7-RHR-M-RPT-DESN-0003, Rev. A, May 27, 2009.

The above documents lack sufficient details for the staff to complete its review. The staff expects relevant details to be provided as stated in Revised Content Guide for Generic Letter 2004-02 Supplemental Responses, November 21, 2007 (NRC Agencywide Documents Access and Management System (ADAMS) package Accession No. ML073110278) and Revised Content Guide for Generic Letter 2004-02 Supplemental Responses, March 28, 2008 (ADAMS Package Accession No. ML080230234).

- A. Submit a calculation report on sizing of suppression pool recirculation pumps suction debris strainers for the staff review to determine that they meet the guidance of Regulatory Guide 1.82, Revision 3. This document should provide sufficient design details as requested in the guidance documents stated above. Or, justify an alternative approach.
- B. The documents that the staff reviewed during the audit did not account for miscellaneous debris (equipment tags, tape, and stickers or placards affixed by adhesives) that was considered during the resolution of GSI 191 program. Describe how you accounted for miscellaneous debris.
- C. During the audit STP stated that subsequent to RAI 2042 response, Toshiba had decided to eliminate all fiber insulation from STP 3 & 4 primary containment. As the staff stated during the audit, STP should account for the possibility of having some fiber in the containment in terms of latent debris or confirm with a foreign material exclusion program that would eliminate all fiber from the STP 3 & 4 primary containment.
- D. During the audit STP stated that the thermal insulation in STP 3 & 4 primary containment will be all stainless steel RMI. STP should account in the debris strainer design a possibility that it may

not be able to use RMI for some small bore piping because of their locations, and thus, may have to use small quantities of other types of insulation like CalSil and fiber.

- E. The STP's RAI 2042 response states that "the latent debris defined in the URG (which was used for the Hamaoka 5 testing) is considered bounding for STP 3 & 4." The URG proposed generic values were based on operating experience of boiling water reactors. Considering that ABWR is a newer plant of which operating experience was not considered in determining the URG proposed values, STP should confirm the values used in the design with operating experience of ABWRs or propose a plan to confirm these values later.
- F. The documents that the staff reviewed during the audit showed latent debris assumed in the design of the debris strainers include 195 lb of sludge. However, the STP's presentation on Downstream Effects at the audit included only four types of debris considered for downstream effects (fibrinous debris, paint chips, concrete dust, and RMI shard), which does not include sludge. Justify not considering sludge as a downstream component of debris.
- G. Provide a table listing how the STP ECCS suction debris strainer meets each regulatory position for BWRs that is stated in Regulatory Guide 1.82, Revision 3, or justify an alternative approach.
- H. STP should provide summary information of the calculation report stated in item A above in STP 3 & 4 FSAR and incorporate it by reference in the FSAR.
- I. Update FSAR as needed to reflect the response to this RAI (e.g., the commitment to use stainless steel reflective metallic insulation).

Request for Additional Information No. 3435 Revision 2

**South Texas Project Units 3 and 4
South Texas Project Nuclear Operating Co
Docket No. 52-012 and 52-013
SRP Section: 06.02.02 - Containment Heat Removal Systems
Application Section: 6.2.7.3**

QUESTIONS for Containment and Ventilation Branch 2 (ESBWR/ABWR Projects) (SBCV)

06.02.02-7

STP 3 & 4 FSAR Section 6.2.7.3 states that "[p]eriodic inspections of the suppression pool for cleanliness are performed during outage periods. Maintenance procedures provide procedure steps for removing, at periodic intervals, sediment and floating or sunk debris from the suppression pool that the [suppression pool cleanup unit] does not remove."

State the frequency at which periodic inspections of the suppression pool cleanliness are performed and include these inspections as TS Surveillance Criteria