PMSTPCOL PEmails

From: Tai, Tom
Sent: Wednesday, July 29, 2009 3:38 PM
To: Price, John E
Cc: STPCOL; Mookhoek, William
Subject: STP Letter 149 - RAI 2920
Attachments: Letter 149 ML0921003466.pdf

John,

Attached is an advanced copy of Letter 149 transmitting RAI 2920 for Chapter 3.2.2.

Regards

Tom Tai
DNRL/NRO
(301) 415-8484
Tom.Tai@NRC.GOV

Hearing Identifier: SouthTexas34Public_EX
Email Number: 1526

Mail Envelope Properties (C56E360E9D804F4B95BC673F886381E71FBC778A02)

Subject: STP Letter 149 - RAI 2920
Sent Date: 7/29/2009 3:37:38 PM
Received Date: 7/29/2009 3:37:39 PM
From: Tai, Tom

Created By: Tom.Tai@nrc.gov

Recipients:
"STPCOL" <STP.COL@nrc.gov>
Tracking Status: None
"Mookhoek, William" <wemookhoek@STPEGS.COM>
Tracking Status: None
"Price, John E" <jeprice@STPEGS.COM>
Tracking Status: None

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Return Notification: No
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July 29, 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. 149 RELATED TO SRP SECTION 3.2.2 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.

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. 2920

Enclosure:
Request for Additional Information

cc: William Mookhoek
John Price

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. 2920

Enclosure:
Request for Additional Information

cc: William Mookhoek
John Price

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ADAMS Accession No. ML092100346 NRO-002

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DATE	5/21/09	5/26/09	6/01/09	6/12/09	6/17/09

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

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Request for Additional Information No. 2920 Revision 2

7/28/2009

South Texas Project Units 3 and 4
South Texas Project Nuclear Operating Co
Docket No. 52-012 and 52-013
SRP Section: 03.02.02 - System Quality Group Classification
Application Section: 3.2

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

03.02.02-1

The applicant is expected to identify site-specific SSCs that are not included in the DCD. COLA Table 3.2-1 includes additional SSCs that are not included in the ABWR DCD, but it appears there are certain SSCs, such as the RSW pumps and RSW strainers, that are not included in either ABWR DCD Table 3.2-1 or the COLA Table 3.2-1. Review the COLA for completeness to identify any SSCs that have not been classified and clarify when this quality group classification information will be submitted.

03.02.02-2

The quality group or corresponding ASME Code class should be shown on piping and instrumentation diagrams (P&IDs). The P&IDs included in the FSAR do not appear to identify quality group or ASME Code class. Identify quality group or ASME Code class boundaries on P&IDs or otherwise explain how the quality group and ASME Code Class boundaries are identified.

03.02.02-3

Certain site-specific components that are nonsafety-related, such as the containment hydrogen and oxygen monitors and fuel servicing equipment, may be considered important to safety or risk-significant and special treatment may be required. Clarify if any nonsafety-related site-specific components included in COLA Table 3.2-1 are considered risk-significant and, if so, identify the special treatment requirements applicable to these systems.

03.02.02-4

Identify if any nonmetallic piping will be used in any risk-significant systems and, if so, identify specific systems and specific applications (underground, sizes, etc.) where the piping is to be used. Also identify the basis for the use of nonmetallic materials, including applicable ASME Code, endorsed code cases, supplemental requirements/special treatment and technical justification such as an engineering evaluation.

03.02.02-5

COL FSAR Section1.8 identifies limited codes and standards, but these codes and standards do not appear to be complete or current. SRM dated July 21,1993 concerning SECY-93-087 identified that the staff will review evolutionary plant design applications using the newest codes and standards endorsed by the NRC and unapproved revisions to the codes will be reviewed on a case by case basis. Identify a

complete list of codes and standards and clarify which editions are not NRC endorsed and, for those editions, clarify if the edition is current.

03.02.02-6

SRP 14.3 identifies that the ITAAC for site-specific design features should be developed at the COL stage. SRP 14.3 further identifies that the safety classification of SSCs are described in each system's design description and the functional drawings identify the boundaries of the ASME classification that are applicable to the safety class. The SRP 14.3 Appendix C design description checklist also specifically includes seismic classification and ASME code classifications that should be verified as part of ITAAC. Piping, equipment, individual system components and supports comprise a system. As stated in SRP 14.3, ASME code class boundaries for mechanical equipment and piping are shown on the figure and form the basis for the basic configuration check (system) that is required for each individual system ITAAC.

Section 14.3S of the FSAR identifies that the selection criteria and methodology provided in Section 14.3 of the reference ABWR DCD for the certified ABWR design were utilized as the site-specific selection criteria and methodology for ITAAC and, in general, the ITAAC for site-specific systems were developed to correspond with the interface criteria in Tier 1 of the reference ABWR DCD. DCD subsection 14.3.2.1 includes system and component classification information as design information that should be included in Tier 1 design descriptions and DCD subsection 14.3.2.2 states that the scope and content of the ITAAC correspond to the scope and content of the Tier 1 design descriptions. The site-specific ITAAC included in Part 9 of the COLA include basic configuration ITAAC for site-specific systems, but the definition of basic configuration in Section 1.1 of the ABWR CDM does not specifically identify classifications as part of the basic configuration ITAAC for a building or a system.

Clarify if the ITAAC criteria to verify the basic configuration include verification of seismic category and ASME Code classification for ASME systems or, if not included, explain how the as-built system classifications are verified, such as through a generic piping design ITAAC described in the DCD.

Also, the COLA ITAAC included in Part 9 of the application do not specifically define ITAAC for classification of site-specific SSCs as Tier 1, but the referenced ABWR DCD does not appear to identify any departures from Tier 1 system ITAAC for ASME Code and Seismic Category I requirements. Clarify if the classification ITAAC for plant-specific SSCs, such as the UHS, are included in Tier 1 or explain why they are not considered as Tier 1.

03.02.02-7

Concerning the application of ITAAC criteria to site-specific structural and systems engineering, SRP 14.3.2 identifies that design descriptions, figures (including key dimensions) and ITAAC should be developed and grouped by systems and building structures. Building structures and electrical systems are not classified by quality group, but seismic classification does apply. The review checklists for fluid systems, electrical systems and building structures in Appendix C of SRP Section 14.3 should be used as aids for establishing consistency and completeness for the Tier 1 information.

The STP site-specific ITAAC includes a basic configuration ITAAC, but does not specifically identify an ITAAC to verify the seismic or ASME Code classification boundaries. Clarify if ITAAC, such as the basic configuration ITAAC or generic piping ITAAC, are used to verify the seismic classification and ASME Code class boundaries or, if not included in these ITAAC, describe how the as-built classification boundaries are verified.

03.02.02-8

Concerning the application of ITAAC criteria to site-specific piping systems and components, SRP 14.3.3 identifies that Tier 1 ASME code classification, safety classification, and seismic classification of piping systems should be indicated clearly on the figures or described in the design descriptions and consistent with DCD Tier 2, Section 3.2. System boundaries and interfaces are to be indicated clearly in Tier 1 and the figures are to be in accordance with the legends. The ABWR DCD Table 14.3-12 for interface requirements identifies that the UHS be classified as Seismic Category I. For certain site-specific systems such as the Ultimate Heat Sink and PSW, the ASME code classification or safety classification and seismic classification are not clearly shown on the figures. Clarify if the FSAR figures will be updated to include the classifications and boundaries.

SRP 14.3.3 identifies that safety-related piping systems should be designated in Tier 1 as seismic Category I and ASME Code Class 1, 2 or 3. COLA Tier 1 does not include ITAAC for site-specific safety-related SSCs. Clarify if classification ITAAC for plant-specific safety-related systems, such as RSW, should be included in Tier 1 or, if subject to change, be identified as Tier 2*.

03.02.02-9

Concerning the application of ITAAC criteria to site-specific plant systems, SRP 14.3.7 identifies that plant systems not part of the core reactor systems are clearly described in Tier 1 including the key performance characteristics and safety functions. Seismic and ASME Code classifications are identified as a Tier 1 issue important to safety to be verified by ITAAC. Equipment and components that are not considered piping are still part of a system. Clearly describe if there is an ITAAC to verify the as-built Seismic and ASME Code class of plant systems, including equipment, components and supports that are not part of the core reactor systems. Also clarify if this ITAAC is included in Tier 1.