PMSTPCOL PEmails

From: Cashell, George S [gscashell@STPEGS.COM]
Sent: Tuesday, August 25, 2009 4:18 PM
To: Govan, Tekia; Muniz, Adrian
Subject: FW: DRAFT RAIs for Ch. 16 and Ch. 14.3
Attachments: RAI 3122.doc; RAI 3213.doc

Adrian / Tekia,

We do not need a phone call on these RAIs. Please issue them formally.

Thanks,

Steve
-----Original Message-----
From: Joseph, Stacy [mailto:Stacy.Joseph@nrc.gov]
Sent: Wednesday, August 19, 2009 9:05 AM
To: Cashell, George S
Subject: DRAFT RAIs for Ch. 16 and Ch. 14.3

Steve,

Please review the attached DRAFT RAI related to SRP Section 16 and 14.3 within 5 working days. Please let me know if a telecon is needed in order to clarify these RAIs.

Thank you,

Stacy

Hearing Identifier: SouthTexas34Public_EX
Email Number: 1682

Mail Envelope Properties (C7F098E3C31A0141A02043F0B8E656EE2562E306C4)

Subject: FW: DRAFT RAIs for Ch. 16 and Ch. 14.3
Sent Date: 8/25/2009 4:18:19 PM
Received Date: 8/25/2009 4:18:22 PM
From: Cashell, George S

Created By: gscashell@STPEGS.COM

Recipients:
"Govan, Tekia" <Tekia.Govan@nrc.gov>
Tracking Status: None
"Muniz, Adrian" <Adrian.Muniz@nrc.gov>
Tracking Status: None

Post Office: exgmb1.CORP.STPEGS.NET

Files	**Size**	**Date & Time**
MESSAGE	509	8/25/2009 4:18:22 PM
RAI 3122.doc	25664	
RAI 3213.doc	33344	

Options
Priority: Standard
Return Notification: No
Reply Requested: No
Sensitivity: Normal
Expiration Date:
Recipients Received:

Request for Additional Information No. 3122 Revision 2

South Texas Project Units 3 and 4
South Texas Project Nuclear Operating Co
Docket No. 52-012 and 52-013
SRP Section: 16 - Technical Specifications
Application Section: 16

QUESTIONS for Technical Specification Branch (CTSB)

16-***

STD DEP 16.3-89 proposes to omit a reference to the rod drop accident from the Applicable Safety Analysis section of the bases for PTS 3.1.2, because ABWR DCD Section 15.4.10.3.1 states, in part, that there is no basis for the control rod drop event to occur.

Section 15.4.1 of the ABWR FSER restates the DCD position that the control rod drop accident is an event that is extremely unlikely for the ABWR. The Staff, however, performed an evaluation of this accident, which is included in the ABWR FSER. The Staff stated, in the ABWR FSER, that this accident “evaluation should establish a reference for comparison of future applications incorporating the ABWR design.”

Please provide additional justification for removing the reference to rod drop accident from the bases.

16-***

STD DEP 16.3-90 departure proposes to omit Reference 5, which is the ABWR DCD Section 15.4.9, "Rod Ejection Accident," from the Applicable Safety Analyses (ASA) and References sections of the bases for PTS 3.1.3 because the reference states that the rod ejection accident is not postulated to occur. The ASA bases section states that the analytical methods and assumptions used in the evaluations involving control rods are presented in References 2, 3, 4, and 5. Please provide additional justification for removal of the rod ejection accident from the bases.

Request for Additional Information No. 3213 Revision 02

South Texas Project Units 3 and 4
South Texas Project Nuclear Operating Co
Docket No. 52-012 and 52-013
SRP Section: 14.03.05 - Instrumentation and Controls - Inspections, Tests, Analyses, and Acceptance Criteria
Application Section: 14.03.05 and related Tier 1 Sections

QUESTIONS for Instrumentation, Controls and Electrical Engineering 2 (ESBWR/ABWR Projects) (ICE2)

14.03.05-***

Based on Tier 1 departure STD DEP T1 3.4-1, the applicant, in the FSAR Tier 1 Table 2.7.5, has primarily taken departures that relate to nomenclature changes resulting from the proposed I&C architecture. As described in Tier 1 Section 2.7.5, the essential communication functions are accomplished as a part of the safety related I&C systems and equipment that make up Safety System Logic and Control (SSLC). The non-essential communication functions are performed through a plant wide, distributed network identified as the Plant Data Network (PDN) system. The proposed data communication architecture is significantly different from the certified Multiplexing System. The NRC Staff requests that STPNOC include the inspections, test, and/or analysis that address specific features of the proposed data communication functions inherent to the SSLC platforms, such as timing and load, etc. In addition, Item 3 of Table 2.7.5 states that "Data cannot be transmitted from the non-safety-related side to equipment implementing the ECFs." However, there is a data communication from the non-safety-related side to the safety-related system although the transmission is manually controlled. The NRC Staff requests that STPNOC provide sufficient clarification for this inconsistency and include the test and inspection of this manually controlled data communication as an ITAAC item in Table 2.7.5. Refer to RAI 3139 related to Chapter 7.9S for additional information.

14.03.05-***

Based on STD DEP T1 3.4-1, the applicant revised the I&C architecture related nomenclature used in Table 3.4, ITAAC Item 3 Design Commitment. However, the types of Class 1E power sources was not changed, which is now inconsistent with the proposed power sources for RTIS and ELCS described in Tier 1 subsection A of Section 3.4. Also, the revised Design Commitment does not include the equipment implementing the ESF SLF in Division IV, and ESF RDLC in all four divisions. The NRC staff requests STPNOC to resolve this inconsistency between ITAAC Design Commitment and Tier 1 Design Description, and identify the ITAAC that addresses the equipment implementing the ESF SLF in Division IV, and ESF RDLC in all four divisions.

14.03.05-***

Based on STD DEP T1 3.4-1, the applicant revised the ESF output channel bypass design commitment and related ITA and acceptance criteria in Table 3.4, ITAAC Item 4. The staff is unable to evaluate this change due to the vagueness of the departed ESF design description in Tier 1 Section 3.4 (RAI 3213, Question 12836). The NRC staff requests STPNOC to evaluate the impact on this ITAAC resulting from potential changes to the ESF design description.

14.03.05-***

Based on STD DEP T1 3.4-1, the applicant changed EMS to ECF and NEMS to NECF in Table 3.4, ITAAC Item 12. This ITAAC is for EMC compliance testing of the electrical and electronic components used in the SSLC and other microprocessor-based, software controlled equipment. Note that ECF and NECF are functions and <u>not the electrical or electronic components</u> they replaced, namely essential and non-essential multiplexing systems. The NRC staff requests STPNOC to evaluate the applicability of ITAAC Item 12 to ECF and NECF.

14.03.05-***

In enclosure 4f of the STPNOC letter U7-C-STP-NRC-090009, dated February 9, 2009, the applicant evaluated the Tier 1 ITAAC for conformance to the SRP 14.3. In this evaluation, STP concluded that the SRP 14.3 does not address specific DAC related ITAAC, therefore requirements of the SRP 14.3 are not applicable to the departed DAC/ITAAC in Tier 1, Chapter 3. Based on following reasons, the staff finds this evaluation unacceptable:

1) On SRP pages 14.3-21 and 14.3-22, definition of DAC and its use as additional certified design material is explained,

2) on page 14.3-22, the SRP states, “The design information and appropriate design methodologies, codes, and standards provided in the DCD Tier 2, together with the design descriptions and DAC, should be sufficiently detailed to provide an adequate basis for the staff to make a final safety determination regarding the design, subject only to satisfactory design implementation and verification of the DAC by the COL applicant or licensee. The DAC are a set of prescribed limits, parameters, procedures, and attributes upon which the NRC relies, in a limited number of technical areas, in making a final safety determination in support of the design certification. The acceptance criteria for the DAC should be objective; that is, they should be inspectable, testable, or subject to analysis using pre-approved methods, and should be verified as a part of the ITAAC performed to demonstrate that the as-built facility conforms to the certified design. Thus, the acceptance criteria for DAC are specified together with the related ITAAC in Tier 1, and both are part of the design certification. The DAC and the ITAAC, when met, ensure that the completed design and as-constructed plant conforms to the design certification. The material in the DCD Tier 2 for each of the DAC areas should include, as appropriate, sample calculations or other supporting information to illustrate methods that are acceptable to the staff for meeting the Tier 1 DAC commitments.”

and

3) on page 14.3.5-5, the SRP states, “The applicant may provide design acceptance criteria (DAC) in lieu of detailed system design information. In this case, the DAC should be sufficiently detailed to provide an adequate basis for the Staff to make a final safety determination regarding the design, subject only to satisfactory design implementation and verification of the DAC by the COL applicant or licensee. Implementation of the DAC should be verified as part of the ITAAC performed to demonstrate that the as-built facility conforms to the certified design.”

The NRC staff requests STPNOC to reevaluate departed Tier 1 ITAAC for conformance to the SRP 14.3 guidance.