

PMSTPCOL PEmails

From: Muniz, Adrian
Sent: Thursday, August 27, 2009 8:10 AM
To: jwcook@stpegs.com
Cc: STPCOL
Subject: RAI Letter # 257
Attachments: ML0923801701.pdf

James:

Attached for your information is an advanced copy of Letter # 257.

Regards,

Adrian Muñiz, DNRL
US NRC

Hearing Identifier: SouthTexas34Public_EX
Email Number: 1665

Mail Envelope Properties (3DF2506A7257014AAC5857E5E852DEAC075B1CAA50)

Subject: RAI Letter # 257
Sent Date: 8/27/2009 8:10:28 AM
Received Date: 8/27/2009 8:10:31 AM
From: Muniz, Adrian

Created By: Adrian.Muniz@nrc.gov

Recipients:
"STPCOL" <STP.COL@nrc.gov>
Tracking Status: None
"jwcook@stpegs.com" <jwcook@stpegs.com>
Tracking Status: None

Post Office: HQCLSTR02.nrc.gov

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MESSAGE	152	8/27/2009 8:10:31 AM
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Reply Requested: No
Sensitivity: Normal
Expiration Date:
Recipients Received:

August 26, 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. 257 RELATED TO
SRP SECTION 7.2 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

-2-

If you have any questions or comments concerning this matter, I can be reached at 301-415-4093 or by e-mail at Adrian.Muniz@nrc.gov or you may contact George Wunder at 301-415-1494 or George.Wunder@nrc.gov.

Sincerely,

/RA/

Adrian Muñoz, Project Manager
ABWR Projects Branch
Division of New Reactor Licensing
Office of New Reactors

Docket Nos. 52-012
52-013

eRAI Tracking No. 3130

Enclosure:
Request for Additional Information

cc: William Mookhoek
James Cook

S. Head

-2-

If you have any questions or comments concerning this matter, I can be reached at 301-415-4093 or by e-mail at Adrian.Muniz@nrc.gov or you may contact George Wunder at 301-415-1494 or George.Wunder@nrc.gov.

Sincerely,

/RA/

Adrian Muñiz, Project Manager
ABWR Projects Branch
Division of New Reactor Licensing
Office of New Reactors

Docket Nos. 52-012
52-013

eRAI Tracking No. 3130

Enclosure:
Request for Additional Information

cc: William Mookhoek
James Cook

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NAME	JZhao	IJung	AMuñiz	SKirkwood	GWunder
DATE	6/26/09	6/30/09	8/26/09	8/14/09	8/14/09

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

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Request for Additional Information No. 3130 Revision 02

South Texas Project Units 3 and 4 South Texas Project Nuclear Operating Co Docket No. 52-012 and 52-013 SRP Section: 07.02 - Reactor Trip System Application Section: 07.02

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

07.02-2

Departure STD DEP T1 3.4-1 proposed changes to the safety-related instrumentation and control (I&C) architecture which impact COLA FSAR Figure 7.2-2 for the safety related reactor protection system (RPS). The bypass unit (BPU) with inputs and output to/from each division shown on the original Figure 7.2-2 in the ABWR DCD was deleted without any explanation in the COLA FSAR. In addition, some interlocks, such as “reset permissive”, “from one ACT (reset permissive)”, and “trips from NMS Div x”, were included on the original figure, but are circled as changes on Figure 7.2-2 in the COLA FSAR. There are many changes to COLA FSAR Figure 7.2-2 which are not explained. Clarify and explain in the COLA Departures Report and FSAR all changes made to Figure 7.2-2.

07.02-3

In Departure STD DEP T1 3.4-1, STPNOC took a deviation from the certified ABWR DCD on the safety-related instrumentation and control (I&C) architecture. In the safety related reactor protection system (RPS), the reference DCD Section 7.2.1.1.6.1(3) requires 5 milliseconds or more for all sequence-of-event (SOE) signals. But for the proposed new I&C architecture, the COLA FSAR changed the time resolution to 25 milliseconds or more for the safety-related nuclear steam supply system (NSSS) systems while keeping the original time resolution for the non-safety related balance-of-plant (BOP) systems. Provide sufficient information to support this change.

07.02-4

In Departure STD DEP T1 3.4-1, STPNOC took deviations on the data communication and other systems from the generic ABWR DCD. Revise the original COLA FSAR Figure 7A-1 in section 7A accordingly to reflect all the changes contained in Departure STD DEP T1 3.4-1.

07.02-5

The NRC Staff requests that STPNOC address the following items in the COL application:

- Departure STD DEP T1 3.4-1 proposed to eliminate references to the essential multiplexing system (EMS). However, EMS is still used in COLA FASR Tier 2 Section 7.2.1.1.4.2(2)(d). Correct this inconsistency.
- STD DEP 7.3-5, Water Level Monitoring, proposed to use the standard ABWR nomenclature of Level 1.5, Level 1, etc. to replace “Low”, “Low-Low”, respectively. However, COLA FSAR Tier 2 Section 7.2.2.1(3), 7.2.2.2.3.1(12)(a), Table 7.2-2, 7.3.1.1.1.1(3), 7.3.1.1.1.3(h) still use low-water level. Correct this inconsistency.

Enclosure

- COLA FSAR Sections 7.2.2.2.3.1(8), (10), and (12) refer to Paragraphs 4.8, 4.10, and 4.12 of IEEE 603-1991. Should the referenced Paragraphs be 6.4, 6.5, and 6.6 of IEEE 603-1991, respectively? Update these sections accordingly.
- “Transducers” for level and pressure have been changed to transmitters in some places, such as Section 7.3.1.1.1.3 in the COLA FSAR, but it’s not changed in other places. To be consistent, STPNOC should change transducer to transmitter throughout, as appropriate.
- “RCIC is automatically isolated on detection or high steam flow or high temperature...” in section 7.3.1.1.1.3(4)(a) should be changed to “RCIC is automatically isolated on detection of high steam flow or high temperature...”
- COLA FSAR Section 7.2.2.2.4 does not show the range for the turbine first-stage pressure, as claimed in departure STD DEP 7.2-6. Correct this inconsistency.
- COLA FSAR Section 7A.2, Revised Response (7) includes 125 VAC which should be changed to 120 VAC.
- COLA FSAR Section 7A.7, Items 7A.5(4) and 7A.6(4) includes RTIF which should be revised to RTIS.
- COLA FASR Tier 2 Section 7.7.1.5(7)(c) used ARRM which should be changed to APRM.
- COLA FASR Tier 2 Section 7.7.1.7(1) used PGS which should be changed to PGCS.
- Departure STD DEP 7.3-18 is referred to in COLA FSAR Section 7.3, but COLA Part 7, Departures Report” does not include this departure. Correct this inconsistency.
- Departure STD DEP 7.3-1 includes only two subsections for replacing the specific time interval with reference to Table 6.3-1. But, the specific time interval has also been replaced with reference to Table 6.3-1 in Section 7.3.1.1.1.3. Correct this inconsistency.
- In Evaluation Summary of STD DEP 7.3-13, it says “Also, it does affect any method...” Should this be revised to read “Also, it does not affect any method...”? Update this section accordingly.
- Section 7.1.2.6.2(1)(d) still uses the system logic on high radiation in the MSL tunnel area although Departure STD DEP T1 2.3-1 deleted the logic related to the high radiation in the MSL tunnel area. Correct this inconsistency.
- Section 7.5.2.1(2)(b) in COLA FSAR should be revised to 7.5.2.1(2)(a).