From: Chandu Patel
To: kurt.schaefer@ge.com
Date: 6/29/2007 3:34:10 PM
Subject: Supplemental RAI for ESBWR Chapter 14.3

Kurt,

Attached are supplemental RAIs for chapter 14.3. Please provide your schedule for responding to these questions. Please let me know if you have any further questions.

Thanks,
Chandu

CC: AEC; David Shum; Edwin Forrest; james.kinsey@ge.com; Milton Concepcion-Robles

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Subject: Supplemental RAI for ESBWR Chapter 14.3
Creation Date 6/29/2007 3:34:10 PM
From: Chandu Patel

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ge.com
james.kinsey CC (james.kinsey@ge.com)
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Files	Size	Date & Time
MESSAGE	619	6/29/2007 3:34:10 PM
Supl RAI CHPT 14 63007.wpd	9043	6/29/2007 3:21:10 PM

Options

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Return Notification:	None
Concealed Subject:	No
Security:	Standard

Supplemental Request for Information for ESBWR, Tier 2, Chapter 14

1. Comment on response to RAI14.3-34 (MFN 07-032, March 9, 2007):

In the added Subsection 2.16.2.3, it should be stated that the emergency filter unit (EFU) can supply sufficient air, pressurization for the full 30 days following an accident. The first 72 hours are powered from safety-related batteries, but a filtered air source is credited for 30 days. The RTNSS qualified power source post 72 hours should be identified. Table 2.16.2-5 should have the EFU fans and the high efficiency particulate air (HEPA) and charcoal adsorbers identified.

2. Comment on response to RAI14.3-52 (MFN 07-032, March 9, 2007):

Item A of this response needs to include the safety-related dampers on the clean area HVAC sub system of the Reactor Building HVAC System (RBVS) in DCD Tier 2 Table 9.4-9. Table 2.16.2-1 should address all safety-related (SR) isolation dampers, including those that isolate the Fuel Building connection to the Reactor Building HVAC purge exhaust portion of the contaminated area HVAC subsystem and smoke purge exhaust. If these other entry or exit points to the RBVS do not require SR isolation dampers, the basis for not providing SR dampers needs to be discussed in the DCD. The ability to cross reference can be achieved by using consistent and explicit nomenclature for items identified in Tier 1 and Tier 2 documents including text, tables, and figures.

3. Comment on response to RAI14.3-53 (MFN 07-032, March 9, 2007):

Although recognizing that some details would be developed later in the design, lack of design detail itself is not an acceptable response. Tag numbers provide a means for identifying components for cross referencing between documents. The ability to cross reference can be achieved by using consistent and explicit nomenclature for items identified in Tier 1 and Tier 2 documents including text, tables, and figures. At this point of the design, at least for SR isolation dampers, GE should be able to identify normal and failure positions, a position indication requirement, and type of operator (pneumatic or motor).

4. Comment on response to RAI14.3-55 (MFN 07-032, March 9, 2007):

Referring to sub paragraph (ii) in Item F of the response, for consistency, please revise DCD Tier 2 Figure 9.4-11 with the change made to Tier 1 Figure 2.16.2-8, the change that labels the refueling area box to Reactor Building refueling area.

5. Comment on response to RAI14.3-61 (MFN 07-032, March 9, 2007):

According to the guidance in NUREG-0696, the Technical support Center (TSC) should be habitable under accident conditions. Therefore, it is necessary to verify the ability of the Technical Support Center HVAC system to maintain the TSC at positive pressure with respect to the areas around it. It is also necessary to confirm that a filter system has been installed and that it meets appropriate test requirements.

> Thus an ITAAC table for this Design Commitment is required. Please discuss the adequacy of flow and cooling design to meet normal and accident conditions both pre 72 hours and post 72 hours so that the staff can determine with reasonable assurance that sufficient system capability exists and include the design details in DCD Tier 2 Section 9.4.7. RTNSS systems should be identified.

6. Comment on response to RAI 14.3-151 (MFN 07-330, June 20, 2007):

In the response to NRC RAI 14.3-151, dated June 20, 2007, regarding the inclusion of diesel generator (DG) supporting systems (fuel oil storage and transfer system, jacket cooling water system, starting air system, lubrication system and combustion air intake and exhaust system) in DCD Tier 1, Revision 3, Section 2.0, “Design Descriptions and ITAAC,” GE stated that no

ITAAC can be developed for any of the above cited DG supporting systems that would meet the ITAAC inclusion criteria in Tier 2 Subsection 14.3.7. Therefore, no DCD change will be made to include these systems in ITAAC.

In the response dated January 30, 2007, to the staff's RAI 19.1.0-2 regarding RTNSS, GE included the DG units as RTNSS systems. Also, DCD, Revision 3, Section 14.3.7.3 states that RTNSS systems shall have Tier 1 inputs that include design descriptions and ITAAC. Therefore, DCD Tier 1, Revision 3, Section 2.0, "Design Descriptions and ITAAC," should be revised to include the above cited DG supporting systems.