

## **NRR-PMDAPEm Resource**

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**From:** Lingam, Siva  
**Sent:** Monday, June 16, 2014 7:33 AM  
**To:** garent@tva.gov; rhbryan@tva.gov  
**Cc:** Quichocho, Jessie; Poole, Justin; Brezovec, Michael; Barss, Dan; LaVie, Steve  
**Subject:** Watts Bar, Unit 2 - RAIs for Radiological Emergency Plan (NP-REP, Rev. 103)  
**Attachments:** REQUEST FOR ADDITIONAL INFORMATION.DOCX

Attached please find the RAIs for the subject matter so that you can address them in Rev. 104 of NP-REP that is due on Aug. 15, 2014. These RAIs have been generated after reviewing Rev. 103 of NP-REP, and also comparing Rev. 92 (the basis of SSER-22) with Rev. 103.

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REQUEST FOR ADDITIONAL INFORMATION

WATTS BAR NUCLEAR PLANT, UNIT 2

RADIOLOGICAL EMERGENCY PLAN

TENNESSEE VALLEY AUTHORITY

DOCKET NO. 50-391

Note: RAI numbers continue from the sequence in the previous requests for additional information in NRC letters dated March 11, 2010 and May 28, 2010. Please do not submit safeguards information. Also, information requests regarding multiple site response are not related to the Fukushima Near-Term Task Force recommendations.

24. Confirmatory Item 37 in Table HH, "Watts Bar Unit 2 Action Items Table," of SSER-22 requires the NRC to review the NP-REP, including the combined WBN Unit 1 and 2 Appendix C to confirm that changes made to NP-REP since Revision 92 do not affect the bases of the staff's findings in the Supplemental Safety Evaluation 22 (SSER-22). The staff requests additional information to support this review.
- a. Revision 103xx of Appendix C, Fission Product Barrier Matrix emergency action level 1.1.2, shows loss of sub cooling thresholds for both units. For Unit 1, the threshold is (<65°F indicated), [85°F ADV]. For Unit 2, the threshold is (<42°F indicated), [42°F ADV]. The staff understands the Unit 2 indicated values are different from the Unit 1 values. Please confirm that 42°F is correct for both "indicated" and "ADV" at Unit 2.
  - b. By letter dated April 27, 2010, TVA responded to RAI 5.a, stating that the use of ARWs as a compensatory measure for radiation protection (RP) technicians remains correct with regard to Unit 2. Please identify where in Appendix C this use of ARWs is described, and how many such individuals are assigned.
  - c. By letters dated April 27, 2010 and October 11, 2010, TVA responded to RAI 5.c by committing to add text clarifying the staffing time requirements for the Technical Support Center (TSC) and the Onsite Support Center (OSC). As identified in §13.2.2.2 of SSER-22, the staff found the proposed language acceptable. The staff confirmed that the language had been incorporated in § C.5 of Revision 103 of NP-REP. The staff also noted that the language in § 3.1 (page 11) appropriately referenced the site-specific information in § C.5. However, §§ 6.1.1 and 6.1.2 state that the activation time of the TSC and OSC is conditional on "...time of day, weather conditions, or immediate availability of personnel." This is the language the staff sought to resolve with the RAI. Please resolve the inconsistency between TVA's response to RAI 5.c and §§ 6.1.1 and 6.1.2 or provide justification as to why resolution is not necessary.
  - d. Figures 10-1 and 10-2 of Revision 103 of NP-REP are significantly different from those reviewed for SSER-22. The staff has one concern regarding the branches that start with the decision "Is the GE declared due to Hostile Action," and "Is there an ongoing Hostile Action." The staff believes that the logic of the figures would always lead to a sheltering protective action even if the ongoing Hostile Action had initiated a significant radioactivity release. There appears to be no

path to a dose-based protective action recommendation until the hostile action is “terminated,” which, like “ongoing,” is not clearly defined in the figures. At what point in a protracted response to a hostile action, would TVA make a dose-based protective action recommendation for the public? Please provide a justification for this approach. [The staff understands that this figure will be revised in Revision 104, but wants to ensure that the concern isn’t carried over to the new figures.]

25. The issuance of SSER-22 preceded the EP rulemaking by several months. The implementation of changes to 10 CFR Part 50 Appendix E at Unit 2 was explicitly addressed in Section I.6 of Appendix E. This rule allowed TVA to meet the requirements of the final rule for Unit 2 on the same schedule applicable to Unit 1. This clause was added to prevent the rule implementation from delaying the issuance of the Unit 2 operating license, then-expected in April 2012. The implementation dates for the majority of the rule provisions have since passed. An applicant has to demonstrate compliance with all effective rules prior to the issuance of an operating license under Part 50. In reviewing Revision 103 of NP-REP, the staff identified the need for additional information to make this determination:
- a. Section IV.A.7 of Appendix E to 10 CFR Part 50 requires licensees to identify and describe the assistance expected from appropriate State, local, and Federal agencies with responsibility for coping with emergencies, including hostile action by June 23, 2014. Please provide a description of the arrangements for this assistance which demonstrates that this requirement has been met. If this is already addressed in the NP-REP, please provide a citation.
  - b. Section IV.A.8 of Appendix E to 10 CFR Part 50 requires licensees to perform a detailed analysis of on-shift staffing. This rule did not require that holders of operating license submit this analysis for staff review. However, Unit 2 is an applicant for an operating license under Part 50 and compliance with this requirement must be demonstrated before the operating license may be issued. Please provide a copy of the current staffing analysis that addresses the staffing for Unit 2.
  - c. Section IV.E.8.c of Appendix E to 10 CFR Part 50 requires that emergency operations facility (i.e. CECC) have certain capabilities by June 20, 2012, including, in part, “(2) the capability to support response to events occurring simultaneously at more than one nuclear power reactor site if the emergency operations facility serves more than one site.” Section 8.2 of NP-REP does not appear to address this capability nor does CECC-EPIP-1. Please provide a description of the CECC capabilities to serve as the EOF for simultaneous events at more than one site.
  - d. The staff understands that Revision 104 will address the new requirements for an alternate facility (Appendix E IV.E.8.d), which must be implemented prior to December 23, 2014. If the staff’s understanding is in error, please describe how TVA plans to demonstrate compliance prior to the issuance of the Unit 2 operating license.
  - f. Section 14.4 of NP-REP addresses the performance of critiques for exercises and drills. Section 15 addresses training. However, neither section appears to

address the requirement in § IV.F.2.g, which also requires formal critiques for training that provides performance opportunities to develop, maintain, or demonstrate key skills. This particular requirement became effective on December 23, 2013. Please resolve this omission or provide justification for why resolution is not necessary.