

**From:** [Wang, Alan](#)  
**To:** [Perino, Christina](#); [JACKSON, RITA R](#); [SEITER, JEFFERY ALAN](#)  
**Subject:** Grand Gulf Nuclear Station Request for Additional Information Regarding Proposed Emergency Action Levels Using Nuclear Energy Institute (NEI) 99-01 Rev. 5 (ME7540)  
**Date:** Monday, April 02, 2012 8:22:00 AM

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Rita, Jeff and Christina,

By letter dated October 28, 2011 (Agency-wide Documents Access and Management System (ADAMS) Accession No. ML113010353), Entergy Operations Incorporated (Entergy) requested prior approval of a revised emergency action level (EAL) scheme for Grand Gulf Nuclear Station (GGNS) using NEI 99-01 Revision 5 Scheme.” Entergy’s letter stated that the current GGNS EAL schemes are based on generic development guidance from Nuclear Energy Institute (NEI) 99-01, Revision 4, “Methodology for Development of Emergency Action Levels,” dated January 2003 (ADAMS Accession No. ML030230250). Since 1992, numerous enhancements and clarification efforts have been made to the generic EAL development guidance resulting in the most recent document, NEI 99-01, Revision 5, “Methodology for Development of Emergency Action Levels,” (ADAMS Accession No. ML080450149), which was found to be acceptable for use as generic EAL development guidance by the Nuclear Regulatory Commission (NRC) staff by letter dated February 22, 2008 (ADAMS Accession No. ML080430535)

The proposed EAL schemes were developed using the generic development guidance from NEI 99-01, Revision 5 with numerous differences and deviations based upon design criteria applicable to the site as well as licensee preferences for terminology, format, and other licensee desired modifications to the generic EAL scheme provided in NEI 99-01 Revision 5.

The NRC staff has determined that the following additional information is needed to complete our review of this request. This request for additional information (RAI) was discussed with Mr. [Jeff Seiter](#), on March 30, 2012, and it was agreed that a response would be provided within 45 days from the issuance of this email. If circumstances result in the need to revise the requested response date, please contact me at (301) 415-1445 or via e-mail at [Alan.Wang@nrc.gov](mailto:Alan.Wang@nrc.gov).

The following RAIs are related to your request in letter dated October 28, 2011:

1. Introduction – A review of an EAL scheme, submitted in accordance with Appendix E to 10, transient events, and simultaneous events. While a licensee has some latitude to design an implementation method that is acceptable to the site (using the guidance provided in NEI 99-01 (Rev. 5) Section 5.3), it is expected that this information be incorporated into a single document (EAL Technical Bases) to ensure an acceptable change management process going forward, to aid in the consistency of site-specific CFR 50, requires the submission of a complete EAL Technical Bases Document ,which includes, among other things, documentation as to how a licensee will address EAL upgrades, downgrades training, and to support the regulatory review. Note that verbatim compliance is not required; however, the intent of each section should be addressed in the licensee EAL Technical Bases Document. Please incorporate the guidance from Sections 3.8 through 3.13 of NEI 99-01 (Rev. 5), or provide justification for its omission.
2. The definition of the terms CONFINEMENT BOUNDARY and CONTAINMENT CLOSURE reflect wording from the generic EAL development guidance, rather than defined as used by GGNS. Please provide further justification for use of generic

definitions or revised accordingly to reflect GGNS-specific use.

3. The list of definitions does not include the emergency classification levels (i.e. Notification of Unusual Event, Alert, Site Area Emergency, General Emergency). Please incorporate them into the definitions or include Section 3.7 of NEI 99-01 (Rev. 5) as part of the response to RAI #1 above.
4. AA2: The differences and deviations table for the GGNS EAL scheme change to NEI 99-01 (Rev. 4) stated that water level monitoring was not installed. The EAL #1 portion of the Basis section references water level monitors. Has water level monitoring subsequently been installed or is planned to be installed?
5. CU3: There is a line spacing typo in paragraph #3 of the basis section.
6. CA3.2: In the "Basis" section, the values "10 psi" and "10 psig" appear to be used interchangeably. Please justify this apparent inconsistency or revise accordingly.
7. Attachment 3, Page 46: The first bullet makes reference to "Sections 3.4 and 3.8," but Attachment 3 has neither a Section 3.4 or Section 3.8. Please clarify to what is this reference being made or revise accordingly.
8. RC3: The current GGNS RC3 Loss 1.a criteria include an "OR" condition of "High Steam Tunnel Temperature (P601-19A-E3) annunciator." The proposed change would make this an "AND" condition, but no justification for the change is provided. Please provide technical justification for the change.
9. HA5.1: Per endorsed guidance, this EAL should only list areas where access is required to operate said equipment. Please confirm that all VITAL AREAS are required to be entered for safe operation or safe shutdown/cooldown.
10. HA6.1: Please confirm that all criteria are actually necessary in order to classify the event And that all indications available in the Control Room.
11. SU8: In the Operating Mode Applicability portion, "Hot Standby (Mode 3)" is listed. Page 5 of Attachment 3 does not list "Hot Standby" as an operating mode.
12. SU9: Please clarify whether indications of the parameters of Table S3, "Offgas flow (cfm)" and "Radiation Monitor Limit (mr/hr)," are available in the Control Room. If they are not, provide justification as to how this information be obtained in a timely manner for event classification determination.

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