From: Wang, Alan
Sent: Thursday, June 23, 2011 9:44 AM
To: 'BURFORD, FRANCIS G'; 'DAVANT, GUY H'
Cc: Lent, Susan; Burkhardt, Janet
Subject: GG Power Range Neutron Monitoring System Instrumentation and Controls Branch Request for Additional Information (ME2531)

Guy and Jerry,

By application dated November 3, 2009 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML093140430), Entergy Operations, Inc. (Entergy, the licensee), requested NRC staff approval of an amendment to the Grand Gulf Nuclear Station, Unit 1, technical specifications to reflect installation of the digital General Electric - Hitachi (GEH) Nuclear Measurement Analysis and Control (NUMAC) Power Range Neutron Monitoring System (PRNMS).

By letter dated January 15, 2010 (ADAMS Accession No. Ml100070385), the U.S. Nuclear Regulatory Commission (NRC) staff issued a request for additional information (RAIs). By letter dated February 8, 2010 (ADAMS Accession No. ML100430825), Entergy provided a response to these RAIs. By letter dated May 4, 2010 (ADAMS Accession No. ML101190125) the NRC staff had supplemental RAIs based on the review of this response. By letters dated June 3, June 18, July 29, September 29, December 13, and December 14, 2010, Entergy responded to this request. The NRC staff has determined that additional information is needed for the NRC staff to complete our review of this amendment . This RAI was discussed with Mr. Jerry Burford of your staff on June 22, 2011, and it was agreed that the response would be provided within 30 days of receipt of this E-mail. If you have any questions regarding the schedule or the RAI, please contact me at (301) 415-1445 or via e-mail at Alan.Wang@nrc.gov.

The following is an additional RAI related to the instrumentation and controls branch review of the PRNMS license amendment request (LAR):

1) Describe in a detailed mapping the approach to software V&V for the PRNMS safety-related firmware versus the V&V activities per IEEE Std 1012-1998 software integrity level 4. This mapping should demonstrate that V&V for software integrity level 4 as defined in IEEE Std 1012-1998 and endorsed by Regulatory Guide 1.168 is satisfied.

   Basis

   Regulatory Guide 1.168 Position 1 “Critical Software” states, in part, that: “Software used in nuclear power plant safety systems should be assigned integrity level 4 or equivalent, as demonstrated by a mapping between the applicant or licensee approach and integrity level 4 as defined in IEEE Std 1012-1998.”

Alan Wang, Project Manager
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