ArevaEPRDCPEm Resource

From: Tesfaye, Getachew
Sent: Tuesday, May 24, 2011 4:20 PM
To: 'usepr@areva.com'
Cc: Xu, Jim; Shams, Mohamed; Hawkins, Kimberly; Miernicki, Michael; Colaccino, Joseph; ArevaEPRDCPEm Resource
Subject: U.S. EPR Design Certification Application RAI No. 489 (5802), FSAR Ch. 3
Attachments: RAI_489_SEB2_5802.doc

Attached please find the subject requests for additional information (RAI). A draft of the RAI was provided to you on May 16, 2011, and on May 24, 2011, you informed us that the RAI is clear and no further clarification is needed. As a result, no change is made to the draft RAI. The schedule we have established for review of your application assumes technically correct and complete responses within 30 days of receipt of RAIs. For any RAIs that cannot be answered within 30 days, it is expected that a date for receipt of this information will be provided to the staff within the 30 day period so that the staff can assess how this information will impact the published schedule.

Thanks,
Getachew Tesfaye
Sr. Project Manager
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Hearing Identifier: AREVA_EPR_DC_RAIs
Email Number: 3011

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Subject: U.S. EPR Design Certification Application RAI No. 489 (5802), FSAR Ch. 3
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Request for Additional Information No. 489(5802), Revision 0

5/24/2011

U. S. EPR Standard Design Certification
AREVA NP Inc.
Docket No. 52-020
SRP Section: 03.07.02 - Seismic System Analysis
Application Section: 3.7.2

QUESTIONS for Structural Engineering Branch 2 (ESBWR/ABWR Projects) (SEB2)

03.07.02-75

POTENTIAL OPEN ITEM

The Defense Nuclear Facilities Safety Board (DNFSB) issued a letter on April 8th, 2011 requesting the Department of Energy (DOE) to address technical and software quality assurance issues related to potentially erroneous seismic analyses performed using the SASSI Subtraction method. A version of SASSI is used by AREVA in the seismic analyses performed in support of the U.S. EPR design certification (DC) application.

The analyses included in Rev. 0 and Rev. 1 of the FSAR were performed considering the NI basemat structures, the NAB, and the EPGB as surface structures. Therefore, the subtraction method is not a concern in these calculations. The ESWB is analyzed as an embedded structure Therefore the subtraction issue may be of concern for this analysis if it were used in the SASSI modeling approach. The response to RAI 320 indicates that the updated analyses involve considering embedment effects for these structures.

To ensure the applicant has adequately met General Design Criteria (GDC) 1 and 2 to Part 50 and Appendix B to Part 50, the staff requests AREVA to provide to following information:

a. Confirm whether the SASSI Subtraction method is used in the seismic analyses
b. Provide how AREVA addresses the technical and software quality assurance issues raised by DNFSB letter in the version of SASSI which AREVA uses for seismic analyses
c. If the SASSI Subtraction method is used by AREVA, provide an assessment to establish: a) the seismic analyses performed in support of the U.S. EPR DC application do not contain any errors or anomalies as identified in DNFSB letter, b) QA steps taken to ensure any future seismic analyses in support of the U.S. EPR DC application will be free from errors or anomalies as identified in DNFSB letter