

ArevaEPRDCPEm Resource

From: Tesfaye, Getachew
Sent: Tuesday, June 22, 2010 10:17 AM
To: 'usepr@areva.com'
Cc: Bongarra, James; Walker, Jacqwan; Marble, Julie; Junge, Michael; Eudy, Michael; Steckel, James; Colaccino, Joseph; ArevaEPRDCPEm Resource
Subject: U.S. EPR Design Certification Application RAI No. 419 (4727,4780), FSAR Ch. 18
Attachments: RAI_419_COLP_4727_4780.doc

Attached please find the subject requests for additional information (RAI). A draft of the RAI was provided to you on June 14, 2010, and discussed with your staff on June 17, 2010. Drat RAI Question 18-173 was deleted as a result of that discussion. 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: 1584

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From: Tesfaye, Getachew

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Request for Additional Information No. 419(4727, 4780), Revision 1

6/22/2010

U. S. EPR Standard Design Certification
AREVA NP Inc.
Docket No. 52-020
SRP Section: 18 - Human Factors Engineering
Application Section: Ch.18.0

QUESTIONS for Operating Licensing and Human Performance Branch (AP1000/EPR Projects) (COLP)

18-171

Follow-up to RAI 4016 (336), question 18-73 (15535):

The staff has determined that the applicant's response to parts (a.1) and (a.2) of this RAI acceptably addresses the staff's questions concerning defining and assessing a meaningful job and providing information related to assessing cognitive workload by providing a definition of meaningful job and describing the application of the GOMS technique to assess cognitive workload. This portion of the RAI question has been satisfactorily addressed and can be closed.

However, the staff has the following additional questions concerning the applicant's response to parts (b.1) and (b.2). While the applicant has provided a generic description of what a task timeline is, the response does not provide an explanation of how the technique is/will be used to develop the EPR task analysis (e.g., an example of a task timeline that is related to the EPR TA has not been provided). In addition, the applicant's response does not clearly explain how the timeline developed for the EPR TA will be used to address issues of workload and response timing related to EPR operators. The staff requests for the applicant to please explain how the task timeline technique is used to develop the EPR TA and how the timeline is used to address issues of workload and response timing related to EPR operators.

18-172

NUREG-0711, Criterion 8.4.5, "HSI Detailed Design and Integration," sub-criterion 8, states that HSI characteristics should support human performance under the full range of environmental conditions. In support of this criterion, AREVA submitted, as part of its HSI IP, a description for developing the minimum inventory of alarms, controls, and displays for the MCR and the RSS. With respect to the applicant's IP Rev 3., page 24, AREVA states that, "The minimum inventory development process, is iterative similar to the other U.S. EPR™ HFE program elements. Design inputs to MI development are revised as the design evolves and the MI list is re-evaluated and adjusted as necessary until the design is finalized." The staff requests for the applicant to please clarify what is meant by the last sentence, "Design inputs to MI development are revised as the design evolves and the MI list is re-evaluated and adjusted as necessary until the design is finalized."

18-173

[Intentionally deleted.]