

ArevaEPRDCPEm Resource

From: WILLIFORD Dennis (AREVA) [Dennis.Williford@areva.com]
Sent: Monday, February 11, 2013 3:36 PM
To: Snyder, Amy
Cc: Ford, Tanya; Clark, Phyllis; DELANO Karen (AREVA); LEIGHLITER John (AREVA); ROMINE Judy (AREVA); RYAN Tom (AREVA); WILLS Tiffany (AREVA); LENTZ Tony (EXTERNAL AREVA)
Subject: Response to U.S. EPR Design Certification Application FINAL RAI No. 562 (6825), FSAR Ch. 14
Attachments: RAI 562 Response US EPR DC.pdf

Amy,

Attached please find AREVA NP Inc.'s response to the subject request for additional information (RAI). The attached file, "RAI 562 Response US EPR DC.pdf," provides a schedule since a technically correct and complete response to the subject question cannot be provided at this time.

The following table indicates the respective pages in the response document, "RAI 562 Response US EPR DC.pdf," that contain AREVA NP's response to the subject question.

Question #	Start Page	End Page
RAI 562 — 14.03.08-6	2	2

The schedule for a technically correct and complete response to the subject question is provided below.

Question #	Response Date
RAI 562 — 14.03.08-6	June 28, 2013

Sincerely,

Dennis Williford, P.E.
U.S. EPR Design Certification Licensing Manager
AREVA NP Inc.

7207 IBM Drive, Mail Code CLT 2B
Charlotte, NC 28262
Phone: 704-805-2223
Email: Dennis.Williford@areva.com

From: Snyder, Amy [<mailto:Amy.Snyder@nrc.gov>]
Sent: Thursday, January 10, 2013 6:03 PM
To: ZZ-DL-A-USEPR-DL
Cc: Stutzcage, Edward; McCoppin, Michael; Ford, Tanya; Segala, John; ArevaEPRDCPEm Resource; Clark, Phyllis
Subject: U.S. EPR Design Certification Application FINAL RAI No. 562 (6825), FSAR Ch. 14

Attached please find the subject request for additional information (RAI). A draft of the RAI was provided to you on October 2, 2012, and discussed with your staff on October 18, 2012 and January 10, 2013. The Draft RAI Question 14.03.08-6 was not modified as a result of those discussions. On January 10, 2013, you informed us that the draft RAI is clear and no further clarification is needed and that the draft RAI does not contain AREVA Proprietary information or SGI information. The schedule we have established for review of your application assumes technically correct and complete responses within 30 days of receipt of this Final RAI. If this RAI question 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

Thank You,

Amy

Amy Snyder, U.S. EPR Design Certification Lead Project Manager
Licensing Branch 1 (LB1)
Division of New Reactor Licensing
Office of New Reactors
U.S. Nuclear Regulatory Commission
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Hearing Identifier: AREVA_EPR_DC_RAIs
Email Number: 4217

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Subject: Response to U.S. EPR Design Certification Application FINAL RAI No. 562 (6825), FSAR Ch. 14
Sent Date: 2/11/2013 3:36:03 PM
Received Date: 2/11/2013 3:36:12 PM
From: WILLIFORD Dennis (AREVA)

Created By: Dennis.Williford@areva.com

Recipients:

"Ford, Tanya" <Tanya.Ford@nrc.gov>
Tracking Status: None
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"DELANO Karen (AREVA)" <Karen.Delano@areva.com>
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"Snyder, Amy" <Amy.Snyder@nrc.gov>
Tracking Status: None

Post Office: FUSLYNCMX03.fdom.ad.corp

Files	Size	Date & Time
MESSAGE	2606	2/11/2013 3:36:12 PM
RAI 562 Response US EPR DC.pdf		61266

Options

Priority: Standard
Return Notification: No
Reply Requested: No
Sensitivity: Normal
Expiration Date:
Recipients Received:

Response to

Request for Additional Information No.562

1/10/2013

U.S. EPR Standard Design Certification

AREVA NP Inc.

Docket No. 52-020

**SRP Section: 14.03.08 - Radiation Protection Inspections, Tests, Analyses, and
Acceptance Criteria**

Application Section: Tier 1, Section 2.4.22

RPAC Branch

Question 14.03.08-6:

Open Item

Follow-up to RAI 543, Question 14.03.08-5 (Supplement 2 response)

10 CFR 52.47(b)(1) requires that applications contain, “the proposed inspections, tests, analyses, and acceptance criteria that are necessary and sufficient to provide reasonable assurance that, if the inspections, tests, and analysis are performed and the acceptance criteria met, a facility that incorporates the design certification has been constructed and will be operated in conformity with the design certification, the provisions of the Act, and the Commission’s rules and regulations.”

Also, SRP Section 14.3.8 states that, “the reviewer should ensure that Tier 1 identifies and describes, commensurate with their safety significance, those SSCs that provide radiation shielding, confinement or containment of radioactivity, ventilation of airborne contamination, or radiation (or radioactivity concentration) monitoring for normal operations and during accidents.” It also states that, “Tier 1 contains ITAAC that ensure that the identified SSCs will function in a manner consistent with the certified design.”

In the response to Question 14.03.08-5, item e, the applicant identified a series of different ITAAC items, that when combined, provide a series of overlapping tests that provide verification of the functionality of the instrument loop for the safety-related radiation monitors from sensor to actuator. However, successful functionality of the system as a whole is not necessarily ensured by the successful testing of each of the individual parts. NRC Bulletin 74-11 (ML 1117202310) provides one example of past operating experience in which safety related equipment did not function as designed because the system was tested in parts and never tested as a whole.

AREVA is requested to update U.S. EPR FSAR Tier 1, to include an ITAAC which tests the function of the safety-related radiation monitors as a whole, from radiation detection to actual protection system actuation or engineered safety function actuation. This ITAAC is necessary in order to ensure that these safety-related systems will function as designed, and to demonstrate compliance with 10 CFR 52.47(b)(1).

Response to Question 14.03.08-6:

A response to this question will be provided by June 28, 2013.