

ArevaEPRDCPEm Resource

From: HOTTLE Nathan (AREVA) [Nathan.Hottle@areva.com]
Sent: Friday, August 30, 2013 5:21 PM
To: Snyder, Amy
Cc: Miernicki, Michael; GUCWA Len (EXTERNAL AREVA); UYEDA Graydon (AREVA); LEIGHLITER John (AREVA); RANSOM Jim (AREVA); ROMINE Judy (AREVA); SHEPHERD Tracey (AREVA); RYAN Tom (AREVA); LOSEKE Brian (AREVA)
Subject: Response to U.S. EPR Design Certification Application FINAL RAI No. 580, FSAR Ch.3 - Supplement 1
Attachments: RAI 580 Supplement 1 Response US EPR DC.PDF

Amy,

AREVA provided a schedule for a response to RAI 580 Questions 03.08.04-28, 03.08.04-29, and 03.08.04-30 on May 1, 2013. AREVA provided an Advanced Response to the three questions on June 25, 2013 and requested NRC feedback and comments by August 16, 2013 to support an August 30, 2013 final response. AREVA received NRC comments on the three questions on August 28, 2013.

The attached file, "RAI 580 Supplement 1 Response US EPR DC.PDF," provides a technically correct and complete final response to Question 03.08.04-30.

The following table indicates the respective pages in the response document, "RAI 580 Supplement 1 Response US EPR DC.PDF" that contain AREVA's response to the question.

Question #	Start Page	End Page
RAI 580 — 03.08.04-30	2	2

To allow additional time for AREVA to consider NRC's comments, the schedule for the final response to Questions 03.08.04-28 and 03.08.04-29 have been changed. Additional information on schedule for these responses will be communicated to NRC in FSAR chapter closure plans.

An updated schedule for the final response to RAI 580 Questions 03.08.04-28 and 03.08.04-29 is provided below:

Question #	Response Date
RAI 580 — 03.08.04-28	TBD
RAI 580 — 03.08.04-29	TBD

Sincerely,

Nathan Hottle

AREVA Inc.
3315 Old Forest Road
Lynchburg, VA 24501
Phone 434-832-3864
Mobile 434-485-4239
nathan.hottle@areva.com

From: WILLIFORD Dennis (RS/NB)
Sent: Wednesday, May 01, 2013 5:32 PM
To: Amy.Snyder@nrc.gov
Cc: Michael.Miernicki@nrc.gov; ANDERSON Katherine (External AREVA NP INC.); DELANO Karen (RS/NB); LEIGHLITER

John (RS/NB); ROMINE Judy (RS/NB); RYAN Tom (RS/NB); HONMA George (EXT)

Subject: Response to U.S. EPR Design Certification Application FINAL RAI No. 580, FSAR Ch.3-- NEW PHASE 4

Amy,

Attached please find AREVA NP Inc.'s response to the subject request for additional information (RAI). The attached file, "RAI 580 Response US EPR DC.pdf," provides a schedule since a technically correct and complete response to the three questions cannot be provided at this time.

The following table indicates the respective pages in the response document, "RAI 580 Response US EPR DC.pdf," that contain AREVA NP's response to the subject questions.

Question #	Start Page	End Page
RAI 580 — 03.08.04-28	2	3
RAI 580 — 03.08.04-29	4	5
RAI 580 — 03.08.04-30	6	6

The schedule for a technically correct and complete response to these questions is provided below.

Question #	Advanced Response Date	NRC Comment Request Date	Final Response Date
RAI 580 — 03.08.04-28	June 28, 2013	August 16, 2013	August 30, 2013
RAI 580 — 03.08.04-29	June 28, 2013	August 16, 2013	August 30, 2013
RAI 580 — 03.08.04-30	June 28, 2013	August 16, 2013	August 30, 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, April 04, 2013 3:56 PM

To: ZZ-DL-A-USEPR-DL

Cc: Miernicki, Michael; Xu, Jim; Segala, John

Subject: U.S. EPR Design Certification Application FINAL RAI No. 580, FSAR Ch.3-- NEW PHASE 4

Attached please find the subject request for additional information (RAI). Draft RAI was provided to you on March 18, 2013. On March 26, 2013, you requested a clarification call. On April 2, 2013, the draft RAI was discussed with your staff. As a result of this discussion, the draft RAI was revised and you informed us that with the change the revised RAI is clear and does not contain AREVA Proprietary 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 or by **May 6, 2013**. 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
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Office of New Reactors
U.S. Nuclear Regulatory Commission
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Hearing Identifier: AREVA_EPR_DC_RAIs
Email Number: 4663

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Subject: Response to U.S. EPR Design Certification Application FINAL RAI No. 580,
FSAR Ch.3 - Supplement 1
Sent Date: 8/30/2013 5:21:00 PM
Received Date: 8/30/2013 5:21:07 PM
From: HOTTLE Nathan (AREVA)

Created By: Nathan.Hottle@areva.com

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Tracking Status: None
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Post Office: FUSLYNCMX03.fdom.ad.corp

Files	Size	Date & Time
MESSAGE	4748	8/30/2013 5:21:07 PM
RAI 580 Supplement 1 Response US EPR DC.PDF		66014

Options

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

Response to

Request for Additional Information No. 580, Supplement 1

3/18/2013

U. S. EPR Standard Design Certification

AREVA NP Inc.

Docket No. 52-020

SRP Section: 03.08.04 - Other Seismic Category I Structures

Application Section: SRP

Question 03.08.04-30:

FSAR Tier 2, Appendix 3E, describes the methodology used to select the EPR critical structural sections. An integral part of this methodology is the “supplemental methodology” by which a number of critical structural sections were selected on the basis of engineering judgment as needed to comprise an essentially complete design of each seismic Category I structure and provide reasonable assurance of the EPR design adequacy, in accordance with 10 CFR 52.47(c).

During the audit conducted on February 25 – 28, 2013, the staff reviewed calculation number 32-7009704-000 “U.S. EPR Standard Plant DC General Design - Typical Beams and Columns for the Nuclear Island (CS-24).” The staff determined that the scope of the design calculations did not include representative connections between steel structural elements or between steel and concrete structural elements. Since connections are key elements in the structural load path, the applicant is requested to provide the following additional information:

- 1) Identify critical structural section designs that exclude steel-to-steel and steel-to-concrete connections as part of their scope. In each case, explain why such structural connections are excluded.
- 2) Since structural connections were excluded from the scope of critical structural section CS-24 “Typical Beams and Columns for the Nuclear Island,” explain why a separate critical structural section corresponding to structural connections was not selected per the “supplemental methodology”.

Response to Question 03.08.04-30:**Item 1:**

CS-01, CS-24, and CS-36 contain connections and their associated calculations have been revised to include their connection designs.

Item 2:

32-7009704, “U.S. EPR™ Standard Plant DC General Design - Beams & Columns for the Nuclear Island (CS-24)”, has been revised to include a beam-to-column connection, and beam to concrete connection and a concrete-to-column connection.

FSAR Impact:

The U.S. EPR FSAR will not be changed as a result of this response.