

ArevaEPRDCPEm Resource

From: BRYAN Martin (EXT) [Martin.Bryan.ext@areva.com]
Sent: Monday, April 05, 2010 9:03 PM
To: Tesfaye, Getachew
Cc: DELANO Karen V (AREVA NP INC); ROMINE Judy (AREVA NP INC); BENNETT Kathy A (OFR) (AREVA NP INC); HOLM Jerald S (EXT)
Subject: Response to U.S. EPR Design Certification Application RAI No. 325, FSARCh. 4 OPEN ITEM, Supplement 1
Attachments: RAI 325 Supplement 1 Response US EPR DC.pdf

Getachew,

Attached please find AREVA NP Inc.'s response to the subject request for additional information (RAI). The attached file, "RAI 325 Supplement 1 Response US EPR DC.pdf" provides a technically correct and complete response to the question.

The following table indicates the respective pages in the response document, "RAI 325 Supplement 1 Response US EPR DC.pdf" that contain AREVA NP's response to the subject question.

Question #	Start Page	End Page
RAI 325 — 04.04.-61	2	2

This concludes the formal AREVA NP response to RAI 325, and there are no questions from this RAI for which AREVA NP has not provided responses.

Sincerely,

Martin (Marty) C. Bryan
Licensing Advisory Engineer
AREVA NP Inc.
Tel: (434) 832-3016
Martin.Bryan@areva.com

From: BRYAN Martin (EXT)
Sent: Monday, March 01, 2010 5:52 PM
To: 'Tesfaye, Getachew'
Cc: DELANO Karen V (AREVA NP INC); BENNETT Kathy A (OFR) (AREVA NP INC); ROMINE Judy (AREVA NP INC); HOLM Jerald S (EXT)
Subject: Response to U.S. EPR Design Certification Application RAI No. 325, FSARCh. 4 OPEN ITEM

Getachew,

AREVA NP's schedule for providing a technically correct and complete response to the question in RAI 325 is provided below.

Question #	Response Date
RAI 325 — 04.04-61	April 30, 2010

Martin (Marty) C. Bryan

Licensing Advisory Engineer
AREVA NP Inc.
Tel: (434) 832-3016
Martin.Bryan@areva.com

From: Tesfaye, Getachew [mailto:Getachew.Tesfaye@nrc.gov]

Sent: Monday, January 04, 2010 6:58 PM

To: ZZ-DL-A-USEPR-DL

Cc: Budzynski, John; VanWert, Christopher; Donoghue, Joseph; Carneal, Jason; Colaccino, Joseph; ArevaEPRDCPEm Resource

Subject: U.S. EPR Design Certification Application RAI No. 325 (3852), FSARCh. 4 OPEN ITEM

Attached please find the subject requests for additional information (RAI). A draft of the RAI was provided to you on October 30, 2009, and discussed with your staff on December 3, 2009. No changes were made to the draft RAI question as a result of that discussion. The question in this RAI is an OPEN ITEM in the safety evaluation report for Chapter 16 for Phases 2 and 3 reviews. As such, the schedule we have established for your application assumes technically correct and complete responses prior to the start of Phase 4 review. For any RAI that cannot be answered prior to the start of Phase 4 review, it is expected that a date for receipt of this information will be provided so that the staff can assess how this information will impact the published schedule.

Thanks,

Thanks,
Getachew Tesfaye
Sr. Project Manager
NRO/DNRL/NARP
(301) 415-3361

Hearing Identifier: AREVA_EPR_DC_RAIs
Email Number: 1293

Mail Envelope Properties (BC417D9255991046A37DD56CF597DB7105C299E2)

Subject: Response to U.S. EPR Design Certification Application RAI No. 325, FSARCh. 4
OPEN ITEM, Supplement 1
Sent Date: 4/5/2010 9:02:31 PM
Received Date: 4/5/2010 9:02:34 PM
From: BRYAN Martin (EXT)

Created By: Martin.Bryan.ext@areva.com

Recipients:

"DELANO Karen V (AREVA NP INC)" <Karen.Delano@areva.com>

Tracking Status: None

"ROMINE Judy (AREVA NP INC)" <Judy.Romine@areva.com>

Tracking Status: None

"BENNETT Kathy A (OFR) (AREVA NP INC)" <Kathy.Bennett@areva.com>

Tracking Status: None

"HOLM Jerald S (EXT)" <jerald.holm.ext@areva.com>

Tracking Status: None

"Tesfaye, Getachew" <Getachew.Tesfaye@nrc.gov>

Tracking Status: None

Post Office: AUSLYNCMX02.adom.ad.corp

Files	Size	Date & Time
MESSAGE	2737	4/5/2010 9:02:34 PM
RAI 325 Supplement 1 Response US EPR DC.pdf		61107

Options

Priority: Standard

Return Notification: No

Reply Requested: No

Sensitivity: Normal

Expiration Date:

Recipients Received:

Response to

Request for Additional Information No. 325, Supplement 1

12/04/2010

U.S. EPR Standard Design Certification

AREVA NP Inc.

Docket No. 52-020

SRP Section: 04.04 - Thermal and Hydraulic Design

Application Section: 4.4

QUESTIONS for Reactor System, Nuclear Performance and Code Review (SRSB)

Question 04.04-61:

OPEN ITEM

Follow-up RAI to RAI Question 04.04-26:

Provide a description of the hydraulic loads analysis for the U.S. EPR fuel and vessel components for normal operating conditions and design basis accident conditions.

Provide an explanation of the "Response to Question 04.04-26" statement that "the hold-down springs provide sufficient force to prevent hydraulic lift of the assemblies", given that FSAR Section 4.2.1.5.5 indicates that assembly lift occurs for reactor coolant pump over-speed transients.

Response to Question 04.04-61:

A description of the hydraulic loads analysis is provided in ANP-10285P, Section 5.1.9 (Reference 1). This description was revised in the Response to RAI 38 (Reference 2) for ANP-10285P, and the revised approach is described in detail in BAW-10243PA (Reference 3).

The statement concerning liftoff in the Response to RAI 38, Question 04.04-26 addresses only normal operation. The issue of assembly lift during a pump overspeed transient is addressed in the Response to RAI 195, Question 04.02-07 (Reference 4), and in the Response to RAI 231, Question 04.04-49 (Reference 5).

References

1. ANP-10285P, "U.S. EPR Fuel Assembly Mechanical Design Topical Report," October 2007.
2. Letter, Ronnie L. Gardner (AREVA NP Inc.) to Document Control Desk (NRC), "Revision to Response 38 in Response to Third Request for Additional Information Regarding ANP-10285P, 'U.S. EPR Fuel Assembly Mechanical Design Topical Report'," NRC:09:046, April 30, 2009.
3. BAW-10243PA, "Statistical Fuel Assembly Hold Down Methodology", September 2005.
4. Letter, Sandra M. Sloan (AREVA NP Inc.) to Document Control Desk (NRC), "Response to U.S. EPR Design Certification Application RAI No. 195," NRC:09:043, April 22, 2009.
5. Letter, Sandra M. Sloan (AREVA NP Inc.) to Document Control Desk (NRC), "Response to U.S. EPR Design Certification Application RAI No. 231," NRC:09:077, July 24, 2009.

FSAR Impact:

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