ArevaEPRDCPEm Resource

From: WILLIFORD Dennis (AREVA) [Dennis.Williford@areva.com]

Sent: Wednesday, December 19, 2012 5:20 PM

To: Snyder, Amy

Cc: DELANO Karen (AREVA); LEIGHLITER John (AREVA); ROMINE Judy (AREVA); RYAN Tom

(AREVA); WILLS Tiffany (AREVA); KOWALSKI David (AREVA); NOXON David (AREVA);

Hearn, Peter

Subject: Response to U.S. EPR Design Certification Application RAI No. 351, FSAR Ch. 9,

Supplement 7

Amy,

AREVA NP Inc. provided a schedule for technically correct and complete responses to the fifteen questions in RAI No. 351 on February 15, 2010. Supplement 1 response to RAI No. 351 was sent on April 15, 2010 to provide a technically correct and complete response to one of the questions. Supplement 2, Supplement 3, Supplement 4 and Supplement 5 responses to RAI No. 351 were sent on July 1, 2010, August 31, 2010, September 30, 2010 and October 29, 2010, respectively, to provide a revised schedule. Supplement 6 response to RAI No. 351 was sent on November 4, 2010 to provide a technically correct and complete response to the remaining fourteen questions.

Based on the joint AREVA-UniStar public meeting with NRC staff on November 19, 2012 to discuss design changes to the Ultimate Heat Sink (UHS), the response to Questions 09.02.05-24 and 09.02.05-27 is being revised. The schedule for a technically correct and complete revised response to these questions is provided below.

Question #	Response Date
RAI 351 — 09.02.05-24	January 31, 2013
RAI 351 — 09.02.05-27	January 31, 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: BRYAN Martin (External RS/NB)

Sent: Thursday, November 04, 2010 7:44 PM

To: 'Tesfaye, Getachew'

Cc: DELANO Karen (RS/NB); ROMINE Judy (RS/NB); BENNETT Kathy (RS/NB); KOWALSKI David (RS/NB) **Subject:** Response to U.S. EPR Design Certification Application RAI No. 351, FSAR Ch. 9, Supplement 6

Getachew,

AREVA NP Inc. provided a schedule for technically correct and complete responses to the fifteen questions in RAI No. 351 on February 15, 2010. Supplement 1 response to RAI No. 351 was sent on April 15, 2010 to provide a technically correct and complete response to one of the questions. Supplement 2, Supplement 3, Supplement 4 and Supplement 5 responses to RAI No. 351 were sent on July 1, 2010, August 31, 2010, September 30, 2010 and October 29, 2010, respectively, to provide a revised schedule.

The attached file, "RAI 351 Supplement 6 Response US EPR DC.pdf" provides technically correct and complete responses to the remaining fourteen questions.

Because the response file contains security-related sensitive information that should be withheld from public disclosure in accordance with 10 CFR 2.390, a public version is provided with the security-related sensitive information redacted. This email does not contain any security-related information. The unredacted SUNSI version is provided under separate email.

Appended to this file are affected pages of the U.S. EPR Final Safety Analysis Report in redline-strikeout format which supports the response to RAI 351.

The following table indicates the respective pages in the response document, "RAI 351 Supplement 6 Response US EPR DC.pdf," that contain AREVA NP's response to the subject questions.

Question #	Start Page	End Page
RAI 351 — 09.02.05-22	2	4
RAI 351 — 09.02.05-23	5	8
RAI 351 — 09.02.05-24	9	13
RAI 351 — 09.02.05-25	14	16
RAI 351 — 09.02.05-26	17	18
RAI 351 — 09.02.05-27	19	22
RAI 351 — 09.02.05-28	23	24
RAI 351 — 09.02.05-29	25	26
RAI 351 — 09.02.05-30	27	32
RAI 351 — 09.02.05-31	33	40
RAI 351 — 09.02.05-32	41	42
RAI 351 — 09.02.05-33	43	44
RAI 351 — 09.02.05-34	45	45
RAI 351 — 09.02.05-35	46	46

This concludes the formal AREVA NP response to RAI 351, and there are no questions from this RAI for which AREVA NP has not provided responses.

Sincerely,

Martin (Marty) C. Bryan
U.S. EPR Design Certification Licensing Manager
AREVA NP Inc.
Tel: (434) 832-3016
702 561-3528 cell
Martin.Bryan.ext@areva.com

From: BRYAN Martin (External RS/NB) **Sent:** Friday, October 29, 2010 4:20 PM

To: 'Tesfaye, Getachew'

Cc: DELANO Karen (RS/NB); ROMINE Judy (RS/NB); BENNETT Kathy (RS/NB); KOWALSKI David (RS/NB) **Subject:** Response to U.S. EPR Design Certification Application RAI No. 351, FSAR Ch. 9, Supplement 5

Getachew,

AREVA NP Inc. provided a schedule for technically correct and complete responses to the fifteen questions in RAI No. 351 on February 15, 2010. Supplement 1 response to RAI No. 351 was sent on April 15, 2010 to provide a technically correct and complete response to one of the questions. Supplement 2, Supplement 3 and Supplement 4 responses to RAI No. 351 were sent on July 1, 2010, August 31, 2010 and September 30, 2010, respectively, to provide a revised schedule. To provide additional time to process the responses, a revised schedule is provided in this e-mail.

The schedule for technically correct and complete responses to the remaining questions is provided below.

Question #	Response Date
RAI 351 — 09.02.05-22	November 4, 2010
RAI 351 — 09.02.05-23	November 4, 2010
RAI 351 — 09.02.05-24	November 23, 2010
RAI 351 — 09.02.05-25	November 4, 2010
RAI 351 — 09.02.05-26	November 4, 2010
RAI 351 — 09.02.05-27	November 4, 2010
RAI 351 — 09.02.05-28	November 4, 2010
RAI 351 — 09.02.05-29	November 4, 2010
RAI 351 — 09.02.05-30	November 4, 2010
RAI 351 — 09.02.05-31	November 4, 2010
RAI 351 — 09.02.05-32	November 4, 2010
RAI 351 — 09.02.05-33	November 4, 2010
RAI 351 — 09.02.05-34	November 4, 2010
RAI 351 — 09.02.05-35	November 4, 2010

Sincerely,

Martin (Marty) C. Bryan
U.S. EPR Design Certification Licensing Manager
AREVA NP Inc.
Tel: (434) 832-3016
702 561-3528 cell
Martin.Bryan.ext@areva.com

From: BRYAN Martin (External RS/NB)

Sent: Thursday, September 30, 2010 8:33 AM

To: 'Tesfaye, Getachew'

Cc: DELANO Karen (RS/NB); ROMINE Judy (RS/NB); BENNETT Kathy (RS/NB); KOWALSKI David (RS/NB); RYAN Tom

(RS/NB)

Subject: Response to U.S. EPR Design Certification Application RAI No. 351, FSAR Ch. 9, Supplement 4

Getachew,

AREVA NP Inc. provided a schedule for technically correct and complete responses to the fifteen questions in RAI No. 351 on February 15, 2010. Supplement 1 response to RAI No. 351 was sent on April 15, 2010 to provide a technically correct and complete response to one of the questions. Supplement 2 response was sent on July 1, 2010, and Supplement 3 response was sent on August 31, 2010, to provide a revised schedule. Since responses to the remaining questions are being processed and additional time is needed for interaction and feedback from the staff, a revised schedule is provided in this email.

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

Question #	Response Date
RAI 351 — 09.02.05-22	October 29, 2010
RAI 351 — 09.02.05-23	October 29, 2010
RAI 351 — 09.02.05-24	October 29, 2010
RAI 351 — 09.02.05-25	October 29, 2010
RAI 351 — 09.02.05-26	October 29, 2010
RAI 351 — 09.02.05-27	October 29, 2010
RAI 351 — 09.02.05-28	October 29, 2010
RAI 351 — 09.02.05-29	October 29, 2010
RAI 351 — 09.02.05-30	October 29, 2010
RAI 351 — 09.02.05-31	October 29, 2010
RAI 351 — 09.02.05-32	October 29, 2010
RAI 351 — 09.02.05-33	October 29, 2010
RAI 351 — 09.02.05-34	October 29, 2010
RAI 351 — 09.02.05-35	October 29, 2010

Sincerely,

Martin (Marty) C. Bryan
U.S. EPR Design Certification Licensing Manager
AREVA NP Inc.
Tel: (434) 832-3016
702 561-3528 cell
Martin.Bryan.ext@areva.com

From: BRYAN Martin (External RS/NB) **Sent:** Tuesday, August 31, 2010 12:40 PM

To: 'Tesfaye, Getachew'

Cc: DELANO Karen (RS/NB); ROMINE Judy (RS/NB); BENNETT Kathy (RS/NB); KOWALSKI David (RS/NB) **Subject:** Response to U.S. EPR Design Certification Application RAI No. 351, FSAR Ch. 9, Supplement 3

Getachew,

AREVA NP Inc. provided a schedule for technically correct and complete responses to the fifteen questions in RAI No. 351 on February 15, 2010. Supplement 1 response to RAI No. 351 was sent on April 15, 2010 to provide a technically correct and complete response to one of the questions. Supplement 2 response was sent on July 1, 2010 to provide a revised schedule. Since responses to the remaining questions are being processed, a revised schedule is provided in this email.

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

Question #	Response Date
RAI 351 — 09.02.05-22	September 30, 2010
RAI 351 — 09.02.05-23	September 30, 2010
RAI 351 — 09.02.05-24	September 30, 2010
RAI 351 — 09.02.05-25	September 30, 2010
RAI 351 — 09.02.05-26	September 30, 2010
RAI 351 — 09.02.05-27	September 30, 2010
RAI 351 — 09.02.05-28	September 30, 2010
RAI 351 — 09.02.05-29	September 30, 2010
RAI 351 — 09.02.05-30	September 30, 2010

RAI 351 — 09.02.05-31	September 30, 2010
RAI 351 — 09.02.05-32	September 30, 2010
RAI 351 — 09.02.05-33	September 30, 2010
RAI 351 — 09.02.05-34	September 30, 2010
RAI 351 — 09.02.05-35	September 30, 2010

Sincerely,

Martin (Marty) C. Bryan
U.S. EPR Design Certification Licensing Manager
AREVA NP Inc.
Tel: (434) 832-3016
702 561-3528 cell
Martin.Bryan.ext@areva.com

From: BRYAN Martin (EXT)

Sent: Thursday, July 01, 2010 4:38 PM

To: 'Tesfaye, Getachew'

Cc: DELANO Karen V (AREVA NP INC); ROMINE Judy (AREVA NP INC); BENNETT Kathy A (OFR) (AREVA NP INC);

KOWALSKI David J (AREVA NP INC); 'Carneal, Jason'

Subject: Response to U.S. EPR Design Certification Application RAI No. 351, FSAR Ch. 9, Supplement 2

Getachew,

AREVA NP Inc. provided a schedule for technically correct and complete responses to the fifteen questions in RAI No. 351 on February 15, 2010. Supplement 1 response to RAI No. 351 was sent on April 15, 2010 to address one of the questions and provide a revised schedule for the remaining questions.

To allow time for interaction between AREVA and the NRC staff, a revised schedule is provided in this e-mail.

The schedule for technically correct and complete responses to the remaining questions has been revised and is provided below.

Question #	Response Date
RAI 351 — 09.02.05-22	August 31, 2010
RAI 351 — 09.02.05-23	August 31, 2010
RAI 351 — 09.02.05-24	August 31, 2010
RAI 351 — 09.02.05-25	August 31, 2010
RAI 351 — 09.02.05-26	August 31, 2010
RAI 351 — 09.02.05-27	August 31, 2010
RAI 351 — 09.02.05-28	August 31, 2010
RAI 351 — 09.02.05-29	August 31, 2010
RAI 351 — 09.02.05-30	August 31, 2010
RAI 351 — 09.02.05-31	August 31, 2010
RAI 351 — 09.02.05-32	August 31, 2010
RAI 351 — 09.02.05-33	August 31, 2010
RAI 351 — 09.02.05-34	August 31, 2010
RAI 351 — 09.02.05-35	August 31, 2010

U.S. EPR Design Certification Licensing Manager

AREVA NP Inc. Tel: (434) 832-3016 702 561-3528 cell

Martin.Bryan.ext@areva.com

From: BRYAN Martin (EXT)

Sent: Thursday, April 15, 2010 1:56 PM

To: 'Tesfaye, Getachew'

Cc: DELANO Karen V (AREVA NP INC); ROMINE Judy (AREVA NP INC); BENNETT Kathy A (OFR) (AREVA NP INC);

KOWALSKI David J (AREVA NP INC)

Subject: Response to U.S. EPR Design Certification Application RAI No. 351, FSAR Ch. 9, Supplement 1

Getachew,

AREVA NP Inc. provided a schedule for technically correct and complete responses to the 15 questions in RAI No. 351 on February 15, 2010. The attached file, "RAI 351 Supplement 1 Response US EPR DC.pdf" provides a technically correct and complete response to 1 of the 15 questions.

Appended to this file are affected pages of the U.S. EPR Final Safety Analysis Report in redline-strikeout format which supports the response to RAI 351 Question 09.05.01-75.

The following table indicates the respective pages in the response document, "RAI 351 Supplement 1 Response US EPR DC.pdf," that contain AREVA NP's response to the subject question.

Question #	Start Page	End Page
RAI 351 — 09.05.01-75	2	5

Since responses to the remaining questions remain in process, a revised schedule is provided in this email.

The schedule for technically correct and complete responses to the remaining questions has been changed as provided below:

Question #	Response Date
RAI 351 — 09.02.05-22	July 1, 2010
RAI 351 — 09.02.05-23	July 1, 2010
RAI 351 — 09.02.05-24	July 1, 2010
RAI 351 — 09.02.05-25	July 1, 2010
RAI 351 — 09.02.05-26	July 1, 2010
RAI 351 — 09.02.05-27	July 1, 2010
RAI 351 — 09.02.05-28	July 1, 2010
RAI 351 — 09.02.05-29	July 1, 2010
RAI 351 — 09.02.05-30	July 1, 2010
RAI 351 — 09.02.05-31	July 1, 2010
RAI 351 — 09.02.05-32	July 1, 2010
RAI 351 — 09.02.05-33	July 1, 2010
RAI 351 — 09.02.05-34	July 1, 2010
RAI 351 — 09.02.05-35	July 1, 2010

Sincerely,

Martin (Marty) C. Bryan Licensing Advisory Engineer AREVA NP Inc.

Tel: (434) 832-3016

Martin.Bryan.ext@areva.com

From: DUNCAN Leslie E (AREVA NP INC) **Sent:** Monday, February 15, 2010 2:39 PM

To: 'Tesfaye, Getachew'

Cc: DELANO Karen V (AREVA NP INC); BENNETT Kathy A (OFR) (AREVA NP INC); ROMINE Judy (AREVA NP INC);

KOWALSKI David J (AREVA NP INC)

Subject: Response to U.S. EPR Design Certification Application RAI No. 351, FSAR Ch. 9

Getachew,

Attached please find AREVA NP Inc.'s response to the subject request for additional information (RAI). The attached file, "RAI 351 Response US EPR DC," provides a schedule since technically correct and complete responses to the fifteen questions are not provided.

The following table indicates the respective pages in the response document, "RAI 351 Response US EPR DC," that contain AREVA NP's response to the subject questions.

Question #	Start Page	End Page
RAI 351 — 09.02.05-22	2	2
RAI 351 — 09.02.05-23	3	4
RAI 351 — 09.02.05-24	5	6
RAI 351 — 09.02.05-25	7	8
RAI 351 — 09.02.05-26	9	10
RAI 351 — 09.02.05-27	11	12
RAI 351 — 09.02.05-28	13	13
RAI 351 — 09.02.05-29	14	14
RAI 351 — 09.02.05-30	15	16
RAI 351 — 09.02.05-31	17	19
RAI 351 — 09.02.05-32	20	21
RAI 351 — 09.02.05-33	22	23
RAI 351 — 09.02.05-34	24	24
RAI 351 — 09.02.05-35	25	25
RAI 351 — 09.05.01-75	26	27

Answers are not provided for fifteen of the fifteen questions. The schedule for a technically correct and complete response to these questions is provided below.

Question #	Response Date
RAI 351 — 09.02.05-22	April 15, 2010
RAI 351 — 09.02.05-23	April 15, 2010
RAI 351 — 09.02.05-24	April 15, 2010
RAI 351 — 09.02.05-25	April 15, 2010
RAI 351 — 09.02.05-26	April 15, 2010
RAI 351 — 09.02.05-27	April 15, 2010
RAI 351 — 09.02.05-28	April 15, 2010
RAI 351 — 09.02.05-29	April 15, 2010

RAI 351 — 09.02.05-30	April 15, 2010
RAI 351 — 09.02.05-31	April 15, 2010
RAI 351 — 09.02.05-32	April 15, 2010
RAI 351 — 09.02.05-33	April 15, 2010
RAI 351 — 09.02.05-34	April 15, 2010
RAI 351 — 09.02.05-35	April 15, 2010
RAI 351 — 09.05.01-75	April 15, 2010

Sincerely,

Les Duncan Licensing Engineer AREVA NP Inc.

An AREVA and Siemens Company

Tel: (434) 832-2849

Leslie.Duncan@areva.com

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

Sent: Friday, January 15, 2010 3:14 PM

To: ZZ-DL-A-USEPR-DL

Cc: Eul, Ryan; McCann, Edward; Segala, John; Lee, Samuel; Dreisbach, Jason; Hearn, Peter; Colaccino, Joseph;

ArevaEPRDCPEm Resource

Subject: U.S. EPR Design Certification Application RAI No. 351 (4112, 4163),FSAR Ch. 9

Attached please find the subject requests for additional information (RAI). A draft of the RAI was provided to you on December 19, 2009, and discussed with your staff on January 13, 2010. No changes were made to the draft RAI 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 NRO/DNRL/NARP (301) 415-3361 **Hearing Identifier:** AREVA_EPR_DC_RAIs

Email Number: 4157

Mail Envelope Properties (554210743EFE354B8D5741BEB695E6560415CE)

Subject: Response to U.S. EPR Design Certification Application RAI No. 351, FSAR Ch.

9, Supplement 7

 Sent Date:
 12/19/2012 5:19:39 PM

 Received Date:
 12/19/2012 5:19:45 PM

 From:
 WILLIFORD Dennis (AREVA)

Created By: Dennis.Williford@areva.com

Recipients:

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

Tracking Status: None

"LEIGHLITER John (AREVA)" < John.Leighliter@areva.com>

Tracking Status: None

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

Tracking Status: None

"RYAN Tom (AREVA)" <Tom.Ryan@areva.com>

Tracking Status: None

"WILLS Tiffany (AREVA)" < Tiffany. Wills@areva.com>

Tracking Status: None

"KOWALSKI David (AREVA)" < David.Kowalski@areva.com>

Tracking Status: None

"NOXON David (AREVA)" < David.Noxon@areva.com>

Tracking Status: None

"Hearn, Peter" < Peter. Hearn@nrc.gov>

Tracking Status: None

"Snyder, Amy" < Amy. Snyder@nrc.gov>

Tracking Status: None

Post Office: FUSLYNCMX03.fdom.ad.corp

Files Size Date & Time

MESSAGE 17522 12/19/2012 5:19:45 PM

Options

Priority: Standard
Return Notification: No
Reply Requested: No
Sensitivity: Normal

Expiration Date: Recipients Received: