

ArevaEPRDCPEm Resource

From: RYAN Tom (AREVA) [Tom.Ryan@areva.com]
Sent: Friday, July 12, 2013 4:43 PM
To: Snyder, Amy
Cc: ANDERSON Katherine (EXTERNAL AREVA); DELANO Karen (AREVA); LEIGHLITER John (AREVA); ROMINE Judy (AREVA); RYAN Tom (AREVA); KOWALSKI David (AREVA); WILLIFORD Dennis (AREVA); Clark, Phyllis; NOXON David (AREVA)
Subject: Response to U.S. EPR Design Certification Application RAI No. 471 (5387, 5426, 5389), FSAR Ch. 6, Supplement 10

Amy,

AREVA NP Inc. letter NRC:13:055 dated July 12, 2013 provides technically correct and complete final responses to Questions 06.02.05-20 and 06.02.05-23 in RAI 471. These responses supersede the prior responses to these two questions provided in RAI 471, Supplement 9 in their entirety.

AREVA NP considers some of the material contained in the responses to be proprietary. An affidavit is included with the letter, as required by 10 CFR 2.390(b), to support the withholding of the proprietary information from public disclosure. Proprietary and non-proprietary versions of the enclosure to this letter are provided separately.

The following table indicates the respective pages in the response that contain AREVA NP's final response to the subject questions.

| Question # | Start Page | End Page |
|-----------------------|------------|----------|
| RAI 471 — 06.02.05-20 | 2 | 5 |
| RAI 471 — 06.02.05-23 | 6 | 12 |

This concludes the formal AREVA NP response to RAI 471, and there are no questions from this RAI for which AREVA NP has not provided responses.

Sincerely,

Tom Ryan

Project Engineer
Regulatory Affairs

AREVA NP

An AREVA and Siemens company

7207 IBM Drive - CLT2B

Charlotte, NC 28262

Phone: 704-805-2643, Cell : 704-292-5627

Fax: 434-382-6657

From: WILLIFORD Dennis (RS/NB)
Sent: Wednesday, May 23, 2012 4:25 PM

To: Getachew.Tesfaye@nrc.gov

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

Subject: Response to U.S. EPR Design Certification Application RAI No. 471 (5387, 5426, 5389), FSAR Ch. 6, Supplement 9

Getachew,

AREVA NP Inc. letter NRC:12:031 dated May 23, 2012 provides a technically correct and complete final response to the remaining three questions (Question 06.02.05-20, Question 06.02.05-21 and Question 06.02.05-23) in RAI 471.

AREVA NP considers some of the material contained in the response to Question 06.02.05-21 to be proprietary. An affidavit is included with the letter, as required by 10 CFR 2.390(b), to support the withholding of this information from public disclosure. Proprietary and non-proprietary versions of the enclosure to this letter are provided separately.

The following table indicates the respective pages in the response that contain AREVA NP's final response to the subject questions.

| Question # | Start Page | End Page |
|-----------------------|------------|----------|
| RAI 471 — 06.02.05-20 | 2 | 2 |
| RAI 471 — 06.02.05-21 | 3 | 53 |
| RAI 471 — 06.02.05-23 | 54 | 54 |

This concludes the formal AREVA NP response to RAI 471, and there are no questions from this RAI for which AREVA NP has not provided responses.

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: WILLIFORD Dennis (RS/NB)

Sent: Monday, March 05, 2012 8:20 AM

To: Getachew.Tesfaye@nrc.gov

Cc: BENNETT Kathy (RS/NB); DELANO Karen (RS/NB); ROMINE Judy (RS/NB); RYAN Tom (RS/NB); GUCWA Len (External RS/NB)

Subject: Response to U.S. EPR Design Certification Application RAI No. 471 (5387, 5426, 5389), FSAR Ch. 6, Supplement 8

Getachew,

AREVA NP Inc. (AREVA NP) provided a schedule for responding to the 6 questions of RAI 471 on March 17, 2011. AREVA NP submitted Supplement 1 response on March 31, 2011 to address one question (Question

06.02.02-84). Supplement 2 and Supplement 3 responses were sent on May 25, 2011 and July 27, 2011, respectively, to revise the response schedule for Questions 06.02.02-85, 06.02.05-20, 06.02.05-21, 06.02.05-22 and 06.02.05-23. Supplement 4 response was sent on August 17, 2011 to provide a response to one (Question 06.02.05-22) of the remaining 5 questions. Supplement 5 response was sent on September 21, 2011 to provide a response to one (Question 06.02.02-85) of the remaining 4 questions. Supplement 6 response was sent on December 14, 2011 to provide a preliminary revised schedule for the three remaining questions. Supplement 7 response was sent on January 25, 2012 to revise the schedule for the remaining questions.

The attached file, "RAI 471 Supplement 8 Response US EPR DC.pdf" provides a revised response to Question 06.02.02-85, which was previously submitted on September 21, 2011 in the Supplement 5 response.

The following table indicates the respective pages in the response document, "RAI 471 Supplement 8 Response US EPR DC.pdf," that contain AREVA NP's response to the subject question.

| Question # | Start Page | End Page |
|-----------------------|------------|----------|
| RAI 471 — 06.02.02-85 | 2 | 3 |

The schedule for technically correct and complete responses to the remaining three questions is unchanged as provided below:

| Question # | Response Date |
|-----------------------|---------------|
| RAI 471 — 06.02.05-20 | May 23, 2012 |
| RAI 471 — 06.02.05-21 | May 23, 2012 |
| RAI 471 — 06.02.05-23 | May 23, 2012 |

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: WILLIFORD Dennis (RS/NB)
Sent: Wednesday, January 25, 2012 12:02 PM
To: Getachew.Tesfaye@nrc.gov
Cc: BENNETT Kathy (RS/NB); DELANO Karen (RS/NB); ROMINE Judy (RS/NB); RYAN Tom (RS/NB); GUCWA Len (External RS/NB); Michael.Miernicki@nrc.gov; bill.gleaves@nrc.gov
Subject: Response to U.S. EPR Design Certification Application RAI No. 471 (5387, 5426, 5389), FSAR Ch. 6, Supplement 7

Getachew,

AREVA NP Inc. (AREVA NP) provided a schedule for responding to the 6 questions of RAI 471 on March 17, 2011. AREVA NP submitted Supplement 1 response on March 31, 2011 to address one question (Question

06.02.02-84). Supplement 2 and Supplement 3 responses were sent on May 25, 2011 and July 27, 2011, respectively, to revise the response schedule for Questions 06.02.02-85, 06.02.05-20, 06.02.05-21, 06.02.05-22 and 06.02.05-23. Supplement 4 response was sent on August 17, 2011 to provide a response to one (Question 06.02.05-22) of the remaining 5 questions. Supplement 5 response was sent on September 21, 2011 to provide a response to one (Question 06.02.02-85) of the remaining 4 questions. Supplement 6 response was sent on December 14, 2011 to provide a preliminary revised schedule for the three remaining questions.

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

| Question # | Response Date |
|-----------------------|---------------|
| RAI 471 — 06.02.05-20 | May 23, 2012 |
| RAI 471 — 06.02.05-21 | May 23, 2012 |
| RAI 471 — 06.02.05-23 | May 23, 2012 |

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: WILLIFORD Dennis (RS/NB)
Sent: Wednesday, December 14, 2011 2:05 PM
To: Getachew.Tesfaye@nrc.gov
Cc: BENNETT Kathy (RS/NB); DELANO Karen (RS/NB); ROMINE Judy (RS/NB); RYAN Tom (RS/NB); GUCWA Len (External RS/NB)
Subject: Response to U.S. EPR Design Certification Application RAI No. 471 (5387, 5426, 5389), FSAR Ch. 6, Supplement 6

Getachew,

AREVA NP Inc. (AREVA NP) provided a schedule for responding to the 6 questions of RAI 471 on March 17, 2011. AREVA NP submitted Supplement 1 response to RAI 471 on March 31, 2011 to address one question (Question 06.02.02-84). Supplement 2 and Supplement 3 responses to RAI 471 were sent on May 25, 2011 and July 27, 2011, respectively, to revise the response schedule for Questions 06.02.02-85, 06.02.05-20, 06.02.05-21, 06.02.05-22 and 06.02.05-23. Supplement 4 response to RAI 471 was sent on August 17, 2011 to provide a response to one (Question 06.02.05-22) of the remaining 5 questions. Supplement 5 response to RAI 471 was sent on September 21, 2011 to provide a response to one (Question 06.02.02-85) of the remaining 4 questions.

A preliminary revised schedule for technically correct and complete responses to the three remaining questions is provided below. This schedule is being reevaluated and a new supplement with a revised schedule will be transmitted by January 25, 2012.

| Question # | Response Date |
|-----------------------|------------------|
| RAI 471 — 06.02.05-20 | January 25, 2012 |
| RAI 471 — 06.02.05-21 | January 25, 2012 |
| RAI 471 — 06.02.05-23 | January 25, 2012 |

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: WILLIFORD Dennis (RS/NB)
Sent: Wednesday, September 21, 2011 4:44 PM
To: Getachew.Tesfaye@nrc.gov
Cc: BENNETT Kathy (RS/NB); DELANO Karen (RS/NB); ROMINE Judy (RS/NB); RYAN Tom (RS/NB); GUCWA Len (External RS/NB)
Subject: Response to U.S. EPR Design Certification Application RAI No. 471 (5387, 5426, 5389), FSAR Ch. 6, Supplement 5

Getachew,

AREVA NP Inc. (AREVA NP) provided a schedule for responding to the 6 questions of RAI 471 on March 17, 2011. AREVA NP submitted Supplement 1 response to RAI 471 on March 31, 2011 to address one question (Question 06.02.02-84). Supplement 2 and Supplement 3 responses to RAI 471 were sent on May 25, 2011 and July 27, 2011, respectively, to revise the response schedule for Questions 06.02.02-85, 06.02.05-20, 06.02.05-21, 06.02.05-22 and 06.02.05-23. Supplement 4 response to RAI 471 was sent on August 17, 2011 to address one question (Question 06.02.05-22).

The attached file, "RAI 471 Supplement 5 Response US EPR DC.pdf" provides a technically correct and complete response to 1 of the remaining 4 questions.

The following table indicates the respective pages in the response document, "RAI 471 Supplement 5 Response US EPR DC.pdf" that contain AREVA NP's response to the subject question.

| Question # | Start Page | End Page |
|-----------------------|------------|----------|
| RAI 471 — 06.02.02-85 | 2 | 3 |

The schedule for technically correct and complete responses to the remaining 3 questions is unchanged and provided below:

| Question # | Response Date |
|-----------------------|-------------------|
| RAI 471 — 06.02.05-20 | December 22, 2011 |
| RAI 471 — 06.02.05-21 | December 22, 2011 |
| RAI 471 — 06.02.05-23 | December 22, 2011 |

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: WILLIFORD Dennis (RS/NB)
Sent: Wednesday, August 17, 2011 5:42 PM
To: Getachew.Tesfaye@nrc.gov
Cc: BENNETT Kathy (RS/NB); DELANO Karen (RS/NB); ROMINE Judy (RS/NB); RYAN Tom (RS/NB); GUCWA Len (External RS/NB)
Subject: Response to U.S. EPR Design Certification Application RAI No. 471 (5387, 5426, 5389), FSAR Ch. 6, Supplement 4

Getachew,

AREVA NP Inc. (AREVA NP) provided a schedule for responding to the 6 questions of RAI 471 on March 17, 2011. AREVA NP submitted Supplement 1 response to RAI 471 on March 31, 2011 to address one question (Question 06.02.02-84). Supplement 2 and Supplement 3 responses to RAI 471 were sent on May 25, 2011 and July 27, 2011, respectively, to revise the response schedule for Questions 06.02.02-85, 06.02.05-20, 06.02.05-21, 06.02.05-22 and 06.02.05-23.

The attached file, "RAI 471 Supplement 4 Response US EPR DC.pdf" provides a technically correct and complete response to 1 of the remaining 5 questions. Appended to this file are affected pages of the U.S. EPR Final Safety Analysis Report in redline-strikeout format which support the response to RAI 471 Question 06.02.05-22.

The following table indicates the respective pages in the response document, "RAI 471 Supplement 4 Response US EPR DC.pdf" that contain AREVA NP's response to the subject question.

| Question # | Start Page | End Page |
|-----------------------|------------|----------|
| RAI 471 — 06.02.05-22 | 2 | 2 |

The schedule for technically correct and complete responses to the remaining 4 questions is unchanged and provided below:

| Question # | Response Date |
|-----------------------|--------------------|
| RAI 471 — 06.02.02-85 | September 21, 2011 |
| RAI 471 — 06.02.05-20 | December 22, 2011 |
| RAI 471 — 06.02.05-21 | December 22, 2011 |
| RAI 471 — 06.02.05-23 | December 22, 2011 |

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: WELLS Russell (RS/NB)
Sent: Wednesday, July 27, 2011 7:33 PM
To: 'Tefaye, Getachew'
Cc: GUCWA Len (External RS/NB); WILLIFORD Dennis (RS/NB); ROMINE Judy (RS/NB); BENNETT Kathy (RS/NB); DELANO Karen (RS/NB); RYAN Tom (RS/NB)
Subject: Response to U.S. EPR Design Certification Application RAI No. 471 (5387, 5426, 5389), FSAR Ch. 6, Supplement 3

Getachew,

AREVA NP Inc. (AREVA NP) provided a schedule for responding to the 6 questions of RAI 471 on March 17, 2011. AREVA NP submitted Supplement 1 response to RAI 471 on March 31, 2011 to address one question (Question 06.02.02-84). Supplement 2 response to RAI 471 was sent on May 25, 2011 to revise the response schedule for Questions 06.02.02-85, 06.02.05-20, 06.02.05-21, 06.02.05-22 and 06.02.05-23.

AREVA NP is providing a revised schedule for responding to Questions 06.02.02-85, 06.02.05-20, 06.02.05-21, 06.02.05-22 and 06.02.05-23. The schedule for a technically correct and complete response to these questions is provided below.

| Question # | Response Date |
|-----------------------|--------------------|
| RAI 471 — 06.02.02-85 | September 21, 2011 |
| RAI 471 — 06.02.05-20 | December 22, 2011 |
| RAI 471 — 06.02.05-21 | December 22, 2011 |
| RAI 471 — 06.02.05-22 | September 21, 2011 |
| RAI 471 — 06.02.05-23 | December 22, 2011 |

Sincerely,

Russ Wells for
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: WILLIFORD Dennis (RS/NB)
Sent: Wednesday, May 25, 2011 10:37 AM
To: 'Tesfaye, Getachew'
Cc: BENNETT Kathy (RS/NB); DELANO Karen (RS/NB); ROMINE Judy (RS/NB); RYAN Tom (RS/NB); GUCWA Len (External RS/NB)
Subject: Response to U.S. EPR Design Certification Application RAI No. 471 (5387, 5426, 5389), FSAR Ch. 6, Supplement 2

Getachew,

AREVA NP Inc. (AREVA NP) provided a schedule for responding to the 6 questions of RAI 471 on March 17, 2011. AREVA NP submitted Supplement 1 response to RAI 471 on March 31, 2011 to address one question (Question 06.02.02-84).

AREVA NP is providing a revised schedule for responding to Questions 06.02.02-85, 06.02.05-20, 06.02.05-21, 06.02.05-22 and 06.02.05-23. The schedule for a technically correct and complete response to these questions is provided below.

| Question # | Response Date |
|-----------------------|---------------|
| RAI 471 — 06.02.02-85 | July 27, 2011 |
| RAI 471 — 06.02.05-20 | July 27, 2011 |
| RAI 471 — 06.02.05-21 | July 27, 2011 |
| RAI 471 — 06.02.05-22 | July 27, 2011 |
| RAI 471 — 06.02.05-23 | July 27, 2011 |

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: WELLS Russell (RS/NB)
Sent: Thursday, March 31, 2011 11:10 AM
To: Tesfaye, Getachew
Cc: GUCWA Len (External RS/NB); BENNETT Kathy (RS/NB); DELANO Karen (RS/NB); ROMINE Judy (RS/NB); RYAN Tom (RS/NB)
Subject: Response to U.S. EPR Design Certification Application RAI No. 471 (5387, 5426, 5389), FSAR Ch. 6, Supplement 1

Getachew,

AREVA NP Inc. (AREVA NP) provided a schedule for responding to the 6 questions of RAI 471 on March 17, 2011. The attached file, "RAI 471 Supplement 1 Response US EPR DC.pdf" provides a technically correct and complete response to one question (Question 06.02.02-84).

The following table indicates the respective pages in the response document, "RAI 471 Supplement 1 Response US EPR DC.pdf," that contain AREVA NP's response to the subject question.

| Question # | Start Page | End Page |
|-----------------------|------------|----------|
| RAI 471 — 06.02.02-84 | 2 | 2 |

The response schedule for the remaining 5 questions is unchanged and is provided below:

| Question # | Response Date |
|-----------------------|---------------|
| RAI 471 — 06.02.02-85 | May 26, 2011 |
| RAI 471 — 06.02.05-20 | May 26, 2011 |
| RAI 471 — 06.02.05-21 | May 26, 2011 |
| RAI 471 — 06.02.05-22 | May 26, 2011 |
| RAI 471 — 06.02.05-23 | May 26, 2011 |

Sincerely,

From: WELLS Russell (RS/NB)

Sent: Thursday, March 17, 2011 6:42 AM

To: Tesfaye, Getachew

Cc: GUCWA Len (External RS/NB); BENNETT Kathy (RS/NB); DELANO Karen (RS/NB); ROMINE Judy (RS/NB); RYAN Tom (RS/NB)

Subject: Response to U.S. EPR Design Certification Application RAI No. 471 (5387, 5426, 5389), FSAR Ch. 6

Getachew,

Attached please find AREVA NP Inc.'s response to the subject request for additional information (RAI). The attached file, "RAI 471 Response US EPR DC.pdf" provides a schedule since technically correct and complete responses to the 6 questions are not provided.

The following table indicates the respective pages in the response document, "RAI 471 Response US EPR DC.pdf" that contain AREVA NP's responses to the subject questions.

| Question # | Start Page | End Page |
|-----------------------|------------|----------|
| RAI 471 — 06.02.02-84 | 2 | 2 |
| RAI 471 — 06.02.02-85 | 3 | 3 |
| RAI 471 — 06.02.05-20 | 4 | 4 |
| RAI 471 — 06.02.05-21 | 5 | 5 |
| RAI 471 — 06.02.05-22 | 6 | 6 |

| | | |
|-----------------------|---|---|
| RAI 471 — 06.02.05-23 | 7 | 7 |
|-----------------------|---|---|

A complete answer is not provided for the 6 questions. The schedule for technically correct and complete responses to these questions is provided below.

| Question # | Response Date |
|-----------------------|----------------|
| RAI 471 — 06.02.02-84 | March 31, 2011 |
| RAI 471 — 06.02.02-85 | May 26, 2011 |
| RAI 471 — 06.02.05-20 | May 26, 2011 |
| RAI 471 — 06.02.05-21 | May 26, 2011 |
| RAI 471 — 06.02.05-22 | May 26, 2011 |
| RAI 471 — 06.02.05-23 | May 26, 2011 |

Sincerely,

Russ Wells

U.S. EPR Design Certification Licensing Manager

AREVA NP, Inc.

3315 Old Forest Road, P.O. Box 10935

Mail Stop OF-57

Lynchburg, VA 24506-0935

Phone: 434-832-3884 (work)

434-942-6375 (cell)

Fax: 434-382-3884

Russell.Wells@Areva.com

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

Sent: Tuesday, February 15, 2011 2:04 PM

To: ZZ-DL-A-USEPR-DL

Cc: Makar, Gregory; Terao, David; Jackson, Christopher; Grady, Anne-Marie; McKirgan, John; Carneal, Jason; Colaccino, Joseph; ArevaEPRDCPEm Resource

Subject: U.S. EPR Design Certification Application RAI No. 471 (5387, 5426, 5389), FSAR Ch. 6

Attached please find the subject requests for additional information (RAI). A draft of the RAI was provided to you on January 26, 2011, and discussed with your staff on February 15, 2011. No change is 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: 4600

Mail Envelope Properties (88F9B30A3139B1498DA89BEBA7B31B901713E0)

Subject: Response to U.S. EPR Design Certification Application RAI No. 471 (5387, 5426, 5389), FSAR Ch. 6, Supplement 10
Sent Date: 7/12/2013 4:42:57 PM
Received Date: 7/12/2013 4:43:15 PM
From: RYAN Tom (AREVA)

Created By: Tom.Ryan@areva.com

Recipients:

"ANDERSON Katherine (EXTERNAL AREVA)" <katherine.anderson.ext@areva.com>

Tracking Status: None

"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

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

Tracking Status: None

"WILLIFORD Dennis (AREVA)" <Dennis.Williford@areva.com>

Tracking Status: None

"Clark, Phyllis" <Phyllis.Clark@nrc.gov>

Tracking Status: None

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

Tracking Status: None

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

Tracking Status: None

Post Office: FUSLYNCMX03.fdom.ad.corp

| Files | Size | Date & Time |
|---------|-------|----------------------|
| MESSAGE | 20720 | 7/12/2013 4:43:15 PM |

Options

Priority: Standard

Return Notification: No

Reply Requested: No

Sensitivity: Normal

Expiration Date:

Recipients Received: