## **ArevaEPRDCPEm Resource**

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

Sent: Tuesday, February 21, 2012 9:31 PM

To: Tesfaye, Getachew

Cc: BENNETT Kathy (AREVA); DELANO Karen (AREVA); ROMINE Judy (AREVA); RYAN Tom

(AREVA)

**Subject:** Response to U.S. EPR Design Certification Application RAI No. 505

(5902,5735,5869,5754,5803,5950,5744), FSAR Ch. 7, Supplement 11

## Getachew,

On September 29, 2011, AREVA NP Inc. provided a schedule for technically correct and complete responses to the 34 questions in RAI 505. In Supplement 1 sent on October 27, 2011, and Supplement 2 sent on November 17, 2011, AREVA NP provided a revised schedule for technically correct and complete responses to 33 questions and a preliminary revised schedule for Question 07.01-33. AREVA NP provided Supplement 3 on November 22, 2011 to provide a final response to 4 questions. On December 9, 2011, AREVA NP provided Supplement 4 to revise the schedule for 7 questions. On December 14, 2011, AREVA NP provided Supplement 5 to revise the schedule for 5 questions. On December 15, 2011, AREVA NP provided Supplement 6 to provide a complete and final response to 6 questions. On January 10, 2012, AREVA NP provided Supplement 7 to provide a complete and final response to 2 questions. On January 19, 2012, AREVA NP provided Supplement 8 to provide a complete and final response to one question and a revised preliminary schedule for the response to Question 07.01-33. On February 9, 2012, AREVA NP provided Supplement 9 to revise the schedule for 11 questions. On February 17, 2012, AREVA NP provided Supplement 10 to revise the schedule for 20 questions.

The schedule for a technically correct and complete response to question 07.01-33 has been changed as provided below. The response schedule for the other questions remains unchanged. This schedule was transmitted to the NRC in AREVA NP letter 12:008 dated February 21, 2012.

Question #	Response Date
RAI 505 — 07.01-33	August 30, 2013
RAI 505 — 07.01-34	May 9, 2012
RAI 505 — 07.01-35	May 30, 2012
RAI 505 — 07.01-36	May 1, 2012
RAI 505 — 07.01-37	April 17, 2012
RAI 505 — 07.01-38	May 1, 2012
RAI 505 — 07.01-39	May 22, 2012
RAI 505 — 07.01-40	May 22, 2012
RAI 505 — 07.01-41	April 17, 2012
RAI 505 — 07.01-44	May 9, 2012
RAI 505 — 07.01-45	May 1, 2012
RAI 505 — 07.01-46	May 1, 2012
RAI 505 — 07.01-47	May 22, 2012
RAI 505 — 07.01-48	May 9, 2012
RAI 505 — 07.01-49	May 30, 2012
RAI 505 — 07.01-50	May 30, 2012

RAI 505 — 07.01-51	May 22, 2012
RAI 505 — 07.03-38	April 17, 2012
RAI 505 — 07.05-10	April 17, 2012
RAI 505 — 07.08-47	May 30, 2012
RAI 505 — 07.09-71	May 9, 2012

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:** Friday, February 17, 2012 4:09 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. 505 (5902,5735,5869,5754,5803,5950,5744),

FSAR Ch. 7, Supplement 10

#### Getachew,

On September 29, 2011, AREVA NP Inc. provided a schedule for technically correct and complete responses to the 34 questions in RAI 505. In Supplement 1 sent on October 27, 2011, and Supplement 2 sent on November 17, 2011, AREVA NP provided a revised schedule for technically correct and complete responses to 33 questions and a preliminary revised schedule for Question 07.01-33. AREVA NP provided Supplement 3 on November 22, 2011 to provide a final response to 4 questions. On December 9, 2011, AREVA NP provided Supplement 4 to revise the schedule for 7 questions. On December 14, 2011, AREVA NP provided Supplement 5 to revise the schedule for 5 questions. On December 15, 2011, AREVA NP provided Supplement 6 to provide a complete and final response to 6 questions. On January 10, 2012, AREVA NP provided Supplement 7 to provide a complete and final response to 2 questions. On January 19, 2012, AREVA NP provided Supplement 8 to provide a complete and final response to one question and a revised preliminary schedule for the response to Question 07.01-33. On February 9, 2012, AREVA NP provided Supplement 9 to revise the schedule for 11 questions.

The schedule for a technically correct and complete response to 20 of the remaining 21 questions has been changed as provided below. The response schedule to the other question remains unchanged.

Question #	Response Date
RAI 505 — 07.01-33	February 21, 2012
RAI 505 — 07.01-34	May 9, 2012
RAI 505 — 07.01-35	May 30, 2012
RAI 505 — 07.01-36	May 1, 2012
RAI 505 — 07.01-37	April 17, 2012

RAI 505 — 07.01-38	May 1, 2012
RAI 505 — 07.01-39	May 22, 2012
RAI 505 — 07.01-40	May 22, 2012
RAI 505 — 07.01-41	April 17, 2012
RAI 505 — 07.01-44	May 9, 2012
RAI 505 — 07.01-45	May 1, 2012
RAI 505 — 07.01-46	May 1, 2012
RAI 505 — 07.01-47	May 22, 2012
RAI 505 — 07.01-48	May 9, 2012
RAI 505 — 07.01-49	May 30, 2012
RAI 505 — 07.01-50	May 30, 2012
RAI 505 — 07.01-51	May 22, 2012
RAI 505 — 07.03-38	April 17, 2012
RAI 505 — 07.05-10	April 17, 2012
RAI 505 — 07.08-47	May 30, 2012
RAI 505 — 07.09-71	May 9, 2012

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: Thursday, February 09, 2012 8:15 AM

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. 505 (5902,5735,5869,5754,5803,5950,5744),

FSAR Ch. 7, Supplement 9

#### Getachew,

On September 29, 2011, AREVA NP Inc. provided a schedule for technically correct and complete responses to the 34 questions in RAI 505. In Supplement 1 sent on October 27, 2011, and Supplement 2 sent on November 17, 2011, AREVA NP provided a revised schedule for technically correct and complete responses to 33 questions and a preliminary revised schedule for Question 07.01-33. AREVA NP provided Supplement 3 on November 22, 2011 to provide a final response to 4 questions. On December 9, 2011, AREVA NP provided Supplement 4 to revise the schedule for 7 questions. On December 14, 2011, AREVA NP provided Supplement 5 to revise the schedule for 5 questions. On December 15, 2011, AREVA NP provided Supplement 6 to provide a complete and final response to 6 questions. On January 10, 2012, AREVA NP provided Supplement 7 to provide a complete and final response to 2 questions. On January 19, 2012, AREVA NP provided Supplement 8 to provide a complete and final response to one question and a revised preliminary schedule for the response to Question 07.01-33.

The schedule for a technically correct and complete response to 11 of the remaining 21 questions has been changed as provided below. The response schedule to the other 10 questions remains unchanged.

Question #	Response Date
RAI 505 — 07.01-33	February 21, 2012
RAI 505 — 07.01-34	April 5, 2012
RAI 505 — 07.01-35	April 26, 2012
RAI 505 — 07.01-36	April 5, 2012
RAI 505 — 07.01-37	March 8, 2012
RAI 505 — 07.01-38	April 5, 2012
RAI 505 — 07.01-39	April 26, 2012
RAI 505 — 07.01-40	April 26, 2012
RAI 505 — 07.01-41	March 8, 2012
RAI 505 — 07.01-44	April 5, 2012
RAI 505 — 07.01-45	April 26, 2012
RAI 505 — 07.01-46	April 26, 2012
RAI 505 — 07.01-47	April 5, 2012
RAI 505 — 07.01-48	April 5, 2012
RAI 505 — 07.01-49	April 26, 2012
RAI 505 — 07.01-50	April 26, 2012
RAI 505 — 07.01-51	April 26, 2012
RAI 505 — 07.03-38	March 8, 2012
RAI 505 — 07.05-10	March 8, 2012
RAI 505 — 07.08-47	April 26, 2012
RAI 505 — 07.09-71	April 5, 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: <u>Dennis.Williford@areva.com</u>

From: WILLIFORD Dennis (RS/NB)

**Sent:** Thursday, January 19, 2012 11:19 AM

**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. 505 (5902,5735,5869,5754,5803,5950,5744),

FSAR Ch. 7, Supplement 8

Getachew,

On September 29, 2011, AREVA NP Inc. provided a schedule for technically correct and complete responses to the 34 questions in RAI 505. In Supplement 1 sent on October 27, 2011, and Supplement 2 sent on November 17, 2011, AREVA NP provided a revised schedule for technically correct and complete responses to 33 questions and a preliminary revised schedule for Question 07.01-33. AREVA NP provided Supplement 3 on November 22, 2011 to provide a final response to 4 questions. On December 9, 2011, AREVA NP provided Supplement 4 to revise the schedule for 7 questions. On December 14, 2011, AREVA NP provided Supplement 5 to revise the schedule for 5 questions. On December 15, 2011, AREVA NP provided Supplement 6 to provide a complete and final response to 6 questions. On January 10, 2012, AREVA NP provided Supplement 7 to provide a complete and final response to 2 questions.

The attached file, "RAI 505 Supplement 8 Response US EPR DC.pdf" provides a technically correct and complete final response to 1 of the remaining 22 questions.

The following table indicates the respective pages in the response document, "RAI 505 Supplement 8 Response US EPR DC.pdf," that contain AREVA NP's response to the subject question.

Question #	Start Page	End Page
RAI 505 — 07.01-42	2	2

The schedule for a technically correct and complete response to the remaining 21 questions is provided below. The preliminary schedule for the response to Question 07.01-33 has been revised and is being reevaluated and a new supplement with a revised schedule will be transmitted by February 21, 2012.

Question #	Response Date
RAI 505 — 07.01-33	February 21, 2012
RAI 505 — 07.01-34	April 5, 2012
RAI 505 — 07.01-35	April 26, 2012
RAI 505 — 07.01-36	February 9, 2012
RAI 505 — 07.01-37	March 8, 2012
RAI 505 — 07.01-38	February 9, 2012
RAI 505 — 07.01-39	February 9, 2012
RAI 505 — 07.01-40	February 9, 2012
RAI 505 — 07.01-41	February 9, 2012
RAI 505 — 07.01-44	February 9, 2012
RAI 505 — 07.01-45	April 26, 2012
RAI 505 — 07.01-46	April 26, 2012
RAI 505 — 07.01-47	February 9, 2012
RAI 505 — 07.01-48	February 9, 2012
RAI 505 — 07.01-49	February 9, 2012
RAI 505 — 07.01-50	April 26, 2012
RAI 505 — 07.01-51	February 9, 2012
RAI 505 — 07.03-38	April 26, 2012
RAI 505 — 07.05-10	March 8, 2012
RAI 505 — 07.08-47	April 26, 2012
RAI 505 — 07.09-71	April 5, 2012

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 (CORP/QP) **Sent:** Tuesday, January 10, 2012 5:21 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. 505 (5902,5735,5869,5754,5803,5950,5744),

FSAR Ch. 7, Supplement 7

#### Getachew,

On September 29, 2011, AREVA NP Inc. provided a schedule for technically correct and complete responses to the 34 questions in RAI 505. In Supplement 1 sent on October 27, 2011, and Supplement 2 sent on November 17, 2011, AREVA NP provided a revised schedule for technically correct and complete responses to 33 questions and a preliminary revised schedule for Question 07.01-33. AREVA NP provided Supplement 3 on November 22, 2011 to provide a final response to 4 questions. On December 9, 2011, AREVA NP provided Supplement 4 to revise the schedule for 7 questions. On December 14, 2011, AREVA NP provided Supplement 5 to revise the schedule for 5 questions. On December 15, 2011, AREVA NP provided Supplement 6 to provide a complete and final response to 6 questions.

The attached file, "RAI 505 Supplement 7 Response US EPR DC.pdf" provides technically correct and complete final responses to 2 of the remaining 24 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 505 Question 07.08-48.

The following table indicates the respective pages in the response document, "RAI 505 Supplement 7 Response US EPR DC.pdf," that contain AREVA NP's response to the subject questions.

Question #	Start Page	End Page
RAI 505 — 07.08-44	2	3
RAI 505 — 07.08-48	4	5

The schedule for a technically correct and complete response to the remaining 22 questions has changed as provided below. The preliminary schedule for the response to Question 07.01-33 is being reevaluated and a new supplement with a revised schedule will be transmitted by January 25, 2012.

Question #	Response Date
RAI 505 — 07.01-33	January 25, 2012
RAI 505 — 07.01-34	April 5, 2012

RAI 505 — 07.01-35	April 26, 2012
RAI 505 — 07.01-36	February 9, 2012
RAI 505 — 07.01-37	March 8, 2012
RAI 505 — 07.01-38	February 9, 2012
RAI 505 — 07.01-39	February 9, 2012
RAI 505 — 07.01-40	February 9, 2012
RAI 505 — 07.01-41	February 9, 2012
RAI 505 — 07.01-42	February 9, 2012
RAI 505 — 07.01-44	February 9, 2012
RAI 505 — 07.01-45	April 26, 2012
RAI 505 — 07.01-46	April 26, 2012
RAI 505 — 07.01-47	February 9, 2012
RAI 505 — 07.01-48	February 9, 2012
RAI 505 — 07.01-49	February 9, 2012
RAI 505 — 07.01-50	April 26, 2012
RAI 505 — 07.01-51	February 9, 2012
RAI 505 — 07.03-38	April 26, 2012
RAI 505 — 07.05-10	March 8, 2012
RAI 505 — 07.08-47	April 26, 2012
RAI 505 — 07.09-71	April 5, 2012

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: Thursday, December 15, 2011 1:49 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. 505 (5902,5735,5869,5754,5803,5950,5744),

FSAR Ch. 7, Supplement 6

#### Getachew.

On September 29, 2011, AREVA NP Inc. provided a schedule for technically correct and complete responses to the 34 questions in RAI 505. In Supplement 1 sent on October 27, 2011, and Supplement 2 sent on November 17, 2011, AREVA NP provided a revised schedule for technically correct and complete responses to 33 questions and a preliminary revised schedule for Question 07.01-33. AREVA NP provided Supplement 3 on November 22, 2011 to provide a final response to 4 questions. On December 9, 2011, AREVA NP provided Supplement 4 to revise the schedule for 7 questions. On December 14, 2011, AREVA NP provided Supplement 5 to revise the schedule for 5 questions.

The attached file, "RAI 505 Supplement 6 Response US EPR DC.pdf" provides technically correct and complete responses to 6 of the remaining 30 questions. Appended to this file are affected pages of the U.S. EPR Final Safety Analysis Report in redline-strikeout format which support the responses. Also appended to this file are affected pages of Technical Reports ANP-10304 and ANP-10309P. Revisions to these Technical Reports will be submitted by separate letter after completion of all responses to RAI 505.

The following table indicates the respective pages in the response document, "RAI 505 Supplement 6 Response US EPR DC.pdf," that contain AREVA NP's response to the subject questions.

Question #	Start Page	End Page
RAI 505 — 07.03-37	2	3
RAI 505 — 07.04-15	4	5
RAI 505 — 07.05-11	6	6
RAI 505 — 07.08-43	7	8
RAI 505 — 07.08-45	9	10
RAI 505 — 07.08-49	11	12

The schedule for a technically correct and complete response to the remaining 24 questions remains unchanged. The preliminary schedule for the response to Question 07.01-33 is being reevaluated and a new supplement with a revised schedule will be transmitted by January 25, 2012.

Question #	Response Date
RAI 505 — 07.01-33	January 25, 2012
RAI 505 — 07.01-34	January 10, 2012
RAI 505 — 07.01-35	February 9, 2012
RAI 505 — 07.01-36	January 10, 2012
RAI 505 — 07.01-37	January 19, 2012
RAI 505 — 07.01-38	January 10, 2012
RAI 505 — 07.01-39	January 10, 2012
RAI 505 — 07.01-40	January 10, 2012
RAI 505 — 07.01-41	January 10, 2012
RAI 505 — 07.01-42	January 10, 2012
RAI 505 — 07.01-44	January 10, 2012
RAI 505 — 07.01-45	February 9, 2012
RAI 505 — 07.01-46	February 9, 2012
RAI 505 — 07.01-47	January 10, 2012
RAI 505 — 07.01-48	January 10, 2012
RAI 505 — 07.01-49	January 10, 2012
RAI 505 — 07.01-50	January 10, 2012
RAI 505 — 07.01-51	January 10, 2012
RAI 505 — 07.03-38	February 9, 2012
RAI 505 — 07.05-10	January 19, 2012
RAI 505 — 07.08-44	January 10, 2012
RAI 505 — 07.08-47	January 10, 2012
RAI 505 — 07.08-48	January 10, 2012

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 11:30 AM

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. 505 (5902,5735,5869,5754,5803,5950,5744),

FSAR Ch. 7, Supplement 5

#### Getachew.

On September 29, 2011, AREVA NP Inc. provided a schedule for technically correct and complete responses to the 34 questions in RAI 505. In Supplement 1 sent on October 27, 2011, and Supplement 2 sent on November 17, 2011, AREVA NP provided a revised schedule for technically correct and complete responses to 33 questions and a preliminary revised schedule for Question 07.01-33. AREVA NP provided Supplement 3 on November 22, 2011 to provide a final response to 4 questions. On December 9, 2011, AREVA NP provided a revised schedule for 7 questions.

The schedule for the response to four questions (Questions 7.1-35, 7.1-45, 7.1-46, and 7.3-38) is being changed, as indicated in bold below. In addition, the preliminary schedule for the response to Question 07.01-33 has been revised as indicated. This schedule is being reevaluated and a new supplement with a revised schedule will be transmitted by January 25, 2012. The schedule for a technically correct and complete response to the remaining 25 questions remains unchanged.

Question #	Response Date
RAI 505 — 07.01-33	January 25, 2012
RAI 505 — 07.01-34	January 10, 2012
RAI 505 — 07.01-35	February 9, 2012
RAI 505 — 07.01-36	January 10, 2012
RAI 505 — 07.01-37	January 19, 2012
RAI 505 — 07.01-38	January 10, 2012
RAI 505 — 07.01-39	January 10, 2012
RAI 505 — 07.01-40	January 10, 2012
RAI 505 — 07.01-41	January 10, 2012
RAI 505 — 07.01-42	January 10, 2012
RAI 505 — 07.01-44	January 10, 2012
RAI 505 — 07.01-45	February 9, 2012

RAI 505 — 07.01-46	February 9, 2012
RAI 505 — 07.01-47	January 10, 2012
RAI 505 — 07.01-48	January 10, 2012
RAI 505 — 07.01-49	January 10, 2012
RAI 505 — 07.01-50	January 10, 2012
RAI 505 — 07.01-51	January 10, 2012
RAI 505 — 07.03-37	January 19, 2012
RAI 505 — 07.03-38	February 9, 2012
RAI 505 — 07.04-15	January 19, 2012
RAI 505 — 07.05-10	January 19, 2012
RAI 505 — 07.05-11	January 19, 2012
RAI 505 — 07.08-43	January 19, 2012
RAI 505 — 07.08-44	January 10, 2012
RAI 505 — 07.08-45	January 10, 2012
RAI 505 — 07.08-47	January 10, 2012
RAI 505 — 07.08-48	January 10, 2012
RAI 505 — 07.08-49	January 19, 2012
RAI 505 — 07.09-71	January 10, 2012

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: RYAN Tom (RS/NB)

Sent: Friday, December 09, 2011 8:35 AM

To: Getachew.Tesfaye@nrc.gov

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

(RS/NB)

Subject: Response to U.S. EPR Design Certification Application RAI No. 505 (5902,5735,5869,5754,5803,5950,5744),

FSAR Ch. 7, Supplement 4

#### Getachew,

On September 29, 2011, AREVA NP Inc. provided a schedule for technically correct and complete responses to the 34 questions in RAI 505. On October 27, 2011, and November 17, 2011, AREVA NP provided a revised schedule for technically correct and complete responses to 33 questions and a preliminary revised schedule for Question 07.01-33. On November 22, 2011, AREVA NP provided a final response to four questions.

The schedule for the response to the questions 7.1-37, 7.3-37, 7.4-15, 7.5-10, 7.5-11, 7.8-43, and 7.8-49 is being changed and indicated in bold below, the remaining 23 questions remains unchanged, as indicated below. In addition, the preliminary schedule for a response to Question 07.01-33 remains unchanged. The

schedule for Question 07.01-33 is being reevaluated and a new supplement with a revised schedule will be transmitted by December 14, 2011.

Question #	Response Date
RAI 505 — 07.01-33	December 14, 2011
RAI 505 — 07.01-34	January 10, 2012
RAI 505 — 07.01-35	January 10, 2012
RAI 505 — 07.01-36	January 10, 2012
RAI 505 — 07.01-37	January 19, 2012
RAI 505 — 07.01-38	January 10, 2012
RAI 505 — 07.01-39	January 10, 2012
RAI 505 — 07.01-40	January 10, 2012
RAI 505 — 07.01-41	January 10, 2012
RAI 505 — 07.01-42	January 10, 2012
RAI 505 — 07.01-44	January 10, 2012
RAI 505 — 07.01-45	January 10, 2012
RAI 505 — 07.01-46	January 10, 2012
RAI 505 — 07.01-47	January 10, 2012
RAI 505 — 07.01-48	January 10, 2012
RAI 505 — 07.01-49	January 10, 2012
RAI 505 — 07.01-50	January 10, 2012
RAI 505 — 07.01-51	January 10, 2012
RAI 505 — 07.03-37	January 19, 2012
RAI 505 — 07.03-38	January 10, 2012
RAI 505 — 07.04-15	January 19, 2012
RAI 505 — 07.05-10	January 19, 2012
RAI 505 — 07.05-11	January 19, 2012
RAI 505 — 07.08-43	January 19, 2012
RAI 505 — 07.08-44	January 10, 2012
RAI 505 — 07.08-45	January 10, 2012
RAI 505 — 07.08-47	January 10, 2012
RAI 505 — 07.08-48	January 10, 2012
RAI 505 — 07.08-49	January 19, 2012
RAI 505 — 07.09-71	January 10, 2012

# Sincerely,

Tom Ryan 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: Tuesday, November 22, 2011 2:51 PM

**To:** <u>Getachew.Tesfaye@nrc.gov</u>

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. 505 (5902,5735,5869,5754,5803,5950,5744),

FSAR Ch. 7, Supplement 3

#### Getachew,

On September 29, 2011, AREVA NP Inc. provided a schedule for technically correct and complete responses to the 34 questions in RAI 505. On October 27, 2011, and November 17, 2011, AREVA NP provided a revised schedule for technically correct and complete responses to 33 questions and a preliminary revised schedule for Question 07.01-33.

After discussions with NRC staff, the attached file, "RAI 505 Supplement 3 Response US EPR DC.pdf" provides technically correct and complete responses to 4 of the 34 questions. Appended to this file are affected pages of the U.S. EPR Final Safety Analysis Report in redline-strikeout format which support the responses to RAI 505 Question 07.07-23, Question 07.08 -46 and Question 07.09.02-72.

The following table indicates the respective pages in the response document, "RAI 505 Supplement 3 Response US EPR DC.pdf," that contain AREVA NP's response to the subject questions.

Question #	Start Page	End Page
RAI 505 — 07.01-43	2	3
RAI 505 — 07.07-23	4	4
RAI 505 — 07.08-46	5	5
RAI 505 — 07.09-72	6	7

The schedule for the response to the remaining 30 questions remains unchanged, as indicated below. In addition, the preliminary revised schedule for a response to Question 07.01-33 remains unchanged. The schedule for Question 07.01-33 is being reevaluated and a new supplement with a revised schedule will be transmitted by December 14, 2011.

Question #	Response Date
RAI 505 — 07.01-33	December 14, 2011
RAI 505 — 07.01-34	January 10, 2012
RAI 505 — 07.01-35	January 10, 2012
RAI 505 — 07.01-36	January 10, 2012
RAI 505 — 07.01-37	December 11, 2011
RAI 505 — 07.01-38	January 10, 2012
RAI 505 — 07.01-39	January 10, 2012
RAI 505 — 07.01-40	January 10, 2012
RAI 505 — 07.01-41	January 10, 2012
RAI 505 — 07.01-42	January 10, 2012
RAI 505 — 07.01-44	January 10, 2012
RAI 505 — 07.01-45	January 10, 2012

RAI 505 — 07.01-46	January 10, 2012
RAI 505 — 07.01-47	January 10, 2012
RAI 505 — 07.01-48	January 10, 2012
RAI 505 — 07.01-49	January 10, 2012
RAI 505 — 07.01-50	January 10, 2012
RAI 505 — 07.01-51	January 10, 2012
RAI 505 — 07.03-37	December 11, 2011
RAI 505 — 07.03-38	January 10, 2012
RAI 505 — 07.04-15	December 11, 2011
RAI 505 — 07.05-10	December 11, 2011
RAI 505 — 07.05-11	December 11, 2011
RAI 505 — 07.08-43	December 11, 2011
RAI 505 — 07.08-44	January 10, 2012
RAI 505 — 07.08-45	January 10, 2012
RAI 505 — 07.08-47	January 10, 2012
RAI 505 — 07.08-48	January 10, 2012
RAI 505 — 07.08-49	December 11, 2011
RAI 505 — 07.09-71	January 10, 2012

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: Thursday, November 17, 2011 5:44 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. 505 (5902,5735,5869,5754,5803,5950,5744),

FSAR Ch. 7, Supplement 2

#### Getachew,

On September 29, 2011, AREVA NP Inc. provided a schedule for technically correct and complete responses to the 34 questions in RAI 505. On October 27, 2011, AREVA NP provided a revised schedule for technically correct and complete responses to 13 questions and a preliminary revised schedule for Question 07.01-33.

The schedule for the final responses has been revised, as indicated in bold below. In addition, the preliminary revised schedule for a response to Question 07.01-33 has been revised. The schedule for Question 07.01-33 is being reevaluated and a new supplement with a revised schedule will be transmitted by December 14, 2011.

Question #	Response Date	
RAI 505 — 07.01-33	December 14, 2011	
RAI 505 — 07.01-34	January 10, 2012	
RAI 505 — 07.01-35	January 10, 2012	
RAI 505 — 07.01-36	January 10, 2012	
RAI 505 — 07.01-37	December 11, 2011	
RAI 505 — 07.01-38	January 10, 2012	
RAI 505 — 07.01-39	January 10, 2012	
RAI 505 — 07.01-40	January 10, 2012	
RAI 505 — 07.01-41	January 10, 2012	
RAI 505 — 07.01-42	January 10, 2012	
RAI 505 — 07.01-43	December 11, 2011	
RAI 505 — 07.01-44	January 10, 2012	
RAI 505 — 07.01-45	January 10, 2012	
RAI 505 — 07.01-46	January 10, 2012	
RAI 505 — 07.01-47	January 10, 2012	
RAI 505 — 07.01-48	January 10, 2012	
RAI 505 — 07.01-49	January 10, 2012	
RAI 505 — 07.01-50	January 10, 2012	
RAI 505 — 07.01-51	January 10, 2012	
RAI 505 — 07.03-37	December 11, 2011	
RAI 505 — 07.03-38	January 10, 2012	
RAI 505 — 07.04-15	December 11, 2011	
RAI 505 — 07.05-10	December 11, 2011	
RAI 505 — 07.05-11	December 11, 2011	
RAI 505 — 07.07-23	December 11, 2011	
RAI 505 — 07.08-43	December 11, 2011	
RAI 505 — 07.08-44	January 10, 2012	
RAI 505 — 07.08-45	January 10, 2012	
RAI 505 — 07.08-46	December 11, 2011	
RAI 505 — 07.08-47	January 10, 2012	
RAI 505 — 07.08-48	January 10, 2012	
RAI 505 — 07.08-49	December 11, 2011	
RAI 505 — 07.09-71	January 10, 2012	
RAI 505 — 07.09-72	January 10, 2012	

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: <u>Dennis.Williford@areva.com</u>

From: WILLIFORD Dennis (RS/NB)

**Sent:** Thursday, October 27, 2011 11:22 AM

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. 505 (5902,5735,5869,5754,5803,5950,5744),

FSAR Ch. 7, Supplement 1

# Getachew,

On September 29, 2011, AREVA NP Inc. provided a schedule for a technically correct and complete response to the 34 questions in RAI 505.

The schedule for the final response to Questions 07.01-38, 07.01-44, 07.01-45, 07.01-46, 07.01-47, 07.01-48, 07.01-49, 07.01-50, 07.01-51, 07.03-38, 07.08-43, 07.08-47, 07.08-48 has been revised, as indicated in bold below. In addition, a preliminary revised schedule for a technically correct and complete response to Question 07.01-33 is provided below. The schedule for Question 07.01-33 is being reevaluated and a new supplement with a revised schedule will be transmitted by November 17, 2011.

Question #	Response Date
RAI 505 — 07.01-33	November 17, 2011
RAI 505 — 07.01-34	December 8, 2011
RAI 505 — 07.01-35	November 17, 2011
RAI 505 — 07.01-36	December 8, 2011
RAI 505 — 07.01-37	December 8, 2011
RAI 505 — 07.01-38	January 10, 2012
RAI 505 — 07.01-39	December 8, 2011
RAI 505 — 07.01-40	December 8, 2011
RAI 505 — 07.01-41	November 17, 2011
RAI 505 — 07.01-42	December 20, 2011
RAI 505 — 07.01-43	November 17, 2011
RAI 505 — 07.01-44	January 10, 2012
RAI 505 — 07.01-45	January 10, 2012
RAI 505 — 07.01-46	January 10, 2012
RAI 505 — 07.01-47	January 10, 2012
RAI 505 — 07.01-48	January 10, 2012
RAI 505 — 07.01-49	January 10, 2012
RAI 505 — 07.01-50	January 10, 2012
RAI 505 — 07.01-51	January 10, 2012
RAI 505 — 07.03-37	November 17, 2011
RAI 505 — 07.03-38	January 10, 2012
RAI 505 — 07.04-15	November 17, 2011
RAI 505 — 07.05-10	November 17, 2011
RAI 505 — 07.05-11	November 17, 2011
RAI 505 — 07.07-23	November 17, 2011
RAI 505 — 07.08-43	January 10, 2012
RAI 505 — 07.08-44	December 8, 2011

RAI 505 — 07.08-45	December 8, 2011
RAI 505 — 07.08-46	December 8, 2011
RAI 505 — 07.08-47	January 10, 2012
RAI 505 — 07.08-48	January 10, 2012
RAI 505 — 07.08-49	November 17, 2011
RAI 505 — 07.09-71	December 8, 2011
RAI 505 — 07.09-72	December 8, 2011

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: Thursday, September 29, 2011 11:04 AM

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. 505 (5902,5735,5869,5754,5803,5950,5744),

FSAR Ch. 7

#### Getachew,

Attached please find AREVA NP Inc.'s response to the subject request for additional information (RAI). The attached file, "RAI 505 Response US EPR DC.pdf," provides a schedule since a technically correct and complete response to the 34 questions cannot be provided at this time.

The following table indicates the respective pages in the response document, "RAI 505 Response US EPR DC.pdf," that contain AREVA NP's response to the subject questions.

Question #	Start Page	End Page
RAI 505 — 07.01-33	2	2
RAI 505 — 07.01-34	3	3
RAI 505 — 07.01-35	4	4
RAI 505 — 07.01-36	5	5
RAI 505 — 07.01-37	6	6
RAI 505 — 07.01-38	7	7
RAI 505 — 07.01-39	8	8
RAI 505 — 07.01-40	9	9
RAI 505 — 07.01-41	10	10
RAI 505 — 07.01-42	11	11
RAI 505 — 07.01-43	12	12
RAI 505 — 07.01-44	13	13
RAI 505 — 07.01-45	14	14

RAI 505 — 07.01-46	15	15
RAI 505 — 07.01-47	16	16
RAI 505 — 07.01-48	17	18
RAI 505 — 07.01-49	19	19
RAI 505 — 07.01-50	20	20
RAI 505 — 07.01-51	21	22
RAI 505 — 07.03-37	23	23
RAI 505 — 07.03-38	24	24
RAI 505 — 07.04-15	25	25
RAI 505 — 07.05-10	26	26
RAI 505 — 07.05-11	27	27
RAI 505 — 07.07-23	28	28
RAI 505 — 07.08-43	29	29
RAI 505 — 07.08-44	30	30
RAI 505 — 07.08-45	31	31
RAI 505 — 07.08-46	32	32
RAI 505 — 07.08-47	33	33
RAI 505 — 07.08-48	34	34
RAI 505 — 07.08-49	35	35
RAI 505 — 07.09-71	36	36
RAI 505 — 07.09-72	37	37

A complete answer is not provided for the 34 questions. The schedule for a technically correct and complete response to these questions is provided below.

Please note that the date for the response to Question 07.01-33 is a commitment date to provide a final schedule for the response in a follow-up letter.

Question #	Response Date
RAI 505 — 07.01-33	October 27, 2011
RAI 505 — 07.01-34	December 8, 2011
RAI 505 — 07.01-35	November 17, 2011
RAI 505 — 07.01-36	December 8, 2011
RAI 505 — 07.01-37	December 8, 2011
RAI 505 — 07.01-38	December 20, 2011
RAI 505 — 07.01-39	December 8, 2011
RAI 505 — 07.01-40	December 8, 2011
RAI 505 — 07.01-41	November 17, 2011
RAI 505 — 07.01-42	December 20, 2011
RAI 505 — 07.01-43	November 17, 2011
RAI 505 — 07.01-44	December 20, 2011
RAI 505 — 07.01-45	December 20, 2011
RAI 505 — 07.01-46	December 20, 2011
RAI 505 — 07.01-47	December 8, 2011
RAI 505 — 07.01-48	December 20, 2011

RAI 505 — 07.01-49	December 20, 2011
RAI 505 — 07.01-50	December 20, 2011
RAI 505 — 07.01-51	December 20, 2011
RAI 505 — 07.03-37	November 17, 2011
RAI 505 — 07.03-38	December 20, 2011
RAI 505 — 07.04-15	November 17, 2011
RAI 505 — 07.05-10	November 17, 2011
RAI 505 — 07.05-11	November 17, 2011
RAI 505 — 07.07-23	November 17, 2011
RAI 505 — 07.08-43	December 20, 2011
RAI 505 — 07.08-44	December 8, 2011
RAI 505 — 07.08-45	December 8, 2011
RAI 505 — 07.08-46	December 8, 2011
RAI 505 — 07.08-47	December 20, 2011
RAI 505 — 07.08-48	December 20, 2011
RAI 505 — 07.08-49	November 17, 2011
RAI 505 — 07.09-71	December 8, 2011
RAI 505 — 07.09-72	December 8, 2011

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

**Sent:** Tuesday, August 30, 2011 1:23 PM

To: ZZ-DL-A-USEPR-DL

Cc: Zhang, Deanna; Morton, Wendell; Spaulding, Deirdre; Mott, Kenneth; Truong, Tung; Zhao, Jack; Mills, Daniel;

Jackson, Terry; Canova, Michael; Colaccino, Joseph; ArevaEPRDCPEm Resource

Subject: U.S. EPR Design Certification Application RAI No. 505 (5902,5735,5869,5754,5803,5950,5744), FSAR Ch. 7

Attached please find the subject requests for additional information (RAI). A draft of the RAI was provided to you on August 12, 2011, and discussed with your staff on August 22 and 25, 2011. No change is made to the draft RAI as a result of those discussions. 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: 3768

Mail Envelope Properties (2FBE1051AEB2E748A0F98DF9EEE5A5D4B2A61C)

**Subject:** Response to U.S. EPR Design Certification Application RAI No. 505

(5902,5735,5869,5754,5803,5950,5744), FSAR Ch. 7, Supplement 11

**Sent Date:** 2/21/2012 9:30:33 PM **Received Date:** 2/21/2012 9:29:56 PM

From: WILLIFORD Dennis (AREVA)

Created By: Dennis.Williford@areva.com

Recipients:

"BENNETT Kathy (AREVA)" < Kathy.Bennett@areva.com>

Tracking Status: None

"DELANO Karen (AREVA)" < Karen. Delano@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

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

Tracking Status: None

**Post Office:** auscharmx02.adom.ad.corp

Files Size Date & Time

MESSAGE 39179 2/21/2012 9:29:56 PM

**Options** 

**Priority:** Standard

Return Notification: No Reply Requested: No Sensitivity: No Mormal

Expiration Date: Recipients Received: