

## ArevaEPRDCPEm Resource

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**From:** WILLIFORD Dennis (AREVA) [Dennis.Williford@areva.com]  
**Sent:** Tuesday, May 22, 2012 4:43 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. 414, FSAR Ch. 7 OPEN ITEM, Supplement 16

Getachew,

AREVA NP Inc. letter NRC:12:029 dated May 22, 2012 provides a technically correct and complete final response to Question 07.03-30 in RAI 414.

Enclosed with the letter as a part of the response are affected pages of ANP-10309P, "U.S. EPR Protection System Technical Report," in redline-strikeout format which support the response to RAI 414, Question 07.03-30. A complete revision to the technical report will be submitted by separate letter. Since AREVA NP considers some of the material contained in the response to be proprietary, an affidavit is included with the letter, as required by 10 CFR 2.390(b), to support the withholding of the 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 question.

Question #	Start Page	End Page
RAI 414 — 07.03-30	2	5

This concludes the formal AREVA NP response to RAI 414, 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](mailto:Dennis.Williford@areva.com)

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**From:** WILLIFORD Dennis (RS/NB)  
**Sent:** Friday, February 17, 2012 3:43 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. 414, FSAR Ch. 7 OPEN ITEM, Supplement 15

Getachew,

AREVA NP provided a schedule on July 14, 2010 for a technically correct and complete response to RAI 414. Supplement 1 response was sent on October 28, 2010 to provide a revised schedule for all questions. Supplement 2 was sent on November 29, 2010 to provide a revised schedule for 6 of the remaining 7 questions. Supplement 3 was sent on January 13, 2011 to provide a revised schedule for 6 of the remaining 7

questions. Supplement 4 was sent on February 3, 2011 to provide technically correct and complete responses to two questions. Supplement 5 was sent on February 8, 2011 to provide technically correct and complete responses to two questions. Supplement 6 was sent on February 18, 2011 to provide technically correct and complete response to one question. Supplement 7 was sent on February 25, 2011 to provide a revised schedule for the remaining 2 questions. Supplement 8 was sent on March 8, 2011 to provide a technically correct and complete response to one question. Supplement 9 sent on April 20, 2011, Supplement 10 sent on May 24, 2011, Supplement 11 sent on July 7, 2011, Supplement 12 sent on August 19, 2011, Supplement 13 sent on October 27, 2011, and Supplement 14 sent on January 10, 2012 provided a revised schedule for the remaining question.

The schedule for a technically correct and complete response for the remaining question has changed as shown below.

<b>Question #</b>	<b>Response Date</b>
RAI 414 — 07.03-30	<b>May 22, 2012</b>

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](mailto:Dennis.Williford@areva.com)

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**From:** WILLIFORD Dennis (CORP/QP)  
**Sent:** Tuesday, January 10, 2012 4:29 PM  
**To:** [Getachew.Tesfaye@nrc.gov](mailto: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. 414, FSAR Ch. 7 OPEN ITEM, Supplement 14

Getachew,

AREVA NP provided a schedule on July 14, 2010 for a technically correct and complete response to RAI 414. Supplement 1 response was sent on October 28, 2010 to provide a revised schedule for all questions. Supplement 2 was sent on November 29, 2010 to provide a revised schedule for 6 of the remaining 7 questions. Supplement 3 was sent on January 13, 2011 to provide a revised schedule for 6 of the remaining 7 questions. Supplement 4 was sent on February 3, 2011 to provide technically correct and complete responses to two questions. Supplement 5 was sent on February 8, 2011 to provide technically correct and complete responses to two questions. Supplement 6 was sent on February 18, 2011 to provide technically correct and complete response to one question. Supplement 7 was sent on February 25, 2011 to provide a revised schedule for the remaining 2 questions. Supplement 8 was sent on March 8, 2011 to provide a technically correct and complete response to one question. Supplement 9 sent on April 20, 2011, Supplement 10 sent on May 24, 2011, Supplement 11 sent on July 7, 2011, Supplement 12 sent on August 19, 2011, and Supplement 13 sent on October 27, 2011 provided a revised schedule for the remaining question.

The schedule for a technically correct and complete response for the remaining question has been revised as shown below.

<b>Question #</b>	<b>Response Date</b>
RAI 414 — 07.03-30	<b>April 5, 2012</b>

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](mailto:Dennis.Williford@areva.com)

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**From:** WILLIFORD Dennis (RS/NB)  
**Sent:** Thursday, October 27, 2011 10:58 AM  
**To:** [Getachew.Tesfaye@nrc.gov](mailto: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. 414, FSAR Ch. 7 OPEN ITEM, Supplement 13

Getachew,

AREVA NP provided a schedule on July 14, 2010 for a technically correct and complete response to RAI 414. Supplement 1 response was sent on October 28, 2010 to provide a revised schedule for all questions. Supplement 2 was sent on November 29, 2010 to provide a revised schedule for 6 of the remaining 7 questions. Supplement 3 was sent on January 13, 2011 to provide a revised schedule for 6 of the remaining 7 questions. Supplement 4 was sent on February 3, 2011 to provide technically correct and complete responses to two questions. Supplement 5 was sent on February 8, 2011 to provide technically correct and complete responses to two questions. Supplement 6 was sent on February 18, 2011 to provide technically correct and complete response to one question. Supplement 7 was sent on February 25, 2011 to provide a revised schedule for the remaining 2 questions. Supplement 8 was sent on March 8, 2011 to provide a technically correct and complete response to one question. Supplement 9 sent on April 20, 2011, Supplement 10 sent on May 24, 2011, Supplement 11 sent on July 7, 2011, and Supplement 12 sent on August 19, 2011 provided a revised schedule for the remaining question.

The schedule for a technically correct and complete response for the remaining question has been revised as shown below.

Question #	Response Date
RAI 414 — 07.03-30	January 10, 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](mailto:Dennis.Williford@areva.com)

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**From:** WILLIFORD Dennis (RS/NB)  
**Sent:** Friday, August 19, 2011 2:02 PM  
**To:** [Getachew.Tesfaye@nrc.gov](mailto: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. 414, FSAR Ch. 7 OPEN ITEM, Supplement 12

Getachew,

AREVA NP provided a schedule on July 14, 2010 for a technically correct and complete response to RAI 414. Supplement 1 response was sent on October 28, 2010 to provide a revised schedule for all questions. Supplement 2 was sent on November 29, 2010 to provide a revised schedule for 6 of the remaining 7 questions. Supplement 3 was sent on January 13, 2011 to provide a revised schedule for 6 of the remaining 7 questions. Supplement 4 was sent on February 3, 2011 to provide technically correct and complete responses to two questions. Supplement 5 was sent on February 8, 2011 to provide technically correct and complete responses to two questions. Supplement 6 was sent on February 18, 2011 to provide technically correct and complete response to one question. Supplement 7 was sent on February 25, 2011 to provide a revised schedule for the remaining 2 questions. Supplement 8 was sent on March 8, 2011 to provide a technically correct and complete response to one question. Supplement 9 sent on April 20, 2011, Supplement 10 sent on May 24, 2011, and Supplement 11 sent on July 7, 2011 provided a revised schedule for the remaining question.

The schedule for a technically correct and complete response for the remaining question has been revised as shown below.

Question #	Response Date
RAI 414 — 07.03-30	October 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](mailto:Dennis.Williford@areva.com)

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**From:** WILLIFORD Dennis (RS/NB)  
**Sent:** Thursday, July 07, 2011 12:13 PM  
**To:** Tesfaye, Getachew  
**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. 414, FSAR Ch. 7 OPEN ITEM, Supplement 11

Getachew,

AREVA NP provided a schedule on July 14, 2010 for a technically correct and complete response to RAI 414. Supplement 1 response was sent on October 28, 2010 to provide a revised schedule for all questions. Supplement 2 was sent on November 29, 2010 to provide a revised schedule for 6 of the remaining 7 questions. Supplement 3 was sent on January 13, 2011 to provide a revised schedule for 6 of the remaining 7 questions. Supplement 4 was sent on February 3, 2011 to provide technically correct and complete responses to two questions. Supplement 5 was sent on February 8, 2011 to provide technically correct and complete responses to two questions. Supplement 6 was sent on February 18, 2011 to provide technically correct and complete response to one question. Supplement 7 was sent on February 25, 2011 to provide a revised schedule for the remaining 2 questions. Supplement 8 was sent on March 8, 2011 to provide a technically correct and complete response to one question. Supplement 9 sent on April 20, 2011, and Supplement 10 sent on May 24, 2011 provided a revised schedule for the remaining question.

The schedule for a technically correct and complete response for the remaining question has been revised as shown below.

Question #	Response Date
RAI 414 — 07.03-30	August 20, 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](mailto:Dennis.Williford@areva.com)

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**From:** WILLIFORD Dennis (RS/NB)  
**Sent:** Tuesday, May 24, 2011 3:03 PM  
**To:** Tesfaye, Getachew  
**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. 414, FSAR Ch. 7 OPEN ITEM, Supplement 10

Getachew,

AREVA NP provided a schedule on July 14, 2010 for a technically correct and complete response to RAI 414. Supplement 1 response was sent on October 28, 2010 to provide a revised schedule for all questions. Supplement 2 was sent on November 29, 2010 to provide a revised schedule for 6 of the remaining 7 questions. Supplement 3 was sent on January 13, 2011 to provide a revised schedule for 6 of the remaining 7 questions. Supplement 4 was sent on February 3, 2011 to provide technically correct and complete responses to two questions. Supplement 5 was sent on February 8, 2011 to provide technically correct and complete responses to two questions. Supplement 6 was sent on February 18, 2011 to provide technically correct and complete response to one question. Supplement 7 was sent on February 25, 2011 to provide a revised schedule for the remaining 2 questions. Supplement 8 was sent on March 8, 2011 to provide technically correct and complete response to one question. Supplement 9 was sent on April 20, 2011 to provide a revised schedule for the remaining question.

The schedule for a technically correct and complete response for the remaining question has been revised and is provided below.

Question #	Response Date
RAI 414 — 07.03-30	July 7, 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](mailto:Dennis.Williford@areva.com)

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**From:** WELLS Russell (RS/NB)  
**Sent:** Wednesday, April 20, 2011 8:01 AM  
**To:** 'Tesfaye, Getachew'  
**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. 414, FSAR Ch. 7 OPEN ITEM, Supplement 9

Getachew,

AREVA NP provided a schedule on July 14, 2010 for a technically correct and complete response to RAI 414. Supplement 1 response was sent on October 28, 2010 to provide a revised schedule for all questions. Supplement 2 was sent on November 29, 2010 to provide a revised schedule for 6 of the remaining 7 questions. Supplement 3 was sent on January 13, 2011 to provide a revised schedule for 6 of the remaining 7 questions. Supplement 4 was sent on February 3, 2011 to provide technically correct and complete responses to two questions. Supplement 5 was sent on February 8, 2011 to provide technically correct and complete responses to two questions. Supplement 6 was sent on February 18, 2011 to provide technically correct and complete response to one question. Supplement 7 was sent on February 25, 2011 to provide a revised schedule for the remaining 2 questions. Supplement 8 was sent on March 8, 2011 to provide technically correct and complete response to one question.

The schedule for a technically correct and complete response for the remaining question has been revised and is provided below.

Question #	Response Date
RAI 414 — 07.03-30	May 24, 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](mailto:Russell.Wells@Areva.com)*

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**From:** WELLS Russell (RS/NB)  
**Sent:** Tuesday, March 08, 2011 12:02 PM  
**To:** 'Tesfaye, Getachew'  
**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. 414, FSAR Ch. 7 OPEN ITEM, Supplement 8

Getachew,

AREVA NP provided a schedule on July 14, 2010 for a technically correct and complete response to RAI 414. Supplement 1 response was sent on October 28, 2010 to provide a revised schedule for all questions. Supplement 2 was sent on November 29, 2010 to provide a revised schedule for 6 of the remaining 7 questions. Supplement 3 was sent on January 13, 2011 to provide a revised schedule for 6 of the remaining 7

questions. Supplement 4 was sent on February 3, 2011 to provide technically correct and complete responses to two questions. Supplement 5 was sent on February 8, 2011 to provide technically correct and complete responses to two questions. Supplement 6 was sent on February 18, 2011 to provide technically correct and complete response to one question. Supplement 7 was sent on February 25, 2011 to provide a revised schedule for the remaining 2 questions. Based on discussions with NRC, the attached file, "RAI 414 Supplement 8 Response US EPR DC.pdf" provides the technically correct and complete response to one of the 2 questions, as committed.

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 414 Question 07.02-32.

The following table indicates the respective pages in the response document, "RAI 414 Supplement 8 Response US EPR DC.pdf," that contain AREVA NP's response to the subject question.

Question #	Start Page	End Page
RAI 414 07.02-32	2	3

The schedule for a technically correct and complete response to the remaining question is unchanged and is provided below.

Question #	Response Date
RAI 414 — 07.03-30	April 21, 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](mailto:Russell.Wells@Areva.com)

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**From:** WELLS Russell (RS/NB)  
**Sent:** Friday, February 25, 2011 12:44 PM  
**To:** Tesfaye, Getachew  
**Cc:** BENNETT Kathy (RS/NB); DELANO Karen (RS/NB); ROMINE Judy (RS/NB); BRYAN Martin (External RS/NB); RYAN Tom (RS/NB)  
**Subject:** Response to U.S. EPR Design Certification Application RAI No. 414, FSAR Ch. 7 OPEN ITEM, Supplement 7

Getachew,

AREVA NP provided a schedule on July 14, 2010 for a technically correct and complete response to RAI 414. Supplement 1 response was sent on October 28, 2010 to provide a revised schedule for all questions. Supplement 2 was sent on November 29, 2010 to provide a revised schedule for 6 of the remaining 7 questions. Supplement 3 was sent on January 13, 2011 to provide a revised schedule for 6 of the remaining 7

questions. Supplement 4 was sent on February 3, 2011 to provide technically correct and complete responses to two questions. Supplement 5 was sent on February 8, 2011 to provide technically correct and complete responses to two questions. Supplement 6 was sent on February 18, 2011 to provide technically correct and complete response to one question.

Based upon the information presented to the NRC during the February 15, 2011, Public Meeting, the schedule for the remaining questions has been changed.

The schedule for a technically correct and complete response to the two remaining questions is changed and is provided below.

Question #	Response Date
RAI 414 — 07.02-32	April 5, 2011
RAI 414 — 07.03-30	April 21, 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](mailto:Russell.Wells@Areva.com)*

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**From:** BRYAN Martin (External RS/NB)

**Sent:** Friday, February 18, 2011 10:17 AM

**To:** Tesfaye, Getachew

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

**Subject:** Response to U.S. EPR Design Certification Application RAI No. 414, FSAR Ch. 7 OPEN ITEM, Supplement 6

Getachew,

AREVA NP provided a schedule on July 14, 2010 for a technically correct and complete response to RAI 414. Supplement 1 response was sent on October 28, 2010 to provide a revised schedule for all questions. Supplement 2 was sent on November 29, 2010 to provide a revised schedule for 6 of the remaining 7 questions. Supplement 3 was sent on January 13, 2011 to provide a revised schedule for 6 of the remaining 7 questions. Supplement 4 was sent on February 3, 2011 to provide technically correct and complete responses to two questions. Supplement 5 was sent on February 8, 2011 to provide technically correct and complete responses to two questions. Based on discussions with NRC, the attached file, "RAI 414 Supplement 6 Response US EPR DC.pdf" provides technically correct and complete response to one of the remaining 3 questions, as committed.

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 this question.

The following table indicates the respective pages in the response document, "RAI 414 Supplement 6 Response US EPR DC.pdf," that contain AREVA NP's response to the subject questions.



Question #	Start Page	End Page
RAI 414 07.03-31	2	3

The schedule for a technically correct and complete response to the two remaining questions is unchanged and is provided below.

Question #	Response Date
RAI 414 — 07.02-32	March 22, 2011
RAI 414 — 07.03-30	March 10, 2011

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](mailto:Martin.Bryan.ext@areva.com)

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**From:** BRYAN Martin (External RS/NB)  
**Sent:** Tuesday, February 08, 2011 9:46 AM  
**To:** 'Tesyfaye, Getachew'  
**Cc:** DELANO Karen (RS/NB); ROMINE Judy (RS/NB); BENNETT Kathy (RS/NB); RYAN Tom (RS/NB)  
**Subject:** Response to U.S. EPR Design Certification Application RAI No. 414, FSAR Ch. 7 OPEN ITEM, Supplement 5

Getachew,

AREVA NP provided a schedule on July 14, 2010 for a technically correct and complete response to RAI 414. Supplement 1 response was sent on October 28, 2010 to provide a revised schedule for all questions. Supplement 2 was sent on November 29, 2010 to provide a revised schedule for 6 of the remaining 7 questions. Supplement 3 was sent on January 13, 2011 to provide a revised schedule for 6 of the remaining 7 questions. Supplement 4 was sent on February 3, 2011 to provide technically correct and complete responses to two questions. Based on discussions with NRC, the attached file, "RAI 414 Supplement 5 Response US EPR DC.pdf" provides technically correct and complete responses to two of the remaining 5 questions, as committed.

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 these two questions.

The following table indicates the respective pages in the response document, "RAI 414 Supplement 5 Response US EPR DC.pdf," that contain AREVA NP's response to the subject questions.

Question #	Start Page	End Page
RAI 414 07.07-20	2	3
RAI 414 07.07-22	4	5

The schedule for a technically correct and complete response to the three remaining questions is unchanged and is provided below.

Question #	Response Date
RAI 414 — 07.02-32	March 22, 2011
RAI 414 — 07.03-30	March 10, 2011
RAI 414 — 07.03-31	March 10, 2011

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](mailto:Martin.Bryan.ext@areva.com)

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**From:** BRYAN Martin (External RS/NB)  
**Sent:** Thursday, February 03, 2011 2:44 PM  
**To:** 'Tesfaye, Getachew'  
**Cc:** DELANO Karen (RS/NB); ROMINE Judy (RS/NB); BENNETT Kathy (RS/NB); RYAN Tom (RS/NB)  
**Subject:** Response to U.S. EPR Design Certification Application RAI No. 414, FSAR Ch. 7 OPEN ITEM, Supplement 4

Getachew,

AREVA NP provided a schedule on July 14, 2010 for a technically correct and complete response to RAI 414. Supplement 1 response was sent on October 28, 2010 to provide a revised schedule for all questions. Supplement 2 was sent on November 29, 2010 to provide a revised schedule for 6 of the remaining 7 questions. Supplement 3 was sent on January 13, 2011 to provide a revised schedule for 6 of the remaining 7 questions. Based on discussions with NRC, the attached file, "RAI 414 Supplement 4 Response US EPR DC.pdf" provides technically correct and complete responses to two of the remaining 7 questions, as committed.

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 these two questions.

The following table indicates the respective pages in the response document, "RAI 414 Supplement 4 Response US EPR DC.pdf," that contain AREVA NP's response to the subject questions.

Question #	Start Page	End Page
RAI 414 07.02-33	2	3
RAI 414 07.04-14	4	5

To allow additional time to interact with the NRC staff, a revised schedule for the remaining questions is provided.

Question #	Response Date
RAI 414 — 07.02-32	March 22, 2011
RAI 414 — 07.03-30	March 10, 2011

RAI 414 — 07.03-31	March 10, 2011
RAI 414 — 07.07-20	March 10, 2011
RAI 414 — 07.07-22	March 10, 2011

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](mailto:Martin.Bryan.ext@areva.com)

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**From:** BRYAN Martin (External RS/NB)  
**Sent:** Thursday, January 13, 2011 4:35 PM  
**To:** 'Tefaye, Getachew'  
**Cc:** DELANO Karen (RS/NB); ROMINE Judy (RS/NB); BENNETT Kathy (RS/NB); PANNELL George (CORP/QP)  
**Subject:** Response to U.S. EPR Design Certification Application RAI No. 414, FSAR Ch. 7 OPEN ITEM, Supplement 3

Getachew,

AREVA NP provided a schedule on July 14, 2010 for a technically correct and complete response to RAI 414. Supplement 1 response was sent on October 28, 2010 to provide a revised schedule for all questions. Supplement 2 was sent on November 29, 2010 to provide a revised schedule for 6 of the remaining 7 questions. To allow additional time to interact with the NRC staff, a revised schedule for these six questions is provided. The schedule for Question 07.02-32 remains the same.

A complete answer is not provided for the 7 questions. The schedule for technically correct and complete responses to these questions is provided below.

Question #	Response Date
RAI 414 — 07.02-32	March 01, 2011
RAI 414 — 07.03-33	February 11, 2011
RAI 414 — 07.02-30	February 11, 2011
RAI 414 — 07.03-31	February 11, 2011
RAI 414 — 07.04-14	February 11, 2011
RAI 414 — 07.07-20	February 11, 2011
RAI 414 — 07.07-22	February 11, 2011

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](mailto:Martin.Bryan.ext@areva.com)

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**From:** BRYAN Martin (External RS/NB)  
**Sent:** Monday, November 29, 2010 2:35 PM  
**To:** 'Tefaye, Getachew'

**Cc:** DELANO Karen (RS/NB); ROMINE Judy (RS/NB); BENNETT Kathy (RS/NB); PANNELL George (CORP/QP)  
**Subject:** Response to U.S. EPR Design Certification Application RAI No. 414, FSAR Ch. 7 OPEN ITEM, Supplement 2

Getachew,

AREVA NP provided a schedule on July 14, 2010 for a technically correct and complete response to RAI 414. Supplement 1 response was sent on October 28, 2010 to provide a revised schedule for all questions. To allow additional time to interact with the NRC staff, a revised schedule for six of the seven questions is provided. The schedule for Question 07.02-32 remains the same.

A complete answer is not provided for the 7 questions. The schedule for technically correct and complete responses to these questions is provided below.

Question #	Response Date
RAI 414 — 07.02-32	March 01, 2011
RAI 414 — 07.03-33	January 13, 2011
RAI 414 — 07.02-30	January 13, 2011
RAI 414 — 07.03-31	January 13, 2011
RAI 414 — 07.04-14	January 13, 2011
RAI 414 — 07.07-20	January 13, 2011
RAI 414 — 07.07-22	January 13, 2011

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](mailto:Martin.Bryan.ext@areva.com)

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**From:** BRYAN Martin (External RS/NB)  
**Sent:** Thursday, October 28, 2010 4:53 PM  
**To:** 'Tesfaye, Getachew'  
**Cc:** DELANO Karen (RS/NB); ROMINE Judy (RS/NB); BENNETT Kathy (RS/NB); PANNELL George (CORP/QP)  
**Subject:** Response to U.S. EPR Design Certification Application RAI No. 414, FSAR Ch. 7 OPEN ITEM, Supplement 1

Getachew,

AREVA NP provided a schedule on July 14, 2010 for a technically correct and complete response to RAI 414. To allow additional time to interact with the NRC staff, a revised schedule is provided.

A complete answer is not provided for the 7 questions. The schedule for technically correct and complete responses to these questions is provided below.

Question #	Response Date
RAI 414 — 07.02-32	March 01, 2011
RAI 414 — 07.03-33	November 29, 2010
RAI 414 — 07.02-30	November 29, 2010
RAI 414 — 07.03-31	November 29, 2010
RAI 414 — 07.04-14	November 29, 2010

RAI 414 — 07.07-20	November 29, 2010
RAI 414 — 07.07-22	November 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](mailto:Martin.Bryan.ext@areva.com)

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**From:** BRYAN Martin (EXT)  
**Sent:** Wednesday, July 14, 2010 6:32 PM  
**To:** 'Tesyfaye, Getachew'  
**Cc:** DELANO Karen V (AREVA NP INC); ROMINE Judy (AREVA NP INC); BENNETT Kathy A (OFR) (AREVA NP INC); RYAN Tom (AREVA NP INC)  
**Subject:** Response to U.S. EPR Design Certification Application RAI No. 414, FSAR Ch. 7 OPEN ITEM

Getachew,

Attached please find AREVA NP Inc.'s response to the subject request for additional information (RAI). The attached file, "RAI 414 Response US EPR DC.pdf" provides a schedule since technically correct and complete responses to the 7 questions are not provided.

The following table indicates the respective pages in the response document, "RAI 414 Response US EPR DC.pdf" that contain AREVA NP's responses to the subject questions.

Question #	Start Page	End Page
RAI 414 — 07.02-32	2	2
RAI 414 — 07.03-33	3	3
RAI 414 — 07.02-30	4	6
RAI 414 — 07.03-31	7	8
RAI 414 — 07.04-14	9	9
RAI 414 — 07.07-20	10	10
RAI 414 — 07.07-22	11	11

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 414 — 07.02-32	October 28, 2010
RAI 414 — 07.03-33	October 28, 2010
RAI 414 — 07.02-30	October 28, 2010
RAI 414 — 07.03-31	October 28, 2010
RAI 414 — 07.04-14	October 28, 2010
RAI 414 — 07.07-20	October 28, 2010
RAI 414 — 07.07-22	October 28, 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](mailto:Martin.Bryan.ext@areva.com)

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

**Sent:** Tuesday, June 15, 2010 4:58 PM

**To:** ZZ-DL-A-USEPR-DL

**Cc:** Truong, Tung; Morton, Wendell; Spaulding, Deirdre; Mott, Kenneth; Jackson, Terry; Canova, Michael; Colaccino, Joseph; ArevaEPRDCPEm Resource

**Subject:** U.S. EPR Design Certification Application RAI No. 414(4394,4398,4752,4548), FSAR Ch. 7 OPEN ITEM

Attached please find the subject requests for additional information (RAI). A draft of the RAI was provided to you on June 8, 2010, and on June 15, 2010, you informed us that the RAI is clear and no further clarification is needed. As a result, no change is made to the draft RAI. The question in this RAI is an OPEN ITEM in the safety evaluation report for Chapter 7 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,  
Getachew Tesfaye  
Sr. Project Manager  
NRO/DNRL/NARP  
(301) 415-3361

**Hearing Identifier:** AREVA\_EPR\_DC\_RAIs  
**Email Number:** 3922

**Mail Envelope Properties** (2FBE1051AEB2E748A0F98DF9EEE5A5D4C818B8)

**Subject:** Response to U.S. EPR Design Certification Application RAI No. 414, FSAR Ch. 7  
OPEN ITEM, Supplement 16  
**Sent Date:** 5/22/2012 4:43:03 PM  
**Received Date:** 5/22/2012 4:43:24 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  
"Tsfaye, Getachew" <Getachew.Tsfaye@nrc.gov>  
Tracking Status: None

**Post Office:** auscharm02.adom.ad.corp

<b>Files</b>	<b>Size</b>	<b>Date &amp; Time</b>
MESSAGE	33748	5/22/2012 4:43:24 PM

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