# **ArevaEPRDCPEm Resource**

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

Sent: Thursday, December 13, 2012 5:39 PM

To: Snyder, Amy

Cc: BENNETT Kathy (AREVA); DELANO Karen (AREVA); LEIGHLITER John (AREVA);

ROMINE Judy (AREVA); RYAN Tom (AREVA); Hearn, Peter

**Subject:** Response to U.S. EPR Design Certification Application RAI No. 513 (5971,5040), FSAR Ch.

9, Supplement 9

Amy,

AREVA NP Inc. letter NRC:12:064 dated December 13, 2012 provides a technically correct and complete final response to two of the remaining six questions in RAI 513. AREVA Transnuclear, Inc. has determined that some of the material contained in the response is proprietary. An affidavit is provided, 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 response to the subject questions.

Question #	Start Page	End Page
RAI 513 — 09.01.01-53	2	5
RAI 513 — 09.01.01-54	6	6

The schedule for a technically correct and complete final response to the remaining four questions is unchanged as shown in the following table.

Question #	Response Date
RAI 513 — 09.01.01-58	June 28, 2013
RAI 513 — 09.01.01-61	June 28, 2013
RAI 513 — 09.01.01-62	June 28, 2013
RAI 513 — 09.01.04-20	July 30, 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: <u>Dennis.Williford@areva.com</u>

**From:** WILLIFORD Dennis (RS/NB) **Sent:** Friday, August 31, 2012 8:23 AM **To:** Getachew.Tesfaye@nrc.gov

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

(RS/NB); KOWALSKI David (RS/NB)

Subject: Response to U.S. EPR Design Certification Application RAI No. 513 (5971,5040), FSAR Ch. 9, Supplement 8

Getachew,

AREVA NP Inc. provided a schedule for technically correct and complete responses to the ten questions in RAI No. 513 on October 27, 2011. Supplement 1, Supplement 2 and Supplement 3 responses to RAI No. 513 were sent on December 13, 2011, January 25, 2012, and February 24, 2012, respectively, to provide a revised schedule. Supplement 4 response was sent on April 17, 2012 to provide a technically correct INTERIM response to Question 09.01.01-59 and a revised schedule for the final response to this question. On April 24, 2012, AREVA NP submitted Supplement 5 to provide a technically correct and complete final response to one (Question 09.01.01-56) of the 10 questions in RAI 513. Supplement 6 response sent on June 5, 2012 provided a revised schedule for the remaining questions. Supplement 7 response was sent on August 17, 2012 to provide a technically correct and complete final response to three of the remaining nine questions in RAI 513 and a revised schedule for two questions.

The schedule for a technically correct and complete final response to two of the remaining six questions has been revised as shown in the following table.

Question #	Response Date	
RAI 513 — 09.01.01-53	December 13, 2012	
RAI 513 — 09.01.01-54	December 13, 2012	
RAI 513 — 09.01.01-58	June 28, 2013	
RAI 513 — 09.01.01-61	June 28, 2013	
RAI 513 — 09.01.01-62	June 28, 2013	
RAI 513 — 09.01.04-20	July 30, 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: WILLIFORD Dennis (RS/NB)
Sent: Friday, August 17, 2012 3:11 PM

**To:** Getachew.Tesfaye@nrc.gov

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

RS/NB)

Subject: Response to U.S. EPR Design Certification Application RAI No. 513 (5971,5040), FSAR Ch. 9, Supplement 7

Getachew,

AREVA NP Inc. letter NRC:12:044 dated August 17, 2012 provides a technically correct and complete final response to three of the remaining nine questions in RAI 513. As AREVA has determined some of the material

contained in the response to be proprietary, an affidavit is provided, 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 response to the subject questions.

Question #	Start Page	End Page
RAI 513 — 09.01.01-57	2	2
RAI 513 — 09.01.01-59	3	4
RAI 513 — 09.01.01-60	5	5

The schedule for a technically correct and complete final response to two of the remaining six questions has been revised as shown in the following table.

Question #	Response Date
RAI 513 — 09.01.01-53	August 31, 2012
RAI 513 — 09.01.01-54	August 31, 2012
RAI 513 — 09.01.01-58	June 28, 2013
RAI 513 — 09.01.01-61	June 28, 2013
RAI 513 — 09.01.01-62	June 28, 2013
RAI 513 — 09.01.04-20	July 30, 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:** WILLIFORD Dennis (RS/NB) **Sent:** Thursday, July 26, 2012 9:46 PM

**To:** Getachew.Tesfaye@nrc.gov

**Cc:** BENNETT Kathy (RS/NB); DELANO Karen (RS/NB); ROMINE Judy (RS/NB); RYAN Tom (RS/NB); GARDNER Darrell (RS/NB) (Darrell.Gardner@areva.com); VANCE Brian (RS/NB); LEIGHLITER John (RS/NB)

**Subject:** Response to U.S. EPR Design Certification Application RAI No. 513 (5971,5040), FSAR Ch. 9, Questions 9.1.1-53,-54,-57,-59 and -60 - STATUS

#### Getachew.

AREVA appreciates the notification you provided yesterday on the review status of the DRAFT RAI responses submitted on June 26<sup>th</sup> and understands that the NRC staff needs additional time to complete their review and provide comments. AREVA will provide a revised schedule for submittal of the final responses to these 5 questions after receipt and evaluation of NRC staff comments.

The schedule for a technically correct and complete final response to the other 4 questions remains unchanged as shown below.

Question #	Response Date	
RAI 513 — 09.01.01-53	TBD	
RAI 513 — 09.01.01-54	TBD	
RAI 513 — 09.01.01-57	TBD	
RAI 513 — 09.01.01-58	June 28, 2013	
RAI 513 — 09.01.01-59	TBD	
RAI 513 — 09.01.01-60	TBD	
RAI 513 — 09.01.01-61	June 28, 2013	
RAI 513 — 09.01.01-62	June 28, 2013	
RAI 513 — 09.01.04-20	July 30, 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:** WILLIFORD Dennis (RS/NB) **Sent:** Tuesday, June 05, 2012 2:43 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. 513 (5971,5040), FSAR Ch. 9, Supplement 6

### Getachew,

AREVA NP Inc. provided a schedule for technically correct and complete responses to the ten questions in RAI No. 513 on October 27, 2011. Supplement 1, Supplement 2 and Supplement 3 responses to RAI No. 513 were sent on December 13, 2011, January 25, 2012, and February 24, 2012, respectively, to provide a revised schedule. Supplement 4 response was sent on April 17, 2012 to provide a technically correct INTERIM response to Question 09.01.01-59 and a revised schedule for the final response to this question. On April 24, 2012, AREVA NP submitted Supplement 5 to provide a technically correct and complete final response to one (Question 09.01.01-56) of the 10 questions in RAI 513.

The schedule for a technically correct and complete final response to the remaining 9 questions has been changed as shown below. This schedule was transmitted to the NRC in AREVA NP letter NRC:12:024 dated May 10, 2012.

Question #	Response Date
RAI 513 — 09.01.01-53	July 26, 2012
RAI 513 — 09.01.01-54	July 26, 2012

RAI 513 — 09.01.01-57	July 26, 2012
RAI 513 — 09.01.01-58	June 28, 2013
RAI 513 — 09.01.01-59	July 26, 2012
RAI 513 — 09.01.01-60	July 26, 2012
RAI 513 — 09.01.01-61	June 28, 2013
RAI 513 — 09.01.01-62	June 28, 2013
RAI 513 — 09.01.04-20	July 30, 2013

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:** Tuesday, April 24, 2012 5:02 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. 513 (5971,5040), FSAR Ch. 9, Supplement 5

#### Getachew.

AREVA NP Inc. provided a schedule for technically correct and complete responses to the ten questions in RAI No. 513 on October 27, 2011. Supplement 1, Supplement 2 and Supplement 3 responses to RAI No. 513 were sent on December 13, 2011, January 25, 2012, and February 24, 2012, respectively, to provide a revised schedule. Supplement 4 response was sent on April 17, 2012 to provide a technically correct INTERIM response to Question 09.01.01-59 and a revised schedule for the final response to this question.

The attached file, "RAI 513 Supplement 5 Response US EPR DC.pdf" provides a technically correct and complete final response to Question 09.01.01-56. The following table indicates the pages in the response document, "RAI 513 Supplement 5 Response US EPR DC.pdf" that contain AREVA NP's response to the subject question.

Question #	Start Page	End Page
RAI 513 — 09.01.01-56	2	3

The schedule for a technically correct and complete final response to the remaining 9 questions is unchanged as shown below.

Question #	Response Date
RAI 513 — 09.01.01-53	July 26, 2012
RAI 513 — 09.01.01-54	July 26, 2012
RAI 513 — 09.01.01-57	July 26, 2012
RAI 513 — 09.01.01-58	August 30, 2013

RAI 513 — 09.01.01-59	July 26, 2012		
RAI 513 — 09.01.01-60	July 26, 2012		
RAI 513 — 09.01.01-61	August 30, 2013		
RAI 513 — 09.01.01-62	August 30, 2013		
RAI 513 — 09.01.04-20	August 30, 2013		

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:** Tuesday, April 17, 2012 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. 513 (5971,5040), FSAR Ch. 9, Supplement 4

Getachew,

AREVA NP Inc. provided a schedule for technically correct and complete responses to the ten questions in RAI No. 513 on October 27, 2011. Supplement 1, Supplement 2 and Supplement 3 responses to RAI No. 513 were sent on December 13, 2011, January 25, 2012, and February 24, 2012, respectively, to provide a revised schedule.

The attached file, "RAI 513 Supplement 4 Response US EPR DC-INTERIM.pdf" provides a technically correct INTERIM response to Question 09.01.01-59. The following table indicates the pages in the response document, "RAI 513 Supplement 4 Response US EPR DC-INTERIM.pdf" that contains AREVA NP's INTERIM response to the subject question.

Question #	Start Page	End Page
RAI 513 — 09.01.01-59	2	2

The schedule for a technically correct and complete final response to this question (Question 09.01.01-59) has been changed as provided below. The schedule for the final response to the remaining questions is unchanged.

Question #	Response Date
RAI 513 — 09.01.01-53	July 26, 2012
RAI 513 — 09.01.01-54	July 26, 2012
RAI 513 — 09.01.01-56	April 26, 2012
RAI 513 — 09.01.01-57	July 26, 2012
RAI 513 — 09.01.01-58	August 30, 2013

RAI 513 — 09.01.01-59	July 26, 2012
RAI 513 — 09.01.01-60	July 26, 2012
RAI 513 — 09.01.01-61	August 30, 2013
RAI 513 — 09.01.01-62	August 30, 2013
RAI 513 — 09.01.04-20	August 30, 2013

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 24, 2012 8:51 AM

To: Getachew.Tesfaye@nrc.gov

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

(RS/NB)

Subject: Response to U.S. EPR Design Certification Application RAI No. 513 (5971,5040), FSAR Ch. 9, Supplement 3

Getachew,

AREVA NP Inc. provided a schedule for technically correct and complete responses to the ten questions in RAI No. 513 on October 27, 2011. Supplement 1 and Supplement 2 responses to RAI No. 513 were sent on December 13, 2011 and January 25, 2012, respectively, to provide a revised schedule.

The schedule for technically correct and complete responses to the ten questions has been changed as provided below. This schedule was transmitted to the NRC in AREVA NP letter NRC:12:008 dated February 21, 2012.

Question #	Response Date
RAI 513 — 09.01.01-53	July 26, 2012
RAI 513 — 09.01.01-54	July 26, 2012
RAI 513 — 09.01.01-56	April 26, 2012
RAI 513 — 09.01.01-57	July 26, 2012
RAI 513 — 09.01.01-58	August 30, 2013
RAI 513 — 09.01.01-59	April 26, 2012
RAI 513 — 09.01.01-60	July 26, 2012
RAI 513 — 09.01.01-61	August 30, 2013
RAI 513 — 09.01.01-62	August 30, 2013
RAI 513 — 09.01.04-20	August 30, 2013

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 12:54 PM

To: Getachew.Tesfaye@nrc.gov

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

(RS/NB); KOWALSKI David (RS/NB); Michael.Miernicki@nrc.gov; peter.hearn@nrc.gov

Subject: Response to U.S. EPR Design Certification Application RAI No. 513 (5971,5040), FSAR Ch. 9, Supplement 2

#### Getachew.

AREVA NP Inc. (AREVA NP) provided a schedule for a response to the ten questions in RAI No. 513 on October 27, 2011. Supplement 1 response sent on December 13, 2011 provided a preliminary revised schedule.

The preliminary schedule for the response to these ten questions has been changed as provided below. This schedule is being reevaluated and a new supplement with a revised schedule will be transmitted by February 21, 2012.

Question #	Response Date
RAI 513 — 09.01.01-53	February 21, 2012
RAI 513 — 09.01.01-54	February 21, 2012
RAI 513 — 09.01.01-56	February 21, 2012
RAI 513 — 09.01.01-57	February 21, 2012
RAI 513 — 09.01.01-58	February 21, 2012
RAI 513 — 09.01.01-59	February 21, 2012
RAI 513 — 09.01.01-60	February 21, 2012
RAI 513 — 09.01.01-61	February 21, 2012
RAI 513 — 09.01.01-62	February 21, 2012
RAI 513 — 09.01.04-20	February 21, 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: Tuesday, December 13, 2011 4:55 PM

To: Getachew.Tesfaye@nrc.gov

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

(RS/NB); KOWALSKI David (RS/NB)

Subject: Response to U.S. EPR Design Certification Application RAI No. 513 (5971,5040), FSAR Ch. 9, Supplement 1

Getachew,

AREVA NP Inc. (AREVA NP) provided a schedule for a response to the 10 questions of RAI 513 on October 27, 2011.

A preliminary revised schedule for technically correct and complete responses to these 10 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 513 — 09.01.01-53	January 25, 2012
RAI 513 — 09.01.01-54	January 25, 2012
RAI 513 — 09.01.01-56	January 25, 2012
RAI 513 — 09.01.01-57	January 25, 2012
RAI 513 — 09.01.01-58	January 25, 2012
RAI 513 — 09.01.01-59	January 25, 2012
RAI 513 — 09.01.01-60	January 25, 2012
RAI 513 — 09.01.01-61	January 25, 2012
RAI 513 — 09.01.01-62	January 25, 2012
RAI 513 — 09.01.04-20	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: Thursday, October 27, 2011 3:04 PM

To: 'Tesfaye, Getachew'

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

(RS/NB); KOWALSKI David (RS/NB)

Subject: Response to U.S. EPR Design Certification Application RAI No. 513 (5971,5040), FSAR Ch. 9

Getachew,

Attached please find AREVA NP Inc.'s response to the subject request for additional information (RAI). The attached file, "RAI 513 Response US EPR DC.pdf," provides a schedule since a technically correct and complete response to the 10 questions cannot be provided at this time.

The following table indicates the respective pages in the response document, "RAI 513 Response US EPR DC.pdf," that contain AREVA NP's response to the subject questions.

Question #	Start Page	End Page
RAI 513 — 09.01.01-53	2	2
RAI 513 — 09.01.01-54	3	3
RAI 513 — 09.01.01-56	4	4
RAI 513 — 09.01.01-57	5	5
RAI 513 — 09.01.01-58	6	6
RAI 513 — 09.01.01-59	7	7
RAI 513 — 09.01.01-60	8	8
RAI 513 — 09.01.01-61	9	9
RAI 513 — 09.01.01-62	10	10
RAI 513 — 09.01.04-20	11	12

A preliminary schedule for technically correct and complete responses to the 10 questions in RAI 513 is provided below. This schedule is being reevaluated and a new supplement with a revised schedule will be transmitted by December 14, 2011.

Question #	Response Date
RAI 513 — 09.01.01-53	December 14, 2011
RAI 513 — 09.01.01-54	December 14, 2011
RAI 513 — 09.01.01-56	December 14, 2011
RAI 513 — 09.01.01-57	December 14, 2011
RAI 513 — 09.01.01-58	December 14, 2011
RAI 513 — 09.01.01-59	December 14, 2011
RAI 513 — 09.01.01-60	December 14, 2011
RAI 513 — 09.01.01-61	December 14, 2011
RAI 513 — 09.01.01-62	December 14, 2011
RAI 513 — 09.01.04-20	December 14, 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:** Tesfaye, Getachew [mailto:Getachew.Tesfaye@nrc.gov]

Sent: Friday, September 30, 2011 3:01 PM

To: ZZ-DL-A-USEPR-DL

Cc: Patel, Amrit; Lu, Shanlai; Donoghue, Joseph; Nolan, Ryan; Segala, John; Lee, Samuel; Hearn, Peter; Colaccino,

Joseph; ArevaEPRDCPEm Resource

Subject: U.S. EPR Design Certification Application RAI No. 513 (5971,5040), FSAR Ch. 9

Attached please find the subject requests for additional information (RAI). A draft of the RAI was provided to you on September 14, 2011, and discussed with your staff on September 29, 2011. Draft RAI Question 09.01.01-55 was deleted, and Draft RAI Questions 09.01.01-56 and 09.01.01-58 were modified 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: 4150

**Mail Envelope Properties** (554210743EFE354B8D5741BEB695E65602AA83)

**Subject:** Response to U.S. EPR Design Certification Application RAI No. 513 (5971,5040),

FSAR Ch. 9, Supplement 9

 Sent Date:
 12/13/2012 5:38:51 PM

 Received Date:
 12/13/2012 5:38:56 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

"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

"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 21873 12/13/2012 5:38:56 PM

**Options** 

Priority:StandardReturn Notification:NoReply Requested:NoSensitivity:Normal

Expiration Date: Recipients Received: