

ArevaEPRDCPEm Resource

From: WELLS Russell (AREVA) [Russell.Wells@areva.com]
Sent: Thursday, May 19, 2011 11:06 AM
To: Tesfaye, Getachew
Cc: WILLIFORD Dennis (AREVA); KOWALSKI David (AREVA); BENNETT Kathy (AREVA); DELANO Karen (AREVA); ROMINE Judy (AREVA); RYAN Tom (AREVA)
Subject: Response to U.S. EPR Design Certification Application RAI No. 294, FSAR Ch. 10, Supplement 13
Attachments: RAI 294 Supplement 13 Response US EPR DC.pdf

Getachew,

AREVA NP Inc. provided a schedule for technically correct and complete responses to the seven questions in RAI No. 294 on February 25, 2010. Supplement 1, Supplement 2, Supplement 3, Supplement 4, Supplement 5, Supplement 6, Supplement 7, Supplement 8, Supplement 9, Supplement 10, Supplement 11 and Supplement 12 responses to RAI No. 294 were sent on April 16, 2010, May 12, 2010, June 11, 2010, July 13, 2010, August 13, 2010, September 10, 2010, October 15, 2010, November 17, 2010, December 20, 2010, February 10, 2011, March 11, 2011 and April 14, 2011, respectively, to provide a revised schedule.

The attached file, "RAI 294 Supplement 13 Response US EPR DC.pdf" provides technically correct and complete FINAL responses to two of the seven questions.

The following table indicates the respective pages in the response document, "RAI 294 Supplement 13 Response US EPR DC.pdf," that contain AREVA NP's response to the subject questions.

Question #	Start Page	End Page
RAI 294 — 10.02.03-18	2	2
RAI 294 — 10.02.03-21	3	3

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

Question #	Response Date
RAI 294 — 10.02.03-17	June 24, 2011
RAI 294 — 10.02.03-19	June 24, 2011
RAI 294 — 10.02.03-20	June 24, 2011
RAI 294 — 10.02.03-22	June 24, 2011
RAI 294 — 10.02.03-23	June 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

From: WELLS Russell (RS/NB)
Sent: Thursday, April 14, 2011 2:33 PM
To: 'Tesfaye, Getachew'
Cc: KOWALSKI David (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. 294, FSAR Ch. 10, Supplement 12

Getachew,

AREVA NP Inc. provided a schedule for technically correct and complete responses to the seven questions in RAI No. 294 on February 25, 2010. Supplement 1, Supplement 2, Supplement 3, Supplement 4, Supplement 5, Supplement 6, Supplement 7, Supplement 8, Supplement 9, Supplement 10 and Supplement 11 responses to RAI No. 294 were sent on April 16, 2010, May 12, 2010, June 11, 2010, July 13, 2010, August 13, 2010, September 10, 2010, October 15, 2010, November 17, 2010, December 20, 2010, February 10, 2011 and March 11, 2011, respectively, to provide a revised schedule.

To provide additional time to interact with the NRC, a revised schedule is provided in this e-mail.

The schedule for technically correct and complete responses to the seven questions is provided below:

Question #	Response Date
RAI 294 — 10.02.03-17	May 19, 2011
RAI 294 — 10.02.03-18	May 19, 2011
RAI 294 — 10.02.03-19	May 19, 2011
RAI 294 — 10.02.03-20	May 19, 2011
RAI 294 — 10.02.03-21	May 19, 2011
RAI 294 — 10.02.03-22	May 19, 2011
RAI 294 — 10.02.03-23	May 19, 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: WELLS Russell (RS/NB)
Sent: Friday, March 11, 2011 1:03 PM
To: Tesfaye, Getachew
Cc: KOWALSKI David (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. 294, FSAR Ch. 10, Supplement 11
Importance: High

Getachew,

AREVA NP Inc. provided a schedule for technically correct and complete responses to the seven questions in RAI No. 294 on February 25, 2010. Supplement 1, Supplement 2, Supplement 3, Supplement 4, Supplement 5, Supplement 6, Supplement 7, Supplement 8, Supplement 9 and Supplement 10 responses to RAI No. 294 were sent on April 16, 2010, May 12, 2010, June 11, 2010, July 13, 2010, August 13, 2010, September 10, 2010, October 15, 2010, November 17, 2010, December 20, 2010 and February 10, 2011, respectively, to provide a revised schedule.

To provide additional time to interact with the NRC, a revised schedule is provided in this e-mail.

The schedule for technically correct and complete responses to the seven questions is provided below:

Question #	Response Date
RAI 294 — 10.02.03-17	April 15, 2011
RAI 294 — 10.02.03-18	April 15, 2011
RAI 294 — 10.02.03-19	April 15, 2011
RAI 294 — 10.02.03-20	April 15, 2011
RAI 294 — 10.02.03-21	April 15, 2011
RAI 294 — 10.02.03-22	April 15, 2011
RAI 294 — 10.02.03-23	April 15, 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: BRYAN Martin (External RS/NB)

Sent: Thursday, February 10, 2011 9:49 AM

To: Tesfaye, Getachew

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

Subject: Response to U.S. EPR Design Certification Application RAI No. 294, FSAR Ch. 10, Supplement 10

Getachew,

AREVA NP Inc. provided a schedule for technically correct and complete responses to the seven questions in RAI No. 294 on February 25, 2010. Supplement 1, Supplement 2, Supplement 3, Supplement 4, Supplement 5, Supplement 6, Supplement 7, Supplement 8 and Supplement 9 responses to RAI No. 294 were sent on April 16, 2010, May 12, 2010, June 11, 2010, July 13, 2010, August 13, 2010, September 10, 2010, October 15, 2010, November 17, 2010 and December 20, 2010, respectively, to provide a revised schedule.

To provide additional time to interact with the NRC, a revised schedule is provided in this e-mail.

The schedule for technically correct and complete responses to the seven questions is provided below:

Question #	Response Date
RAI 294 — 10.02.03-17	March 11, 2011
RAI 294 — 10.02.03-18	March 11, 2011
RAI 294 — 10.02.03-19	March 11, 2011
RAI 294 — 10.02.03-20	March 11, 2011
RAI 294 — 10.02.03-21	March 11, 2011
RAI 294 — 10.02.03-22	March 11, 2011
RAI 294 — 10.02.03-23	March 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

From: BRYAN Martin (External RS/NB)
Sent: Monday, December 20, 2010 11:58 AM
To: Tesfaye, Getachew
Cc: DELANO Karen (RS/NB); ROMINE Judy (RS/NB); BENNETT Kathy (RS/NB); KOWALSKI David (RS/NB); 'Carneal, Jason'
Subject: Response to U.S. EPR Design Certification Application RAI No. 294, FSAR Ch. 10, Supplement 9

Getachew,

AREVA NP Inc. provided a schedule for technically correct and complete responses to the seven questions in RAI No. 294 on February 25, 2010. Supplement 1, Supplement 2, Supplement 3, Supplement 4, Supplement 5, Supplement 6, Supplement 7 and Supplement 8 responses to RAI No. 294 were sent on April 16, 2010, May 12, 2010, June 11, 2010, July 13, 2010, August 13, 2010, September 10, 2010, October 15, 2010 and November 17, 2010, respectively, to provide a revised schedule.

To provide additional time to interact with the NRC, a revised schedule is provided in this e-mail.

The schedule for technically correct and complete responses to the seven questions is provided below:

Question #	Response Date
RAI 294 — 10.02.03-17	February 10, 2011
RAI 294 — 10.02.03-18	February 10, 2011
RAI 294 — 10.02.03-19	February 10, 2011
RAI 294 — 10.02.03-20	February 10, 2011
RAI 294 — 10.02.03-21	February 10, 2011
RAI 294 — 10.02.03-22	February 10, 2011
RAI 294 — 10.02.03-23	February 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

From: BRYAN Martin (External RS/NB)
Sent: Wednesday, November 17, 2010 12:04 PM
To: 'Tesfaye, Getachew'
Cc: DELANO Karen (RS/NB); ROMINE Judy (RS/NB); BENNETT Kathy (RS/NB); KOWALSKI David (RS/NB); 'Miernicki, Michael'
Subject: Response to U.S. EPR Design Certification Application RAI No. 294, FSAR Ch. 10, Supplement 8

Getachew,

AREVA NP Inc. provided a schedule for technically correct and complete responses to the seven questions in RAI No. 294 on February 25, 2010. Supplement 1, Supplement 2, Supplement 3, Supplement 4, Supplement 5, Supplement 6 and Supplement 7 responses to RAI No. 294 were sent on April 16, 2010, May 12, 2010, June 11, 2010, July 13, 2010, August 13, 2010, September 10, 2010 and October 15, 2010, respectively, to provide a revised schedule.

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

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

Question #	Response Date
RAI 294 — 10.02.03-17	December 22, 2010
RAI 294 — 10.02.03-18	December 22, 2010
RAI 294 — 10.02.03-19	December 22, 2010
RAI 294 — 10.02.03-20	December 22, 2010
RAI 294 — 10.02.03-21	December 22, 2010
RAI 294 — 10.02.03-22	December 22, 2010
RAI 294 — 10.02.03-23	December 22, 2010

Sincerely,

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

From: BRYAN Martin (External RS/NB)
Sent: Friday, October 15, 2010 9:40 AM
To: 'Tesfaye, Getachew'
Cc: DELANO Karen (RS/NB); ROMINE Judy (RS/NB); BENNETT Kathy (RS/NB); KOWALSKI David (RS/NB)
Subject: Response to U.S. EPR Design Certification Application RAI No. 294, FSAR Ch. 10, Supplement 7

Getachew,

AREVA NP Inc. provided a schedule for technically correct and complete responses to the seven questions in RAI No. 294 on February 25, 2010. Supplement 1, Supplement 2, Supplement 3, Supplement 4 and Supplement 5 responses to RAI No. 294 were sent on April 16, 2010, May 12, 2010, June 11, 2010, July 13, 2010 and August 13, 2010, respectively, to provide a revised schedule. Supplement 6 response to RAI No. 294 was sent on September 10, 2010, to revise the schedule to allow time for further interaction between AREVA and the NRC staff.

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

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

Question #	Response Date
RAI 294 — 10.02.03-17	November 17, 2010
RAI 294 — 10.02.03-18	November 17, 2010
RAI 294 — 10.02.03-19	November 17, 2010
RAI 294 — 10.02.03-20	November 17, 2010
RAI 294 — 10.02.03-21	November 17, 2010
RAI 294 — 10.02.03-22	November 17, 2010
RAI 294 — 10.02.03-23	November 17, 2010

Sincerely,

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

From: BRYAN Martin (External RS/NB)
Sent: Friday, September 10, 2010 9:55 AM
To: 'Tesfaye, Getachew'
Cc: DELANO Karen (RS/NB); ROMINE Judy (RS/NB); BENNETT Kathy (RS/NB); KOWALSKI David (RS/NB)
Subject: Response to U.S. EPR Design Certification Application RAI No. 294, FSAR Ch. 10, Supplement 6

Getachew,

AREVA NP Inc. provided a schedule for technically correct and complete responses to the seven questions in RAI No. 294 on February 25, 2010. Supplement 1, Supplement 2, Supplement 3, Supplement 4 and Supplement 5 responses to RAI No. 294 were sent on April 16, 2010, May 12, 2010, June 11, 2010, July 13, 2010 and August 13, 2010, respectively, to provide a revised schedule.

On June 11, 2010, AREVA provided DRAFT responses to the seven questions in RAI No. 294. To allow time for further interaction between AREVA and the NRC staff, a revised schedule is provided in this e-mail.

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

Question #	Response Date
RAI 294 — 10.02.03-17	October 15, 2010
RAI 294 — 10.02.03-18	October 15, 2010
RAI 294 — 10.02.03-19	October 15, 2010
RAI 294 — 10.02.03-20	October 15, 2010
RAI 294 — 10.02.03-21	October 15, 2010
RAI 294 — 10.02.03-22	October 15, 2010
RAI 294 — 10.02.03-23	October 15, 2010

Sincerely,

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

From: BRYAN Martin (EXT)
Sent: Friday, August 13, 2010 7:14 AM
To: 'Tesyfaye, Getachew'
Cc: DELANO Karen (RS/NB); ROMINE Judy (RS/NB); BENNETT Kathy (RS/NB); KOWALSKI David (RS/NB); NOXON David (RS/NB)
Subject: Response to U.S. EPR Design Certification Application RAI No. 294, FSAR Ch. 10, Supplement 5

Getachew,

AREVA NP Inc. provided a schedule for technically correct and complete responses to the seven questions in RAI No. 294 on February 25, 2010. Supplement 1, Supplement 2, Supplement 3 and Supplement 4 responses to RAI No. 294 were sent on April 16, 2010, May 12, 2010, June 11, 2010 and July 13, 2010, respectively, to provide a revised schedule.

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

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

Question #	Response Date
RAI 294 — 10.02.03-17	September 10, 2010
RAI 294 — 10.02.03-18	September 10, 2010
RAI 294 — 10.02.03-19	September 10, 2010
RAI 294 — 10.02.03-20	September 10, 2010
RAI 294 — 10.02.03-21	September 10, 2010
RAI 294 — 10.02.03-22	September 10, 2010
RAI 294 — 10.02.03-23	September 10, 2010

Sincerely,

Martin (Marty) C. Bryan
U.S. EPR Design Certification Licensing Manager
AREVA NP Inc.
Tel: (434) 832-3016

702 561-3528 cell
Martin.Bryan.ext@areva.com

From: BRYAN Martin (EXT)
Sent: Tuesday, July 13, 2010 4:37 PM
To: 'Tesfaye, Getachew'
Cc: DELANO Karen V (AREVA NP INC); ROMINE Judy (AREVA NP INC); BENNETT Kathy A (OFR) (AREVA NP INC); KOWALSKI David J (AREVA NP INC)
Subject: Response to U.S. EPR Design Certification Application RAI No. 294, FSAR Ch. 10, Supplement 4

Getachew,

AREVA NP Inc. provided a schedule for technically correct and complete responses to the seven questions in RAI No. 294 on February 25, 2010. Supplement 1 and Supplement 2 responses to RAI No. 294 were sent on April 16, 2010 and May 12, 2010, respectively, to provide a revised schedule.

Supplement 3 and Supplement 4 responses to RAI No. 294 were sent on June 11, 2010 to provide a revised schedule and a draft response, respectively.

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

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

Question #	Response Date
RAI 294 — 10.02.03-17	August 13, 2010
RAI 294 — 10.02.03-18	August 13, 2010
RAI 294 — 10.02.03-19	August 13, 2010
RAI 294 — 10.02.03-20	August 13, 2010
RAI 294 — 10.02.03-21	August 13, 2010
RAI 294 — 10.02.03-22	August 13, 2010
RAI 294 — 10.02.03-23	August 13, 2010

Sincerely,

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

From: BRYAN Martin (EXT)
Sent: Friday, June 11, 2010 12:28 PM
To: 'Tesfaye, Getachew'
Cc: DELANO Karen V (AREVA NP INC); ROMINE Judy (AREVA NP INC); BENNETT Kathy A (OFR) (AREVA NP INC); KOWALSKI David J (AREVA NP INC)
Subject: Response to U.S. EPR Design Certification Application RAI No. 294, FSAR Ch. 10, Supplement 3

Getachew,

AREVA NP Inc. provided a schedule for technically correct and complete responses to the seven questions in RAI No. 294 on February 25, 2010. Supplement 1 and Supplement 2 responses to RAI No. 294 were sent on April 16, 2010 and May 12, 2010, respectively, to provide a revised schedule.

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

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

Question #	Response Date
RAI 294 — 10.02.03-17	July 14, 2010
RAI 294 — 10.02.03-18	July 14, 2010
RAI 294 — 10.02.03-19	July 14, 2010
RAI 294 — 10.02.03-20	July 14, 2010
RAI 294 — 10.02.03-21	July 14, 2010
RAI 294 — 10.02.03-22	July 14, 2010
RAI 294 — 10.02.03-23	July 14, 2010

Sincerely,

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

From: BRYAN Martin (EXT)
Sent: Wednesday, May 12, 2010 5:19 PM
To: 'Tesfaye, Getachew'
Cc: DELANO Karen V (AREVA NP INC); ROMINE Judy (AREVA NP INC); BENNETT Kathy A (OFR) (AREVA NP INC); KOWALSKI David J (AREVA NP INC)
Subject: Response to U.S. EPR Design Certification Application RAI No. 294, FSAR Ch. 10, Supplement 2

Getachew,

AREVA NP Inc. provided a schedule for technically correct and complete responses to the 7 questions in RAI No. 294 on February 25, 2010. Supplement 1 response to RAI No. 294 was sent on April 16, 2010 to provide a revised schedule. An interaction to discuss the proposed responses was originally scheduled on March 26, 2010, but has been subsequently rescheduled. As agreed with the NRC, additional time is needed for AREVA to discuss the responses to these questions.

The schedule for technically correct and complete responses to these questions has been revised as provided below.

Question #	Response Date
RAI 294 — 10.02.03-17	June 11, 2010
RAI 294 — 10.02.03-18	June 11, 2010
RAI 294 — 10.02.03-19	June 11, 2010
RAI 294 — 10.02.03-20	June 11, 2010
RAI 294 — 10.02.03-21	June 11, 2010

RAI 294 — 10.02.03-22	June 11, 2010
RAI 294 — 10.02.03-23	June 11, 2010

Sincerely,

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

From: BRYAN Martin (EXT)
Sent: Friday, April 16, 2010 12:31 PM
To: 'Tefaye, Getachew'
Cc: DELANO Karen V (AREVA NP INC); ROMINE Judy (AREVA NP INC); BENNETT Kathy A (OFR) (AREVA NP INC); KOWALSKI David J (AREVA NP INC)
Subject: Response to U.S. EPR Design Certification Application RAI No. 294, FSAR Ch. 10, Supplement 1

Getachew,

AREVA NP Inc. provided a schedule for technically correct and complete responses to the 7 questions in RAI No. 294 on February 25, 2010. To allow time for AREVA to discuss the response to these questions with the NRC, a revised schedule is provided in this e-mail.

The schedule for technically correct and complete responses to these questions has been revised as provided below.

Question #	Response Date
RAI 294 — 10.02.03-17	May 12, 2010
RAI 294 — 10.02.03-18	May 12, 2010
RAI 294 — 10.02.03-19	May 12, 2010
RAI 294 — 10.02.03-20	May 12, 2010
RAI 294 — 10.02.03-21	May 12, 2010
RAI 294 — 10.02.03-22	May 12, 2010
RAI 294 — 10.02.03-23	May 12, 2010

Sincerely,

Martin (Marty) C. Bryan
Licensing Advisory Engineer
AREVA NP Inc.
Tel: (434) 832-3016
Martin.Bryan.ext@areva.com

From: DUNCAN Leslie E (AREVA NP INC)
Sent: Thursday, February 25, 2010 1:55 PM
To: 'Tefaye, Getachew'
Cc: DELANO Karen V (AREVA NP INC); BENNETT Kathy A (OFR) (AREVA NP INC); ROMINE Judy (AREVA NP INC);

KOWALSKI David J (AREVA NP INC); BRYAN Martin (EXT)

Subject: Response to U.S. EPR Design Certification Application RAI No. 294, FSAR Ch. 10

Getachew,

Attached please find AREVA NP Inc.'s response to the subject request for additional information (RAI). The attached file, "RAI 294 Response US EPR DC.pdf," provides a schedule since a technically correct and complete response to the seven questions is not provided.

The following table provides the pages in the response document, "RAI 294 Response US EPR DC.pdf," containing the response to each question.

Question #	Start Page	End Page
RAI 294 — 10.02.03-17	2	2
RAI 294 — 10.02.03-18	3	3
RAI 294 — 10.02.03-19	4	4
RAI 294 — 10.02.03-20	5	5
RAI 294 — 10.02.03-21	6	6
RAI 294 — 10.02.03-22	7	7
RAI 294 — 10.02.03-23	8	8

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

Question #	Response Date
RAI 294 — 10.02.03-17	April 16, 2010
RAI 294 — 10.02.03-18	April 16, 2010
RAI 294 — 10.02.03-19	April 16, 2010
RAI 294 — 10.02.03-20	April 16, 2010
RAI 294 — 10.02.03-21	April 16, 2010
RAI 294 — 10.02.03-22	April 16, 2010
RAI 294 — 10.02.03-23	April 16, 2010

Sincerely,

Les Duncan
Licensing Engineer
AREVA NP Inc.
An AREVA and Siemens Company
Tel: (434) 832-2849
Leslie.Duncan@areva.com

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

Sent: Monday, October 05, 2009 5:22 PM

To: ZZ-DL-A-USEPR-DL

Cc: Honcharik, John; Terao, David; Hearn, Peter; Colaccino, Joseph; ArevaEPRDCPEm Resource

Subject: U.S. EPR Design Certification Application RAI No. 294 (3758), FSARCh. 10

Attached please find the subject requests for additional information (RAI). A draft of the RAI was provided to you on September 18, 2009, and on the October 5, 2009, 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 questions in this RAI are considered potential open items 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: 2994

Mail Envelope Properties (1F1CC1BBDC66B842A46CAC03D6B1CD41046225DE)

Subject: Response to U.S. EPR Design Certification Application RAI No. 294, FSAR Ch. 10, Supplement 13
Sent Date: 5/19/2011 11:05:53 AM
Received Date: 5/19/2011 11:05:57 AM
From: WELLS Russell (AREVA)

Created By: Russell.Wells@areva.com

Recipients:

"WILLIFORD Dennis (AREVA)" <Dennis.Williford@areva.com>
Tracking Status: None
"KOWALSKI David (AREVA)" <David.Kowalski@areva.com>
Tracking Status: None
"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: AUSLYNCMX02.adom.ad.corp

Files	Size	Date & Time
MESSAGE	24369	5/19/2011 11:05:57 AM
RAI 294 Supplement 13 Response US EPR DC.pdf		67436

Options

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

Response to

Request for Additional Information No. 294 (3758), Supplement 13

10/5/2009

U.S. EPR Standard Design Certification

AREVA NP Inc.

Docket No. 52-020

SRP Section: 10.02.03 - Turbine Rotor Integrity

Application Section: 10.2.3

**QUESTIONS for Component Integrity, Performance, and Testing Branch 1
(AP1000/EPR Projects) (CIB1)**

Question 10.02.03-18:

POTENTIAL OPEN ITEM

In response to RAI No. 100, Question 10.02.03-4, the applicant responded that the specific method to calculate fracture toughness properties of the turbine rotor from material properties tests will be identified by the COL applicant upon selection of the specific rotor design. The staff finds this acceptable, since the COL applicant will provide the specific method of calculating the fracture toughness properties depending upon the specific rotor design. However, the COL Information Item 10.2-5 in the FSAR should be revised to specify that the method of calculating the fracture toughness properties of the turbine rotor material should be provided.

Response to Question 10.02.03-18:

U.S. EPR FSAR Tier 2, Table 1.8-2—U.S. EPR Combined License Information Items, Item 10.2-2 was revised in U.S. EPR FSAR, Revision 2 to state:

“A COL applicant that references the U.S. EPR design certification will provide applicable material properties of the turbine rotor, including the method of calculating the fracture toughness properties, after the site-specific turbine has been procured.”

U.S. EPR FSAR Tier 2, Section 10.2.3.1 was revised in U.S. EPR FSAR, Revision 2 to incorporate this information.

FSAR Impact:

The U.S. EPR FSAR will not be changed as a result of this question.

Question 10.02.03-21:

POTENTIAL OPEN ITEM

In response to RAI No. 100, Question 10.02.03-9, the applicant stated that each specific turbine missile analysis is a function of the selected turbine and, therefore, is a COL applicant-provided analysis. Once a specific turbine design has been selected, the COL applicant provides a design-specific turbine missile analysis as required by the ITAAC Item Nos. 1a and 1b in FSAR Tier 1, Table 2.8.1-3. Therefore, the applicant considers that the turbine rotor inservice inspection program is correctly described in the FSAR Tier 2, Sections 10.2.3.6 and 10.2A.3.6, and associated ITAAC. The NRC staff notes that Section 10.2A.3.6 did specify that the COL applicant will provide the inspection program. However, Section 10.2A has been deleted, since an alternate turbine design will not be used. However, FSAR Tier 2, Section 10.2.3.6 for the standard turbine design only requires that the COL applicant provide the inspection interval, not the inspection program (which includes the types of inspections, extent of inspections, acceptance criteria, and inspection intervals). Therefore, the NRC staff requests that COL Information Item 10.2-5 for the standard turbine design in Table 1.8-2 of the FSAR Tier 2, be revised to state the inspection “program” and “interval” to ensure the COL applicant, submits the required information for the staff to review during the COL review.

Response to Question 10.02.03-21:

U.S. EPR FSAR Tier 2, Table 1.8-2—U.S. EPR Combined License Information Items, Item 10.2-5 was revised in U.S. EPR FSAR, Revision 2 to state:

“A COL applicant that references the U.S. EPR design certification will provide the site-specific turbine rotor inservice inspection program and inspection interval consistent with the manufacturer’s turbine missile analysis.”

U.S. EPR FSAR Tier 2, Section 10.2.3.6 was revised in U.S. EPR FSAR, Revision 2 to reflect this information.

FSAR Impact:

The U.S. EPR FSAR will not be changed as a result of this question.