## **ArevaEPRDCPEm Resource**

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

**Sent:** Thursday, June 30, 2011 8:34 PM

To: Tesfaye, Getachew

Cc: BENNETT Kathy (AREVA); DELANO Karen (AREVA); HALLINGER Pat (EXTERNAL

AREVA); ROMINÈ Judy (AREVA); RYAN Tom (AREVA); KOWALSKI David (AREVA); PATTON Jeff (AREVA); BALLARD Bob (AREVA); HARRINGTON James (AREVA)

Subject: DRAFT Response to U.S. EPR Design Certification Application RAI No. 385, FSAR Ch. 9

Questions 09.01.04-15,-16 & -17 (Part 3 of 4)

Attachments: RAI 385 Response Questions 09.01.04-15,-16 & -17 US EPR DC - DRAFT - Part 3 of 4.pdf

Importance: High

## Getachew

Attached is part 3 of 4 of the draft responses to RAI 385, Questions 09.01.04-15, 09.01.04-16 and 09.01.04-17.

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, June 30, 2011 8:31 PM

To: 'Tesfaye, Getachew'

**Cc:** BENNETT Kathy (RS/NB); DELANO Karen (RS/NB); HALLINGER Pat (EXT); ROMINE Judy (RS/NB); RYAN Tom (RS/NB); KOWALSKI David (RS/NB); PATTON Jeff (RS/NB); BALLARD Bob (EP/PE); HARRINGTON James (EP/PE)

Subject: DRAFT Response to U.S. EPR Design Certification Application RAI No. 385, FSAR Ch. 9, Questions 09.01.04-15,-

16 & -17 (Part 2 of 4) **Importance:** High

#### Getachew

Attached is part 2 of 4 of the draft responses to RAI 385, Questions 09.01.04-15, 09.01.04-16 and 09.01.04-17.

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, June 30, 2011 8:24 PM

**To:** 'Tesfaye, Getachew'

**Cc:** BENNETT Kathy (RS/NB); DELANO Karen (RS/NB); HALLINGER Pat (EXT); ROMINE Judy (RS/NB); RYAN Tom (RS/NB); KOWALSKI David (RS/NB); PATTON Jeff (RS/NB); BALLARD Bob (EP/PE); HARRINGTON James (EP/PE) **Subject:** DRAFT Response to U.S. EPR Design Certification Application RAI No. 385, ESAR Ch. 9, Questions 09 01 04-15

**Subject:** DRAFT Response to U.S. EPR Design Certification Application RAI No. 385, FSAR Ch. 9, Questions 09.01.04-15,-16 & -17 (Part 1 of 4)

Importance: High

Getachew,

Draft responses to RAI 385, Questions 09.01.04-15, 09.01.04-16 and 09.01.04-17 are provided in the attached file, "RAI 385 Response Questions 09.01.04-15,-16 & -17 US EPR DC - DRAFT - Part 1 of 4.pdf." The remaining parts will be provided in subsequent e-mails. Earlier today, AREVA submitted Supplement 20 that provided a date for the final responses as August 18, 2011. Please let us know if you have any questions or if we can submit these responses as final.

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, June 30, 2011 4:42 PM

To: 'Tesfaye, Getachew'

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. 385, FSAR Ch. 9, Supplement 20

Importance: High

#### Getachew.

AREVA NP Inc. provided a schedule for technically correct and complete responses to the seven questions in RAI No. 385 on May 19, 2010. Supplement 1, Supplement 2, Supplement 3, Supplement 4, Supplement 5, Supplement 6, Supplement 7, Supplement 8, Supplement 9, Supplement 10, Supplement 11, Supplement 12, Supplement 13, Supplement 14 and Supplement 15 responses to RAI No. 385 were sent on June 24, 2010, July 28, 2010, August 24, 2010, September 15, 2010, September 22, 2010, October 22, 2010, October 28, 2010, November 18, 2010, November 23, 2010, December 15, 2010, January 6, 2011, January 12, 2011, February 9, 2011, March 2, 2011 and April 5, 2011, respectively, to provide a revised schedule. Supplement 16 response to RAI No. 385 was sent on April 18, 2011 to provide technically correct and complete responses to three of the seven questions. Supplement 17 response to RAI No. 385 was sent on May 6, 2011 to provide a revised schedule. Supplement 18 response to RAI No. 385 was sent on May 20, 2011 to provide a technically correct and complete response to Question 09.01.05-22. Supplement 19 response to RAI No. 385 was sent on June 10, 2011 to provide a revised schedule for the remaining questions.

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

Question #	Response Date
RAI 385 — 09.01.04-15	August 18, 2011
RAI 385 — 09.01.04-16	August 18, 2011
RAI 385 — 09.01.04-17	August 18, 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:** Friday, June 10, 2011 8:58 AM

**To:** Tesfaye, Getachew

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. 385, FSAR Ch. 9, Supplement 19

Getachew,

AREVA NP Inc. provided a schedule for technically correct and complete responses to the seven questions in RAI No. 385 on May 19, 2010. Supplement 1, Supplement 2, Supplement 3, Supplement 4, Supplement 5, Supplement 6, Supplement 7, Supplement 8, Supplement 9, Supplement 10, Supplement 11, Supplement 12, Supplement 13, Supplement 14 and Supplement 15 responses to RAI No. 385 were sent on June 24, 2010, July 28, 2010, August 24, 2010, September 15, 2010, September 22, 2010, October 22, 2010, October 28, 2010, November 18, 2010, November 23, 2010, December 15, 2010, January 6, 2011, January 12, 2011, February 9, 2011, March 2, 2011 and April 5, 2011, respectively, to provide a revised schedule. Supplement 16 response to RAI No. 385 was sent on April 18, 2011 to provide technically correct and complete responses to three of the seven questions. Supplement 17 response to RAI No. 385 was sent on May 6, 2011 to provide a revised schedule. Supplement 18 response to RAI No. 385 was sent on May 20, 2011 to provide a technically correct and complete response to Question 09.01.05-22.

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

Question #	Response Date
RAI 385 — 09.01.04-15	June 30, 2011
RAI 385 — 09.01.04-16	June 30, 2011
RAI 385 — 09.01.04-17	June 30, 2011

Sincerely,

Dennis Williford, P.E. U.S. EPR Design Certification Licensing Manager AREVA NP Inc.

7207 IBM Drive, Mail Code CLT 2B Charlotte. NC 28262

Phone: 704-805-2223

Email: Dennis.Williford@areva.com

From: WILLIFORD Dennis (RS/NB) Sent: Friday, May 20, 2011 1:10 PM

**To:** 'Tesfaye, Getachew'

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. 385, FSAR Ch. 9, Supplement 18

#### Getachew,

AREVA NP Inc. provided a schedule for technically correct and complete responses to the seven questions in RAI No. 385 on May 19, 2010. Supplement 1, Supplement 2, Supplement 3, Supplement 4, Supplement 5, Supplement 6, Supplement 7, Supplement 8, Supplement 9, Supplement 10, Supplement 11, Supplement 12, Supplement 13, Supplement 14 and Supplement 15 responses to RAI No. 385 were sent on June 24, 2010, July 28, 2010, August 24, 2010, September 15, 2010, September 22, 2010, October 22, 2010, October 28, 2010, November 18, 2010, November 23, 2010, December 15, 2010, January 6, 2011, January 12, 2011, February 9, 2011, March 2, 2011 and April 5, 2011, respectively, to provide a revised schedule. Supplement 16 response to RAI No. 385 was sent on April 18, 2011 to provide technically correct and complete responses to three of the seven questions. Supplement 17 response to RAI No. 385 was sent on May 6, 2011 to provide a revised schedule.

The attached file, "RAI 385 Supplement 18 Response US EPR DC.pdf" provides a technically correct and complete final response to Question 09.01.05-22.

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 385 Question 09.01.05-22.

The following table indicates the respective pages in the response document, "RAI 385 Supplement 18 Response US EPR DC.pdf," that contain AREVA NP's response to the subject question.

Question #	Start Page	End Page
RAI 385 — 09.01.05-22	2	3

The schedule for technically correct and complete responses to the remaining three questions has not changed and is provided below:

Question #	Response Date
RAI 385 — 09.01.04-15	June 10, 2011
RAI 385 — 09.01.04-16	June 10, 2011
RAI 385 — 09.01.04-17	June 10, 2011

Sincerely,

Dennis Williford, P.E. U.S. EPR Design Certification Licensing Manager AREVA NP Inc.

7207 IBM Drive, Mail Code CLT 2B

Charlotte, NC 28262 Phone: 704-805-2223

Email: Dennis.Williford@areva.com

From: WELLS Russell (RS/NB)

**Sent:** Friday, May 06, 2011 10:18 AM

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. 385, FSAR Ch. 9, Supplement 17

#### Getachew,

AREVA NP Inc. provided a schedule for technically correct and complete responses to the seven questions in RAI No. 385 on May 19, 2010. Supplement 1, Supplement 2, Supplement 3, Supplement 4, Supplement 5, Supplement 6, Supplement 7, Supplement 8, Supplement 9, Supplement 10, Supplement 11, Supplement 12, Supplement 13, Supplement 14 and Supplement 15 responses to RAI No. 385 were sent on June 24, 2010, July 28, 2010, August 24, 2010, September 15, 2010, September 22, 2010, October 22, 2010, October 28, 2010, November 18, 2010, November 23, 2010, December 15, 2010, January 6, 2011, January 12, 2011, February 9, 2011, March 2, 2011 and April 5, 2011, respectively, to provide a revised schedule. Supplement 16 response to RAI No. 385 was sent on April 18, 2011 to provide technically correct and complete responses to three of the seven questions.

To provide additional time to interact with the NRC on Questions 09.01.04-15, 09.01.04-16 and 09.01.04-17, a revised schedule is provided in this e-mail.

A final response to Question 09.01.05-22 is being prepared to incorporate NRC review comments on the revised draft response; a revised schedule is provided in this e-mail.

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

Question #	Response Date
RAI 385 — 09.01.04-15	June 10, 2011
RAI 385 — 09.01.04-16	June 10, 2011
RAI 385 — 09.01.04-17	June 10, 2011
RAI 385 — 09.01.05-22	May 20, 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:** Monday, April 18, 2011 4:36 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. 385, FSAR Ch. 9, Supplement 16

Getachew,

AREVA NP Inc. provided a schedule for technically correct and complete responses to the seven questions in RAI No. 385 on May 19, 2010. Supplement 1, Supplement 2, Supplement 3, Supplement 4, Supplement 5, Supplement 6, Supplement 7, Supplement 8, Supplement 9, Supplement 10, Supplement 11, Supplement 12, Supplement 13, Supplement 14 and Supplement 15 responses to RAI No. 385 were sent on June 24, 2010, July 28, 2010, August 24, 2010, September 15, 2010, September 22, 2010, October 22, 2010, October 28, 2010, November 18, 2010, November 23, 2010, December 15, 2010, January 6, 2011, January 12, 2011, February 9, 2011, March 2, 2011 and April 5, 2011, respectively, to provide a revised schedule.

The attached file, "RAI 385 Supplement 16 Response US EPR DC.pdf" provides technically correct and complete responses to three of the seven questions.

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 385 Questions 09.01.05-20 and 09.01.05-21.

The following table indicates the respective pages in the response document, "RAI 385 Supplement 16 Response US EPR DC.pdf," that contain AREVA NP's response to the subject questions.

Question #	Start Page	End Page
RAI 385 — 09.01.05-20	2	2
RAI 385 — 09.01.05-21	3	4
RAI 385 — 09.01.05-23	5	6

The schedule for technically correct and complete responses to the remaining four questions has not changed and is provided below:

Question #	Response Date
RAI 385 — 09.01.04-15	May 6, 2011
RAI 385 — 09.01.04-16	May 6, 2011
RAI 385 — 09.01.04-17	May 6, 2011
RAI 385 — 09.01.05-22	May 6, 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:** Tuesday, April 05, 2011 8:27 AM

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. 385, FSAR Ch. 9, Supplement 15

#### Getachew.

AREVA NP Inc. provided a schedule for technically correct and complete responses to the seven questions in RAI No. 385 on May 19, 2010. Supplement 1, Supplement 2, Supplement 3, Supplement 4, Supplement 5, Supplement 6, Supplement 7, Supplement 8, Supplement 9, Supplement 10, Supplement 11, Supplement 12, Supplement 13 and Supplement 14 responses to RAI No. 385 were sent on June 24, 2010, July 28, 2010, August 24, 2010, September 15, 2010, September 22, 2010, October 22, 2010, October 28, 2010, November 18, 2010, November 23, 2010, December 15, 2010, January 6, 2011, January 12, 2011, February 9, 2011 and March 2, 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 questions is provided below.

Question #	Response Date
RAI 385 — 09.01.04-15	May 6, 2011
RAI 385 — 09.01.04-16	May 6, 2011
RAI 385 — 09.01.04-17	May 6, 2011
RAI 385 — 09.01.05-20	May 6, 2011
RAI 385 — 09.01.05-21	May 6, 2011
RAI 385 — 09.01.05-22	May 6, 2011
RAI 385 — 09.01.05-23	May 6, 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)

434-942-6375 (ceii Fax: 434-382-3884

Russell.Wells@Areva.com

From: WELLS Russell (RS/NB)

**Sent:** Wednesday, March 02, 2011 10:22 AM

**To:** 'Tesfaye, Getachew'

**Cc:** BENNETT Kathy (RS/NB); ROMINE Judy (RS/NB); DELANO Karen (RS/NB); KOWALSKI David (RS/NB) **Subject:** Response to U.S. EPR Design Certification Application RAI No. 385, FSAR Ch. 9, Supplement 14

## Getachew,

AREVA NP Inc. provided a schedule for technically correct and complete responses to the seven questions in RAI No. 385 on May 19, 2010. Supplement 1, Supplement 2, Supplement 3, Supplement 4, Supplement 5, Supplement 6, Supplement 7, Supplement 8, Supplement 9, Supplement 10, Supplement 11, Supplement 12 and Supplement 13 responses to RAI No. 385 were sent on June 24, 2010, July 28, 2010, August 24, 2010, September 15, 2010, September 22, 2010, October 22, 2010, October 28, 2010, November 18, 2010, November 23, 2010, December 15, 2010, January 6, 2011, January 12, 2011 and February 9, 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 questions is provided below.

Question #	Response Date
RAI 385 — 09.01.04-15	April 7, 2011
RAI 385 — 09.01.04-16	April 7, 2011
RAI 385 — 09.01.04-17	April 7, 2011
RAI 385 — 09.01.05-20	April 7, 2011
RAI 385 — 09.01.05-21	April 7, 2011
RAI 385 — 09.01.05-22	April 7, 2011
RAI 385 — 09.01.05-23	April 7, 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: Wednesday, February 09, 2011 2:52 PM

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. 385, FSAR Ch. 9, Supplement 13

## Getachew,

AREVA NP Inc. provided a schedule for technically correct and complete responses to the seven questions in RAI No. 385 on May 19, 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. 385 were sent on June 24, 2010, July 28, 2010, August 24, 2010, September 15, 2010, September 22, 2010, October 22, 2010, October 28, 2010, November 18, 2010, November 23, 2010, December 15, 2010, January 6, 2011, and January 12, 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 questions has been revised and is provided below.

Question #	Response Date
RAI 385 — 09.01.04-15	March 9, 2011
RAI 385 — 09.01.04-16	March 9, 2011
RAI 385 — 09.01.04-17	March 9, 2011
RAI 385 — 09.01.05-20	March 9, 2011

RAI 385 — 09.01.05-21	March 9, 2011
RAI 385 — 09.01.05-22	March 9, 2011
RAI 385 — 09.01.05-23	March 9, 2011

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, January 12, 2011 6:35 PM

**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. 385, FSAR Ch. 9, Supplement 12

#### Getachew,

AREVA NP Inc. provided a schedule for technically correct and complete responses to the seven questions in RAI No. 385 on May 19, 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. 385 were sent on June 24, 2010, July 28, 2010, August 24, 2010, September 15, 2010, September 22, 2010, October 28, 2010, November 18, 2010, November 23, 2010, December 15, 2010 and January 6, 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 for the responses to Questions 09.01.05-20 and 09.01.05-22.

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

Question #	Response Date
RAI 385 — 09.01.04-15	February 10, 2011
RAI 385 — 09.01.04-16	February 10, 2011
RAI 385 — 09.01.04-17	February 10, 2011
RAI 385 — 09.01.05-20	February 10, 2011
RAI 385 — 09.01.05-21	February 10, 2011
RAI 385 — 09.01.05-22	February 10, 2011
RAI 385 — 09.01.05-23	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:** Thursday, January 06, 2011 8:14 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. 385, FSAR Ch. 9, Supplement 11

#### Getachew.

AREVA NP Inc. provided a schedule for technically correct and complete responses to the seven questions in RAI No. 385 on May 19, 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. 385 were sent on June 24, 2010, July 28, 2010, August 24, 2010, September 15, 2010, September 22, 2010, October 28, 2010, November 18, 2010, November 23, 2010 and December 15, 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 for the responses to Questions 09.01.04-15, 09.01.04-16, 09.01.04-17, 09.01.05-21 and 09.01.05-23.

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

Question #	Response Date
RAI 385 — 09.01.04-15	February 10, 2011
RAI 385 — 09.01.04-16	February 10, 2011
RAI 385 — 09.01.04-17	February 10, 2011
RAI 385 — 09.01.05-20	January 14, 2011
RAI 385 — 09.01.05-21	February 10, 2011
RAI 385 — 09.01.05-22	January 14, 2011
RAI 385 — 09.01.05-23	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, December 15, 2010 9:44 AM

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. 385, FSAR Ch. 9, Supplement 10

Getachew,

AREVA NP Inc. provided a schedule for technically correct and complete responses to the seven questions in RAI No. 385 on May 19, 2010. Supplement 1, Supplement 2, Supplement 3, Supplement 4, Supplement 5, Supplement 6, Supplement 7, Supplement 8 and Supplement 9 responses to RAI No. 385 were sent on June 24, 2010, July 28, 2010, August 24, 2010, September 15, 2010, September 22, 2010, October 22, 2010, October 28, 2010, November 18, 2010 and November 23, 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 for the responses to Questions 09.01.05-20 and 09.01.05-22.

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

Question #	Response Date
RAI 385 — 09.01.04-15	January 6, 2011
RAI 385 — 09.01.04-16	January 6, 2011
RAI 385 — 09.01.04-17	January 6, 2011
RAI 385 — 09.01.05-20	January 14, 2011
RAI 385 — 09.01.05-21	January 6, 2011
RAI 385 — 09.01.05-22	January 14, 2011
RAI 385 — 09.01.05-23	January 6, 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:** Tuesday, November 23, 2010 9:22 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. 385, FSAR Ch. 9, Supplement 9

#### Getachew,

AREVA NP Inc. provided a schedule for technically correct and complete responses to the seven questions in RAI No. 385 on May 19, 2010. Supplement 1, Supplement 2, Supplement 3, Supplement 4, Supplement 5, Supplement 6, Supplement 7 and Supplement 8 responses to RAI No. 385 were sent on June 24, 2010, July 28, 2010, August 24, 2010, September 15, 2010, September 22, 2010, October 22, 2010, October 28, 2010 and November 18, 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 for the responses to Questions 09.01.04-15 thru -17, 09.01.05-21 and 09.01.05-23.

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

Question #	Response Date
RAI 385 — 09.01.04-15	January 6, 2011

RAI 385 — 09.01.04-16	January 6, 2011
RAI 385 — 09.01.04-17	January 6, 2011
RAI 385 — 09.01.05-20	December 16, 2010
RAI 385 — 09.01.05-21	January 6, 2011
RAI 385 — 09.01.05-22	December 16, 2010
RAI 385 — 09.01.05-23	January 6, 2011

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: Thursday, November 18, 2010 3:11 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. 385, FSAR Ch. 9, Supplement 8

#### Getachew.

AREVA NP Inc. provided a schedule for technically correct and complete responses to the seven questions in RAI No. 385 on May 19, 2010. Supplement 1, Supplement 2, Supplement 3, Supplement 4, Supplement 5, Supplement 6 and Supplement 7 responses to RAI No. 385 were sent on June 24, 2010, July 28, 2010, August 24, 2010, September 15, 2010, September 22, 2010, October 22, 2010 and October 28, 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 for the responses to Questions 09.01.05-20 and 09.01.05-22.

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

Question #	Response Date
RAI 385 — 09.01.04-15	November 23, 2010
RAI 385 — 09.01.04-16	November 23, 2010
RAI 385 — 09.01.04-17	November 23, 2010
RAI 385 — 09.01.05-20	December 16, 2010
RAI 385 — 09.01.05-21	November 23, 2010
RAI 385 — 09.01.05-22	December 16, 2010
RAI 385 — 09.01.05-23	November 23, 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:** Thursday, October 28, 2010 3:55 PM

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. 385, FSAR Ch. 9, Supplement 7

#### Getachew.

AREVA NP Inc. provided a schedule for technically correct and complete responses to the seven questions in RAI No. 385 on May 19, 2010. Supplement 1, Supplement 2, Supplement 3, Supplement 4, Supplement 5, and Supplement 6 responses to RAI No. 385 were sent on June 24, 2010, July 28, 2010, August 24, 2010, September 15, 2010, September 22, 2010, and October 22, respectively, to provide a revised schedule.

To provide additional time to interact with the NRC, and to provide time to process the responses, a revised schedule is provided in this e-mail for the responses to Questions 09.01.04-15, 09.01.04-16, 09.01.04-17, 09.01.05-21 and 09.01.05-23. The schedule for the responses to the remaining questions is unchanged and is provided below.

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

Question #	Response Date
RAI 385 — 09.01.04-15	November 23, 2010
RAI 385 — 09.01.04-16	November 23, 2010
RAI 385 — 09.01.04-17	November 23, 2010
RAI 385 — 09.01.05-20	November 18, 2010
RAI 385 — 09.01.05-21	November 23, 2010
RAI 385 — 09.01.05-22	November 18, 2010
RAI 385 — 09.01.05-23	November 23, 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 22, 2010 2:06 PM

**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. 385, FSAR Ch. 9, Supplement 6

Getachew.

AREVA NP Inc. provided a schedule for technically correct and complete responses to the seven questions in RAI No. 385 on May 19, 2010. Supplement 1, Supplement 2, Supplement 3, Supplement 4 and Supplement 5 responses to RAI No. 385 were sent on June 24, 2010, July 28, 2010, August 24, 2010, September 15, 2010 and September 22, 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 for the responses to Questions 09.01.05-20 and 09.01.05-22.

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

Question #	Response Date
RAI 385 — 09.01.04-15	October 28, 2010
RAI 385 — 09.01.04-16	October 28, 2010
RAI 385 — 09.01.04-17	October 28, 2010
RAI 385 — 09.01.05-20	November 18, 2010
RAI 385 — 09.01.05-21	October 28, 2010
RAI 385 — 09.01.05-22	November 18, 2010
RAI 385 — 09.01.05-23	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

From: BRYAN Martin (External RS/NB)

Sent: Wednesday, September 22, 2010 11:46 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. 385, FSAR Ch. 9, Supplement 5

#### Getachew.

AREVA NP Inc. provided a schedule for technically correct and complete responses to the seven questions in RAI No. 385 on May 19, 2010. Supplement 1, Supplement 2, Supplement 3 and Supplement 4 responses to RAI No. 385 were sent on June 24, 2010, July 28, 2010, August 24, 2010 and September 15, 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 for the responses to Questions 09.01.05-20 and 09.01.05-22.

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

Question #	Response Date
RAI 385 — 09.01.04-15	October 28, 2010
RAI 385 — 09.01.04-16	October 28, 2010

RAI 385 — 09.01.04-17	October 28, 2010
RAI 385 — 09.01.05-20	October 22, 2010
RAI 385 — 09.01.05-21	October 28, 2010
RAI 385 — 09.01.05-22	October 22, 2010
RAI 385 — 09.01.05-23	October 28, 2010

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, September 15, 2010 4:06 PM

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. 385, FSAR Ch. 9, Supplement 4

### Getachew,

AREVA NP Inc. provided a schedule for technically correct and complete responses to the seven questions in RAI No. 385 on May 19, 2010. Supplement 1, Supplement 2 and Supplement 3 responses to RAI No. 385 were sent on June 24, 2010, July 28, 2010 and August 24, 2010, respectively, to provide a revised schedule.

Since the remaining responses are being processed, 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 385 — 09.01.04-15	October 28, 2010
RAI 385 — 09.01.04-16	October 28, 2010
RAI 385 — 09.01.04-17	October 28, 2010
RAI 385 — 09.01.05-20	September 22, 2010
RAI 385 — 09.01.05-21	October 28, 2010
RAI 385 — 09.01.05-22	September 22, 2010
RAI 385 — 09.01.05-23	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

**From:** BRYAN Martin (External RS/NB) **Sent:** Tuesday, August 24, 2010 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. 385, FSAR Ch. 9, Supplement 3

Getachew,

AREVA NP Inc. provided a schedule for technically correct and complete responses to the seven questions in RAI No. 385 on May 19, 2010. Supplement 1 and Supplement 2 responses to RAI No. 385 were sent on June 24, 2010 and July 28, 2010, respectively, to provide a revised schedule.

On July 28, 2010, DRAFT responses to Questions 09.01.05-20 and 09.01.05-22 were submitted to the NRC staff. To allow additional 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 and is provided below.

Question #	Response Date
RAI 385 — 09.01.04-15	September 15, 2010
RAI 385 — 09.01.04-16	September 15, 2010
RAI 385 — 09.01.04-17	September 15, 2010
RAI 385 — 09.01.05-20	September 22, 2010
RAI 385 — 09.01.05-21	September 15, 2010
RAI 385 — 09.01.05-22	September 22, 2010
RAI 385 — 09.01.05-23	September 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: Wednesday, July 28, 2010 6:14 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. 385, FSAR Ch. 9, Supplement 2

Getachew,

AREVA NP Inc. provided a schedule for technically correct and complete responses to the seven questions in RAI No. 385 on May 19, 2010. Supplement 1 response to RAI No. 385 was sent on June 24, 2010 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 and is provided below.

Question #	Response Date
RAI 385 — 09.01.04-15	September 15, 2010
RAI 385 — 09.01.04-16	September 15, 2010
RAI 385 — 09.01.04-17	September 15, 2010
RAI 385 — 09.01.05-20	August 25, 2010
RAI 385 — 09.01.05-21	September 15, 2010
RAI 385 — 09.01.05-22	August 25, 2010
RAI 385 — 09.01.05-23	September 15, 2010

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:** Thursday, June 24, 2010 4:52 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. 385, FSAR Ch. 9, Supplement 1

Getachew,

AREVA NP Inc. provided a schedule for technically correct and complete responses to the seven questions in RAI No. 385 on May 19, 2010.

To allow time for interaction between AREVA and the NRC staff, a revised schedule is provided in this e-mail. With respect to Questions 09.01.04-15, 09.01.04-16, 09.01.04-17, and 09.01.04-22, AREVA anticipates having draft responses available during July to support interaction with the NRC staff to review the responses prior to the formal submittal.

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

Question #	Response Date
RAI 385 — 09.01.04-15	August 13, 2010
RAI 385 — 09.01.04-16	August 13, 2010
RAI 385 — 09.01.04-17	August 13, 2010
RAI 385 — 09.01.05-20	July 28, 2010
RAI 385 — 09.01.05-21	July 28, 2010
RAI 385 — 09.01.05-22	August 12, 2010
RAI 385 — 09.01.05-23	July 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

From: BRYAN Martin (EXT)

**Sent:** Wednesday, May 19, 2010 5:57 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. 385, FSAR Ch. 9

#### Getachew,

Attached please find AREVA NP Inc.'s response to the subject request for additional information (RAI). The attached file, "RAI 385 Response US EPR DC," provides a schedule since technically correct and complete responses to the seven questions are not provided. With respect to Questions 09.01.04-15, 09.01.04-16 and 09.01.04-17, AREVA anticipates having draft responses in late July to support interaction with the NRC staff to review the responses prior to the formal submittal. Additional time is included in the response date below to allow for these interactions.

The following table indicates the respective pages in the response document, "RAI 385 Response US EPR DC.pdf," that contain AREVA NP's response to the subject questions.

Question #	Start Page	End Page
RAI 385 — 09.01.04-15	2	3
RAI 385 — 09.01.04-16	4	5
RAI 385 — 09.01.04-17	6	6
RAI 385 — 09.01.05-20	7	7
RAI 385 — 09.01.05-21	8	8
RAI 385 — 09.01.05-22	9	10
RAI 385 — 09.01.05-23	11	11

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

Question #	Response Date
RAI 385 — 09.01.04-15	August 13, 2010
RAI 385 — 09.01.04-16	August 13, 2010
RAI 385 — 09.01.04-17	August 13, 2010
RAI 385 — 09.01.05-20	June 18, 2010
RAI 385 — 09.01.05-21	June 18, 2010
RAI 385 — 09.01.05-22	July 14, 2010
RAI 385 — 09.01.05-23	June 18, 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:** Tesfaye, Getachew [mailto:Getachew.Tesfaye@nrc.gov]

**Sent:** Monday, April 19, 2010 9:46 AM

To: ZZ-DL-A-USEPR-DL

Cc: Curran, Gordon; Lee, Samuel; Segala, John; Hearn, Peter; Colaccino, Joseph; ArevaEPRDCPEm Resource

Subject: U.S. EPR Design Certification Application RAI No. 385 (4524, 4515),FSAR Ch. 9

Attached please find the subject requests for additional information (RAI). A draft of the RAI was provided to you on March 31, 2010, and on April 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 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: 3181

Mail Envelope Properties (2FBE1051AEB2E748A0F98DF9EEE5A5D47AF4FE)

**Subject:** DRAFT Response to U.S. EPR Design Certification Application RAI No. 385,

FSAR Ch. 9 ,Questions 09.01.04-15,-16 & -17 (Part 3 of 4)

**Sent Date:** 6/30/2011 8:34:17 PM **Received Date:** 6/30/2011 8:35:34 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

"HALLINGER Pat (EXTERNAL AREVA)" <Pat.Hallinger.ext@areva.com>

Tracking Status: None

"ROMINE Judy (AREVA)" < Judy.Romine@areva.com>

Tracking Status: None

"RYAN Tom (AREVA)" <Tom.Ryan@areva.com>

Tracking Status: None

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

Tracking Status: None

"PATTON Jeff (AREVA)" < Jeff.Patton@areva.com>

Tracking Status: None

"BALLARD Bob (AREVA)" < Robert.Ballard@areva.com>

Tracking Status: None

"HARRINGTON James (AREVA)" < James. Harrington@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 42693 6/30/2011 8:35:34 PM

RAI 385 Response Questions 09.01.04-15,-16 & -17 US EPR DC - DRAFT - Part 3 of 4.pdf 4503959

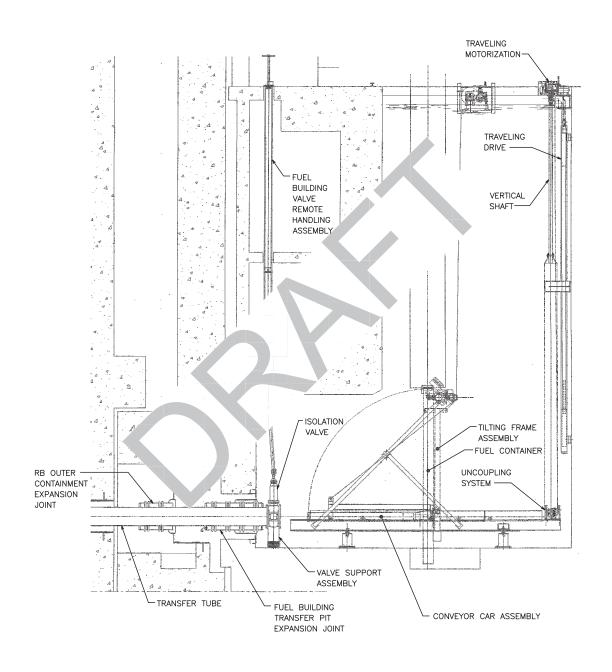
**Options** 

Priority: High
Return Notification: No
Reply Requested: No
Sensitivity: Normal

Expiration Date: Recipients Received:



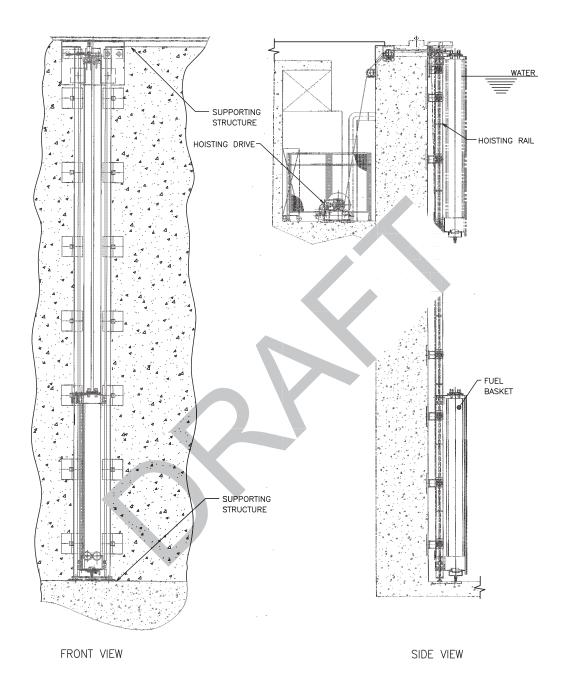
Figure 9.1.4-4—Fuel Transfer Tube Facility, Fuel Building



JXX04 T2



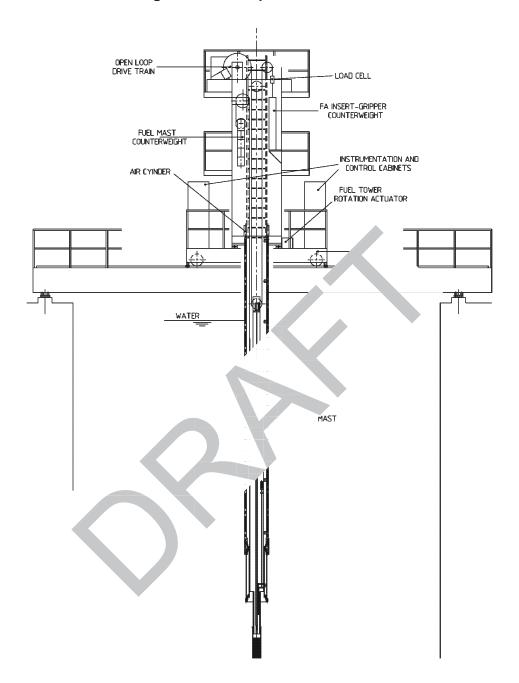
Figure 9.1.4-5—New Fuel Elevator



JXX05 T2 .



Figure 9.1.4-6—Spent Fuel Machine



JXX06 T2