

## ArevaEPRDCPEm Resource

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**From:** BRYAN Martin (EXTERNAL AREVA) [Martin.Bryan.ext@areva.com]  
**Sent:** Thursday, October 28, 2010 2:45 PM  
**To:** Tesfaye, Getachew  
**Cc:** DELANO Karen (AREVA); ROMINE Judy (AREVA); BENNETT Kathy (AREVA); PANNELL George (AREVA)  
**Subject:** Response to U.S. EPR Design Certification Application RAI No. 285, FSAR Ch 7, Supplement 9

Getachew,

AREVA NP Inc. (AREVA NP) provided responses to 4 of the 20 questions of RAI No. 285 on November 11, 2009. AREVA NP submitted Supplement 1 to the response on December 17, 2009 to address 6 of the remaining 16 questions. AREVA NP submitted Supplement 2 to the response on January 22, 2010 to provide a revised schedule for the remaining questions. AREVA NP submitted Supplement 3 to the response on February 19, 2010 which provided responses to 7 of the 10 remaining questions. The RAI 285 Supplement 4 response on February 26, 2010 provided technically correct and complete responses to 1 of the remaining 3 questions. That submittal completed responses to 14 of the 16 questions for RAI 285. The RAI 285 Supplement 5 response on March 5, 2010 provided technically correct and complete responses to 1 of the remaining 2 questions for a total response to 15 of 16 questions. The RAI 285 Supplement 6 response on April 16, 2010, and RAI 285 Supplement 7 response on May 28, 2010, provided a revised schedule for the remaining question 07.03-21. To allow additional time to address comments from the NRC staff and then to interact with the staff on this remaining question, the response date is being revised.

The schedule for technically correct and complete responses to question 07.03-21 is changed and is provided below.

Question #	Response Date
RAI 285 — 07.03-21	January 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 (EXT)  
**Sent:** Tuesday, July 20, 2010 3:43 PM  
**To:** 'Tesfaye, 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); PANNELL George L (AREVA NP INC)  
**Subject:** Response to U.S. EPR Design Certification Application RAI No. 285, FSAR Ch 7, Supplement 8

Getachew,

AREVA NP Inc. (AREVA NP) provided responses to 4 of the 20 questions of RAI No. 285 on November 11, 2009. AREVA NP submitted Supplement 1 to the response on December 17, 2009 to address 6 of the remaining 16 questions. AREVA NP submitted Supplement 2 to the response on January 22, 2010 to provide

a revised schedule for the remaining questions. AREVA NP submitted Supplement 3 to the response on February 19, 2010 which provided responses to 7 of the 10 remaining questions. The RAI 285 Supplement 4 response on February 26, 2010 provided technically correct and complete responses to 1 of the remaining 3 questions. That submittal completed responses to 14 of the 16 questions for RAI 285. The RAI 285 Supplement 5 response on March 5, 2010 provided technically correct and complete responses to 1 of the remaining 2 questions for a total response to 15 of 16 questions. The RAI 285 Supplement 6 response on April 16, 2010, and RAI 285 Supplement 7 response on May 28, 2010, provided a revised schedule for the remaining question 07.03-21. To allow time to continue to interact with the staff on this remaining question the response date is being revised.

The schedule for technically correct and complete responses to question 07.03-21 is changed and is provided below. It should be noted that this response date may be updated based on the outcome of future NRC and AREVA interactions on FSAR Chapter 7 topics.

Question #	Response Date
RAI 285 — 07.03-21	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:** BRYAN Martin (EXT)  
**Sent:** Friday, May 28, 2010 2:16 PM  
**To:** 'Tesfaye, Getachew'  
**Cc:** DELANO Karen V (AREVA NP INC); ROMINE Judy (AREVA NP INC); BENNETT Kathy A (OFR) (AREVA NP INC); PANNELL George L (AREVA NP INC)  
**Subject:** Response to U.S. EPR Design Certification Application RAI No. 285, FSAR Ch 7, Supplement 7

Getachew,

AREVA NP Inc. (AREVA NP) provided responses to 4 of the 20 questions of RAI No. 285 on November 11, 2009. AREVA NP submitted Supplement 1 to the response on December 17, 2009 to address 6 of the remaining 16 questions. AREVA NP submitted Supplement 2 to the response on January 22, 2010 to provide a revised schedule for the remaining questions. AREVA NP submitted Supplement 3 to the response on February 19, 2010 which provided responses to 7 of the 10 remaining questions. The RAI 285 Supplement 4 response on February 26, 2010 provided technically correct and complete responses to 1 of the remaining 3 questions. That submittal completed responses to 14 of the 16 questions for RAI 285. The RAI 285 Supplement 5 response on March 5, 2010 provided technically correct and complete responses to 1 of the remaining 2 questions for a total response to 15 of 16 questions. The RAI 285 Supplement 6 response on April 16, 2010 provided a revised schedule for the remaining question.

A public meeting was held on April 27-28, 2010 between AREVA and NRC Technical Specification Branch and I&C Branch. Another public meeting is planned for late June to discuss I & C topics related to Chapter 7. The feedback from these meetings needs to be factored into the response for the remaining question.

The schedule for a technically correct and complete response to question 07.03-21 is changed and is provided below.

Question #	Response Date
RAI 285 — 07.03-21	July 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](mailto:Martin.Bryan.ext@areva.com)

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**From:** BRYAN Martin (EXT)  
**Sent:** Friday, April 16, 2010 3:26 PM  
**To:** 'Tesfaye, Getachew'  
**Cc:** DELANO Karen V (AREVA NP INC); ROMINE Judy (AREVA NP INC); BENNETT Kathy A (OFR) (AREVA NP INC); PANNELL George L (AREVA NP INC)  
**Subject:** Response to U.S. EPR Design Certification Application RAI No. 285, FSAR Ch 7, Supplement 6

Getachew,

AREVA NP Inc. (AREVA NP) provided responses to 4 of the 20 questions of RAI No. 285 on November 11, 2009. AREVA NP submitted Supplement 1 to the response on December 17, 2009 to address 6 of the remaining 16 questions. AREVA NP submitted Supplement 2 to the response on January 22, 2010 to provide a revised schedule for the remaining questions. AREVA NP submitted Supplement 3 to the response on February 19, 2010 which provided responses to 7 of the 10 remaining questions. The RAI 285 Supplement 4 response provided technically correct and complete responses to 1 of the remaining 3 questions. That submittal completed responses to 14 of the 16 questions for RAI 285. The RAI 285 Supplement 5 response provided technically correct and complete responses to 1 of the remaining 2 questions for a total response to 15 of 16 questions.

The schedule for technically correct and complete response to question 07.03-21 is changed and is provided below. The schedule is being revised to provide opportunities for interactions with the NRC prior to submittal.

Question #	Response Date
RAI 285 — 07.03-21	May 28, 2010

Sincerely,

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

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**From:** BRYAN Martin (EXT)  
**Sent:** Friday, March 05, 2010 3:11 PM  
**To:** 'Tesfaye, Getachew'

**Cc:** DELANO Karen V (AREVA NP INC); BENNETT Kathy A (OFR) (AREVA NP INC); ROMINE Judy (AREVA NP INC); PANNELL George L (AREVA NP INC)

**Subject:** Response to U.S. EPR Design Certification Application RAI No. 285, FSAR Ch 7, Supplement 5

Getachew,

AREVA NP Inc. (AREVA NP) provided responses to 4 of the 20 questions of RAI No. 285 on November 11, 2009. AREVA NP submitted Supplement 1 to the response on December 17, 2009 to address 6 of the remaining 16 questions. AREVA NP submitted Supplement 2 to the response on January 22, 2010 to provide a revised schedule for the remaining questions. AREVA NP submitted Supplement 3 to the response on February 19, 2010 which provided responses to 7 of the 10 remaining questions. AREVA NP submitted Supplement 4 to the response on Feb. 26, 2010 which provided responses to 1 of the remaining 3 questions. The attached file, "RAI 285 Supplement 5 Response US EPR DC.pdf" provides technically correct and complete responses to 1 of the remaining 2 questions. This submittal completes responses to 15 of the 16 questions for RAI 285.

The following table indicates the respective pages in the response document, "RAI 285 Supplement 5 Response US EPR DC.pdf," that contain AREVA NP's response to the subject question.

Question #	Start Page	End Page
RAI 285 — 07.01-15	2	4

The schedule for technically correct and complete response to question 07.03-21 is provided below.

Question #	Response Date
RAI 285 — 07.03-21	April 16, 2010

Sincerely,

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

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**From:** DUNCAN Leslie E (AREVA NP INC)

**Sent:** Friday, February 26, 2010 3:27 PM

**To:** 'Tsfaye, Getachew'

**Cc:** DELANO Karen V (AREVA NP INC); BENNETT Kathy A (OFR) (AREVA NP INC); ROMINE Judy (AREVA NP INC); PANNELL George L (AREVA NP INC); BRYAN Martin (EXT)

**Subject:** Response to U.S. EPR Design Certification Application RAI No. 285, FSAR Ch 7, Supplement 4

Getachew,

AREVA NP Inc. (AREVA NP) provided responses to 4 of the 20 questions of RAI No. 285 on November 11, 2009. AREVA NP submitted Supplement 1 to the response on December 17, 2009 to address 6 of the remaining 16 questions. AREVA NP submitted Supplement 2 to the response on January 22, 2010 to provide a revised schedule for the remaining questions. AREVA NP submitted Supplement 3 to the response on

February 19, 2010 which provided responses to 7 of the 10 remaining questions. The attached file, "RAI 285 Supplement 4 Response US EPR DC.pdf," provides a technically correct and complete response to 1 of the remaining 3 questions.

The following table indicates the respective pages in the response document, "RAI 285 Supplement 4 Response US EPR DC.pdf," that contain AREVA NP's response to the subject question.

Question #	Start Page	End Page
RAI 285 — 07.03-25	2	3

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

Question #	Response Date
RAI 285 — 07.01-15	March 5, 2010
RAI 285 — 07.03-21	April 16, 2010

Sincerely,

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

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**From:** DUNCAN Leslie E (AREVA NP INC)  
**Sent:** Friday, February 19, 2010 4:57 PM  
**To:** 'Tesfaye, Getachew'  
**Cc:** DELANO Karen V (AREVA NP INC); BENNETT Kathy A (OFR) (AREVA NP INC); ROMINE Judy (AREVA NP INC); PANNELL George L (AREVA NP INC)  
**Subject:** Response to U.S. EPR Design Certification Application RAI No. 285, FSAR Ch 7, Supplement 3

Getachew,

AREVA NP Inc. (AREVA NP) provided responses to 4 of the 20 questions of RAI No. 285 on November 11, 2009. AREVA NP submitted Supplement 1 to the response on December 17, 2009 to address 6 of the remaining 16 questions. AREVA NP submitted Supplement 2 to the response on January 22, 2010 to provide a revised schedule for the remaining questions. The attached file, "RAI 285 Supplement 3 Response US EPR DC.pdf" provides technically correct and complete responses to 7 of the remaining 10 questions. The schedule for a technically correct and complete response to question 07.03-25 remains unchanged, and the schedule for technically correct and complete responses to questions 07.01-15 and 07.03-21 has been changed.

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 285 Supplement 3 Questions 07.01-16, 07.03-27, 07.04-11, and 07.04-13.

The following table indicates the respective pages in the response document, "RAI 285 Supplement 3 Response US EPR DC.pdf," that contain AREVA NP's response to the subject questions.

Question #	Start Page	End Page
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RAI 285 — 07.01-13	2	3
RAI 285 — 07.01-16	4	5
RAI 285 — 07.01-17	6	8
RAI 285 — 07.03-26	9	11
RAI 285 — 07.03-27	12	13
RAI 285 — 07.04-11	14	14
RAI 285 — 07.04-13	15	17

The schedule for a technically correct and complete response to question 07.03-25 remains unchanged and provided below. The schedule for technically correct and complete responses to questions 07.01-15 and 07.03-21 has been changed and is provided below.

Question #	Response Date
RAI 285 — 07.01-15	March 5, 2010
RAI 285 — 07.03-21	April 16, 2010
RAI 285 — 07.03-25	February 26, 2010

Sincerely,

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

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**From:** DUNCAN Leslie E (AREVA NP INC)  
**Sent:** Friday, January 22, 2010 6:27 PM  
**To:** 'Tefaye, Getachew'  
**Cc:** BENNETT Kathy A (OFR) (AREVA NP INC); DELANO Karen V (AREVA NP INC); PANNELL George L (AREVA NP INC)  
**Subject:** Response to U.S. EPR Design Certification Application RAI No. 285, FSAR Ch 7, Supplement 2

Getachew,

AREVA NP Inc. provided responses to 4 of the 20 questions of RAI No. 285 on November 11, 2009. AREVA NP submitted Supplement 1 to the response on December 17, 2009 to address 6 of the remaining 16 questions.

AREVA NP is unable to provide a response to the 9 RAI No. 285 questions with a commitment date of January 22, 2010. The commitment date for these nine questions has been changed to February 19, 2010 to allow time to incorporate comments and feedback from the upcoming 1/25/10-1/26/10 meeting with the NRC related to U.S. EPR FSAR Chapter 7.

The schedule for a technically correct and complete response to RAI 285 Question 07.03-25 is unchanged and provided below. The schedule for technically correct and complete responses to the other nine RAI questions has been changed and is provided below:

Question #	Response Date
RAI 285 — 07.01-13	February 19, 2010
RAI 285 — 07.01-15	February 19, 2010
RAI 285 — 07.01-16	February 19, 2010
RAI 285 — 07.01-17	February 19, 2010

RAI 285 — 07.03-21	February 19, 2010
RAI 285 — 07.03-25	February 26, 2010
RAI 285 — 07.03-26	February 19, 2010
RAI 285 — 07.03-27	February 19, 2010
RAI 285 — 07.04-11	February 19, 2010
RAI 285 — 07.04-13	February 19, 2010

Sincerely,

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

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**From:** WELLS Russell D (AREVA NP INC)  
**Sent:** Thursday, December 17, 2009 1:26 PM  
**To:** 'Getachew Tesfaye'  
**Cc:** Pederson Ronda M (AREVA NP INC); BENNETT Kathy A (OFR) (AREVA NP INC); DELANO Karen V (AREVA NP INC)  
**Subject:** Response to U.S. EPR Design Certification Application RAI No. 285, FSAR Ch 7, Supplement 1

Getachew,

AREVA NP Inc. provided responses to 4 of the 20 questions of RAI No. 285 on November 11, 2009. The attached file, "RAI 285 Supplement 1 Response US EPR DC.pdf" provides technically correct and complete responses to 6 of the remaining 16 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 285 Questions 07.02-31 and 07.03-23.

The following table indicates the respective pages in the response document, "RAI 285 Supplement 1 Response US EPR DC.pdf," that contain AREVA NP's response to the subject questions.

Question #	Start Page	End Page
RAI 285 — 07.01-12	2	2
RAI 285 — 07.02-31	3	3
RAI 285 — 07.03-22	4	5
RAI 285 — 07.03-23	6	6
RAI 285 — 07.03-24	7	8
RAI 285 — 07.05-9	9	9

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

Question #	Response Date
RAI 285 — 07.01-13	January 22, 2010
RAI 285 — 07.01-15	January 22, 2010
RAI 285 — 07.01-16	January 22, 2010
RAI 285 — 07.01-17	January 22, 2010
RAI 285 — 07.03-21	January 22, 2010
RAI 285 — 07.03-25	February 26, 2010

RAI 285 — 07.03-26	January 22, 2010
RAI 285 — 07.03-27	January 22, 2010
RAI 285 — 07.04-11	January 22, 2010
RAI 285 — 07.04-13	January 22, 2010

Sincerely,

(Russ Wells on behalf of)

*Ronda Pederson*

[ronda.pederson@areva.com](mailto:ronda.pederson@areva.com)

Licensing Manager, U.S. EPR Design Certification

New Plants Deployment

**AREVA NP, Inc.**

An AREVA and Siemens company

3315 Old Forest Road

Lynchburg, VA 24506-0935

Phone: 434-832-3694

Cell: 434-841-8788

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**From:** Pederson Ronda M (AREVA NP INC)

**Sent:** Wednesday, November 11, 2009 6:11 PM

**To:** Tesfaye, Getachew

**Cc:** BENNETT Kathy A (OFR) (AREVA NP INC); DELANO Karen V (AREVA NP INC); PANNELL George L (AREVA NP INC)

**Subject:** Response to U.S. EPR Design Certification Application RAI No. 285, FSAR Ch. 7

Getachew,

Attached please find AREVA NP Inc.'s response to the subject request for additional information RAI 285. The attached file, "RAI 285 Response US EPR DC.pdf" provides technically correct and complete responses to 4 of the 20 questions.

Appended to this file are affected pages of the U.S. EPR Final Safety Analysis Report in redline-strikeout format which support the response to RAI 285 Questions 07.01-14 and 07.04-12.

The following table indicates the respective page(s) in the response document, "RAI 285 Response US EPR DC.pdf," that contain AREVA NP's response to the subject questions.

Question #	Start Page	End Page
RAI 285 — 07.01-12	2	2
RAI 285 — 07.01-13	3	3
RAI 285 — 07.01-14	4	4
RAI 285 — 07.01-15	5	5
RAI 285 — 07.01-16	6	6
RAI 285 — 07.01-17	7	8
RAI 285 — 07.02-30	9	10
RAI 285 — 07.02-31	11	11
RAI 285 — 07.03-21	12	12
RAI 285 — 07.03-22	13	13
RAI 285 — 07.03-23	14	14
RAI 285 — 07.03-24	15	15



RAI 285 — 07.03-25	16	16
RAI 285 — 07.03-26	17	17
RAI 285 — 07.03-27	18	18
RAI 285 — 07.04-10	19	19
RAI 285 — 07.04-11	20	20
RAI 285 — 07.04-12	21	21
RAI 285 — 07.04-13	22	23
RAI 285 — 07.05-9	24	24

A complete answer is not provided for 16 of the 20 questions. The schedule for a technically correct and complete response to these questions is provided below.

Question #	Response Date
RAI 285 — 07.01-12	December 18, 2009
RAI 285 — 07.01-13	January 22, 2010
RAI 285 — 07.01-15	January 22, 2010
RAI 285 — 07.01-16	January 22, 2010
RAI 285 — 07.01-17	January 22, 2010
RAI 285 — 07.02-31	December 18, 2009
RAI 285 — 07.03-21	January 22, 2010
RAI 285 — 07.03-22	December 18, 2009
RAI 285 — 07.03-23	December 18, 2009
RAI 285 — 07.03-24	December 18, 2009
RAI 285 — 07.03-25	February 26, 2010
RAI 285 — 07.03-26	January 22, 2010
RAI 285 — 07.03-27	January 22, 2010
RAI 285 — 07.04-11	January 22, 2010
RAI 285 — 07.04-13	January 22, 2010
RAI 285 — 07.05-9	December 18, 2009

Sincerely,

*Ronda Pederson*

[ronda.pederson@areva.com](mailto:ronda.pederson@areva.com)

Licensing Manager, U.S. EPR Design Certification

**AREVA NP Inc.**

An AREVA and Siemens company

3315 Old Forest Road

Lynchburg, VA 24506-0935

Phone: 434-832-3694

Cell: 434-841-8788

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

**Sent:** Tuesday, October 13, 2009 4:49 PM

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

**Cc:** Spaulding, Deirdre; Truong, Tung; Morton, Wendell; Cheung, Calvin; Jackson, Terry; Canova, Michael; Guardiola,

Maria; Colaccino, Joseph; ArevaEPRDCPEm Resource

**Subject:** U.S. EPR Design Certification Application RAI No. 285(3560,3507,3552,3564,3565), FSAR Ch. 7

Attached please find the subject requests for additional information (RAI). A draft of the RAI was provided to you on August 25, 2009, and discussed with your staff on September 3, 2009. Draft RAI Question 07-01-13 was 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:** 2193

**Mail Envelope Properties** (BC417D9255991046A37DD56CF597DB7108155BB0)

**Subject:** Response to U.S. EPR Design Certification Application RAI No. 285, FSAR Ch 7, Supplement 9  
**Sent Date:** 10/28/2010 2:44:59 PM  
**Received Date:** 10/28/2010 2:45:33 PM  
**From:** BRYAN Martin (EXTERNAL AREVA)  
**Created By:** Martin.Bryan.ext@areva.com

**Recipients:**  
"DELANO Karen (AREVA)" <Karen.Delano@areva.com>  
Tracking Status: None  
"ROMINE Judy (AREVA)" <Judy.Romine@areva.com>  
Tracking Status: None  
"BENNETT Kathy (AREVA)" <Kathy.Bennett@areva.com>  
Tracking Status: None  
"PANNELL George (AREVA)" <George.Pannell@areva.com>  
Tracking Status: None  
"Tesfaye, Getachew" <Getachew.Tesfaye@nrc.gov>  
Tracking Status: None

**Post Office:** AUSLYNCMX02.adom.ad.corp

<b>Files</b>	<b>Size</b>	<b>Date &amp; Time</b>
MESSAGE	21756	10/28/2010 2:45:33 PM

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