

## ArevaEPRDCPEm Resource

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**From:** WELLS Russell (AREVA) [Russell.Wells@areva.com]  
**Sent:** Wednesday, March 23, 2011 10:49 AM  
**To:** Tesfaye, Getachew  
**Cc:** 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. 278, FSAR Ch. 5, Supplement 11

Getachew,

AREVA NP Inc. provided a schedule for technically correct and complete responses to the eight questions in RAI No. 278 on February 27, 2010. Supplement 1, Supplement 2, Supplement 3, Supplement 4 and Supplement 5 responses to RAI No. 278 were sent on April 9, 2010, April 30, 2010, May 26, 2010, June 23, 2010 and July 27, 2010, respectively, to provide a revised schedule. Supplement 6 response to RAI No. 278 was sent on August 27, 2010 to provide technically correct and complete responses to seven of the eight questions. Supplement 7, Supplement 8, Supplement 9 and Supplement 10 responses to RAI No. 278 were sent on September 9, 2010, December 15, 2010, January 17, 2011 and February 18, 2011, respectively, to provide a revised schedule for the remaining question.

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

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

Question #	Response Date
RAI 278 — 05.02.03-20	April 21, 2011

*Sincerely,*

*Russ Wells*

*U.S. EPR Design Certification Licensing Manager*

*AREVA NP, Inc.*

*3315 Old Forest Road, P.O. Box 10935*

*Mail Stop OF-57*

*Lynchburg, VA 24506-0935*

*Phone: 434-832-3884 (work)*

*434-942-6375 (cell)*

*Fax: 434-382-3884*

[Russell.Wells@Areva.com](mailto:Russell.Wells@Areva.com)

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**From:** BRYAN Martin (External RS/NB)  
**Sent:** Friday, February 18, 2011 10:10 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. 278, FSAR Ch. 5, Supplement 10

Getachew,

AREVA NP Inc. provided a schedule for technically correct and complete responses to the eight questions in RAI No. 278 on February 27, 2010. Supplement 1, Supplement 2, Supplement 3, Supplement 4 and Supplement 5 responses to RAI No. 278 were sent on April 9, 2010, April 30, 2010, May 26, 2010, June 23,

2010 and July 27, 2010, respectively, to provide a revised schedule. Supplement 6 response to RAI No. 278 was sent on August 27, 2010 to provide technically correct and complete responses to seven of the eight questions. Supplement 7, Supplement 8 and Supplement 9 responses to RAI No. 278 were sent on September 9, 2010, December 15, 2010 and January 17, 2011, respectively, to provide a revised schedule for the remaining question.

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

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

Question #	Response Date
RAI 278 — 05.02.03-20	March 25, 2011

Sincerely,

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

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**From:** BRYAN Martin (External RS/NB)  
**Sent:** Monday, January 17, 2011 3:52 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. 278, FSAR Ch. 5, Supplement 9

Getachew,

AREVA NP Inc. provided a schedule for technically correct and complete responses to the eight questions in RAI No. 278 on February 27, 2010. Supplement 1, Supplement 2, Supplement 3, Supplement 4 and Supplement 5 responses to RAI No. 278 were sent on April 9, 2010, April 30, 2010, May 26, 2010, June 23, 2010 and July 27, 2010, respectively, to provide a revised schedule. Supplement 6 response to RAI No. 278 was sent on August 27, 2010 to provide technically correct and complete responses to seven of the eight questions. Supplement 7 and Supplement 8 responses to RAI No. 278 were sent on September 9, 2010 and December 15, 2010, respectively, to provide a revised schedule for the remaining question.

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

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

Question #	Response Date
RAI 278 — 05.02.03-20	February 18, 2011

Sincerely,

Martin (Marty) C. Bryan  
U.S. EPR Design Certification Licensing Manager

AREVA NP Inc.  
Tel: (434) 832-3016  
702 561-3528 cell  
[Martin.Bryan.ext@areva.com](mailto:Martin.Bryan.ext@areva.com)

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**From:** BRYAN Martin (External RS/NB)  
**Sent:** Wednesday, December 15, 2010 8:13 AM  
**To:** 'Tsfaye, 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. 278, FSAR Ch. 5, Supplement 8

Getachew,

AREVA NP Inc. provided a schedule for technically correct and complete responses to the eight questions in RAI No. 278 on February 27, 2010. Supplement 1, Supplement 2, Supplement 3, Supplement 4 and Supplement 5 responses to RAI No. 278 were sent on April 9, 2010, April 30, 2010, May 26, 2010, June 23, 2010 and July 27, 2010, respectively, to provide a revised schedule. Supplement 6 response to RAI No. 278 was sent on August 27, 2010 to provide technically correct and complete responses to seven of the eight questions. On September 09, 2010, Supplement 7 provided a revised schedule.

To allow time to finalize the response and interact with the NRC, a revised schedule is provided in this e-mail.

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

Question #	Response Date
RAI 278 — 05.02.03-20	January 19, 2011

Sincerely,

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

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**From:** BRYAN Martin (External RS/NB)  
**Sent:** Thursday, September 09, 2010 1:12 PM  
**To:** Tsfaye, 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. 278, FSAR Ch. 5, Supplement 7

Getachew,

AREVA NP Inc. provided a schedule for technically correct and complete responses to the eight questions in RAI No. 278 on February 27, 2010. Supplement 1, Supplement 2, Supplement 3, Supplement 4 and Supplement 5 responses to RAI No. 278 were sent on April 9, 2010, April 30, 2010, May 26, 2010, June 23, 2010 and July 27, 2010, respectively, to provide a revised schedule.

On June 23, 2010, a DRAFT response to RAI No. 278 was submitted and on August 13, 2010, AREVA NP received feedback from the NRC staff.

Supplement 6 response to RAI No. 278 was sent on August 27, 2010 to provide technically correct and complete responses to seven of the eight questions and a schedule for the remaining question. Since a response to the remaining question is being processed, a revised schedule is provided in this e-mail. AREVA expects to submit a DRAFT response to this question by mid-November, 2010.

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

Question #	Response Date
RAI 278 — 05.02.03-20	December 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](mailto:Martin.Bryan.ext@areva.com)

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**From:** BRYAN Martin (External RS/NB)  
**Sent:** Friday, August 27, 2010 11:09 AM  
**To:** 'Tsfaye, 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. 278, FSAR Ch. 5, Supplement 6

Getachew,

AREVA NP Inc. provided a schedule for technically correct and complete responses to the eight questions in RAI No. 278 on February 27, 2010. Supplement 1, Supplement 2, Supplement 3, Supplement 4 and Supplement 5 responses to RAI No. 278 were sent on April 9, 2010, April 30, 2010, May 26, 2010, June 23, 2010 and July 27, 2010, respectively, to provide a revised schedule.

On June 23, 2010, a DRAFT response to RAI No. 278 was submitted and on August 13, 2010, AREVA NP received feedback from the NRC staff.

The attached file, "RAI 278 Supplement 6 Response US EPR DC.pdf" provides a technically correct and complete response to seven of the eight 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 278 Questions 05.02.03-22 and 05.02.03-23.

The following table indicates the respective pages in the response document, "RAI 278 Supplement 6 Response US EPR DC.pdf," that contain AREVA NP's response to the subject questions.

Question #	Start Page	End Page
RAI 278 — 05.02.03-21	2	3
RAI 278 — 05.02.03-22	4	5
RAI 278 — 05.02.03-23	6	7
RAI 278 — 05.03.02-7	8	10

RAI 278 — 05.03.02-8	11	11
RAI 278 — 05.03.02-9	12	13
RAI 278 — 05.03.02-10	14	14

A complete answer is not provided for one of the questions. The schedule for a technically correct and complete response to this question remains the same and is provided below.

Question #	Response Date
RAI 278 — 05.02.03-20	September 9, 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:** Tuesday, July 27, 2010 3:53 PM  
**To:** 'Tefsaye, 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. 278, FSAR Ch. 5, Supplement 5

Getachew,

AREVA NP Inc. provided a schedule for technically correct and complete responses to the eight questions in RAI No. 278 on February 27, 2010. Supplement 1, Supplement 2, Supplement 3 and Supplement 4 responses to RAI No. 278 were sent on April 9, 2010, April 30, 2010, May 26, 2010 and June 23, 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 and is provided below.

Question #	Response Date
RAI 278 — 05.02.03-20	September 09, 2010
RAI 278 — 05.02.03-21	August 27, 2010
RAI 278 — 05.02.03-22	August 27, 2010
RAI 278 — 05.02.03-23	August 27, 2010
RAI 278 — 05.03.02-7	August 27, 2010
RAI 278 — 05.03.02-8	August 27, 2010
RAI 278 — 05.03.02-9	August 27, 2010
RAI 278 — 05.03.02-10	August 27, 2010

Sincerely,

Martin (Marty) C. Bryan

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

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**From:** BRYAN Martin (EXT)  
**Sent:** Wednesday, June 23, 2010 11:20 AM  
**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. 278, FSAR Ch. 5, Supplement 4

Getachew,

AREVA NP Inc. provided a schedule for technically correct and complete responses to the eight questions in RAI No. 278 on February 27, 2010. Supplement 1, Supplement 2 and Supplement 3 responses to RAI No. 278 were sent on April 9, 2010, April 30, 2010 and May 26, 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 and is provided below.

Question #	Response Date
RAI 278 — 05.02.03-20	July 27, 2010
RAI 278 — 05.02.03-21	July 27, 2010
RAI 278 — 05.02.03-22	July 27, 2010
RAI 278 — 05.02.03-23	July 27, 2010
RAI 278 — 05.03.02-7	July 27, 2010
RAI 278 — 05.03.02-8	July 27, 2010
RAI 278 — 05.03.02-9	July 27, 2010
RAI 278 — 05.03.02-10	July 27, 2010

Sincerely,

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

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**From:** BRYAN Martin (EXT)  
**Sent:** Wednesday, May 26, 2010 5:29 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. 278, FSAR Ch. 5, Supplement 3

Getachew,

AREVA NP Inc. provided a schedule for technically correct and complete responses to the eight questions in RAI No. 278 on February 27, 2010. Supplement 1 and Supplement 2 responses to RAI No. 278 were sent on April 9, 2010 and April 30, 2010, respectively, to provide a revised schedule. Since additional time is needed for AREVA to discuss the responses to the questions with the NRC, an updated 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 278 — 05.02.03-20	June 24, 2010
RAI 278 — 05.02.03-21	June 24, 2010
RAI 278 — 05.02.03-22	June 24, 2010
RAI 278 — 05.02.03-23	June 24, 2010
RAI 278 — 05.03.02-7	June 24, 2010
RAI 278 — 05.03.02-8	June 24, 2010
RAI 278 — 05.03.02-9	June 24, 2010
RAI 278 — 05.03.02-10	June 24, 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 30, 2010 4:27 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. 278, FSAR Ch. 5, Supplement 2

Getachew,

AREVA NP Inc. provided a schedule for technically correct and complete responses to the eight questions in RAI No. 278 on February 27, 2010. A revised schedule for technically correct and complete responses was provided on April 9, 2010. Since additional time is needed for AREVA to have an opportunity to interact with NRC on the response, an updated 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 278 — 05.02.03-20	May 26, 2010
RAI 278 — 05.02.03-21	May 26, 2010
RAI 278 — 05.02.03-22	May 26, 2010
RAI 278 — 05.02.03-23	May 26, 2010

RAI 278 — 05.03.02-7	May 26, 2010
RAI 278 — 05.03.02-8	May 26, 2010
RAI 278 — 05.03.02-9	May 26, 2010
RAI 278 — 05.03.02-10	May 26, 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 09, 2010 4:04 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. 278, FSAR Ch. 5, Supplement 1

Getachew,

AREVA NP Inc. provided a schedule for technically correct and complete responses to the eight questions in RAI No. 278 on February 27, 2010. To allow time for AREVA to discuss the responses 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 as provided below.

Question #	Response Date
RAI 278 — 05.02.03-20	April 30, 2010
RAI 278 — 05.02.03-21	April 30, 2010
RAI 278 — 05.02.03-22	April 30, 2010
RAI 278 — 05.02.03-23	April 30, 2010
RAI 278 — 05.03.02-7	April 30, 2010
RAI 278 — 05.03.02-8	April 30, 2010
RAI 278 — 05.03.02-9	April 30, 2010
RAI 278 — 05.03.02-10	April 30, 2010

Sincerely

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

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**From:** BRYAN Martin (EXT)  
**Sent:** Saturday, February 27, 2010 10:48 AM



**To:** 'Tesfaye, 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)

**Subject:** Response to U.S. EPR Design Certification Application RAI No. 278, FSAR Ch. 5

Getachew,

Attached please find AREVA NP Inc.'s response to the subject request for additional information (RAI). The attached file, "RAI 278 Response US EPR DC" states that complete answers cannot be currently provided for the eight questions.

The following table provides the page(s) in the response document, "RAI 278 Response US EPR DC" containing the response to each question.

<b>Question #</b>	<b>Start Page</b>	<b>End Page</b>
RAI 278 — 05.02.03-20	2	2
RAI 278 — 05.02.03-21	3	3
RAI 278 — 05.02.03-22	4	4
RAI 278 — 05.02.03-23	5	5
RAI 278 — 05.03.02-7	6	6
RAI 278 — 05.03.02-8	7	7
RAI 278 — 05.03.02-9	8	8
RAI 278 — 05.03.02-10	9	9

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

<b>Question #</b>	<b>Response Date</b>
RAI 278 — 05.02.03-20	April 9, 2010
RAI 278 — 05.02.03-21	April 9, 2010
RAI 278 — 05.02.03-22	April 9, 2010
RAI 278 — 05.02.03-23	April 9, 2010
RAI 278 — 05.03.02-7	April 9, 2010
RAI 278 — 05.03.02-8	April 9, 2010
RAI 278 — 05.03.02-9	April 9, 2010
RAI 278 — 05.03.02-10	April 9, 2010

Sincerely,

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

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

**Sent:** Monday, September 14, 2009 3:37 PM

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

**Cc:** Davis, Robert; Downey, Steven; Terao, David; Roy, Tarun; Colaccino, Joseph; ArevaEPRDCPEm Resource

**Subject:** U.S. EPR Design Certification Application RAI No. 278 (3466, 3506),FSAR Ch. 5

Attached please find the subject requests for additional information (RAI). A draft of the RAI was provided to you on August 17, 2009, and discussed with your staff on September 14, 2009. Draft RAI Question 05.03.02-8

was modified as a result of that discussion. 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 question 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:** 2741

**Mail Envelope Properties** (1F1CC1BBDC66B842A46CAC03D6B1CD41042103FA)

**Subject:** Response to U.S. EPR Design Certification Application RAI No. 278, FSAR Ch. 5, Supplement 11  
**Sent Date:** 3/23/2011 10:48:58 AM  
**Received Date:** 3/23/2011 10:49:04 AM  
**From:** WELLS Russell (AREVA)

**Created By:** Russell.Wells@areva.com

**Recipients:**

"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

"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	20551	3/23/2011 10:49:04 AM

**Options**

**Priority:** Standard

**Return Notification:** No

**Reply Requested:** No

**Sensitivity:** Normal

**Expiration Date:**

**Recipients Received:**