

## **ArevaEPRDCPEm Resource**

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**From:** Tesfaye, Getachew  
**Sent:** Thursday, November 03, 2011 7:09 PM  
**To:** 'usepr@areva.com'  
**Cc:** Lu, Shanlai; Forsaty, Fred; Donoghue, Joseph; Colaccino, Joseph; ArevaEPRDCPEm Resource  
**Subject:** U.S. EPR Design Certification Application RAI No. 523 (6157), FSAR Ch. 15  
**Attachments:** RAI\_523\_SRSB\_6157.doc

Attached please find the subject request for additional information (RAI). A draft of the RAI was provided to you on October 28, 2011, and on November 3, 2011, 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  
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**Hearing Identifier:** AREVA\_EPR\_DC\_RAIs  
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**From:** Tesfaye, Getachew

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Request for Additional Information No. 523(6157), Revision 0

11/03/2011

U. S. EPR Standard Design Certification

AREVA NP Inc.

Docket No. 52-020

SRP Section: 15.06.05 - Loss of Coolant Accidents Resulting From Spectrum of Postulated Piping  
Breaks Within the Reactor Coolant Pressure Boundary

Application Section: 15.06.05

QUESTIONS for Reactor System, Nuclear Performance and Code Review (SRSB)

15.06.05-115

- a. As part of EPR LOCA long term cooling evaluation, AREVA is planning to address the in-vessel downstream effect considering the accumulation of debris on the surface of the fuel rod surface. Demonstrate that, if a debris bed is developed and covers the fuel rod surface around the spacer grid, the localized heat transfer is still sufficient to maintain the fuel rod surface temperature below 800°F.
- b. In its original submittal of the strainer design technical report, AREVA assumed that the debris would not reach the reactor core until 900 seconds into the LOCA. Provide the basis of this assumption and demonstrate that the selection of 900 seconds to establish the acceptance criteria is conservative.