

## ArevaEPRDCPEm Resource

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**From:** Tesfaye, Getachew  
**Sent:** Friday, October 28, 2011 11:19 AM  
**To:** 'usepr@areva.com'  
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**Subject:** Draft - U.S. EPR Design Certification Application RAI No. 523 (6157), FSAR Ch. 15  
**Attachments:** Draft RAI\_523\_SRSB\_6157.doc

Attached please find draft RAI No. 523 regarding your application for standard design certification of the U.S. EPR. If you have any question or need clarifications regarding this RAI, please let me know as soon as possible, I will have our technical Staff available to discuss them with you.

Please also review the RAI to ensure that we have not inadvertently included proprietary information. If there are any proprietary information, please let me know within the next ten days. If I do not hear from you within the next ten days, I will assume there are none and will make the draft RAI publicly available.

Thanks,  
Getachew Tesfaye  
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**Hearing Identifier:** AREVA\_EPR\_DC\_RAIs  
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Request for Additional Information No. 523(6157), Revision 0

10/28/2011

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.