

## ArevaEPRDCPEm Resource

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**From:** Wunder, George  
**Sent:** Thursday, February 06, 2014 1:39 PM  
**To:** usepr@areva.com  
**Cc:** ArevaEPRDCPEm Resource; Bergman, Thomas; Hearn, Peter  
**Subject:** US EPR DC DRAFT RAI LETTER 628 RAI 3773  
**Attachments:** Draft RAI 628 RAI\_7337.docx

Attached please find Draft RAI Letter No. 628 regarding your application for standard design certification of the U.S. EPR. If you have any questions or need clarification regarding this Draft RAI, please let us know as soon as possible; I will have our technical Staff available to discuss them with you.

Please also review the Draft RAI to ensure that we have not inadvertently included proprietary information. If there is any proprietary information, please let us know within the next ten days. If I do not hear from you within the next ten days, I will make the Draft RAI publicly available.

Sincerely,

George Wunder, Senior Project Manager  
Office of New Reactors

**Hearing Identifier:** AREVA\_EPR\_DC\_RAIs  
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**From:** Wunder, George

**Created By:** George.Wunder@nrc.gov

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## Draft Request for Additional Information 628

Issue Date: 02/06/2014

Application Title: U. S. EPR Standard Design Certification - Docket Number 52-020

Operating Company: AREVA NP Inc.

Docket No. 52-020

Review Section: 09.01.04 - Light Load Handling System (Related to Refueling)

Application Section: 9.1.4

### QUESTIONS

#### 09.01.04-44

The staff has reviewed technical report (TR) ANP-10317, "Design Requirements for the U.S. EPR Aircraft Hazard Protection Structures", Revision 3, and the associated US EPR Tier 2 FSAR Interim Revision 6 markup pages, regarding the Spent Fuel Cask Transfer Facility (SFCTF) transmitted by AREVA Letter No. NRC:13:068 dated August 1, 2013 (ADAMS Accession Nos. ML13218A006, ML13218A007, and ML13218A008 all non-public). Section 2.2, Item 16 of the technical report and associated proposed changes to Tier 2 FSAR (Interim Revision 6) Section 9.1.4 incorporated additional aircraft impact shock criteria into the design basis of the safety-related SFCTF components.

Currently, US EPR Tier 2, FSAR, Revision 5, Section 9.1.4 states, in part in Subsection 9.1.4.1 "Design Bases," that the safety-related components of the SFCTF are designed to maintain the fluid boundary to preclude the loss of significant inventory in the SFP during cask loading operations, including SSE, and the postulated drop of a fuel assembly from the maximum handling height in the cask loading pit onto a connected cask. Further, the SFCTM is designed to prevent tipping or dropping of the fuel cask during cask handling operations, including a SSE.

However, in TR ANP-10317, Revision 3, and the associated Interim Revision 6 Tier 2 FSAR markup pages for Section 9.1.4, AREVA credits, as part of its design basis, that the SFCTF design can additionally withstand the shock and vibration effects and remain capable of performing its safety functions during and following the beyond design basis large commercial aircraft impact event

The SFCTF contains safety related procured components and ITAAC are included to verify the seismic category I components can withstand design basis loads. Therefore, pursuant to 10 CFR 52.47(a)(26) and (b)(1), in addition to the proposed FSAR Tier 2, Section 9.1.4 changes, the applicant is requested to revise Tier 1 FSAR, Section 2.2.8 and ITAAC, Table 2.2.8-2, Item 3.2 to include conforming additional aircraft impact shock design criteria credited for the SFCTF design. The applicant is also requested to verify that the additional aircraft impact shock criteria for the SFCTF is consistently incorporated into all applicable subsections in the proposed markup of Tier 2 FSAR Section 9.1.4.