

## **ArevaEPRDCPEm Resource**

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**From:** Buckberg, Perry  
**Sent:** Tuesday, March 19, 2013 10:38 AM  
**To:** WILLIFORD Dennis (AREVA); Snyder, Amy  
**Cc:** LENTZ Tony (EXTERNAL AREVA); UYEDA Graydon (AREVA); DELANO Karen (AREVA); LEIGHLITER John (AREVA); ROMINE Judy (AREVA); RYAN Tom (AREVA); TOLLEY Tracey (AREVA); VANCE Brian (AREVA); WELLS Russell (AREVA); WILLS Tiffany (AREVA); Snyder, Amy; Xu, Jim  
**Subject:** RE: SUNSI Advanced Response to U.S. EPR Design Certification Application RAI No. 527 (6179, 6205, 6180), FSAR Ch. 14, Questions 14.02-163, 14.03.02-57 through 14.03.02-62, 14.03.07-38

Dennis,

The staff feedback on RAI 527, Q#s 14.03.02-57 thru -62 are pasted below.  
Please contact me anytime to discuss.

Thanks,

**PERRY BUCKBERG**

Senior Project Manager  
Nuclear Regulatory Commission  
Office of New Reactors  
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### **Assessment of Draft Responses to RAI 527, Questions 14.03.02-57 to 62**

#### **Question 14.03.02-57**

Issue: The applicant was requested to add appropriate ITAAC requirements for missile barriers.

Response: Missile barriers will be added to the requirements to perform an analysis to determine key dimensions of internal hazard barriers and to perform inspections that verify the configuration of as-built internal hazard barriers.

As worded in the Question 14.03.02-57 response ITAAC tables, the inspection, test and analysis (ITA) states:

- a) An analysis will be performed to determine key dimensions of internal hazard barriers.
- b) An inspection will be performed to verify configuration of as-built internal hazard barriers.

The acceptance criteria should include the requirement that the as-built configuration must meet the requirements for internal hazard barriers as provided by the results of the hazard barrier analysis.

The applicant also states that the postulated missiles for high energy line break, CRDM housing, or control rod ejection are not considered credible. The applicant should provide the basis for this statement.

#### **Question 14.03.02-58**

Issue: The applicant was asked why in Tier 1, Table 2.1.1-8, ITAAC item 2.5 (Revision 3) items a through e dealing with liner and penetration assemblies were deleted.

Response: The applicant stated these were deleted in response to RAI 469, Question 14.03-16. RAI 469, Question 14.03-16 is a draft response with the final not due until August of this year. However, in reading this draft response it is not clear why the question or response provides a basis for deleting items a through e of item 2.5.

#### **Question 14.03.02-59**

Issue: The applicant was asked to justify why the US EPR containment should not be treated as a prototype with respect to ASME requirements for containment testing.

Response: The applicant has agreed that the US EPR containment is a prototype. The SIT will comply with the requirements of ASME Code, Section III, Division 2 for prototype containments. **The response is acceptable.**

#### **Question 14.03.02-60**

Issue: It was not clear that the integrated leak rate test (ILRT) met the Appendix J requirements for Type A, B, and C tests.

Response: The applicant has clarified the requirements for the Type A, Type B, and Type C tests such that they now meet the requirements of Appendix J. **The response is acceptable.**

#### **Question 14.03.02-61**

Issue: The vent stack had been reclassified as a SC I structure by the applicant. It was not clear in Tier 1, Section 2.1.1.3 that the vent stack was part of the fuel building (FB) and that the vent stack was a SC I structure.

Response: The applicant has revised Sections 2.1.1, 2.1.1.2, 2.1.1.3, and Tables 2.1.1-4, 2.1.1-11 to provide language that addresses the staff's concerns. **The response is acceptable.**

#### **Question 14.03.02-62**

Issue: This question contained two concerns. The first was that the ITAAC language regarding the as-built reconciliation of the Nuclear Auxiliary Building (NAB) to its design basis loads was lacking in certain detail and inconsistent with the ITAAC language used for other EPR structures. The second was that the ITAAC did not contain a requirement that an analysis be performed to determine the required separation distance between the NI and the NAB.

Response: Regarding the first concern, the applicant has provided a revision to the ITAAC language regarding the as-built reconciliation such that **this part of the response is acceptable.**

Regarding the second concern, the applicant did not change the requirements for the separation distance as provided in Table 2.1.3-1, Item 3.2. Under the ITA column it states "An inspection will be performed to verify the as-built physical separation between the NAB and the NI common basemat". It should include a requirement that an analysis will be performed to determine the minimum required separation distance between the NI and NAB. It is also not clear why the separation distance is between the NAB and the NI common basemat. It would seem that the separation requirement should apply along the entire vertical structure of the NAB and the NI. Under the Acceptance Criteria (AC) the last sentence should be reworded to state "A minimum required separation distance based on a bounding analysis that includes a factor of safety of two exists between the NI and the NAB".

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**From:** WILLIFORD Dennis (AREVA) [mailto:Dennis.Williford@areva.com]

**Sent:** Friday, January 25, 2013 2:45 PM

**To:** Snyder, Amy

**Cc:** Ford, Tanya; LENTZ Tony (EXTERNAL AREVA); UYEDA Graydon (AREVA); DELANO Karen (AREVA); LEIGHLITER John (AREVA); ROMINE Judy (AREVA); RYAN Tom (AREVA); TOLLEY Tracey (AREVA); VANCE Brian (AREVA); WELLS Russell (AREVA); WILLS Tiffany (AREVA)

**Subject:** SUNSI Advanced Response to U.S. EPR Design Certification Application RAI No. 527 (6179, 6205, 6180), FSAR Ch. 14, Questions 14.02-163, 14.03.02-57 through 14.03.02-62, 14.03.07-38

Amy,

To support a final response date of March 29, 2013, an Advanced response to RAI No. 527, Questions 14.02-163, 14.03.02-57 through 14.03.02-62, and 14.03.07-38 is provided in the attached file, "RAI 527 Response US EPR DC - SUNSI - Advanced.pdf". AREVA NP considers portions of the attached response to contain Sensitive Unclassified Non-Safeguards Information (SUNSI), to be withheld under 10 CFR 2.390(d).

To keep our commitment to send a final response to these questions by the commitment date, we need to receive all NRC staff feedback and comments no later than **March 14, 2013**.

Please let me know if the staff has questions or if this can be sent as a final response.

Sincerely,

***Dennis Williford, P.E.***

***U.S. EPR Design Certification Licensing Manager***

***AREVA NP Inc.***

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Charlotte, NC 28262

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**From:** WILLIFORD Dennis (RS/NB)

**Sent:** Sunday, February 26, 2012 7:35 PM

**To:** [Getachew.Tesfaye@nrc.gov](mailto:Getachew.Tesfaye@nrc.gov)

**Cc:** BENNETT Kathy (RS/NB); DELANO Karen (RS/NB); ROMINE Judy (RS/NB); RYAN Tom (RS/NB); LENTZ Tony (External RS/NB)

**Subject:** Response to U.S. EPR Design Certification Application RAI No. 527 (6179, 6205, 6180), FSAR Ch. 14, Supplement 1

AREVA NP provided a schedule for a technically correct and complete response to the 9 questions in RAI 527 on January 25, 2012.

The schedule for a response to these 9 questions has been changed as provided below. This schedule was transmitted to the NRC in AREVA NP letter NRC:12:008 dated February 21, 2012.

Question #	Response Date
RAI 527 — 14.02-163	March 29, 2013
RAI 527 — 14.03.02-56	August 30, 2013
RAI 527 — 14.03.02-57	March 29, 2013
RAI 527 — 14.03.02-58	March 29, 2013
RAI 527 — 14.03.02-59	March 29, 2013
RAI 527 — 14.03.02-60	March 29, 2013
RAI 527 — 14.03.02-61	March 29, 2013
RAI 527 — 14.03.02-62	March 29, 2013
RAI 527 — 14.03.07-38	March 29, 2013

Sincerely,

***Dennis Williford, P.E.***  
***U.S. EPR Design Certification Licensing Manager***  
***AREVA NP Inc.***

7207 IBM Drive, Mail Code CLT 2B  
Charlotte, NC 28262  
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**From:** WILLIFORD Dennis (RS/NB)  
**Sent:** Wednesday, January 25, 2012 8:05 AM  
**To:** Tesfaye, Getachew  
**Cc:** BENNETT Kathy (RS/NB); DELANO Karen (RS/NB); ROMINE Judy (RS/NB); RYAN Tom (RS/NB); LENTZ Tony (External RS/NB); [Michael.Miernicki@nrc.gov](mailto:Michael.Miernicki@nrc.gov); Jaffe, David  
**Subject:** Response to U.S. EPR Design Certification Application RAI No. 527 (6179, 6205, 6180), FSAR Ch. 14

Getachew,

Attached please find AREVA NP Inc.'s response to the subject request for additional information (RAI). The attached file, "RAI 527 Response US EPR DC.pdf" provides a schedule since a technically correct and complete response to these 9 questions cannot be provided at this time.

The following table indicates the respective pages in the response document, "RAI 527 Response US EPR DC.pdf" that contain AREVA NP's response to the subject questions.

Question #	Start Page	End Page
RAI 527 — 14.02-163	2	4
RAI 527 — 14.03.02-56	5	6
RAI 527 — 14.03.02-57	7	7
RAI 527 — 14.03.02-58	8	8

RAI 527 — 14.03.02-59	9	9
RAI 527 — 14.03.02-60	10	10
RAI 527 — 14.03.02-61	11	11
RAI 527 — 14.03.02-62	12	13
RAI 527 — 14.03.07-38	14	16

A preliminary schedule for a technically correct and complete response to these questions is provided below. This schedule is being reevaluated and a new supplement with a revised schedule will be transmitted by February 21, 2012.

Question #	Response Date
RAI 527 — 14.02-163	February 21, 2012
RAI 527 — 14.03.02-56	February 21, 2012
RAI 527 — 14.03.02-57	February 21, 2012
RAI 527 — 14.03.02-58	February 21, 2012
RAI 527 — 14.03.02-59	February 21, 2012
RAI 527 — 14.03.02-60	February 21, 2012
RAI 527 — 14.03.02-61	February 21, 2012
RAI 527 — 14.03.02-62	February 21, 2012
RAI 527 — 14.03.07-38	February 21, 2012

Sincerely,

***Dennis Williford, P.E.***  
***U.S. EPR Design Certification Licensing Manager***  
***AREVA NP Inc.***

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

**Sent:** Friday, December 16, 2011 8:38 AM

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

**Cc:** Dehmelt, Jean-Claude; Roach, Edward; Chakravorty, Manas; Thomas, Brian; Ford, Tanya; Jaffe, David; Colaccino, Joseph; ArevaEPRDCPEm Resource

**Subject:** U.S. EPR Design Certification Application RAI No. 527 (6179, 6205, 6180), FSAR Ch. 14

Attached please find the subject request for additional information (RAI). A draft of the RAI was provided to you on November 25, 2011, and on December 12, 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, excluding the time period of **December 24, 2011 thru January 2, 2012, to account for the holiday season** as discussed with AREVA NP Inc. For any RAIs that cannot be answered **within 40 days**, it is expected that a date for receipt of this information will be provided to the staff within the 40-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:** 4290

**Mail Envelope Properties** (44CD2E65B0FF0E499CB32BC30CF781F0D14BB75EE7)

**Subject:** RE: SUNSI Advanced Response to U.S. EPR Design Certification Application  
RAI No. 527 (6179, 6205, 6180), FSAR Ch. 14, Questions 14.02-163, 14.03.02-57 through 14.03.02-62,  
14.03.07-38

**Sent Date:** 3/19/2013 10:38:18 AM

**Received Date:** 3/19/2013 10:38:23 AM

**From:** Buckberg, Perry

**Created By:** Perry.Buckberg@nrc.gov

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MESSAGE	11619	3/19/2013 10:38:23 AM

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