

## ArevaEPRDCDocsPEm Resource

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**From:** Buckberg, Perry  
**Sent:** Thursday, August 08, 2013 2:31 PM  
**To:** HOTTLE Nathan (AREVA)  
**Cc:** RYAN Tom (AREVA); LENTZ Tony (EXTERNAL AREVA); Snyder, Amy; WILLIFORD Dennis (AREVA)  
**Subject:** RE: Advanced Response to U.S. EPR Design Certification Application FINAL RAI 592, Chapter 14, Section 14.03.02, Structural and Systems Engineering - ITAAC, Question 14.03.02-63  
**Attachments:** RAI 592 feedback - 7-19-13 Advance response.docx

Nathan,

In response to the RAI No. 592, Question 14.03.02-63 advance response sent by Dennis in the e-mail below, the attached document includes suggested Tier 1 wording.

The staff considered the Tier 1, Section 2.1.3, mark-ups in your advance response but suggests that wording consistent with the attached be considered to improve overall clarity.

Thanks,

**PERRY BUCKBERG**

**Senior Project Manager**

Nuclear Regulatory Commission

Office of New Reactors

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fax: (301)415-6406

[perry.buckberg@nrc.gov](mailto:perry.buckberg@nrc.gov)

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

**Sent:** Friday, July 19, 2013 4:43 PM

**To:** Snyder, Amy

**Cc:** Buckberg, Perry; ANDERSON Katherine (EXTERNAL AREVA); DELANO Karen (AREVA); HONMA George (EXTERNAL AREVA); LEIGHLITER John (AREVA); LEWIS Ray (EXTERNAL AREVA); ROMINE Judy (AREVA); RYAN Tom (AREVA); SHEPHERD Tracey (AREVA); VANCE Brian (AREVA); MONTAGUE Kelvin (EXTERNAL AREVA); LENTZ Tony (EXTERNAL AREVA); ABAYAN Victor (AREVA)

**Subject:** Advanced Response to U.S. EPR Design Certification Application FINAL RAI 592, Chapter 14, Section 14.03.02, Structural and Systems Engineering - ITAAC, Question 14.03.02-63

Amy,

Attached is an Advanced Response to RAI No. 592, Question 14.03.02-63 to support the final response date of August 22, 2013.

To keep our commitment to send a final response to this question by the commitment date, we need to receive all NRC staff feedback and comments no later than **August 15, 2013**.

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

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

Phone: 704-805-2223

Email: [Dennis.Williford@areva.com](mailto:Dennis.Williford@areva.com)

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

**Sent:** Friday, July 19, 2013 4:36 PM

**To:** 'Snyder, Amy'

**Cc:** Buckberg, Perry <[Perry.Buckberg@nrc.gov](mailto:Perry.Buckberg@nrc.gov)> ([Perry.Buckberg@nrc.gov](mailto:Perry.Buckberg@nrc.gov)); ANDERSON Katherine (External AREVA NP INC.); DELANO Karen (RS/NB); LEIGHLITER John (RS/NB); ROMINE Judy (RS/NB); RYAN Tom (RS/NB); MONTAGUE Kelvin (External AREVA NP INC.); LENTZ Tony (External RS/NB)

**Subject:** Response to U.S. EPR Design Certification Application FINAL RAI 592, Chapter 14, Section 14.03.02, Structural and Systems Engineering - ITAAC

Amy,

Attached please find AREVA NP Inc.'s response to the subject request for additional information (RAI). The attached file, "RAI 592 Response US EPR DC.pdf," provides a schedule since a technically correct and complete response to the one question cannot be provided at this time.

The following table indicates the respective pages in the response document, "RAI 592 Response US EPR DC.pdf," that contain AREVA NP's response to the subject question.

Question #	Start Page	End Page
RAI 592 — 14.03.02-63	2	2

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

Question #	Advanced Response Date	NRC Comment Request Date	Final Response Date
RAI 592 — 14.03.02-63	July 19, 2013	August 15, 2013	<b>August 22, 2013</b>

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  
Phone: 704-805-2223  
Email: [Dennis.Williford@areva.com](mailto:Dennis.Williford@areva.com)

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**From:** Snyder, Amy [<mailto:Amy.Snyder@nrc.gov>]  
**Sent:** Thursday, July 11, 2013 10:09 AM  
**To:** ZZ-DL-A-USEPR-DL  
**Cc:** Chakravorty, Manas; Xu, Jim; Buckberg, Perry; Segala, John; Welch, Christopher; Kowal, Mark  
**Subject:** U.S. EPR Design Certification Application FINAL RAI 592, Chapter 14, Section 14.03.02, Structural and Systems Engineering - ITAAC

Attached please find the subject request for additional information (RAI). A draft RAI was provided to you on July 3, 2013. On July 8, 2013, you informed us that the draft RAI does not contain proprietary information and that the draft RAI is clear and no further clarification is needed. As result, the RAI was not changed.

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 or August 12, 2013**, 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.

Thank You,

Amy

Amy Snyder, U.S. EPR Design Certification Lead Project Manager  
Licensing Branch 1 (LB1)  
Division of New Reactor Licensing  
Office of New Reactors  
U.S. Nuclear Regulatory Commission  
☎ Office: (301) 415-6822  
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✉ Mail Stop: T6-C20M  
✉ E-mail: [Amy.Snyder@nrc.gov](mailto:Amy.Snyder@nrc.gov)

**Hearing Identifier:** AREVA\_EPR\_DC\_Docs\_Public  
**Email Number:** 47

**Mail Envelope Properties** (Perry.Buckberg@nrc.gov20130808143000)

**Subject:** RE: Advanced Response to U.S. EPR Design Certification Application FINAL  
RAI 592, Chapter 14, Section 14.03.02, Structural and Systems Engineering - ITAAC, Question  
14.03.02-63

**Sent Date:** 8/8/2013 2:30:33 PM

**Received Date:** 8/8/2013 2:30:00 PM

**From:** Buckberg, Perry

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

**Recipients:**

"RYAN Tom (AREVA)" <Tom.Ryan@areva.com>

Tracking Status: None

"LENTZ Tony (EXTERNAL AREVA)" <Tony.Lentz.ext@areva.com>

Tracking Status: None

"Snyder, Amy" <Amy.Snyder@nrc.gov>

Tracking Status: None

"WILLIFORD Dennis (AREVA)" <Dennis.Williford@areva.com>

Tracking Status: None

"HOTTLE Nathan (AREVA)" <Nathan.Hottle@areva.com>

Tracking Status: None

**Post Office:**

<b>Files</b>	<b>Size</b>	<b>Date &amp; Time</b>
MESSAGE	5285	8/8/2013 2:30:00 PM
RAI 592 feedback - 7-19-13 Advance response.docx		25062

**Options**

**Priority:** Standard

**Return Notification:** No

**Reply Requested:** No

**Sensitivity:** Normal

**Expiration Date:**

**Recipients Received:**

RAI No. 592, Question 14.03.02-63

Suggested Tier 1 changes

	Commitment Wording	Inspections, Tests and Analysis	Acceptance Criteria
3.1	<p>The NAB <del>is</del>, a Seismic Category II and RW-IIa structure <del>and will, is designed to</del> withstand design basis loads <del>listed in Regulatory Guide 1.143, except that the earthquake and tornado, including extreme</del> wind and full SSE seismic loads <del>will comply with the criteria in Regulatory Guide 1.76,</del> without loss of structural integrity.</p>	<p>An inspection and analysis will be performed <u>of the NAB</u> to verify the as-built <del>NAB</del> structure <del>will</del> <u>meets Seismic Category II and RW-IIa requirements and can</u> withstand design basis loads <del>-, including extreme wind and full SSE seismic loads, without loss of structural integrity.</del></p>	<p>A report <u>exists and</u> concludes <del>that the as-built</del> NAB structure <u>will meet</u> <u>Seismic Category II and RW-IIa requirements and can</u> withstand design basis loads <del>listed in Regulatory Guide 1.143, except that the earthquake and tornado, including extreme wind and full SSE seismic loads will comply with the criteria in Regulatory Guide 1.76,</del> without <u>a</u> loss of structural integrity.</p>

**Table 2.1.3-1**

**3.0 Mechanical Design Features**

3.1 The NAB is a Seismic Category II ~~and RW-IIa~~ structure and will ~~withstand design basis~~ be designed to the same codes, standards, loads listed in Regulatory Guide 1.143, except, and loading combinations that the earthquake and tornado wind loads will comply with the criteria in Regulatory Guide 1.76, apply to a Seismic Category I structure without loss of structural integrity. Design basis loads include extreme wind loads as specified in Regulatory Guides 1.76 and 1.221, and full SSE seismic loads. The NAB is also classified as RW-IIa structure and in all other aspects will meet the guidance of Regulatory Guide 1.143.