

## ArevaEPRDCPEm Resource

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**From:** WELLS Russell (AREVA) [Russell.Wells@areva.com]  
**Sent:** Thursday, April 07, 2011 9:23 AM  
**To:** Tesfaye, Getachew  
**Cc:** GUCWA Len (EXTERNAL AREVA); Miernicki, Michael; BENNETT Kathy (AREVA); DELANO Karen (AREVA); ROMINE Judy (AREVA); RYAN Tom (AREVA)  
**Subject:** Response to U.S. EPR Design Certification Application RAI No. 479 (5568\_5610\_5612), FSAR Ch. 6  
**Attachments:** RAI 479 Response US EPR DC.PDF

Getachew,

Attached please find AREVA NP Inc.'s response to the subject request for additional information (RAI). The attached file, "RAI 479 Response US EPR DC.pdf" provides a schedule since technically correct and complete responses to the 3 questions are not provided.

The following table indicates the respective pages in the response document, "RAI 479 Response US EPR DC.pdf," that contain AREVA NP's responses to the subject questions.

Question #	Start Page	End Page
RAI 479 — 06.02.01-102	2	2
RAI 479 — 06.02.04-11	3	3
RAI 479 — 06.02.04-12	4	4

A complete answer is not provided for 3 of the 3 questions. The schedule for technically correct and complete responses to these questions is provided below.

Question #	Response Date
RAI 479 — 06.02.01-102	June 15, 2011
RAI 479 — 06.02.04-11	June 15, 2011
RAI 479 — 06.02.04-12	June 15, 2011

*Sincerely,*

*Russ Wells*

*U.S. EPR Design Certification Licensing Manager*

*AREVA NP, Inc.*

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

**Sent:** Monday, March 07, 2011 8:29 PM

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

**Cc:** Jensen, Walton; Grady, Anne-Marie; Jackson, Christopher; McKirgan, John; Carneal, Jason; Colaccino, Joseph; ArevaEPRDCPEm Resource

**Subject:** U.S. EPR Design Certification Application RAI No. 479 (5568\_5610\_5612), FSAR Ch. 6

Attached please find the subject request for additional information (RAI). A draft of the RAI was provided to you on March 4, 2011, and on March 7, 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  
Sr. Project Manager  
NRO/DNRL/NARP  
(301) 415-3361

**Hearing Identifier:** AREVA\_EPR\_DC\_RAIs  
**Email Number:** 2821

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**Subject:** Response to U.S. EPR Design Certification Application RAI No. 479  
(5568\_5610\_5612), FSAR Ch. 6  
**Sent Date:** 4/7/2011 9:22:57 AM  
**Received Date:** 4/7/2011 9:23:03 AM  
**From:** WELLS Russell (AREVA)

**Created By:** Russell.Wells@areva.com

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MESSAGE	2467	4/7/2011 9:23:03 AM
RAI 479 Response US EPR DC.PDF		13406

**Options**

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**Reply Requested:** No  
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**Response to**

**Request for Additional Information No. 479(5568, 5610, 5612), Revision 0**

**3/07/2011**

**U. S. EPR Standard Design Certification**

**AREVA NP Inc.**

**Docket No. 52-020**

**SRP Section: 06.02.01 - Containment Functional Design**

**SRP Section: 06.02.04 - Containment Isolation System**

**Application Section: 06.02**

**QUESTIONS for Containment and Ventilation Branch 1 (AP1000/EPR Projects)  
(SPCV)**

**Question 06.02.01-102:**

These questions relate to the discussions at the February 15 and 16 Containment Audit for US-EPR.

1. The staff observed discrepancies in the compartment volumes in various data sets submitted by AREVA. See RAI 437 Q 06.02.01-99 and RAI 466 Q 06.02.01.02-10. The staff understands that the discrepancies are the result of compartment boundaries being independently determined by different analysts. The compartment size may affect the pressures obtained in subcompartment analyses. Provide an ITAAC by which the compartment volumes used in subcompartment analyses will be verified for the as-built plant so that the results from the FSAR analyses can be concluded to be valid for the as-built plant.
2. RHR heat exchanger fouling: The staff noted that assurance is needed that the heat transfer capabilities of the RHR heat exchangers are not degraded as the plant ages to levels below those assumed in the safety analyses. Tech Spec surveillance requirements are one means to provide the required assurance. AREVA has indicated that the Chapter 5 maintenance program would be adequate. The staff requires that AREVA provide a full and complete justification that the Chapter 5 maintenance program will be sufficient to identify any heat transfer degradation within the heat exchangers below that which was assumed in the safety analyses for reactor heat removal and the containment heat removal over the life of the plant and a justification for why Tech Specs are not appropriate.

**Response to Question 06.02.01-102:**

A response to this question will be provided by June 15, 2011.

**Question 06.02.04-11:****OPEN ITEM**

GDC 55, GDC 56, and GDC 57 require that isolation valves outside containment be located as close to the containment as practical. FSAR Tier 2, Section 6.2.4 indicates that these CIVs will be located as close to the containment as practical. However, the distances from the outside containment CIVs are not included in FSAR Tier 2 Table 6.2.4-1. There are no FSAR Tier 1 requirements in any of the appropriate Sections 2.2, 2.6 and 3.5 requiring that outboard CIVs will be located as close to the containment wall as practical. No COL information items (FSAR Tier 2, Table 1.8-2) have been identified associated with locating the subject valves as close as practical to the containment wall or defining maximum allowable distances. No ITAAC for any of the appropriate Sections 2.2, 2.3, and 3.5 have been identified to confirm that the outboard CIVs are located as close to the containment wall as practical. Provide the distances in FSAR Tier 2, Table 6.2.4-1 which will demonstrate compliance with GDCs 55, 56, and 57. In FSAR, Tier 1, Section 2.2, 2.3 and 3.5 provide a reference to FSAR Tier 2, Table 6.2.4-1, so that these maximum distances will be verified.

**Response to Question 06.02.04-11:**

A response to this question will be provided by June 15, 2011.

**Question 06.02.04-12:**

**OPEN ITEM**

In FSAR Tier 2, Table 6.2.4-1, all containment penetrations are given and described. The dedicated penetration 60BQ064 is included. However, the size (36") in diameter should be added to the Table. This information was provided in the applicant's response to RAI 181, Question 19-271, but not included in Table 6.2.4-1. Please add the diameter of the dedicated penetration to Table 6.2.4-1.

**Response to Question 06.02.04-12:**

A response to this question will be provided by June 15, 2011.