

## ArevaEPRDCPEm Resource

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**From:** BRYAN Martin (EXTERNAL AREVA) [Martin.Bryan.ext@areva.com]  
**Sent:** Tuesday, September 07, 2010 10:14 AM  
**To:** Tesfaye, Getachew  
**Cc:** DELANO Karen (AREVA); ROMINE Judy (AREVA); BENNETT Kathy (AREVA); WELLS Russell (AREVA)  
**Subject:** Response to U.S. EPR Design Certification Application RAI No. 431 (4977), FSARCh. 5, OPEN ITEM  
**Attachments:** RAI 431 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 431 Response U.S. EPR DC.pdf" provides a schedule for a technically correct and complete response to the 1 question.

The following table indicates the respective pages in the response document, RAI 431 Response U.S. EPR DC.pdf "that contain AREVA NP's response to the subject questions.

Question #	Start Page	End Page
RAI 431 — 05.02.05-12	2	2

A complete answer is not provided for the 1 questions. The schedule for a technically correct and complete response to this question is provided below.

Question #	Response Date
RAI __ — 05.02.05-12	October 27, 2010

Sincerely,

Martin (Marty) C. Bryan  
U.S. EPR Design Certification Licensing Manager  
AREVA NP Inc.  
Tel: (434) 832-3016  
702 561-3528 cell  
[Martin.Bryan.ext@areva.com](mailto:Martin.Bryan.ext@areva.com)

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**From:** Tesfaye, Getachew [mailto:Getachew.Tesfaye@nrc.gov]  
**Sent:** Friday, August 13, 2010 5:44 PM  
**To:** ZZ-DL-A-USEPR-DL  
**Cc:** Li, Chang; Lee, Samuel; Segala, John; Hearn, Peter; Colaccino, Joseph  
**Subject:** U.S. EPR Design Certification Application RAI No. 431 (4977), FSARCh. 5, OPEN ITEM

Attached please find the subject requests for additional information (RAI). A draft of the RAI was provided to you on August 5, 2010, and on August 12, 2010, 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:** 1960

**Mail Envelope Properties** (BC417D9255991046A37DD56CF597DB710771CB76)

**Subject:** Response to U.S. EPR Design Certification Application RAI No. 431 (4977),  
FSARCh. 5, OPEN ITEM  
**Sent Date:** 9/7/2010 10:13:36 AM  
**Received Date:** 9/7/2010 10:13:54 AM  
**From:** BRYAN Martin (EXTERNAL AREVA)

**Created By:** Martin.Bryan.ext@areva.com

**Recipients:**

"DELANO Karen (AREVA)" <Karen.Delano@areva.com>  
Tracking Status: None  
"ROMINE Judy (AREVA)" <Judy.Romine@areva.com>  
Tracking Status: None  
"BENNETT Kathy (AREVA)" <Kathy.Bennett@areva.com>  
Tracking Status: None  
"WELLS Russell (AREVA)" <Russell.Wells@areva.com>  
Tracking Status: None  
"Tesfaye, Getachew" <Getachew.Tesfaye@nrc.gov>  
Tracking Status: None

**Post Office:** AUSLYNCMX02.adom.ad.corp

<b>Files</b>	<b>Size</b>	<b>Date &amp; Time</b>
MESSAGE	2116	9/7/2010 10:13:54 AM
RAI 431 Response US EPR DC.pdf		59846

**Options**

**Priority:** Standard  
**Return Notification:** No  
**Reply Requested:** No  
**Sensitivity:** Normal  
**Expiration Date:**  
**Recipients Received:**

**Response to**

**Request for Additional Information No. 431(4977), Revision 1  
Supplement 1**

**8/13/2010**

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

**AREVA NP Inc.**

**Docket No. 52-020**

**SRP Section: 05.02.05 - Reactor Coolant Pressure Boundary Leakage Detection**

**Application Section: 5.2.5**

**QUESTIONS for Balance of Plant Branch 2 (SBPB)**

**Question 05.02.05-12:**

**OPEN ITEM**

**Follow-up to Open Item RAI 365, Question 05.02.05-11**

RAI 365 Question 05.02.05-11 requested the applicant to include the RCPB leakage detection sensitivity and response time for the RCPB leakage detection instrument in the ITAAC. In reviewing the response to Question 05.02.05-11 pertaining to ITAAC markups (Tier 1 Table 2.4.8-1, Table 2.9.4-3, and Table 2.9.5-2), the staff noted that the proposed ITAAC have the leakage detection acceptance criterion of 1 gpm within 1 hour for the fan cooler condenser and sump level. The applicant is requested to provide the following information.

1. The sensitivity criterion of 1.0 gpm is inconsistent with Tier 2 FSAR Section 3.6.3.7, which indicates that to support leak-before-break (LBB), the leakage detection sensitivity of 0.5 gpm is needed for the main coolant loop piping (MCL) and pressurizer surge line (SL). Further, the leakage detection sensitivity of 0.1 gpm is needed for the main steam line (MSL). Revise the sensitivity criteria or justify the adequacy of the 1.0 gpm sensitivity criterion.
2. Include and specify the sensitivity and response time for radiation monitors in the ITAAC in terms of leakage detection (gpm).
3. Verify the initial testing specified in Tier 2 FSAR Section 14.2 to have consistent criteria for the sensitivity and response time of reactor coolant leakage detection.

**Response to Question 05.02.05-12:**

A response to this question will be provided by October 27, 2010.