

## ArevaEPRDCPEm Resource

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**From:** Pederson Ronda M (AREVA NP INC) [Ronda.Pederson@areva.com]  
**Sent:** Tuesday, September 01, 2009 6:23 PM  
**To:** Tesfaye, Getachew  
**Cc:** BENNETT Kathy A (OFR) (AREVA NP INC); DELANO Karen V (AREVA NP INC); NOXON David B (AREVA NP INC)  
**Subject:** Response to U.S. EPR Design Certification Application RAI No. 197, FSAR Ch 19, Supplement 2  
**Attachments:** RAI 197 Supplement 2 Response US EPR DC.pdf

Getachew,

AREVA NP Inc. provided responses to 9 of the 10 questions of RAI No. 197 on April 10, 2009. Supplement 1 response to RAI No. 197 was sent May 15, 2009 to address the one remaining question.

The attached file, "RAI 197 Supplement 2 Response US EPR DC.pdf" provides a supplemental response to RAI 197 Question 19-279.

The following table indicates the respective page in the response document, "RAI 197 Response US EPR DC.pdf," that contains AREVA NP's response to the subject question.

Question #	Start Page	End Page
RAI 197 — 19-279	2	2

This concludes the formal AREVA NP response to RAI 197, and there are no questions from this RAI for which AREVA NP has not provided responses.

Sincerely,

*Ronda Pederson*

[ronda.pederson@areva.com](mailto:ronda.pederson@areva.com)

Licensing Manager, U.S. EPR Design Certification

**AREVA NP Inc.**

An AREVA and Siemens company

3315 Old Forest Road

Lynchburg, VA 24506-0935

Phone: 434-832-3694

Cell: 434-841-8788

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**From:** Pederson Ronda M (AREVA NP INC)

**Sent:** Friday, May 15, 2009 6:02 PM

**To:** 'Getachew Tesfaye'

**Cc:** BENNETT Kathy A (OFR) (AREVA NP INC); DELANO Karen V (AREVA NP INC); NOXON David B (AREVA NP INC)

**Subject:** Response to U.S. EPR Design Certification Application RAI No. 197, FSAR Ch 19, Supplement 1

Getachew,

AREVA NP Inc. provided responses to 9 of the 10 questions of RAI No. 197 on April 10, 2009. The attached file, "RAI 197 Supplement 1 Response US EPR DC.pdf" provides a technically correct and complete response to the one remaining question, as committed.

The following table indicates the pages in the response document, "RAI 197 Response US EPR DC.pdf," that contain AREVA NP's response to the subject question.

Question #	Start Page	End Page
RAI 197 — 19-275	2	4

This concludes the formal AREVA NP response to RAI 197, and there are no questions from this RAI for which AREVA NP has not provided responses.

Sincerely,

*Ronda Pederson*

[ronda.pederson@areva.com](mailto:ronda.pederson@areva.com)

Licensing Manager, U.S. EPR Design Certification

**AREVA NP Inc.**

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**From:** WELLS Russell D (AREVA NP INC)

**Sent:** Friday, April 10, 2009 5:36 PM

**To:** 'Getachew Tesfaye'

**Cc:** Pederson Ronda M (AREVA NP INC); BENNETT Kathy A (OFR) (AREVA NP INC); DELANO Karen V (AREVA NP INC); DUNCAN Leslie E (AREVA NP INC)

**Subject:** Response to U.S. EPR Design Certification Application RAI No. 197, FSAR Ch 19

Getachew,

The proprietary and non-proprietary versions of the response to RAI No. 197 are submitted via AREVA NP Inc. letter, "Response to U.S. EPR Design Certification Application RAI No. 197" NRC 09:039, dated April 10, 2009. The enclosure to that letter provides technically correct and complete responses to 9 of the 10 questions in RAI No. 197. An affidavit to support withholding of information from public disclosure, per 10CFR2.390(b), is provided as an enclosure to that letter.

The following table indicates the respective pages in the response document, "RAI 197 Response US EPR DC.pdf" that contain AREVA NP's response to the subject questions.

Question #	Start Page	End Page
RAI 197 — 19-274	2	4
RAI 197 — 19-275	5	5
RAI 197 — 19-276	6	6
RAI 197 — 19-277	7	10
RAI 197 — 19-278	11	13
RAI 197 — 19-279	14	15

RAI 197 — 19-280	16	18
RAI 197 — 19-281	19	19
RAI 197 — 19-282	20	20
RAI 197 — 19-283	21	21

The schedule for the technically correct and complete response to the remaining question in RAI No. 197 is provided below:

Question #	Response Date
RAI 197 — 19-275	May 15, 2009

Sincerely,

(Russ Wells on behalf of)

*Ronda Pederson*

[ronda.pederson@areva.com](mailto:ronda.pederson@areva.com)

Licensing Manager, U.S. EPR Design Certification  
New Plants Deployment

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

**Sent:** Wednesday, March 11, 2009 6:56 PM

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

**Cc:** Theresa Clark; Hanh Phan; Edward Fuller; Lynn Mrowca; John Rycyna; Joseph Colaccino; ArevaEPRDCPEm Resource

**Subject:** U.S. EPR Design Certification Application RAI No. 197 (2202), FSARCh. 19

Attached please find the subject requests for additional information (RAI). A draft of the RAI was provided to you on February 27, 2009, and discussed with your staff on March 11, 2009. No changes were made to the Draft RAI Questions as a result of that discussion. 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:** 780

**Mail Envelope Properties** (5CEC4184E98FFE49A383961FAD402D3101316EC4)

**Subject:** Response to U.S. EPR Design Certification Application RAI No. 197, FSAR Ch  
19, Supplement 2  
**Sent Date:** 9/1/2009 6:23:18 PM  
**Received Date:** 9/1/2009 6:23:20 PM  
**From:** Pederson Ronda M (AREVA NP INC)

**Created By:** Ronda.Pederson@areva.com

**Recipients:**

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Tracking Status: None

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

<b>Files</b>	<b>Size</b>	<b>Date &amp; Time</b>
MESSAGE	5436	9/1/2009 6:23:20 PM
RAI 197 Supplement 2 Response US EPR DC.pdf		57808

**Options**

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

**Response to**

**Request for Additional Information No. 197, Supplement 2**

**03/11/2009**

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

**AREVA NP Inc.**

**Docket No. 52-020**

**SRP Section: 19 - Probabilistic Risk Assessment and Severe Accident Evaluation**

**Application Section: 19**

**QUESTIONS for PRA Licensing, Operations Support and Maintenance Branch 1  
(AP1000/EPR Projects) (SPLA)**

**Question 19-279:**

(Follow-up to Question 19-247) The response to Question 19-247 estimates the amount by which core damage frequency (CDF) would decrease if the design change related to reactor coolant pump (RCP) thermal barrier cooling were incorporated in the U.S. EPR PRA. The sensitivity suggests that total CDF would decrease by 16 percent, largely driven by the fire and flood contribution, as a result of the design change. Therefore, while the change represents a decrease in overall risk, insights from the PRA may be affected. In response to Question 19-270, FSAR Section 19.1.2.4.1 was revised to state that, when a design change results in a cumulative impact of more than 10 percent on total CDF or large release frequency (LRF), PRA insights are assessed to see if they remain valid. If the insights are no longer valid, the PRA is updated.

- a. Discuss the expected effect of the design change on the PRA insights (such as those documented in Table 19.1-108 of the FSAR), as well as the input to the reliability assurance program (RAP) and the important operator actions provided to the developers of procedures, training, and other human-factors programs.
- b. State the planned schedule for incorporating this design change in the PRA.
- c. Discuss how this schedule relates to the planned schedule for implementing other programs (e.g., RAP, procedure development) that may be affected by the change.

**Response to Question 19-279:**

The response to RAI 257, Supplement 1, Question 19-316, Item I provides an updated Table 19-279-1 (see RAI 257, Question 19-316, Table 19-316I-2). This updated table supersedes the Table 19-279-1 provided in the initial response, and provides updated values for those numbers mentioned in the initial response.

**FSAR Impact**

The U.S. EPR FSAR will not be changed as a result of this revised response.