

## ArevaEPRDCPEm Resource

---

**From:** DUNCAN Leslie E (AREVA NP INC) [Leslie.Duncan@areva.com]  
**Sent:** Thursday, February 18, 2010 3:39 PM  
**To:** Tesfaye, Getachew  
**Cc:** DELANO Karen V (AREVA NP INC); BENNETT Kathy A (OFR) (AREVA NP INC); ROMINE Judy (AREVA NP INC); LENTZ Tony F (EXT)  
**Subject:** Response to U.S. EPR Design Certification Application RAI No. 358, FSAR Ch. 14  
**Attachments:** RAI 358 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 358 Response US EPR DC.pdf," provides a technically correct and complete response to the question.

The following table indicates the respective pages in the response document, "RAI 358 Response US EPR DC.pdf," that contain AREVA NP's response to the subject question.

Question #	Start Page	End Page
RAI 358 — 14.03-15	2	3

This concludes the formal AREVA NP response to RAI 358, and there are no questions from this RAI for which AREVA NP has not provided responses.

Sincerely,

Les Duncan  
Licensing Engineer  
**AREVA NP Inc.**  
An AREVA and Siemens Company  
Tel: (434) 832-2849  
[Leslie.Duncan@areva.com](mailto:Leslie.Duncan@areva.com)

---

**From:** Tesfaye, Getachew [mailto:Getachew.Tesfaye@nrc.gov]  
**Sent:** Tuesday, January 19, 2010 12:57 PM  
**To:** ZZ-DL-A-USEPR-DL  
**Cc:** Miernicki, Michael; Gilles, Nanette; Wilson, Jerry; Colaccino, Joseph; ArevaEPRDCPEm Resource  
**Subject:** U.S. EPR Design Certification Application RAI No. 358 (4265), FSARCh. 14

Attached please find the subject request for additional information (RAI). A draft of the RAI was provided to you on January 11, 2010, and on January 19, 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 RAI 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:** 1152

**Mail Envelope Properties** (F322AA625A7A7443A9C390B0567503A101971C37)

**Subject:** Response to U.S. EPR Design Certification Application RAI No. 358, FSAR Ch. 14  
**Sent Date:** 2/18/2010 3:39:10 PM  
**Received Date:** 2/18/2010 3:39:13 PM  
**From:** DUNCAN Leslie E (AREVA NP INC)

**Created By:** Leslie.Duncan@areva.com

**Recipients:**

"DELANO Karen V (AREVA NP INC)" <Karen.Delano@areva.com>

Tracking Status: None

"BENNETT Kathy A (OFR) (AREVA NP INC)" <Kathy.Bennett@areva.com>

Tracking Status: None

"ROMINE Judy (AREVA NP INC)" <Judy.Romine@areva.com>

Tracking Status: None

"LENTZ Tony F (EXT)" <Tony.Lentz.ext@areva.com>

Tracking Status: None

"Tsfaye, Getachew" <Getachew.Tsfaye@nrc.gov>

Tracking Status: None

**Post Office:** AUSLYNCMX01.adom.ad.corp

<b>Files</b>	<b>Size</b>	<b>Date &amp; Time</b>
MESSAGE	1977	2/18/2010 3:39:13 PM
RAI 358 Response US EPR DC.pdf		62967

**Options**

**Priority:** Standard

**Return Notification:** No

**Reply Requested:** No

**Sensitivity:** Normal

**Expiration Date:**

**Recipients Received:**

**Response to**

**Request for Additional Information No. 358(4265), Revision 1**

**1/19/2010**

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

**AREVA NP Inc.**

**Docket No. 52-020**

**SRP Section: 14.03 - Inspections, Tests, Analyses, and Acceptance Criteria**

**Application Section: FSAR Tier 1, ITAAC Tables**

**QUESTIONS for EPR Projects Branch (NARP)**

**Question 14.03-15:****Follow-up to RAI 182, Question No. 14.03-10**

In your response to RAI 182, supplement 4, Question 14.03-10, Part E, you revised the definition of “as-built” in Section 1.1 of DCD Tier 1 to the following:

**As-built** means the physical properties of the SSC following the completion of its installation or construction activities at its final location at the plant site. Determination of physical properties of the as-built structure, system, or component may be based on measurements, inspections, or tests that occur prior to installation, provided that subsequent fabrication, handling, installation, and testing do not alter the properties.

This definition will be used in implementing the inspection, test, analyses, and acceptance criteria (ITAAC) verification process. Your proposed change to the definition of “as-built” concerns the NRC staff because the NRC expects that verifications will be performed in the final, in-place location of the SSC except in cases where it is technically justifiable to perform the verification elsewhere. The staff has raised these concerns during public meetings with representatives of the Nuclear Energy Institute (NEI) and design certification applicants. The NRC staff understands that it may be impossible to perform some ITAAC verifications of an SSC in its final, in-place location. Therefore, the staff and NEI have agreed to a proposal to modify the definition of “as-built” as follows:

**As-built** means the physical properties of a structure, system, or component following completion of its installation or construction activities at its final location at the plant site. In cases where it is technically justifiable, determination of physical properties of the as-built structure, sub-system, or component may be based on measurements, inspections, or tests that occur prior to installation, provided that subsequent fabrication, handling, installation, and testing do not alter the properties.

NEI has committed to provide guidance on this new definition in the next revision of NEI-08-01, "Industry Guideline for ITAAC Closure Process Under 10 CFR Part 52," planned to be completed in mid 2010. The NRC staff is encouraging all vendors who currently have definitions of “as-built” that are unacceptable to the NRC to adopt this new definition. Provide your proposed revision to the definition of “as-built” to address the staff’s concerns discussed above.

**Response to Question 14.03-15:**

U.S. EPR FSAR Tier 1, Section 1.1 defines “as-built” in accordance with NEI 08-01, Revision 3, which is endorsed by RG 1.215. RG 1.215, Section C.1 states that the “NRC staff considers the methods discussed in NEI 08-01, Revision 3, to be acceptable for complying with the provisions of 10 CFR 52.99.” The definition of as-built in U.S. EPR FSAR Tier 1, Section 1.1 will not be revised to add the phrase “in cases where it is technically justifiable.”

Adding the phrase, “in cases where it is technically justifiable,” adds an unnecessary burden to the ITAAC closure process. The decision of when to perform inspections or tests related to ITAAC closure is primarily a business decision and does not need to be technically justifiable. For example, emergency diesel generator (EDG) ITAAC in U.S. EPR FSAR Tier 1, Table 2.5.4-

4, Item 3.24 states that “hydrostatic tests will be performed on the components” listed in Table 2.5.4-1. These hydrostatic tests verify that ASME Code Section III components retain their pressure boundary integrity at their design pressure. The EDG components will be part of an EDG package purchased from a vendor and may be hydrostatically tested prior to final installation. This situation is similar to modular construction and does not need to be technically justifiable to be performed prior to installing the EDG.

NEI has committed to add the phrase “in cases where it is technically justifiable” to the definition of as-built in the next revision of NEI 08-01 and to also provide examples where it is technically justifiable to perform inspections and tests prior to installation. However, it is impractical to attempt to develop a comprehensive discussion of inspections and tests that will be performed prior to installation. The ITAAC closure process is required to and should remain focused on verifying that ITAAC criteria have been satisfied, that subsequent fabrication, handling, installation, and testing have not altered the ITAAC, and not that performing the inspections and tests prior to installation is technically justifiable.

The definition of as-built in U.S. EPR FSAR Tier 1, Section 1.1 will not be revised to add the phrase “in cases where it is technically justifiable.”

**FSAR Impact:**

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