ArevaEPRDCPEm Resource

From: Pederson Ronda M (AREVA NP INC) [Ronda.Pederson@areva.com]
Sent: Friday, May 08, 2009 4:15 PM
To: Getachew Tesfaye
Cc: BENNETT Kathy A (OFR) (AREVA NP INC); DELANO Karen V (AREVA NP INC); DUNCAN Leslie E (AREVA NP INC); OWEN Dennis E (EXT)
Subject: Response to U.S. EPR Design Certification Application RAI No. 208 (2458), FSARCh. 5
Attachments: RAI 208 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 208 Response US EPR DC.pdf," provides technically correct and complete responses to 1 of the 2 questions.

Appended to this file is an affected page of the U.S. EPR Final Safety Analysis Report in redline-strikeout format which supports the response to RAI 208 Question 05.02.04-6.

The following table indicates the respective page in the response document, "RAI 208 Response US EPR DC.pdf," that contains AREVA NP's response to the each of the subject questions.

Question #	Start Page	End Page
RAI 208 — 05.02.04-5	2	2
RAI 208 — 05.02.04-6	3	3

A complete answer is not provided for the 1 of the 2 questions. The schedule for a technically correct and complete response to this question is provided below.

Question #	Response Date
RAI 208 — 05.02.04-5	June 5, 2009

Sincerely,

Ronda Pederson
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

From: Getachew Tesfaye [mailto:Getachew.Tesfaye@nrc.gov]
Sent: Wednesday, April 08, 2009 7:50 PM
To: ZZ-DL-A-USEPR-DL
Cc: Timothy Steingass; David Terao; Tarun Roy; Joseph Colaccino; ArevaEPRDCPEm Resource
Subject: U.S. EPR Design Certification Application RAI No. 208 (2458), FSARCh. 5

Attached please find the subject requests for additional information (RAI). A draft of the RAI was provided to you on March 27, 2009, and discussed with your staff on April 8, 2009. Except for a minor typographical error correction, 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: 459

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Subject: Response to U.S. EPR Design Certification Application RAI No. 208 (2458), FSARCh. 5
Sent Date: 5/8/2009 4:14:58 PM
Received Date: 5/8/2009 4:15:00 PM
From: Pederson Ronda M (AREVA NP INC)

Created By: Ronda.Pederson@areva.com

Recipients:
"BENNETT Kathy A (OFR) (AREVA NP INC)" <Kathy.Bennett@areva.com>
Tracking Status: None
"DELANO Karen V (AREVA NP INC)" <Karen.Delano@areva.com>
Tracking Status: None
"DUNCAN Leslie E (AREVA NP INC)" <Leslie.Duncan@areva.com>
Tracking Status: None
"OWEN Dennis E (EXT)" <Dennis.Owen.ext@areva.com>
Tracking Status: None
"Getachew Tesfaye" <Getachew.Tesfaye@nrc.gov>
Tracking Status: None

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Files	**Size**	**Date & Time**
MESSAGE	2428	5/8/2009 4:15:00 PM
RAI 208 Response US EPR DC.pdf	119140	

Options
Priority: Standard
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Reply Requested: No
Sensitivity: Normal
Expiration Date:
Recipients Received:

Response to

Request for Additional Information No. 208 (2458), Revision 0

4/08/2009

U. S. EPR Standard Design Certification
AREVA NP Inc.
Docket No. 52-020
SRP Section: 05.02.04 - Reactor Coolant Pressure Boundary Inservice Inspection and Testing
Application Section: 5.2.4.1.10

QUESTIONS for Component Integrity, Performance, and Testing Branch 1 (AP1000/EPR Projects) (CIB1)

Question 05.02.04-5:

In its response to staff RAI Question No. 05.02.04-4, the applicant proposed to add the following sentence to the U.S. EPR FSAR, Section 5.2.4.1.10: “The ISI program for the U.S. EPR regarding potential RCPB corrosion due to boric acid leaks includes regular visual inspections as specified in Sections 5.2.4.1.1 through 5.2.4.1.4 and use of RCPB leakage detection systems as described in Section 5.2.5.” The staff finds that the applicant’s added description does not provide a level of detail to sufficiently describe its boric acid corrosion program, and, as a minimum, needs to describe how the four key elements of the program as discussed in NRC Generic Letter 88-05 are to be implemented.

Response to Question 05.02.04-5:

A response to this question will be provided by June 5, 2009.

Question 05.02.04-6:

In its response to RAI Question No. 05.02.04-2, the applicant stated that the regulations do not preclude a licensee from applying different inspection intervals for the Class 1, 2, and 3 components. The applicant also quoted ASME Section XI, paragraph IWA-2430, which states: "It is not required that the inspection intervals of IWB, IWC, IWD, IWE, and IWF conform to the same inspection program." The staff does not agree with the applicant's interpretation of IWA-2430 and is uncertain of the intent of the applicant's statement in the FSAR. The statement in the FSAR infers that the COL holder can arbitrarily change the intervals by switching from Inspection Program A or B. Furthermore, IWA-2430(b) states that the interval shall be determined by calendar years following placement of the plant into commercial service. IWA-2430(g) states that the inspection program of IWA-2431 may be replaced by the inspection program of IWA-2432, and vice versa, during the first three years of the service lifetime of the plant. Finally, the statement made in Section 6.6.4, due to its abbreviation, is inaccurate because it incompletely states the ASME Code requirement. If it is the intent of the applicant to meet the ASME Code, Section XI requirements for inspection intervals, then the statement in the FSAR should be removed since the applicant is already required to meet ASME Code, Section XI requirements. If the applicant intends to deviate from Code requirements and is proposing an alternative approach, then it should clearly describe the alternative approach and demonstrate that the alternative approach provides an acceptable level of quality and safety pursuant to 10 CFR 50.55a(a)(3)(i).

Response to Question 05.02.04-6:

To eliminate confusion regarding the statement in U.S. EPR FSAR Tier 2, Section 6.6.4 concerning the ASME Section XI, Article IWC and Article IWD inspection intervals, the sentence "It is not necessary that the inspection intervals be the same for the IWC (Class 2) and the IWD (Class 3) portions of the ISI program" will be deleted from U.S. EPR FSAR Tier 2, Section 6.6.4.

FSAR Impact:

U.S. EPR FSAR Tier 2, Section 6.6.4 will be revised as described in the response and indicated on the enclosed markup.

U.S. EPR Final Safety Analysis Report Markups

may be reduced (except the first interval of Inspection Program A) or extended by as much as one year to enable an inspection to coincide with a plant outage. ~~It is not necessary that the inspection intervals be the same for the IWC (Class 2) and the IWD (Class 3) portions of the ISI program.~~

05.02.04-6

6.6.5 Examination Categories and Requirements

Examination and pressure testing categories and requirements for Class 2 and Class 3 components and piping—including the method of examination for the components and parts of the pressure retaining boundaries—are established in accordance with Subarticle IWA-2200 of the ASME Code, and conform to Tables IWC-2500-1 and IWD-2500-1, respectively.

6.6.6 Evaluation of Examination Results

Evaluation of the examination results is in accordance with Articles IWC-3000 (Class 2) and IWD-3000 (Class 3) of Section XI, and also Article IWA-3000. IWC-3000 and IWD-3000 present or reference parametric flaw size limits that may be used to determine the acceptability of returning affected components to immediate or continued service. The articles further specify the process for resolving unacceptable results so that an affected component may be returned to service. Depending upon the type of examination and the flaw characteristics, this may require supplemental examination, repair, replacement, or acceptance by analytical evaluation.

Components whose preservice examinations detect flaws that fail to meet the applicable Code requirements must be corrected by a repair / replacement activity to the extent necessary to meet those requirements prior to placing the component in service.

Components whose inservice volumetric and surface examinations detect flaws that exceed the acceptance standards of Table IWC-3410-1 are acceptable for continued service without a repair / replacement activity if an analytical evaluation, as described in IWC-3600, meets the acceptance criteria of IWC-3600 (the area containing the flaw shall be subsequently reexamined). Otherwise, repair or replacement to the extent necessary to meet the acceptance standards of Article IWC-3000 is required to qualify such components for return to service.

Class 2 and Class 3 components whose inservice visual examinations detect flaws that exceed the acceptance standards are acceptable for continued service without a repair / replacement activity or corrective measures if a supplemental volumetric or surface examination determines the flaws meet the acceptance standards for such an examination (IWC-3200), or an evaluation performed in accordance with IWC-3130 demonstrates the components are acceptable.