ArevaEPRDCPEm Resource

From: Pederson Ronda M (AREVA NP INC) [Ronda.Pederson@areva.com]
Sent: Wednesday, February 18, 2009 4:47 PM
To: Getachew Tesfaye
Cc: KOWALSKI David J (AREVA NP INC); BENNETT Kathy A (OFR) (AREVA NP INC); DELANO Karen V (AREVA NP INC)
Subject: Response to U.S. EPR Design Certification Application RAI No. 125, Supplement 2
Attachments: RAI 125 Supplement 2 Response US EPR DC.pdf

Getachew,

AREVA NP Inc. (AREVA NP) provided responses to 16 of the 18 questions of RAI No. 125 on December 5, 2008. AREVA NP submitted Response to RAI No. 125, Supplement 1 on January 20, 2009 to address 1 of the remaining 2 questions.

The attached file, "RAI 125 Supplement 2 Response US EPR DC.pdf" provides a technically correct and complete response to the remaining question, as committed.

The following table indicates the respective pages in the response document, "RAI 125 Supplement 2 Response US EPR DC.pdf," that contain AREVA NP's response to the subject question.

Question #	Start Page	End Page
RAI 125 — 09.03.04-6	2	3

This concludes the formal AREVA NP response to RAI 125, and there are no questions from this RAI for which AREVA NP has not provided responses.

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: Pederson Ronda M (AREVA NP INC)
Sent: Tuesday, January 20, 2009 9:39 AM
To: 'Getachew Tesfaye'
Cc: BENNETT Kathy A (OFR) (AREVA NP INC); DELANO Karen V (AREVA NP INC); KOWALSKI David J (AREVA NP INC)
Subject: Response to U.S. EPR Design Certification Application RAI No. 125, Supplement 1

Getachew,

AREVA NP Inc. (AREVA NP) provided responses to 16 of the 18 questions of RAI No. 125 on December 5, 2008. The attached file, "RAI 125 Supplement 1 Response US EPR DC.pdf" provides a technically correct and complete response to 1 of the remaining 2 questions, as committed.

The following table indicates the respective page in the response document, "RAI 125 Supplement 1 Response US EPR DC.pdf" that contains AREVA NP's response to the subject question.

Question #	Start Page	End Page
RAI 125 — 09.03.04-8	2	2

The schedule for a technically correct and complete response to the remaining question is unchanged and provided below:

Question #	Response Date
RAI 125 — 09.03.04-6	February 25, 2009

Sincerely,

Ronda Pederson
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From: DUNCAN Leslie E (AREVA NP INC)
Sent: Friday, December 05, 2008 5:07 PM
To: Getachew Tesfaye
Cc: John Rycyna; Pederson Ronda M (AREVA NP INC); BENNETT Kathy A (OFR) (AREVA NP INC); DELANO Karen V (AREVA NP INC)
Subject: Response to U.S. EPR Design Certification Application RAI No. 125, FSAR Ch. 9

Getachew,

Attached please find AREVA NP Inc.'s response to the subject request for additional information (RAI). The attached file, "RAI 125 Response US EPR DC.pdf" provides technically correct and complete responses to 16 of the 18 questions.

Appended to this file are affected pages of the U.S. EPR Final Safety Analysis Report in redline-strikeout format which support the response to RAI 125 Questions 09.03.04-1, 09.03.04-2, 09.03.04-3, 09.03.04-4, 09.03.04-7, 09.03.04-12, 09.03.04-13, 09.03.04-14 and 09.03.04-18.

The following table indicates the respective pages in the response document, "RAI 125 Response US EPR DC.pdf," that contain AREVA NP's response to the subject questions.

Question #	Start Page	End Page
RAI 125 — 09.03.04-1	2	2
RAI 125 — 09.03.04-2	3	4
RAI 125 — 09.03.04-3	5	5

RAI 125 — 09.03.04-4	6	6
RAI 125 — 09.03.04-5	7	8
RAI 125 — 09.03.04-6	9	9
RAI 125 — 09.03.04-7	10	10
RAI 125 — 09.03.04-8	11	11
RAI 125 — 09.03.04-9	12	12
RAI 125 — 09.03.04-10	13	13
RAI 125 — 09.03.04-11	14	14
RAI 125 — 09.03.04-12	15	15
RAI 125 — 09.03.04-13	16	16
RAI 125 — 09.03.04-14	17	17
RAI 125 — 09.03.04-15	18	18
RAI 125 — 09.03.04-16	19	19
RAI 125 — 09.03.04-17	20	21
RAI 125 — 09.03.04-18	22	24

A complete answer is not provided for 2 of the 18 questions. The schedule for a technically correct and complete response to these questions is provided below.

Question #	Response Date
RAI 125 — 09.03.04-6	February 25, 2009
RAI 125 — 09.03.04-8	January 21, 2009

Sincerely,

(Les Duncan on behalf of)
Ronda Pederson
ronda.pederson@areva.com
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New Plants Deployment
AREVA NP, Inc.
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From: Getachew Tesfaye [mailto:Getachew.Tesfaye@nrc.gov]
Sent: Wednesday, November 05, 2008 3:45 PM

To: ZZ-DL-A-USEPR-DL
Cc: John Budzynski; Shanlai Lu; Joseph Donoghue; Jeffrey Poehler; David Terao; Peter Hearn; Joseph Colaccino; John Rycyna
Subject: U.S. EPR Design Certification Application RAI No. 125 (1302, 1440),FSAR Ch. 9

Attached please find the subject requests for additional information (RAI). A draft of the RAI was provided to you on October 24, 2008, and on November 4, 2008, 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: 224

Mail Envelope Properties (5CEC4184E98FFE49A383961FAD402D31AD9358)

Subject: Response to U.S. EPR Design Certification Application RAI No. 125, Supplement 2
Sent Date: 2/18/2009 4:46:35 PM
Received Date: 2/18/2009 5:24:03 PM
From: Pederson Ronda M (AREVA NP INC)

Created By: Ronda.Pederson@areva.com

Recipients:
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Tracking Status: None
"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
"Getachew Tesfaye" <Getachew.Tesfaye@nrc.gov>
Tracking Status: None

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Files	Size	Date & Time
MESSAGE	6139	2/18/2009 5:24:03 PM
RAI 125 Supplement 2 Response US EPR DC.pdf	29880	

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

Response to

Request for Additional Information No. 125, Supplement 2

11/05/2008

U. S. EPR Standard Design Certification
AREVA NP Inc.
Docket No. 52-020
SRP Section: 09.03.04 - Chemical and Volume Control System (PWR) (Including Boron Recovery System)
Application Section: FSAR Section 9.3.4

QUESTIONS for Reactor System, Nuclear Performance and Code Review (SRSB)
QUESTIONS for Component Integrity, Performance, and Testing Branch 1 (AP1000/EPR Projects) (CIB1)

Question 09.03.04-6:

Quality Group Classification

GDC 1 requires that equipment important to safety be designed to quality group standards commensurate with the level of importance. Quality group classifications for the CVCS system are identified in FSAR Tier 1 Figure 2.2.6-1 and FSAR Tier 2 Figure 9.3.4-1. Classifications are also given in FSAR Tier 1 Table 2.2.6-1. The supply piping from the RCS to the CVCS can be isolated by two (in series) motor-operated valves and both return lines to the RCS loops can be isolated by sets of two check valves (also in series). All of these valves are shown in Tier 1 Table 2.2.6-1 as ASME III, Class 1 valves. However, Table 2.2.6-1 does not show the piping between the two motor-operated valves or between the two check valves to be Class 1. Also, the pressurizer auxiliary spray line is isolated from the RCS by a check valve and a motor-operated valve (MOV). The check valve is ASME Class 1 and the MOV is Class 3. Again in this case, the classification of the piping between the check valve and the MOV is not listed on Table 2.2.6-1. In view of the above, respond to the following:

1. Justify not listing the piping between the isolation valves in Table 2.2.6-1.
2. Justify the pressurizer spray isolation valve being Class 3 rather than Class 1.
3. Justify not listing the containment isolation valves in Table 2.2.6-1 as Class 2.

Response to Question 09.03.04-6:

1. The ASME Code Section III boundaries for piping are addressed by Item 3.3 in U.S. EPR FSAR Tier 1, Section 2.2.6, which references U.S. EPR FSAR Tier 1, Figure 2.2.6-1—Chemical and Volume Control System Functional Arrangement, for defining what portion of piping is included within the ASME Code Section III boundary.

2. The pressurizer auxiliary spray isolation valve is classified as Class 3 rather than Class 1 because there are two Class 1 check valves in series from the reactor coolant system (RCS) pressure boundary. The check valves are shown on U.S. EPR FSAR Tier 2, Figure 9.3.4-1—Chemical and Volume Control System, Sheet 5, tag number 30KBA35 AA002; and U.S. EPR FSAR Tier 2, Figure 5.1-4—RCS Piping and Instrumentation Diagram, Sheet 3, tag number 30JEF10 AA008.

3. SRP 14.3 requires that safety significant ASME Section III components and piping be identified in Tier 1. It is not appropriate to designate in Tier 1 the class within ASME Section III as this material is identified in Tier 2. The relationship between Tier 1 and Tier 2 material is described throughout SRP 14.3 including the appendices. As described in SRP 14.3, AREVA reviewed the precedent of previous design certifications to establish the information included in Tier 1. Specifically:

    - Reference SRP 14.3, Item III.3:

      “If applicable, review the DCD for a certified design similar to the design for which certification is sought, specifically the Tier 1 information, for the purpose of using a similar approach, format, and language and for familiarity with the treatment of SSCs, the appropriate level of design detail, and other certification issues.”

- Reference SRP 14.3, Appendix A, Introduction:

  "The purpose of this appendix is to describe how previous design certification applications have implemented the requirements of Subpart B of 10 CFR Part 52, so that this information can be used as guidance for review of new design certification applications."

A review of recent existing design certifications demonstrates that Tier 1 tables specify that the equipment is ASME Code Section III but not the class within the ASME Code.

FSAR Impact:

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