

ArevaEPRDCPEm Resource

From: Tesfaye, Getachew
Sent: Thursday, June 25, 2009 7:25 AM
To: 'usepr@areva.com'
Cc: Crane, Samantha; Peralta, Juan; Ng, Ching; Dixon-Herrity, Jennifer; Miernicki, Michael; Colaccino, Joseph; ArevaEPRDCPEm Resource
Subject: U.S. EPR Design Certification Application RAI No. 255 (1885, 3094), FSAR Ch. 14
Attachments: RAI_255_CQVP_1885_EMB2_3094.doc

Attached please find the subject requests for additional information (RAI). A draft of the RAI was provided to you on May 18, 2009, and on June 24, 2009, 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
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Created By: Getachew.Tesfaye@nrc.gov

Recipients:

"Crane, Samantha" <Samantha.Crane@nrc.gov>
Tracking Status: None
"Peralta, Juan" <Juan.Peralta@nrc.gov>
Tracking Status: None
"Ng, Ching" <Ching.Ng@nrc.gov>
Tracking Status: None
"Dixon-Herrity, Jennifer" <Jennifer.Dixon-Herrity@nrc.gov>
Tracking Status: None
"Miernicki, Michael" <Michael.Miernicki@nrc.gov>
Tracking Status: None
"Colaccino, Joseph" <Joseph.Colaccino@nrc.gov>
Tracking Status: None
"ArevaEPRDCPEm Resource" <ArevaEPRDCPEm.Resource@nrc.gov>
Tracking Status: None
"usepr@areva.com" <usepr@areva.com>
Tracking Status: None

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Request for Additional Information No. 255(1885,3094), Revision 0

6/25/2009

U. S. EPR Standard Design Certification
AREVA NP Inc.
Docket No. 52-020

SRP Section: 14.02 - Initial Plant Test Program - Design Certification and New License Applicants
SRP Section: 14.03.03 - Piping Systems and Components - Inspections, Tests, Analyses, and
Acceptance Criteria
Application Section: FSAR Ch. 14

QUESTIONS for Quality and Vendor Branch 1 (AP1000/EPR Projects) (CQVP)
QUESTIONS for Engineering Mechanics Branch 2 (ESBWR/ABWR Projects) (EMB2)

14.02-97

RG 1.68 Appendix A.1.h.5 states that cold water interlocks (including logic, circuitry, and final control devices used to prevent cold water injection into the reactor vessel) should be tested as part of the engineered safety features testing. Section 14.2.12 of the US EPR FSAR does not provide for testing of cold water interlocks. The staff requests that AREVA indicate in which test in Section 14.2.12 the cold water interlocks will be tested, revise section 14.2.12 to include testing of cold water interlocks, or justify the exclusion of cold water interlock testing.

14.02-98

RG 1.68 Appendix A.1.i describes testing to demonstrate that the containment will function as designed. This testing includes testing of the main steamline leakage sealing systems and testing of the containment and containment annulus vacuum-breakers. Section 14.2.12 of the US EPR FSAR does not provide for testing of the main steamline leakage sealing systems and testing of the containment and containment annulus vacuum-breakers. The NRC staff requests that AREVA indicate where in Section 14.2 the main steamline leakage sealing systems and the containment and containment annulus vacuum-breakers are being tested, revise Section 14.2.12 to include testing of the main steamline leakage sealing systems and testing of the containment and containment annulus vacuum-breakers, or justify the exclusion of these tests.

14.03.03-38

Follow-up to RAI 156, Question 14.03.03-27

In its letter dated April 29th, 2009, AREVA responded to RAI 14.03.03-27 by revising the ITAAC related to piping systems in Tier 1 Table 2.2.1-5. ITAAC related to piping design was modified and ITAAC related to as-built reconciliation as well as fabrication and installation were also added. The staff requests the following changes to improve clarity and inspectibility of the ITAAC.

- a. Piping design reports ITAAC:
For item 3.20 of Tier 1, Table 2.2.1-5, AREVA modified the Inspections, Tests, and Analyses (ITA) and included the ASME Code Section III Design Reports (NCA-3550) in the Acceptance Criteria (AC). The staff has two concerns about the proposed changes. First, in the ITA, the staff found that inspections for the existence of the Design Reports are not the objectives of the ITAAC. Rather, the ITA should be reworded as “Inspections of the ASME Code Section III Design Reports (NCA-3550) and required documents will be performed”. Second, the AC should be reworded as “ASME Code Section III Design Reports (NCA-3550) exist and conclude that for portions of the RCS piping shown as ASME Code Section III in Figure 2.2.1-1 comply with the ASME Code Section III requirements.”

- b. Piping as-built reconciliation ITAAC:
For item 3.21, of Tier 1, Table 2.2.1-5, AREVA included the ITAAC to address the as-built reconciliation activity. Three modifications should be made to clarify the statements in the Commitment Wording, ITA, and AC: (i) Revise the Commitment Wording to “The as-built portions of the RCS piping shown in ASME Code Section III in Figure 2.2.1-1 shall be reconciled with the piping design requirements.” (ii) The staff found that an inspection is not appropriate. Rather, the ITA should be “A reconciliation analysis of the piping using the as-designed and as-built information and ASME Code certified Design Report (NCA-3550) will be conducted.” (iii) Modify the AC to “For portions of...in Figure 2.2.1-1, ASME Code Design Report(s) exist and conclude that design reconciliation has been completed in accordance with the ASME Code for as-built reconciliation. The report(s) document the results of the reconciliation analysis.”

- c. Piping fabrication and installation ITAAC:
For item 3.24, of Tier 1, Table 2.2.1-5, AREVA incorporated the ITAAC to address the fabrication and installation activities. The staff requests three minor modifications. (i) In the ITA, it should state that “An inspection of the piping will be conducted.” (ii) In the Commitment Wording, instead of “...are installed...” it should be “...are fabricated, installed, and inspected...” Similarly in the AC, instead of “...conclude that installation is...” the AC should be “...conclude that fabrication, installation, and inspection are...”