

CCNPP3COLA PEmails

From: Steckel, James
Sent: Friday, July 01, 2011 1:44 PM
To: CCNPP3COLA PEmails
Subject: FW: RAI No 43 CIB1 1516.doc (P)
Attachments: RAI No 43 CIB1 1516.doc

From: John Rycyna
Sent: Tuesday, January 06, 2009 9:03 AM
To: Poche, Robert
Cc: Jeffrey Poehler; David Terao; Michael Miernicki; Joseph Colaccino; Adam Gendelman; James Biggins; CCNPP3COL Resource
Subject: RAI No 43 CIB1 1516.doc (P)

Rob

Attached please find the subject request for additional information (RAI). A draft of the RAI was provided to you on December 10, 2008. No conference call was requested to discuss this 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.

John Rycyna, PE
Sr. Project Manager
Division of New Reactor Licensing
Office of New Reactors
U.S. Nuclear Regulatory Commission
301-415-4122

Hearing Identifier: CalvertCliffs_Unit3Cola_Public_EX
Email Number: 2621

Mail Envelope Properties (0AA17736E4C4154CA37233EEBFC8DEB27400C0E62F)

Subject: FW: RAI No 43 CIB1 1516.doc (P)
Sent Date: 7/1/2011 1:43:52 PM
Received Date: 7/1/2011 1:43:55 PM
From: Steckel, James

Created By: James.Steckel@nrc.gov

Recipients:
"CCNPP3COLA PEmails" <CCNPP3COLA.PEmails@nrc.gov>
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Files	Size	Date & Time
MESSAGE	1021	7/1/2011 1:43:55 PM
RAI No 43 CIB1 1516.doc		31342

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

Request for Additional Information No. 43 Revision 3
1/6/09

Calvert Cliffs Unit 3
UniStar
Docket No. 52-016
SRP Section: 06.01.02 - Protective Coating Systems (Paints) - Organic Materials
Application Section: 6.1.2

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

06.01.02-1

SRP Section 6.1.2 provides that an acceptable method of complying with 10 CFR Part 50, Appendix B requirements is for the coatings monitoring and maintenance program to satisfy the recommendations of RG 1.54 , "Service Level I, II, and III Protective coatings Applied to Nuclear Power Plants." RG 1.54 provides that verification that coatings monitoring and maintenance procedures be capable of ensuring that the coatings will not fail (delaminate from the substrate) and, therefore, become a debris source that could prevent the Emergency Core Cooling System (ECCS) from performing its safety related function. RG 1.54 also recommends ASTM standards that are acceptable to the NRC staff with respect to qualification of safety-related coatings to withstand DBA conditions.

COL Section 6.1.2.3.5 states there are no departures or supplements to DCD Section 6.1.2.3.5, which describes the protective coatings program. However, the staff is currently evaluating exceptions to the guidance of RG 1.54 in U.S. EPR FSAR Section 6.1.2, mostly relating to the use of different year editions of various ASTM coatings standards than those endorsed by RG 1.54. Also, the resolution of COL information item 6.1-2 did not state whether RG 1.54 would be used with respect to qualification of the coatings to be applied to components procured without DBA-qualified coatings. Therefore, the staff requests the following additional information:

1. The applicant should describe in its coatings program the standards to be applied to selection, qualification, procurement, application, inspection, monitoring, and maintenance of the protective coatings. Address whether the standards to be applied are consistent with the guidance of RG 1.54, and, if not, the basis to conclude that the deviation is acceptable.
2. The program description should describe the administrative controls that will be applied to the coatings program.

06.01.02-2

SRP Section 6.1.2 provides that an acceptable method of complying with 10 CFR Part 50, Appendix B requirements is for the coatings monitoring and maintenance program to satisfy the recommendations of RG 1.54 , "Service Level I, II, and III Protective coatings Applied to Nuclear Power Plants." RG 1.54 provides that verification that coatings monitoring and maintenance procedures be capable of ensuring that the coatings will not fail (delaminate from the substrate) and, therefore, become a debris source that could

prevent the Emergency Core Cooling System (ECCS) from performing its safety related function. RG 1.54 also recommends ASTM standards that are acceptable to the NRC staff with respect to qualification of safety-related coatings to withstand DBA conditions.

In Section 6.1.2 of the CCNPP3 COL, the applicant incorporated by reference without any departures Section 6.1.2 of the US-EPR FSAR. Section 6.1.2.3.5 of the US-EPR FSAR describes the protective coatings program for the US-EPR. The description states, in part that "The procurement and application, or re-application, of new and existing coating systems are monitored through the program with respect to the coating type, service level of qualification required for application in each specific case, service level at which the coating is procured, and the significance and type of application (including information such as coating repair or replacement and resultant coating thickness, including overlapping areas)." No COL information item is currently identified in the US-EPR FSAR for the COL applicant to describe the coatings program in detail. However, since the program will control application of new coatings, it is important that the program be in place before any of the activities listed in the description above are performed. Therefore, the staff requests the following additional information:

Provide the schedule for full implementation of the coatings program with respect to major milestones in the construction of the plant; for example, prior to application of coatings, prior to preparation of surfaces to be coated, or prior to procurement of coatings materials.

06.01.02-3

SRP Section 6.1.2 provides that an acceptable method of complying with 10 CFR Part 50, Appendix B requirements is for the coatings monitoring and maintenance program to satisfy the recommendations of RG 1.54, "Service Level I, II, and III Protective coatings Applied to Nuclear Power Plants." RG 1.54 provides that verification that coatings monitoring and maintenance procedures be capable of ensuring that the coatings will not fail (delaminate from the substrate) and, therefore, become a debris source that could prevent the Emergency Core Cooling System (ECCS) from performing its safety related function. RG 1.54 also recommends ASTM standards that are acceptable to the NRC staff with respect to qualification of safety-related coatings to withstand DBA conditions.

The applicant indicated in response to COL information item from Section 6.1.2.3.2 of the EPR FSAR that for components procured without a DBA-qualified coating, an option is to apply a DBA-qualified coating system in accordance with 10 CFR 50, Appendix B, Criterion IX. However, the applicant did not indicate which standards would be used to control the application of the DBA-qualified coatings.

If the applicant applies DBA-qualified coatings on components supplied without a DBA-qualified coating from the manufacturer, what standards will be applied to the qualification and application of these coatings?