

CCNPP3COLA PEmails

From: John Rycyna
Sent: Tuesday, September 30, 2008 10:56 AM
To: Wrobel, George
Cc: CCNPP3COL Resource; Joseph Colaccino; Juan Peralta; Samantha Crane; Michael Miernicki
Subject: RAIs 14, 15, 16
Attachments: RAI No 15 CQVP 1104.doc; RAI No 16 CQVP 1111.doc; RAI No 14 CQVP 1099.doc

George,

Attached please find the subject requests for additional information (RAI). Drafts of the RAIs were provided to you on September 17 and September 18, 2008. A conference call was held on September 30, 2008 to discuss these RAIs. No questions were changed as a result of the call. 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.

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From: John Rycyna

Created By: John.Rycyna@nrc.gov

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Files	Size	Date & Time
MESSAGE	854	9/30/2008 10:56:01 AM
RAI No 15 CQVP 1104.doc		34298
RAI No 16 CQVP 1111.doc		32762
RAI No 14 CQVP 1099.doc		32762

Options

Priority: Standard
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Reply Requested: No
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Request for Additional Information No. 15 Revision 0
9/30/2008

Calvert Cliffs Unit 3

UniStar

Docket No. 52-016

SRP Section: 14.02 - Initial Plant Test Program - Design Certification and New License Applicants
Application Section: 14.2

QUESTIONS

14.02-3

SRP 14.2.II.SRP Acceptance Criteria.5.B states that test abstracts for the initial test program should include acceptance criteria in sufficient detail to establish the functional adequacy of the SSCs and design features tested. SRP 14.2, "Technical Rationale," further states that an objective of the ITP is to verify that SSCs are capable of performing their safety functions as specified in the design and as assumed/credited in safety analyses. RG 1.68 C.4., "Procedures," states that each test procedure should include acceptance criteria that account for the uncertainties used in transient and accident analysis.

In its review of Subsection 14.2.14 of the CCNPP3 COL, the staff noted that Section 3, "Test Method," of each test abstract includes a comprehensive list of activities that are needed to ensure functional adequacy of SSCs under test. The staff also noted that Section 5, "Acceptance Criteria," of each test abstract contains pointers to design information in other FSAR chapters. However, some test abstracts also include acceptance criteria under the test method section. The acceptance criteria section of the test abstracts do not provide explicit values, prescribed limits, or measurable parameters to allow for the determination that the SSCs under test are capable of performing their safety function.

The staff requests that UniStar Nuclear review all the test abstracts in Section 14.2.14 to ensure that test method and acceptance criteria information are included in the appropriate sections. In addition, the staff requests that UniStar revise the acceptance criteria section of the test abstracts to include sufficient detail to establish the functional adequacy of the SSCs.

14.02-4

As stated in Regulatory Guide (RG) 1.68, testing should include verification of redundancy and electrical independence. Appendix A to RG 1.68 provides a representative list of SSCs that should undergo preoperational testing. For many systems including but not limited to the circulating water system, cooling towers, cooling water systems, raw water system and service water system, and fire protection systems Appendix A to RG 1.68 states that tests should be conducted to verify redundancy and electrical independence of these SSCs.

The staff notes that a number of test abstracts in Section 14.2.14 of the CCNP3 COL do not provide for verification of redundancy and electrical independence, as recommended by RG 1.68. Consistent with this guidance, the staff requests that UniStar revise the

applicable test abstracts under Section 14.2.14 to include verification of redundancy and electrical independence of affected SSCs or explain why such verification is not necessary.

Request for Additional Information No. 16 Revision 0
9/30/2008

Calvert Cliffs Unit 3

UniStar

Docket No. 52-016

SRP Section: 14.02 - Initial Plant Test Program - Design Certification and New License Applicants
Application Section: 14.2

QUESTIONS

14.02-5

SRP Section 14.2.II. "COL/OL Applicants" 3.D.i states, in part, that the applicant should describe the education, training, and experience requirements established for each management and operating staff member who will conduct the preoperational and startup tests and will develop testing, operating, and emergency procedures.

Section 14.2.2 of the Calvert Cliffs Unit 3 COL states, in part, that the Startup Manager's engineering organization consists of System Engineers who are responsible for specific systems and Startup Engineers who are responsible for testing evolutions and/or specific tests. Table 13.1-1 outlines the staffing level of the startup organization and references ANSI-3.1-1993 for the education, training, and experience requirements of each position. Table 13.1-1 includes the Startup Manager, Startup Engineer, and Preoperational Test Engineer in the startup organization. The System Engineers are not included in Table 13.1-1. Similarly, the roles and responsibilities of the Preoperational Test Engineers are not included in Section 14.2.2.

The NRC staff requests that UniStar either confirm that the System Engineer and Preoperational Test Engineer are the same position and fix the discrepancy in the title of the position in Section 14.2.2 and Table 13.1-1, or add the System Engineer and associated education, training, and experience requirements in Table 13.1-1, and add the Preoperational Test Engineer and associated roles and responsibilities to Section 14.2.2.

Request for Additional Information No. 14 Revision 0
9/30/2008

Calvert Cliffs Unit 3

UniStar

Docket No. 52-016

SRP Section: 14.02 - Initial Plant Test Program - Design Certification and New License Applicants
Application Section: 14.2

QUESTIONS

14.02-1

U.S. EPR COL Item 14.2.12.7.11 states that a COL applicant that references the U.S. EPR design certification will provide site-specific information for testing of the circulating water supply system. This test is listed as a Phase I preoperational test. U.S. EPR COL Item 14.2.21.6 states that a COL applicant that references the U.S. EPR design certification will provide site-specific information for testing of the cooling tower. That test is listed as a Phase IV power ascension test. Section 14.2.14.7 of the Calvert Cliffs Unit 3 COL combines these tests into the Circulating Water Supply System Test. Please specify the timing (preoperational vs. power ascension) of testing conducted under Section 14.2.14.7, explain how the objectives of the two tests in the EPR design certification are being met, verify that both COL Item 14.2.12.7.11 and COL Item 14.2.21.6 are being satisfied through this test abstract, and update your COL application accordingly.

14.02-2

Table 14.2-1 of the U.S. EPR Design Certification application identifies testing of the Raw Water Supply System as a COL test. Please identify the test abstract that addresses testing of the Raw Water Supply System or confirm that it will be tested, and describe how it will be tested as part of the Desalinization Plant testing in Section 14.2.14.1 of the CCNPP3 COL.