

## CCNPP3COLA PEmails

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**From:** Arora, Surinder  
**Sent:** Tuesday, September 29, 2009 8:35 AM  
**To:** 'Poche, Robert'; 'cc3project@constellation.com'  
**Cc:** CCNPP3COL Resource; Crane, Samantha; Peralta, Juan; Colaccino, Joseph; Miernicki, Michael; Biggins, James; Vrahoretis, Susan; Hair, Christopher  
**Subject:** FINAL RAI No. 162 CQVP 3412  
**Attachments:** FINAL RAI 162 CQVP 3412.doc

Rob,

Attached please find the subject request for additional information (RAI). The draft of this RAI was provided to you on September 3, 2009. No clarification phone call was requested on 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 schedule date for submitting your technically correct and complete response will be provided to the staff within the 30 day period so that the staff can assess how this information will impact the review schedule.

Your response letter should also include a statement confirming that the response does or does not contain any sensitive or proprietary information.

Thanks.

**SURINDER ARORA, PE**  
**PROJECT MANAGER,**  
**Office of New Reactors**  
**US Nuclear Regulatory Commission**

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**Hearing Identifier:** CalvertCliffs\_Unit3Cola\_Public\_EX  
**Email Number:** 1005

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**Subject:** FINAL RAI No. 162 CQVP 3412  
**Sent Date:** 9/29/2009 8:34:34 AM  
**Received Date:** 9/29/2009 10:29:52 AM  
**From:** Arora, Surinder

**Created By:** Surinder.Arora@nrc.gov

**Recipients:**

"CCNPP3COL Resource" <CCNPP3COL.Resource@nrc.gov>  
Tracking Status: None  
"Crane, Samantha" <Samantha.Crane@nrc.gov>  
Tracking Status: None  
"Peralta, Juan" <Juan.Peralta@nrc.gov>  
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**Post Office:** HQCLSTR01.nrc.gov

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FINAL RAI 162 CQVP 3412.doc		39930

**Options**

**Priority:** Standard  
**Return Notification:** No  
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**Sensitivity:** Normal  
**Expiration Date:**  
**Recipients Received:**

Request for Additional Information No. 162 (eRAI 3412)

9/29/2009

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: 14.2.14.8

QUESTIONS for Quality and Vendor Branch 1 (AP1000/EPR Projects) (CQVP)

14.02-43

In RAI 14.02-24, dated November 3, 2008 (ML083080607), the staff requested that the applicant revise the test abstracts under Section 14.2.14 to identify in which phase each test will be performed. In its response to the staff's RAI, dated December 22, 2008 (ML083650127), the applicant proposed to revise the tests described in Section 14.2.14 to indicate the applicable phase(s) in which testing will occur. In Revision 5 of the CCNPP3 COL FSAR, the applicant revised all of the test abstracts in Section 14.2.14 except for the following tests: 14.2.14.11 Portable Personnel Monitors and Radiation Survey Instruments, and 14.2.14.12 UHS Makeup Water Intake Structure and UHS Electrical Building Communication Systems. Therefore, the NRC staff requests that UniStar revise sections 14.2.14.11 and 14.2.14.12 of the CCNPP3 COL FSAR to identify in which phase each test will be performed.

14.02-44

In response to RAI 14.02-38, the applicant significantly revised Section 14.2.2, "Organization and Staffing," of the Calvert Cliffs Unit 3 COL FSAR. This revision included new organizational descriptions and titles for the staff participating in the initial test program. Specifically, the positions of Startup Manager, Startup Engineering Support Supervisor, Startup Engineer, and Preoperational Engineer were removed from Section 14.2.2 in the proposed revision. However, these positions are still referred to throughout Section 14.2, "Initial Test Program." Therefore, the NRC staff requests that UniStar revise the remainder of Section 14.2 to reflect the new organizational structure described in the proposed revision to Section 14.2.2 in response to RAI 14.02-38.

14.02-45

In response to RAI 14.02-38, the applicant significantly revised Section 14.2.2, "Organization and Staffing," of the Calvert Cliffs Unit 3 COL FSAR. Specifically, the applicant proposed a new startup organization for the initial test program whose roles and responsibilities differ from the previously described organization in revision 5 of the Calvert Cliffs Unit 3 COL FSAR.

SRP Section 14.2.II. "COL/OL Applicants" 3.E.ii states, in part, that the applicant should use the NSSS vendor, architect-engineer, and other major contractors, as appropriate, to provide the test objectives and acceptance criteria used in developing detailed test procedures.

The staff requests that UniStar revise Section 14.2.2 to reinstate the provision that the NSSS vendor, architect-engineer, and other major contractors, as appropriate, should provide the test objectives and acceptance criteria used in developing detailed test procedures.

#### 14.02-46

Subsection 14.2 of Revision 5 of the CCNPP3 FSAR described the roles and responsibilities of the Startup Manager, Startup Engineering Support Supervisors, System Engineers, Startup and Preoperational Engineers, the Architect Engineering Personnel, and the Areva Site Startup Organization. Specifically, these positions had, in part, the following responsibilities:

- Approving startup administrative procedures
- Approving startup technical procedures
- Approving startup test schedule
- Approving work and procedures that are prerequisites for ITP
- Developing and implementing administrative controls to address system and equipment configuration control
- Managing the development and approval of procedures to support the ITP
- Responsibility for specific systems/subsystems for the ITP
- Providing technical guidance and assistance in testing and the preparation of test procedures
- Recommending changes in plant design and/or construction to facilitate testing, operation, and maintenance
- Assuring that assigned test procedures are written and testing is conducted in accordance with the site specific administrative procedures
- Supervising testing and reporting current status of ITP
- Coordinating activities among involved groups
- Providing the objectives and acceptance criteria used in developing detailed test procedures.
- Providing a designated member of the test review team.
- Evaluating test results
- Providing technical support and liaison with the startup organization to coordinate problem resolution.
- Provide the objectives and acceptance criteria used in developing detailed test procedures.
- Provide initial procedure drafts of startup test procedures and review proposed changes.
- Provide technical advice and consultation to the plant staff during the conduct of the test program.

These functions are not described in the proposed revision the Subsection 14.2 of the CCNPP3 COL FSAR provided in response to RAIs 14.02-37 and 14.02-38. Please identify which positions in the revised startup organization will perform each of these tasks and revise Subsection 14.2 accordingly.

#### 14.02-47

In response to RAIs 14.02-37 and 14.02-38, UniStar provided a proposed revision to Subsections 13.1 and 14.2 of the CCNPP3 COL FSAR. In the proposed revision to Subsection 14.2, the applicant states, in part, that there are five supervisors that report to the Site Commissioning Manager which include the Site Commissioning Integration Supervisor, the Test Analysis & Documentation Supervisor, the Mechanical Commissioning Supervisor, the Electrical Commissioning Supervisor, and the I&C Commissioning Supervisor. In the proposed revision to Subsection 13.1, the applicant states that these positions have the equivalent training, education, and qualification requirements as the functional positions of preoperational and startup engineers, as described in ANS-3.1-1993.

The NRC staff requests that UniStar clarify whether these five supervisors will be performing the tests in the initial test program in the role of preoperational and startup engineers or whether they will be supervising staff performing these functions. In addition, the NRC staff requests that the applicant revise Subsection 14.2 to clearly reflect the role of these supervisors in the conduct of the initial test program.

#### 14.02-48

In response to RAIs 14.02-37 and 14.02-38, UniStar proposed a revision to Organization and Staffing Section of Subsection 14.2.2 of the CCNPP3 COL FSAR. The revision to Subsection 14.2.2 states, in part, that the commissioning and startup program include construction inspections and tests to verify that structures, systems and components have been installed in conformance with design specifications, drawings and other design documents. This group ensures system turnover and testing procedures and boundaries are complete, accurate, and sufficiently clear to allow for the safe and efficient turnover of systems to UniStar Nuclear Operating Services, LLC. This group also provides direct support to UniStar Nuclear Operating Services, LLC for system turnover and plant testing to ensure requirements are met.

The above description appears to describe construction acceptance testing and the turnover process. The NRC staff requests that the applicant clarify how the above description relates to the initial test program and revise Subsection 14.2.2 accordingly.

#### 14.02-49

In RAI 14.02-16, the staff noted that Regulatory Guide (RG) 1.206, Section C.1.14.2.2, "Organization and Staffing," states that "the COL applicant should implement measures to ensure that personnel formulating and conducting test activities are not the same personnel who designed or are responsible for satisfactory performance of the system(s) or design features(s) being tested," and requested that the applicant revise its FSAR to include such provisions. In response to RAI 14.02-16, the applicant added the above language to Subsection 14.2.2.

In response to RAI 14.02-38, the applicant proposed a major revision to the organizational and staffing section of Subsection 14.2.2 and the above language was not included in the proposed revision. The NRC staff requests that the language included in response to RAI 14.02-16 be reinstated in Subsection 14.2.2 of the CCNPP3 COL FSAR.

