CCNPP3COLA NPEmails

From: Arora, Surinder
Sent: Thursday, February 25, 2010 1:45 PM
To: 'Poche, Robert'
Cc: CCNPP3COL Resource
Subject: Calvert Audit Plan Mar 2010 - RCOLA Section 2.5
Attachments: Calvert Audit Plan Mar 2010 Final.doc

Rob,

Attached is the audit plan for Section 2.5 Audit scheduled for March 16 and 17. This will help you in getting started and having the right resources line up in support of the audit. The audit also include a site tour of the new site for CCNPP Unit 3.

As you will notice, the discussions on the RAIs will be in a public meeting setting. We will need a room with a speaker phone where the interested public participants will be able to tie in on a bridge line. The notice for this portion of the meeting will be separately posted.

Please let me know if there are any questions.

Thanks.

SURINDER ARORA, PE
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Hearing Identifier: CalvertCliffs_Unit3Cola_NonPublic_EX
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From: Arora, Surinder

Created By: Surinder.Arora@nrc.gov

Recipients:
"CCNPP3COL Resource" <CCNPP3COL.Resource@nrc.gov>
Tracking Status: None
"'Poche, Robert'" <Robert.Poche@constellation.com>
Tracking Status: None

Post Office: HQCLSTR01.nrc.gov

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Calvert Audit Plan Mar 2010 Final.doc	69114	

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Return Notification: No
Reply Requested: No
Sensitivity: Normal
Expiration Date:
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AUDIT PLAN TO REVIEW SELECTED AREAS RELATED TO
UNISTAR COL FSAR SECTION 2.5 AND SUPPORTING TECHNICAL INFORMATION

APPLICANT:	UniStar, Inc.
APPLICANT CONTACT:	Rob Poche
TIME:	9:00 am to 5:00 pm on 3/16/2010, and 9:00 am to 3:00 pm on 3/17/2010
LOCATION:	Calvert Cliffs Nuclear Power Plant, Lusby, MD
REVIEWERS:	Rebecca Karas, NRO, RGS1 Branch Chief Ricardo Rodriguez, NRO, RGS1 Reviewer Weijun Wang, NRO, RGS1 Audit Lead Surinder Arora, NRO, Lead PM James Steckel, NRO, Chapter PM Joseph Colaccino, NRO, NARP Branch Chief Carl Constantino, CJC Associates John Greeves, Numark Associates

BACKGROUND

To complete the review of Section 2.5, "Geology, Seismology, and Geotechnical Engineering," of the CCNPP3 COL FSAR, NRC staff has planned audit activities defined in Attachments A and B of this plan.

The audit is needed to accomplish the CCNPP3 FSAR review in an efficient manner and to support the COL FSAR technical review in conformance with NRC's NUREG-0800, "Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants," Section 2.5.

Audit activities include inspection of certain core borings from the site, a site tour, and, as necessary, clarification discussions with CCNPP3 representatives concerning the geotechnical calculations for settlement and bearing capacity determinations. There will also be discussions, in the format of a public meeting, on pertinent Requests for Additional Information (RAIs) submitted by NRC staff against COL FSAR Section 2.5.

AUDIT BASIS

- NUREG-0800, "Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants: LWR Edition – Site Characteristics and Site Parameters (Chapter 2)"

PURPOSE AND APPROACH

The purpose of this audit is to review soil borings and their documentation, and to discuss questions staff may have after their preliminary review of the geotechnical calculations developed by UniStar, that pertain to the generation of Sections 2.5.1, 2.5.2, and 2.5.3 of the UniStar COL FSAR. Additionally, the audit will provide staff the chance to tour the proposed CCNPP3 site, in particular locations associated with the ultimate heat sink (UHS). Also, there will be opportunity for discussion with UniStar subject matter experts on issues that may require clarification regarding NRC generated Requests for Additional Information (RAIs) associated with the staffs' review of COL FSAR Section 2.5. This RAI discussion will be held as a call-in public meeting.

An audit agenda is shown in Attachment A and the audit topic items and requested material for review are identified in Attachment B.

The materials identified in Attachment B are to be made available by UniStar at the audit location. NRC staff request that the applicant be prepared to provide soil core borings focusing on the load bearing layer (i.e., Stratum II soils). Additional samples of borings relevant to the discussion topics in Attachment B may be requested. The staff also requests that UniStar subject matter expert personnel experienced in the geologic calculation methodology and supporting material be available for interview.

It is requested that UniStar representatives attending the audit be familiar with the details of the audit topics and assure that documents and technical supporting evidence will be available to the NRC reviewers.

AUDIT ACTIVITIES AND SCHEDULE

NRC staff will conduct the review over a period of two business days, March 16 & 17, 2010. If necessary, NRC may request an ad-hoc extension of the audit at the same location if findings during the ongoing audit reveal the need for additional time. Such an extension will be requested by the NRC staff responsible for the audit before the meeting is adjourned on March 17. If such an extension is necessary it will be scheduled to occur on a mutually agreed upon date.

Following the audit, each technical reviewer will prepare a separate audit summary with specific findings, to be sent to the Lead Auditor by April 7, 2010. The NRC Chapter PM will assemble and prepare a final audit report. The final report will be made available to all contributors for their concurrence by April 21, 2010. Any final notes by the contributors will be communicated no later than April 21, 2010.

Attachment A

Agenda
NRC CCNPP3 Site Audit
Pertaining to the Review of the UniStar FSAR, Section 2.5
March 16-17, 2010
CCNPP3 Proposed Site, and UniStar offices
Lusby, MD

Tuesday, March 16, 2010, MORNING SESSION: AUDIT

09:00-09:30 Audit Entrance / Introduction ..... [NRC/UNISTAR]

09:30-12:00 Site Tour and Review of UHS Location ..... [NRC/UNISTAR]

12:00-13:00 Lunch

Tuesday, March 16, 2010, AFTERNOON SESSION: AUDIT

13:00-16:30 Core Borings Review, Including Supporting Documentation ..... [NRC/UNISTAR]

16:30-16:45 NRC Internal Caucus..... [NRC]

16:45-17:00 Exit Meeting ..... [NRC/UNISTAR]

17:00 Adjourn

Wednesday, March 17, 2010, MORNING SESSION: AUDIT

09:00-09:15 Clarification of items from Previous day, if needed ... [NRC/UNISTAR]

09:15-12:00 Documentation Review and Discussion: Methodology for Seismic Calculations and Analysis..... [NRC/UNISTAR]

12:00-13:00 Lunch

Wednesday, March 17, 2010, AFTERNOON SESSION: AUDIT Conclusion

13:00-14:30 PUBLIC MEETING - RAI Clarification Discussion..... [NRC/UNISTAR]

14:30-14:45 Exit Meeting ..... [NRC/UNISTAR]

15:00 Adjourn

Attachment B

CCNPP3 Site Audit Topics and Supporting Technical Information
UniStar COL FSAR Section 2.5, "Geology, Seismology, and Geotechnical Engineering"

Site Tour

- Tour of the CCNPP3 proposed site, in particular, locations associated with ultimate heat sink (UHS) structures

Review of Soil Borings

- Review of undisturbed soil samples focusing on load bearing layer (i.e. Stratum II soils). Borings of interest include B-301, B-302, B-774 and B-357A

- Additional borings should be available, if requested

Methodology for Seismic Calculations and Analyses

- Documentation review and discussion of the methodology used to develop the model to calculate soil bearing capacity and expected settlement calculations

RAI Clarification Discussions (Public Meeting Format)

- Clarification discussions, including UniStar's planned approach for response, on the RAIs prepared during technical review of the following COL FSAR Sections:
    - Section 2.5.4, "Stability of Subsurface Materials and Foundations"
        - RAI-195 (eRAI-3908), Question 02.05.04-1, liquefaction potential evaluation related data
        - RAI-201 (eRAI-4255), Question 02.05.04-2, methodology and package used to develop model to calculate bearing capacity and expected settlement
        - RAI-218 (eRAI-4332), Questions 02.05.04-3 – 02.05.04-16, various questions related to subsurface materials and foundations
    - Section 2.5.5, "Stability of Slopes"
        - RAI-215 (eRAI-4333), Question 02.05.05-1, effect of higher groundwater on slope stability