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June 4, 2012

UN#12-045

ATTN: Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Subject: UniStar Nuclear Energy, NRC Docket No. 52-016
Response to Request for Additional Information for the
Calvert Cliffs Nuclear Power Plant, Unit 3,
RAI 342, Dynamic Testing and Analyses of
Systems, Structures, and Components

Reference: 1) Surinder Arora (NRC) to Paul Infanger (UniStar Nuclear Energy), "CCNPP3
- Final RAI 342 EMB 6426," dated May 9, 2012

The purpose of this letter is to respond to the request for additional information (RAI) identified in the NRC e-mail correspondence to UniStar Nuclear Energy, dated May 9, 2012 (Reference 1). This RAI addresses Dynamic Testing and Analyses of Systems, Structures, and Components as discussed in Section 3.9.2 of the Final Safety Analysis Report (FSAR), as submitted in the Calvert Cliffs Nuclear Power Plant (CCNPP) Unit 3 Combined License Application (COLA), Revision 8.

The enclosure provides our response to RAI No. 342, Question 03.09.02-1, and includes revised COLA content. A Licensing Basis Document Change Request has been initiated to incorporate these changes into a future revision of the COLA.

This response to RAI No. 342, Question 03.09.02-1 includes a change to COLA FSAR Subsection 3.9.2.4. No previous RAI responses have involved a change to COLA FSAR Subsection 3.9.2.4.

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Our response does not include any new regulatory commitments. This letter does not contain any sensitive or proprietary information.

If there are any questions regarding this transmittal, please contact me at (410) 369-1907 or Mr. Wayne A. Massie at (410) 369-1910.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on June 4, 2012



Mark T. Finley

- Enclosures:
- 1) Response to NRC Request for Additional Information RAI No. 342, Question 03.09.02-1, Dynamic Testing and Analyses of Systems, Structures, and Components, Calvert Cliffs Nuclear Power Plant, Unit 3
 - 2) Table of Changes to CCNPP Unit 3 COLA Associated with Response to RAI No. 342

cc: Surinder Arora, NRC Project Manager, U.S. EPR Projects Branch
Laura Quinn-Willingham, NRC Environmental Project Manager, U.S. EPR COL Application
Getachew Tesfaye, NRC Project Manager, U.S. EPR DC Application, (w/o enclosure)
Patricia Holahan, Acting Deputy Regional Administrator, NRC Region II, (w/o enclosure)
Silas Kennedy, U.S. NRC Resident Inspector, CCNPP, Units 1 and 2,
David Lew, Deputy Regional Administrator, NRC Region I (w/o enclosure)

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Enclosure 1

**Response to NRC Request for Additional Information RAI No. 342,
Question 03.09.02-1, Dynamic Testing and Analyses of
Systems, Structures, and Components,
Calvert Cliffs Nuclear Power Plant, Unit 3**

RAI No. 342

NRC Question 03.09.02-1

Subsection 3.9.2.4 of the CCNPP Unit 3 FSAR, Revision 8 states that "For CCNPP Unit 3, performance of vibration testing during Hot Functional Testing, and associated field testing, shall be as described in U.S. EPR FSAR Section 3.9.2.4 and in accordance with the Hot Functional Testing milestone identified in U.S. EPR FSAR Figure 14.2-1." However, Figure 14.2-1 was deleted in Revision 3 of the EPR FSAR. The staff requests the applicant to update the above statement.

Response

U.S. EPR FSAR Figure 14.2-1, "U.S. EPR Commissioning Milestones" was deleted in the response to U.S. EPR RAI 16, Question 14.02-17¹. Revision 1 of the U.S. EPR FSAR reflected that the figure was deleted. Calvert Cliffs Nuclear Power Plant (CCNPP) Unit 3 COLA Subsection 3.9.2.4 should have been revised as part of the U.S. EPR FSAR Revision 1 impact review to the CCNPP Unit 3 COLA. This condition has been entered into the UniStar Nuclear Energy (UNE) corrective action program for disposition.

The subject sentence, in CCNPP Unit 3 COLA FSAR Subsection 3.9.2.4, is being revised to delete mention of U.S. EPR FSAR Figure 14.2-1 and to add reference to U.S. EPR FSAR Section 14.2.11, "Test Program Schedule," which is appropriate to the sentence.

COLA Impact

CCNPP Unit 3 FSAR Chapter 3 will be updated as follows in a future COLA revision:

3.9.2.4 Preoperational Flow-Induced Vibration Testing of Reactor Internals

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The COL Item and Regulatory Guide 1.206 request are addressed as follows:

{The U. S. EPR FSAR designates the Reactor Pressure Vessel (RPV) internals as a prototype design in accordance with the guidance of Regulatory Guide 1.20 (NRC, 2007a). The CCNPP Unit 3 RPV internals are currently classified as the U.S. EPR prototype for RPV internals testing. However, should a comprehensive vibration assessment program for an EPR unit other than CCNPP Unit 3 be completed and approved by the U.S Nuclear Regulatory Commission prior to initiation of start-up testing at CCNPP Unit 3, CCNPP Unit 3 will be reclassified as a non-prototype Category I RPV internals design and the associated experimental and/or analytical justification, including any required changes to the comprehensive vibration assessment program, will be provided to the U.S Nuclear Regulatory Commission for review and approval.

¹ Areva Response (ADAMS No. ML082240699) to U.S. EPR Design Certification Application RAI No. 16, FSAR Ch. 14, dated August 4, 2008.

A methodology for the comprehensive vibration assessment program that the U.S. Nuclear Regulatory Commission considers acceptable for use is provided in Regulatory Guide 1.20 and shall be utilized at CCNPP Unit 3. For CCNPP Unit 3, performance of vibration testing during Hot Functional Testing, and associated field testing, shall be as described in U.S. EPR FSAR Section 3.9.2.4 and ~~in accordance with the Hot Functional Testing milestone identified in U.S. EPR FSAR Figure 14.2-1~~U.S. EPR FSAR Section 14.2.11.

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Enclosure 2

Calvert Cliffs Nuclear Power Plant, Unit 3

Table of Changes to CCNPP Unit 3 COLA Associated with Response to RAI No. 342

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The following table provides the changes to CCNPP Unit 3 COLA associated with the response to RAI No. 342.

Change ID #	Subsection	Type of Change	Description of Change
Part 2 – FSAR			
CC3-12-0109	3.9.2.4	Incorporate COLA markups associated with the RAI 342 Question 03.09.02-1 response.	<p>The UNE RAI 342 Question 03.09.02-1 response makes the CCNPP Unit 3 COLA consistent with the U.S. EPR Design Certification Application.</p> <p>U.S. EPR FSAR Figure 14.2-1 was deleted in the response to U.S. EPR Design Certification Application RAI No. 16, Question 14.02-17, dated August 4, 2008 (ADAMS No. ML082240699).</p> <p>CCNPP Unit 3 FSAR Subsection 3.9.2.4 is revised to delete mention of U.S. EPR FSAR Figure 14.2-1 and to add mention of U.S. EPR FSAR Section 14.2.11.</p>