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10 CFR 50.4
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October 26, 2012

UN#12-111

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 373, Initial Plant Test Program - Design Certification and New License
Applicants

- References:
- 1) Michael Canova (NRC) to Paul Infanger (UniStar Nuclear Energy), "CCNPP3 - FINAL RAI No. 373 CMVB 6727" email dated September 26, 2012
 - 2) UniStar Nuclear Energy Letter UN#09-120, from Greg Gibson to Document Control Desk, U.S. NRC, Response to Request for Additional Information for the Calvert Cliffs Nuclear Power Plant, Unit 3, RAI 52, Initial Plant Test Program - Design Certification and New License Applicants, dated March 6, 2009

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 September 26, 2012 (Reference 1). This RAI addresses Initial Plant Test Program - Design Certification and New License Applicants, as discussed in Section 14.2.14 of the Final Safety Analysis Report (FSAR), as submitted in Part 2 of the Calvert Cliffs Nuclear Power Plant (CCNPP) Unit 3 Combined License Application (COLA), Revision 8.

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RAI 373 concerns the proper implementation of the previous RAI 52 response changes into the CCNPP Unit 3 COLA.

Enclosure 1 provides our response to RAI No. 373, Question 14.02-59, 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. Enclosure 2 provides a table of changes to the CCNPP Unit 3 COLA associated with the RAI 373 response.

A condition report regarding the incorrect FSAR Chapter 14 information in COLA Revision 8, as discussed in Enclosure 1, has been entered into the UNE corrective action program for disposition.

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 October 26, 2012



Mark T. Finley

- Enclosures:
- 1) Response to NRC Request for Additional Information, RAI No. 373, Question 14.02-59, Initial Plant Test Program - Design Certification and New License Applicants, Calvert Cliffs Nuclear Power Plant, Unit 3
 - 2) Table of Changes to CCNPP Unit 3 COLA Associated with the Response to RAI No. 373, Question 14.02-59, Calvert Cliffs Nuclear Power Plant, Unit 3

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 enclosures)
Patrica Holahan, Acting Deputy Regional Administrator, NRC Region II, (w/o enclosures)
Silas Kennedy, U.S. NRC Resident Inspector, CCNPP, Units 1 and 2,
David Lew, Deputy Regional Administrator, NRC Region I (w/o enclosures)

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Enclosure 1

**Response to NRC Request for Additional Information,
RAI No. 373, Question 14.02-59,
Initial Plant Test Program - Design Certification and New License Applicants,
Calvert Cliffs Nuclear Power Plant, Unit 3**

RAI No 373

Question 14.02-59

Follow up to RAI 52, Question 14.02-31:

In the March 6, 2009 response to RAI 52, Question 14.02-31 (ML090690546), the COL applicant stated that the essential service water blowdown system is not a safety-related system. The motor-operated valves (MOVs) that isolate the safety-related essential service water system from the non-safety-related essential service water blowdown system are considered part of the ESWS not the blowdown system, and testing of these MOVs is addressed in the U.S. EPR FSAR Tier 2, Section 14.2.12.5.7, "Essential Service Water System (Test #048)." The COL applicant stated that there are no parts (including MOVs, solenoid-operated valves (SOVs), air-operated valves (AOVs)) of the blowdown system that can be operated from the control panel or remote shutdown panel; and therefore proposed to delete Test Method Steps 3a, 3b, 3e, and 3f; Data Required Item 4c; and Acceptance Criteria Items 5a, 5b, 5e, and 5f from COL FSAR Section 14.2.14.3.

In addition, the COL applicant proposed the following revisions to COL FSAR Section 14.2.14.3. Test Method Steps 3a, 3b, 3e, and 3f, Data Required Item 4c, and Acceptance Criteria Items 5a, 5b, 5e, and 5f will be deleted from COL FSAR Section 14.2.14.3. The staff reviewed the COL applicant's response, and found that the proposed change conformed to the guidance contained in RG 1.68 and RG 1.206 and was tracking this item as a confirmatory item pending the incorporation of the response into the applicants COL FSAR. However, upon reviewing Revision 8 of the applicant's COL FSAR, the staff found that under Acceptance Criteria, items 5a, 5b, 5e, and 5f remain in this application. The RAI 52 response had indicated that items 5a, 5b, 5e, and 5f are to be deleted since there are no parts of the blowdown system that can be operated from the control panel or remote shutdown panel. In addition, EPR DCD Tier 1 Table 2.7.11-2, "Essential Service Water System Equipment I&C and Electrical Design," has been revised since the applicant's response and indicates that the blowdown MOVs are controlled from the main control room. In light of the above, please provide clarification to your response to RAI 52, Question 14.02-31.

Response

The Calvert Cliffs Nuclear Power Plant (CCNPP) Unit 3 Combined License Application (COLA), Final Safety Analysis Report (FSAR) Section 14.2.14.3 has been updated to delete Acceptance Criteria, items 5a, 5b, 5e, and 5f. These items were left in the FSAR in error when developing CCNPP Unit 3 COLA Revision 5.

As stated in the response to CCNPP Unit 3, RAI 52¹, there are no components in the site-specific Essential Service Water System (ESWS) blowdown system that can be operated from the main control room (MCR) or remote shutdown station (RSS). The motor operated valves (MOVs) addressed by CCNPP Unit 3 COLA FSAR Section 14.2.14.3 Acceptance Criteria items 5a, 5b, 5e, and 5f, are part of the ESWS Blowdown System that are not controlled from the Main Control Room (MCR). There are MOVs described in the U.S. Evolutionary Plant Reactor (EPR) Design Certification (DC) FSAR Section 14.2.12.5.7, Essential Service Water System (Test #48), that are controlled from the MCR, and tested as part of the ESWS Startup Test Program. These U.S. EPR DC MOVs isolate the safety-related ESWS from the non safety-related ESWS described in the CCNPP Unit 3 COLA FSAR Section 14.2.14.3 Essential Service Water Blowdown System.

COLA Impact

The CCNPP Unit 3 COLA FSAR Section 14.2.14.3 has been updated as follows:

14.2.14.3 Essential Service Water Blowdown System

...

5. ACCEPTANCE CRITERIA

- ~~a. Each ESW blowdown system division can be operated, as designed, from the main control room and the remote shutdown panel.~~
- ~~b. Each ESW blowdown system division MOVs close automatically in response to an emergency signal.~~
- a e. The ESW blowdown system operates at the rated flow and design conditions.
- b d. The alarms, interlocks, display instrumentation, and status lights function as designed.
- ~~e. The valves meet performance data where required.~~
- ~~f. The valve position indications properly indicate actual valve position.~~
- c g. The ESW blowdown system operates per design and as described in Section 9.2.5.

¹ UniStar Nuclear Energy Letter UN#09-120, from Greg Gibson to Document Control Desk, U.S. NRC, Response to Request for Additional Information for the Calvert Cliffs Nuclear Power Plant, Unit 3, RAI 52, Initial Plant Test Program - Design Certification and New License Applicants, dated March 6, 2009

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Enclosure 2

**Table of Changes to CCNPP Unit 3 COLA
Associated with the Response to RAI No. 373,
Question 14.02-59,
Calvert Cliffs Nuclear Power Plant, Unit 3**

**Table of Changes to CCNPP Unit 3 COLA
 Associated with the Response to RAI No. 373**

Change ID #	Ref	Subsection	Type of Change	Description of Change
Part 2 – FSAR				
09-0082	UN#09-120	14.2.14.3 Item 3	09-0082 incorporates changes associated with UN#09-120, the response to RAI 52.	This change deleted 14.2.14.3 Items 5.a, 5.b, 5.e, and 5.f, but the change was not incorporated in the CCNPP Unit 3 COLA
CC3-12-0181	UN#12-111	14.2.14.3 Item 3	CC3-12-0181 incorporates changes associated with UN#12-111, the response to RAI 373.	This change deletes 14.2.14.3 Items 5.a, 5.b, 5.e, and 5.f