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10 CFR 50.4
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August 3, 2010

UN#10-215

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

Subject: UniStar Nuclear Energy, NRC Docket No. 52-016
Calvert Cliffs Nuclear Power Plant, Unit 3,
Updated Response to RAI 223, Reactor Coolant Pressure Boundary Leakage
Detection

- References:
- 1) Surinder Arora (NRC) to Robert Poche (UniStar Nuclear Energy), "FINAL RAI 223 SBPB 4480" email dated April 5, 2010
 - 2) UniStar Nuclear Energy Letter UN#10-161, from Greg Gibson to Document Control Desk, U.S. NRC, Updated Response to RAI 223, Reactor Coolant Pressure Boundary Leakage Detection, dated June 17, 2010.

The purpose of this letter is to provide an updated response to request for additional information (RAI) 223 identified in the NRC e-mail correspondence to UniStar Nuclear Energy, dated April 5, 2010 (Reference 1). This RAI addresses Reactor Coolant Pressure Boundary Leakage Detection, as discussed in Section 5.2.5 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 6.

Reference 2 provided a response to RAI 223, Questions 05.02.05-3 and 05.02.05-4. The enclosure contains our updated response to RAI 223, Questions 05.02.05-3 and 05.02.05-4, which replaces the response provided in Reference 2 in its entirety. The response includes

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revised COLA content. A Licensing Basis Document Change Request has been initiated to incorporate these changes into a future revision of the COLA.

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) 470-4205, or Mr. Wayne A. Massie at (410) 470-5503.

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

Executed on August 3, 2010

A handwritten signature in black ink, appearing to read 'Greg Gibson', with a long horizontal flourish extending to the right.

Greg Gibson

Enclosure: Updated Response to NRC Request for Additional Information RAI 223, Questions 05.02.05-3 and 05.02.05-4, Reactor Coolant Pressure Boundary Leakage Detection, Calvert Cliffs Nuclear Power Plant, Unit 3

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

Enclosure

**Updated Response to NRC Request for Additional Information
RAI 223, Questions 05.02.05-3 and 05.02.05-4,
Reactor Coolant Pressure Boundary Leakage Detection,
Calvert Cliffs Nuclear Power Plant, Unit 3**

RAI 223

Question 05.02.05-3

This is a follow-up question for RAI 166, Question 05.02.05-1. In response to Question 05.02.05-1, the applicant, in a letter dated October 27, 2009, promised to provide the requested procedures and alarm setpoints, but had not made changes to the FSAR.

To date, the FSAR does not address the procedures, nor does it make any commitment to developing them.

Based on the October 27, 2009, response letter, the staff is not able to determine whether the promised procedures would be consistent with the guidance in RG 1.45 Revision 1 Regulatory Position C.3.3 or when the procedures would be made available for NRC inspection. The applicant is requested to provide in the FSAR the information discussed above.

Response

In the AREVA response to U.S. EPR RAI 365, Questions 05.02.05-9 and 05.02.05-10, (ML101180189), COL Item 5.2-4 was added. COL Item 5.2-4 states that "A COL applicant that references the U.S. EPR design certification will develop procedures in accordance with RG 1.45, Revision 1."

CCNNP Unit 3 FSAR Table 1.8-2 will be revised to add this new COL item. CCNNP Unit 3 FSAR Section 5.2.5 will be revised to include information to address the new COL item.

COLA Impact

FSAR Table 1.8-2 is being updated with the addition of COL Item 5.2-4 as follows:

Table 1.8-2—FSAR Sections that Address COL Items

Item No	Description	Section
<u>5.2-4</u>	<u>A COL applicant that references the U.S. EPR design certification will develop procedures in accordance with RG 1.45, Revision 1.</u>	<u>5.2.5</u>

FSAR Section 5.2.5 is being updated with the addition of COL Item 5.2-4 as follows:

5.2.5 RCPB LEAKAGE DETECTION

~~No departures or supplements.~~

The U.S. EPR FSAR includes the following COL Item in Section 5.2.5:

A COL applicant that references the U.S. EPR design certification will develop procedures in accordance with RG 1.45, Revision 1.

This COL Item is addressed as follows:

Operating and emergency operating procedures will conform to the guidance of RG 1.45, Revision 1, including adjustment of leakage rate alarm setpoints as specified in Regulatory Position C.3.2. The procedures will also provide conversion of instrument indications of various leakage detection instruments into a common leak rate and procedures that specify operator actions in response to leakage rates less than the limits set forth in the plant technical specifications.

Operating and emergency procedures will be developed in accordance with the schedule provided in Section 13.5.2.1.5.

Question 05.02.05-4

This is a follow-up question for RAI 166, Question 05.02.05-2. In response to Question 05.02.05-2, the applicant, in a letter dated October 27, 2009, promised to provide the requested procedures, but had not made changes to the FSAR.

To date, the FSAR does not address the procedures, nor does it make any commitment to developing them.

Based on the October 27, 2009, response letter, the staff is not able to determine whether the promised procedures would be consistent with the guidance in RG 1.45 Revision 1 Regulatory Position C.3.3 or when the procedures would be made available for NRC inspection. The applicant is requested to provide in the FSAR the information discussed above.

Response

The response to this question is provided in response to Question 05.02.05-3 (this enclosure).

COLA Impact

The COLA Impact for this question is provided in response to Question 05.02.05-3 (this enclosure).