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UniStar
NUCLEAR ENERGY

10 CFR 50.4
10 CFR 52.79

June 17, 2010

UN#10-161

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#10-120, from Greg Gibson to Document Control Desk, U.S. NRC, Re-transmittal of Response to RAI 223, Reactor Coolant Pressure Boundary Leakage Detection, dated April 27, 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 stated that following the AREVA response to U.S. EPR RAI 365, Questions 05.02.05-9 and 05.02.05-10, UniStar Nuclear Energy would provide an updated response to RAI 223, Questions 05.02.05-3 and 05.02.05-4. The enclosure contains our

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updated response to RAI 223, Questions 05.02.05-3 and 05.02.05-4, 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.

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 June 17, 2010

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

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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 and Section 5.2.5 will be revised to add this new COL information along with the information that was provided in RAI 166, Questions 05.02.05-1 and 05.02.05-2 (ML093030612).

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
5.2-4	A COL applicant that references the U.S. EPR design certification will develop procedures in accordance with RG 1.45, Revision 1.	5.2.5.5

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:

Procedures needed to conform to the guidance of RG 1.45, Revision 1 will be prepared as operating and emergency operating procedures in accordance with Section 13.5.2.1. This includes procedures that 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.

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).