Greg Gibson
Vice President, Regulatory Affairs

750 East Pratt Street, Suite 1600
Baltimore, Maryland 21202

UniStar
NUCLEAR ENERGY

10 CFR 50.4
10 CFR 52.79

June 30, 2010

UN#10-170

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 No. 238, Inspections, Tests, Analyses, and Acceptance Criteria

References:
1) Surinder Arora (NRC) to Robert Poche (UniStar Nuclear Energy), "Final RAI No 238 CTSB 4407" email dated May 12, 2010

2) UniStar Nuclear Energy Letter UN#10-137, from Greg Gibson to Document Control Desk, U.S. NRC, Submittal of Response to RAI No. 238, Inspections, Tests, Analyses, and Acceptance Criteria, dated May 24, 2010

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 12, 2009 (Reference 1). This RAI addresses Inspections, Tests, Analyses, and Acceptance Criteria, as discussed in Appendix B of the Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC), as submitted in Part 10 of the Calvert Cliffs Nuclear Power Plant (CCNPP) Unit 3 Combined License Application (COLA), Revision 6.

Reference 2 indicated that the response to Question 14.03-14 would be provided by June 30, 2010.

D096
NRO

The enclosure provides our response to RAI No. 238, Question 14.03-14, Calvert Cliffs Nuclear Power Plant, Unit 3.

There are no regulatory commitments identified in this letter. This letter does not contain any proprietary or sensitive 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 30, 2010

Christian Elmert

for

Greg Gibson

Enclosure: Response to NRC Request for Additional Information RAI No. 238, Question 14.03-14, Inspections, Tests, Analyses, and Acceptance Criteria, 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

GTG/JV/mdf

Enclosure

Response to NRC Request for Additional Information
RAI No. 238, Question 14.03-14
Inspections, Tests, Analyses, and Acceptance Criteria,
Calvert Cliffs Nuclear Power Plant, Unit 3

RAI No. 238

Question 14.03-14

Generic to all ITAAC for Calvert Cliff's application

The numbering of the site-specific ITAAC in the Calvert Cliffs application is not always consistent with the way that the EPR FSAR numbers its Tier 1 ITAAC based on the following:

a. The Tier 1 ITAAC in the EPR FSAR in Section 2..4, Table 2.4.1-9 are numbered by using two numbers that represent sub-sections of the FSAR which for section 2.4 of FSAR are the following: 2.1 to 2.2; 3.1; 4.1 to 4.15; & 5.1. In Table 2.4-1, of Calvert Cliff's application, the ITAAC are numbered only with consecutive single digit numbers starting from 1 which for Table 2.4-1 are the following numbers: 1 – 4.

b. For ITAAC Item 4.14 in Table 2.4.1-9 of the EPR FSAR, the individual nine ITAAC are labeled from 4.14.a. to 4.14.i. with each of those nine items listed in the Inspections, Tests, and Analyses (ITA) and Acceptance Criteria (AC) columns being individual ITAAC and with each of them identified by lower-case letters. These nine ITAAC verify, by inspections and analyses, that for the five phases of the design for the PS software and hardware that each phase has design outputs, and that reports exist and conclude that the design outputs for each phase are in accordance with the requirements of each phase. For Table 2.4-9 of Calvert Cliff's application, the bulleted items under the Commitment Wordings for ITAAC Items 1 and 2 in Table 2.4-9 are not treated as individual ITAAC, and they are identified by numbers from 1 to 3 or 1 to 2. For these two ITAAC there are either three different routings of duct banks or two different types of piping, respectively, that are routed between certain buildings. Based on the above, there appears to be a discrepancy between how the ITAAC are numbered in Table 2.4.1-9 of the EPR FSAR and ITAAC Items 1 and 2 in Table 2.4-9 of the Calvert Cliffs application.

c. For Items 4.1 and 4.2 in Table 2.5.1-3 of the EPR FSAR, there are two individual ITAAC each for both 4.1 and 4.2 identified by lower case letters verifying that displays can be retrieved and controls exist in both MCR and RSS. In Table 2.4-31 of Calvert Cliff's application, the bulleted items identified by single digit numbers under the Commitment Wordings and Acceptance Criteria for ITAAC Items 2 and 3 are not treated as individual ITAAC, and they verify that particular displays and controls for various UHS equipment exist in the MCR. Based on the above, there appears to be a discrepancy between how the bulleted items are numbered in ITAAC 4.1 and 4.2 in Table 2.5.1-3 of the EPR FSAR and the bulleted items for ITAAC Items 2 and 3 in Table 2.4-31 of the Calvert Cliff's application.

d. For ITAAC Item 5 in Table 2.4-28, there is one inspection with three items in the AC all numbered by lower case letters. These ITAAC are treated as individual ITAAC. For ITAAC Item 9 in the same Table 2.4-28, there is one inspection with four items listed in the AC all numbered by single digit numbers. These ITAAC are treated as bulleted items under a singular ITAAC. Based on the above, there appears to be a discrepancy

between how the bulleted items are numbered in ITAAC 5 in Table 2.4 -28 and the bulleted items for ITAAC Item 9 in Table 2.4-28 of the Calvert Cliff's application.

The staff requests the applicant to develop a numbering scheme for the Calvert Cliffs application that (1) is uniform with that of the Tier 1 ITAAC in the EPR FSAR, and (2) identifies and numbers all ITAAC in a uniform manner.

RESPONSE:

The response to RAI 118, Question 14.03.02-2, Item H[1] established more consistent numbering in the Calvert Cliffs Nuclear Power Plant (CCNPP), Unit 3, Combined License Application (COLA) Part 10, Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) and ITAAC Closure. The structure and associated numbering is more consistent with the U.S. Evolutionary Power Reactor (EPR) Design Certification (DC) Tier 1.

The U.S. EPR DC Tier 1 ITAAC address different structures, systems, and components (SSCs) than the CCNPP Unit 3 COLA Part 10 ITAAC. Therefore, the table numbering for the DC and COLA are not consistent.

The U.S. EPR DC Tier 1 sections contain subsections whose numbering correlates with the ITAAC in the associated DC section. The CCNPP Unit 3 COLA Part 10 ITAAC do not include such sections, and the ITAAC are numbered consecutively. Therefore, the item numbering within the ITAAC tables for the DC and COLA are not consistent.

Though the response to RAI 118, Question 14.03.02-2, Item H[1] established more consistent numbering between the CCNPP Unit 3 COLA Part 10 ITAAC and the U.S. EPR DC Tier 1 ITAAC, due to the different content and structure of the documents, exact numbering correlation between the documents is not possible.

The structure and content of the CCNPP Unit 3 COLA Part 10 is consistent with the guidance in RG 1.206.

When numbered in the CCNPP Unit 3 ITAAC schedule, the intent is to reference a unique identifier combining the table and item identifier (e.g., Table 2.4-11, Item 1.a is 2.4.11.1.a). The ITAAC for the COLA and DC could be differentiated by categorization as COLA or DC (i.e., COLA 2.4.11.1.a and DC 2.4.1.9.4.14.a).

a. For the reasons explained above, the use of single and dual digits in the CCNPP Unit 3 COLA Part 10 ITAAC and the U.S. EPR DC Tier 1 ITAAC are not consistent.

[1] UniStar Nuclear Energy Letter UN#10-160, 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 No. 118, Inspections, Tests, Analyses and Acceptance Criteria (ITAAC), dated June 18, 2010

b. For ITAAC Item 4.14 in Table 2.4.1-9 of the U.S. EPR DC Tier 1 ITAAC, the individual nine ITAAC are established to address each of the 5 phases of the design process. For Table 2.4-9 of the CCNPP Unit 3 COLA Part 10 ITAAC, the bulleted items under the Commitment Wordings for ITAAC Items 1 and 2 describe the loads to be addressed by the analysis to be performed. In the response to RAI 161 Question 14.03.03-3[2], it was clarified that addressing these loads would be conducted as part of the seismic qualification reports, and the ITAAC was divided into two portions, one for type tests and analyses and one for inspections. This content and format is consistent with the U.S. EPR DC Tier 1 ITAAC.

c. CCNPP Unit 3 COLA Part 10 ITAAC Table 2.4-31 Items 2 and 3 were modified as part of the response to RAI 118, Question 14.03.02-2, Item H[1], in part to make the structure and wording more consistent with the U.S. EPR DC Tier 1 ITAAC. For reasons explained above, the use of single and dual digits in the CCNPP Unit 3 COLA Part 10 ITAAC and the U.S. EPR DC Tier 1 ITAAC are not consistent.

d. Table 2.4-28 has been removed from the CCNPP Unit 3 COLA Part 10 ITAAC by letter UN#10-047[3]. These requirements have been relocated to the U.S. EPR DC Tier 1 ITAAC.

COLA Impact

The COLA Part 10 will not be revised as a result of this response.

[2] UniStar Nuclear Energy Letter UN#10-090, 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 No. 161, Piping Systems and Components- Inspections, Tests, Analyses, and Acceptance Criteria, dated March 31, 2010
[3] UniStar Nuclear Energy Letter UN#10-047, from Greg Gibson to Document Control Desk, U.S. NRC, New and Spent Fuel Storage Racks, dated February 26, 2010