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February 27, 2009

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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. 49, Question 14.02-25, Initial Plant Test Program

References: 1) John Rycyna (NRC) to George Wrobel (UniStar), "RAI No. 49 CQVP
1336.doc" email dated January 28, 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, dated January 28, 2009 (Reference 1). This RAI addresses the Initial Plant Test Program, as discussed in Section 14.2.9 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 3.

The enclosure provides our response to RAI No. 49, Question 14.02-25. COLA impacts associated with this RAI response are noted with the question response. A Licensing Basis Document Change Request has been initiated to incorporate these changes into a future revision of the COLA. Our response to Question 14.02-25 does not include any new regulatory commitments.

If there are any questions regarding this transmittal, please contact me at (410) 470-4205, or Mr. Michael J. Yox at (410) 495-2436.

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

Executed on February 27, 2009



Greg Gibson

Enclosure: Response to NRC Request for Additional Information, RAI No. 49, Question
14.02-25, Initial Plant Test Program, Calvert Cliffs Nuclear Power Plant, Unit 3

cc: John Rycyna, NRC Project Manager, U.S. EPR COL Application
Thomas Fredrichs, NRC Environmental Project Manager, U.S. EPR COL Application
Getachew Tesfaye, NRC Project Manager, U.S. EPR DC Application (w/o enclosure)
Joseph Colaccino, Chief, EPR Projects Branch, Division of New Reactor Licensing
Loren Plisco, Deputy Regional Administrator, NRC Region II (w/o enclosure)
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Enclosure

**Response to NRC Request for Additional Information
RAI No. 49, Question 14.02-25, Initial Plant Test Program
Calvert Cliffs Nuclear Power Plant, Unit 3**

RAI No. 49

Question 14.02-25

Section 14.2.II.3.H.ii of the SRP states that the applicant should provide additional operator training and participation based on the performance and evaluation of the test results of certain initial tests. An acceptable program will satisfy the criteria described in Three Mile Island (TMI) Action Plan Item I.G.1 of NUREG-0660 and NUREG-0737. Furthermore, RG 1.206.C.I.14.2.9 states that the COL applicant should provide a schedule for development of plant procedures as well as a description of how, and to what extent, the plant operating, emergency, and surveillance procedures will be use-tested during the initial test program. In addition, the COL applicant should identify the specific operator training to be conducted as part of the use-testing during the special low-power testing program related to the resolution of TMI Action Plan Item I.G.1, described in NUREG-0660, NUREG-0694 and NUREG-0737. Furthermore, the COL Item identified in Section 14.2.9 of the U.S. EPR FSAR states that the COL applicant should identify the specific operator training to be conducted as part of the low-power testing program.

Section 14.2.9 of the Calvert Cliffs COL states that to accomplish these requirements, the emergency operating procedures will be performed on the plant simulator for procedure validation and operator training. However, Section 14.2.9 of the Calvert Cliffs COL does not provide for the performance of specific operator training and participation, based on the performance and evaluation of the test results of certain initial tests, to be conducted as part of the use-testing of the plant operating, surveillance, and emergency procedures during the initial test program.

Therefore, the staff requests that the applicant revise Section 14.2.9 of its FSAR to include a provision that specific operator training and participation, based on the performance and evaluation of the test results of certain initial tests, will be conducted as part of the use-testing of the plant operating, surveillance, and emergency procedures during the initial test program, or to justify an alternative.

Response

CCNPP Unit 3, FSAR Chapter 13 addresses the Operator Training Program for CCNPP Unit 3. FSAR Section 13.2 describes that NEI 06-13A (NEI, 2007) "Template for an Industry Training Program Description" is incorporated by reference..."

The NRC approved NEI 06-13A in Final Safety Evaluation dated September 5, 2007.

Section 1 of NEI 06-13A states that

"The results of reviews of operating experience are incorporated into training and retraining programs in accordance with the provisions of TMI Action Item I.C.5, Appendix 1A. Training programs encompass all phases of plant operation including preoperational testing and low power operation in accordance with the provisions of TMI Action Item I.G.1 (Reference 13.2-19). Before initial fuel loading, sufficient plant staff will be trained to provide for safe plant operations. Implementation milestones for initial training are presented in Table 13.4-1."

By virtue of the preceding statements which are incorporated by reference into the CCNPP Unit 3 COLA, the Operator Training Program at CCNPP Unit 3 includes a provision that specific operator training and participation, based on the performance and evaluation of the test results of initial tests, will be conducted as part of the use-testing of the plant operating, surveillance, and emergency procedures during the initial test program.

Additionally, NRC RAI 127, Question 14.02-57, 58, 59, and 60 for the U.S. EPR FSAR address similar concerns regarding section 14.2.9.

In its response to these RAIs¹, AREVA stated that section 14.2.9 of the U.S. EPR FSAR, Tier 2, Section 14.2.9 would be revised to include the following:

To accomplish these requirements, the following actions will be performed during Phase I:

- Emergency operating procedures will be performed on the plant simulator for procedure validation and operator training. The emergency operating procedures will be scheduled to be performed as soon as possible after the associated preoperational test so that test problems can be resolved prior to fuel load.
- Each operating shift will be provided hands-on training for plant evaluation and off-normal events, in addition to emergency procedures.
- Each operating shift will be provided training for normal operating and surveillance procedures. The normal operating and surveillance procedures will be scheduled to be performed as soon as possible after the associated preoperational test so that test problems can be resolved prior to fuel load.
- Each operating shift will be provided hands-on training and participation in Phase I through Phase III testing. To accomplish this goal, operations procedures will control personnel that are allowed to perform the following tasks:
 - Valve alignments (i.e., local valve manipulations, remote manual operation).
 - Electrical alignments (i.e., breaker manipulations, installing or removing fuses).
 - Equipment manipulations (i.e., pump starts, refueling equipment operation).

These changes have been incorporated and will appear in future revision of the U.S. EPR FSAR and are incorporated by reference into CCNPP Unit 3, FSAR Section 14.2.9.

¹ AREVA NP Response to U.S. EPR Standard Design Certification Application RAI No. 127, (1250, 1278), FSAR Ch. 14, dated 12/12/08

The changes to U.S. EPR FSAR Section 14.2.9 describe the training that the COL applicant is required to conduct. Because the CCNPP Unit 3 FSAR incorporates these items by reference, the additional detail requested by the NRC in this RAI is addressed in the U.S. EPR FSAR.

COLA Impact

Based on this RAI, COL FSAR Section 14.2.9 will be revised to read as follows:

Specific operator training and participation, as described in the U.S. EPR FSAR Section 14.2.9 will be conducted.~~The emergency operating procedures will be performed on the plant simulator for procedure validation and operator training.~~