



**UNITED STATES
NUCLEAR REGULATORY COMMISSION
ADVISORY COMMITTEE ON REACTOR SAFEGUARDS
WASHINGTON, DC 20555 - 0001**

December 12, 2013

Mr. Mark A. Satorius
Executive Director for Operations
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

**SUBJECT: CHAPTERS 2, 3, 9, 13, AND 14 OF THE SAFETY EVALUATION REPORT
WITH OPEN ITEMS ASSOCIATED WITH THE CALVERT CLIFFS NUCLEAR
POWER PLANT, UNIT 3, COMBINED LICENSE APPLICATION**

Dear Mr. Satorius:

During the 610th meeting of the Advisory Committee on Reactor Safeguards (ACRS), December 4-7, 2013, we met with representatives of the NRC staff and UniStar Nuclear Energy, Inc. (UniStar or the applicant) to review the following chapters of the Safety Evaluation Report with Open Items associated with the review of the Calvert Cliffs Nuclear Power Plant, Unit 3, Combined License Application:

- Chapter 2, "Site Characteristics," Section 2.4, "Hydrologic Engineering," and Section 2.5, "Geology, Seismology, and Geotechnical Engineering";
- Chapter 3, "Design of Structures, Components, Equipment, and Systems," (except for Section 3.7, "Seismic Design");
- Chapter 9, "Auxiliary Systems";
- Chapter 13, "Conduct of Operations";
- Chapter 14, "Verification Programs".

Our Evolutionary Power Reactor (EPR) Subcommittee also reviewed these chapters during meetings on January 17; May 8; and November 6, 2013. The Calvert Cliffs Nuclear Power Plant, Unit 3, Combined License Application references the U.S. Evolutionary Power Reactor (U.S. EPR) Design Certification Document. Site-specific technical aspects of the use of the U.S. EPR design as well as the open items and the combined license action items identified in each of these Safety Evaluation Report chapters were discussed at these meetings. We also had the benefit of the documents referenced.

CONCLUSION AND RECOMMENDATION

Our reviews of the Safety Evaluation Report with Open Items for Chapters 3 (except for Section 3.7), 9, 13, 14 and portions of Chapter 2 (Sections 2.4 and 2.5) have not identified additional issues that merit consideration by us at this time. These chapters can be moved to Phase 4 of the staff strategy for preparation of the Safety Evaluation Report.

DISCUSSION

We have reviewed the five chapters of the staff's Safety Evaluation Report listed above. We conclude that staff has adequately identified open items that must be resolved prior to finalizing the Safety Evaluation Report. We agree that pathways are available for staff and the applicant to resolve these open items. We agree that exceptions and deviations from the EPR Design Control Document adopted by the applicant are appropriate and properly reflect the particular circumstances of the proposed site for Calvert Cliffs, Unit 3. We have not identified other technical issues that merit further consideration at this time for these Safety Evaluation Report chapters.

These chapters can transfer to Phase 4 of the staff's strategy for preparing the Safety Evaluation Report for the Calvert Cliffs, Unit 3 Combined License Application. We will look forward to review of the Safety Evaluation Report in Phase 5 when the Open Items have been resolved.

Dr. J. Rempe did not participate in the Committee's deliberations regarding this matter.

Sincerely,

/RA/

J. Sam Armijo
Chairman

REFERENCES

1. UniStar Nuclear Letter, "Submittal of a Partial Combined License Application for the Calvert Cliffs Nuclear Power Plant, Unit 3," 07/13/2007 (ML071980292)
2. UniStar Nuclear Letter, "Submittal of Revision 2 of the Partial Combined License Application for the Calvert Cliffs Nuclear Power Plant, Unit 3," 03/14/2008 (ML080780459)
3. UniStar Nuclear Letter, "Submittal of Revision 6 of the Partial Combined License Application for the Calvert Cliffs Nuclear Power Plant, Unit 3," 09/30/2009 (ML092880200)
4. UniStar Nuclear Letter, "Submittal of Revision 7 of the Partial Combined License Application for the Calvert Cliffs Nuclear Power Plant, Unit 3," 12/20/2010 (ML103620346)
5. UniStar Nuclear Letter, "Submittal of Corrected Revision 9 to the Combined License Application for the Calvert Cliffs Nuclear Power Plant, Unit 3," 04/09/2013 (ML13105A275)
6. NRC Memorandum, transmitting Calvert Cliffs Nuclear Power Plant, Unit 3 Combined License Application - Safety Evaluation with Open Items for Chapter 2, Section 2.4, "Hydrologic Engineering," 10/02/2013 (ML13102A164)

7. NRC Memorandum, transmitting Calvert Cliffs Nuclear Power Plant, Unit 3 Combined License Application - Safety Evaluation with Open Items for Chapter 2, Section 2.5, "Geology, Seismology, and Geotechnical Engineering," 04/11/2013 (ML13094A149)
8. NRC Memorandum, transmitting Calvert Cliffs Nuclear Power Plant, Unit 3 Combined License Application - Safety Evaluation with Open Items for Chapter 3, "Design of Structures, Components, Equipment, and Systems," 12/17/2012 (ML12291A731)
9. NRC Memorandum, transmitting Calvert Cliffs Nuclear Power Plant, Unit 3 Combined License Application - Safety Evaluation with Open Items for Chapter 9, "Auxiliary Systems," 10/8/2013 (ML13268A427)
10. NRC Memorandum, transmitting Calvert Cliffs Nuclear Power Plant, Unit 3 Combined License Application – Safety Evaluation with Open Items for Chapter 13, "Conduct of Operations," 04/09/2013 (ML12311A329)
11. NRC Memorandum, transmitting Calvert Cliffs Nuclear Power Plant, Unit 3 Combined License Application – Safety Evaluation with Open Items for Chapter 14, "Verification Programs," 12/19/2012 (ML122690248)

7. NRC Memorandum, transmitting Calvert Cliffs Nuclear Power Plant, Unit 3 Combined License Application - Safety Evaluation with Open Items for Chapter 2, Section 2.5, "Geology, Seismology, and Geotechnical Engineering," 04/11/2013 (ML13094A149)
8. NRC Memorandum, transmitting Calvert Cliffs Nuclear Power Plant, Unit 3 Combined License Application - Safety Evaluation with Open Items for Chapter 3, "Design of Structures, Components, Equipment, and Systems," 12/17/2012 (ML12291A731)
9. NRC Memorandum, transmitting Calvert Cliffs Nuclear Power Plant, Unit 3 Combined License Application - Safety Evaluation with Open Items for Chapter 9, "Auxiliary Systems," 10/8/2013 (ML13268A427)
10. NRC Memorandum, transmitting Calvert Cliffs Nuclear Power Plant, Unit 3 Combined License Application – Safety Evaluation with Open Items for Chapter 13, "Conduct of Operations," 04/09/2013 (ML12311A329)
11. NRC Memorandum, transmitting Calvert Cliffs Nuclear Power Plant, Unit 3 Combined License Application – Safety Evaluation with Open Items for Chapter 14, "Verification Programs," 12/19/2012 (ML122690248)

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