Mark T. Finley
Senior Vice President, Regulatory Affairs & Engineering



10 CFR 52.3 10 CFR 50.46(a)(3)

February 9, 2012

UN#12-015

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

Subject:

UniStar Nuclear Energy, NRC Docket Nos. 52-016 and 52-038

Calvert Cliffs Nuclear Power Plant, Unit 3 and Nine Mile Point 3 Nuclear Power

Plant - 10 CFR 50.46 Annual Report

References:

- 1) Sandra M. Sloan (AREVA NP Inc.) to Document Control Desk, USNRC, "10 CFR 50.46 Report for the U.S. EPR Design Certification," NRC:11:119, dated December 16, 2011
- 2) UniStar Nuclear Energy Letter UN#11-303, from Mark T. Finley to Document Control Desk, U.S. NRC, Calvert Cliffs Nuclear Power Plant, Unit 3 and Nine Mile Point 3 Nuclear Power Plant 10 CFR 50.46 Annual Report, dated December 20, 2011
- 3) Sandra M. Sloan (AREVA NP Inc.) to Document Control Desk, USNRC, "10 CFR 50.46 Report for the U.S. EPR Design Certification," NRC:12:002, dated January 31, 2012

In accordance with 10 CFR 50.46, "Acceptance Criteria for Emergency Core Cooling Systems for Light Water Reactors," AREVA NP submitted its third annual report of the emergency core cooling system (ECCS) evaluation model changes and errors for the U.S. EPR Standard Design in Reference 1.

The Reference 1 AREVA report identified a number of evaluation revisions with a cumulative impact (the sum of the absolute magnitudes of the changes) that exceeds 50 degrees F. Accordingly, the referenced AREVA submittal also represents a required thirty day report. As the Calvert Cliffs Nuclear Power Plant (CCNPP) Unit 3 and Nine Mile Point 3 Nuclear Power Plant (NMP3NPP) COL applications incorporate the AREVA analysis by reference, the UNE

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submittal (Reference 2) also represents a thirty day report in accordance with 10 CFR 50.46(a)(3). A commitment was made in Reference 2 to provide a letter addressing the requirement in 10 CFR 50.46 to provide a proposed schedule for providing a reanalysis or taking other action as may be needed to show compliance with 10 CFR 50.46 requirements by February 17, 2012.

In Reference 3, AREVA indicated that action has been taken to review the errors and their impact on the peak cladding temperature (PCT) for both small break loss of coolant accident (SBLOCA) and large break loss of coolant accident (LBLOCA) with respect to the adequacy of the demonstration of compliance to the 10 CFR 50.46 criteria. The sum of the absolute values of the errors for both SBLOCA and LBLOCA is significant (significant is defined in 10 CFR 50.46 as greater than 50 degrees F). Compliance with the criteria is assured, though, since the U.S. EPR has significant margin (greater than 500 degrees F for both SBLOCA and LBLOCA) to the PCT criterion (and thus significant margin to all of the 10 CFR 50.46 criteria). Thus, a reanalysis is not required as a result of these errors and compliance to the 10 CFR 50.46 criteria continues to be demonstrated.

The AREVA report (Reference 3) is applicable to the CCNPP Unit 3 and NMP3NPP COL applications and it provides the response committed to in Reference 2, addressing the requirement in 10 CFR 50.46(a)(3) to provide a proposed schedule for providing a reanalysis or taking other action as may be needed to show compliance with 10 CFR 50.46(a)(3).

The AREVA report (Reference 3) indicates that the sum of the absolute values of errors or changes for both SBLOCA and LBLOCA has been reset, and AREVA will begin to accumulate the sum of the absolute values of future errors or changes to determine if a 30 day report is required due to the sum exceeding 50 degrees F.

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

If there are any questions regarding this transmittal, please contact me at (410) 369-1907, or Mr. Wayne A. Massie at (410) 369-1910.

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

Executed on February 9, 2012

Mark T. Finley

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