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UniStar
NUCLEAR ENERGY

10 CFR 50.4
10 CFR 52.79

July 30, 2009

UN#09-322

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. 99, Probable Maximum Tsunami Flooding, Question 02.04.06-9

Reference:
1) John Rycyna (NRC) to Robert Poche (UniStar), "RAI No 99 RHEB 2090.doc (PUBLIC)" email dated April 16, 2009

2) UniStar Nuclear Energy Letter UN#09-272, from Greg Gibson to Document Control Desk, U.S. NRC, Response Schedule to Request for Additional Information for RAI No. 99, Probable Maximum Tsunami Flooding; RAI No.101, Groundwater; RAI No. 103, Probable Maximum Surge and Seiche Flooding, dated June 2, 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 Energy, dated April 16, 2009 (Reference 1). Reference 2 stated that a response to Question 02.04.06-9 would be provided by July 31, 2009. This RAI addresses Probable Maximum Tsunami Flooding, as discussed in Section 2.4.6 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 5.

Enclosure 1 provides our response to RAI No. 99, Question 02.04.06-9 which does not include any new regulatory commitments or revised COLA content. Enclosure 2 provides the electronic copies (CD) of the NLSWE and TSU Model input files requested in Question 02.04.06-9.

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NRO

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

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

Executed on July 30, 2009

Greg Gibson

Enclosure: 1) Response to NRC Request for Additional Information RAI No. 99, Question 02.04.06-9, Probable Maximum Tsunami Flooding, Calvert Cliffs Nuclear Power Plant, Unit 3

2) Response to NRC Request for Additional Information RAI No. 99, Probable Maximum Tsunami Flooding, Question 02.04.06-9 Electronic Copy (CD) of NLSWE and TSU Model Input Files Calvert Cliffs Nuclear Power Plant, Unit 3

cc: John Rycyna, NRC Project Manager, U.S. EPR COL Application
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/SFW/kat

Enclosure 1

Response to NRC Request for Additional Information RAI No. 99
Question 02.04.06-9, Probable Maximum Tsunami Flooding
Calvert Cliffs Nuclear Power Plant, Unit 3

RAI No. 99

Question 02.04.06-9

Section C.I.2.4.6.4 of Regulatory Guide 1.206 (RG 1.206) provides specific guidance with respect to tsunami analysis. This includes providing a complete description of the analysis procedure used to calculate tsunami wave height and period at the site. Provide input files and hydrodynamic model codes (NLSWE and TSU) used in the model simulations.

Response

The current input files and hydrodynamic model codes, NLSWE and TSU, of the tsunami model simulations performed to support Revision 5 of FSAR Subsection 2.4.6 are provided in the enclosed CD-ROM. The folder, subfolders and files in the CD-ROM are listed below.

Folder	Subfolder	File Names[1]
Model Inputs and Codes	Case 1	dep.dat Tsunami.ctl NLSWE.for NLSWE.exe
	Case 2	dep.dat Tsunami.ctl NLSWE.for NLSWE.exe
	Case 3	dep.dat Tsunami.ctl NLSWE.for NLSWE.exe
	Case 4	dep.dat Tsunami.ctl TSU.for TSU.exe

1 Most model inputs are integrated and compiled directly as part of the Fortran code of each of the model cases.

As previously communicated, a new computer code, TSU_NLSWE Version 1.0, is currently being developed that combines the NLSWE and TSU codes. This new code will be used to provide preliminary responses to several NRC RAI 99 questions. Prior to the results being provided as final, the new code will be validated to the requirements of NQA-1-1994, Subpart 2.7.

COLA Impact

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

Enclosure 2

Response to NRC Request for Additional Information
RAI No. 99, Probable Maximum Tsunami Flooding, Question 02.04.06-9
Electronic Copy (CD) of NLSWE and TSU Model Input Files
Calvert Cliffs Nuclear Power Plant, Unit 3