

June 22, 2004

Mr. George Vanderheyden, Vice President  
Calvert Cliffs Nuclear Power Plant, Inc.  
Calvert Cliffs Nuclear Power Plant  
1650 Calvert Cliffs Parkway  
Lusby, MD 20657-4702

SUBJECT: CALVERT CLIFFS NUCLEAR POWER PLANT, UNIT NOS. 1 AND 2 -  
AMENDMENT RE: REQUEST FOR ADDITIONAL INFORMATION RELATING  
TO PROPOSED AMENDMENT TO INCREASE THE SETPOINT OF THE MAIN  
STEAM SAFETY VALVES (TAC NOS. MC1578 AND MC1579)

Dear Mr. Vanderheyden:

The Nuclear Regulatory Commission (NRC) staff has reviewed your letter of May 19, 2004, in which you responded to the NRC staff's request for additional information (RAI) dated March 26, 2004, and find that the enclosed additional information is needed with regards to your response to Question 1(3) and Question 2. The requested information was e-mailed to you on May 26, 2004, and was discussed with your licensing staff. Your staff indicated that they can respond within 45 days of receipt of this letter.

Sincerely,

Guy S. Vissing, Sr. Project Manager, Section 1  
Project Directorate I  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket Nos. 50-317 and 50-318

Enclosure: RAI

cc w/encl: See next page

REQUEST FOR ADDITIONAL INFORMATION (RAI)  
WITH REGARDS TO QUESTION 1(3) AND QUESTION 2  
RELATING TO THE INCREASE OF THE SETPOINT  
OF THE MAIN STEAM SAFETY VALVES

1. In a letter dated May 19, 2004, the licensee provided its response to RAIs on the review of Technical Specification (TS) changes related to an increase in the setpoints for the main steam safety valves (MSSVs). The response to RAI 1(3) indicates that the peak pressure is 2686 psia for the loss-of-load (LOL) reanalysis that assumed that the opening pressure of the MSSVs is 1020 psia. In Section 4 of the original submittal dated December 9, 2004, the licensee claimed that system response of the loss-of-non-emergency ac power (LOAC) event is similar to the LOL event, and thus, it did not reanalyze the LOAC event for the TS changes. The staff notes that the peak pressure (shown in Table 14.10-2 of the updated final safety analysis report) is 2493 psia for the LOAC analysis that assumed the MSSVs open at 1000 psia. The peak pressure difference (193 psi) of the LOL and LOAC events is significant. However, it is not clear whether the pressure difference (2686 psia vs. 2493 psia) is attributed to the system responses of the two events, or to the different opening pressure assumed for the MSSVs.

The licensee should explain why the LOAC does not need to be reanalyzed with consideration of the effects of the new MSSV setpoint, or reanalyze the LOAC event using the proposed value of the MSSV setpoint including measurement uncertainties and demonstrate that the results of the reanalysis meet the acceptance criteria for the pressure and pressurizer water level limits.

2. Question 2 requested the licensee to justify that the proposed MSSVs setpoints will not change the power level-high trip setpoints in TS Table 3.7.1-1. In response, the licensee indicated that the analysis of the LOL event, the limiting case resulting in a maximum peak pressure within the pressure safety limit, does not credit the power level-high trip, and thus claimed that the power level-high trip setpoints remain unchanged.

As discussed in Table 3.7.1-1, the power level-high trip setpoints at 107, 93, 79, and 66 percent of the rated thermal power (RTP) are applicable to the cases with the maximum power levels at 100, 97, 79, and 66 of the RTP, when the required minimum numbers of operable MSSVs are limited to 8, 7, 6, and 5 per steam generator, respectively. Discuss the design-basis events (DBEs) that were analyzed to determine the power level-high trip setpoints. Provide the results of the analysis to demonstrate that with the proposed MSSV setpoints, the DBEs with the conditions of the maximum power levels at 100, 93, 79, and 66 percent of the RTP specified in Table 3.7.1-1, will not increase the reactor coolant system pressure, the main steam system pressure and the pressurizer water level to exceed the acceptable limits.

Enclosure

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/RA/

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