

August 30, 2005

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 -
REQUEST FOR ADDITIONAL INFORMATION RE: MEASUREMENT
UNCERTAINTY RECAPTURE POWER UPRATE (TAC NOS. MC6210
AND MC6211)

Dear Mr. Vanderheyden:

By letter dated January 31, 2005, as supplemented on July 18, 2005, Calvert Cliffs Nuclear Power Plant (CCNPP), Inc. requested an amendment to the operating license and technical specifications authorizing an increase in the maximum steady-state thermal power at Calvert Cliffs Nuclear Power Plant, Unit Nos. 1 and 2.

The Nuclear Regulatory Commission staff is reviewing the information provided by CCNPP to support its application and has determined that additional information is needed to continue the review. The specific questions are found in the enclosed request for additional information (RAI). During a telephone call on August 17, 2005, the CCNPP staff indicated that a response to the RAI would be provided within 45 days.

Please contact me at (301) 415-1457 if you have any questions on this issue.

Sincerely,

/RA/

Patrick D. Milano, 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: As stated

cc w/encl: See next page

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Calvert Cliffs Nuclear Power Plant, Unit Nos. 1 and 2

cc:

President
Calvert County Board of
Commissioners
175 Main Street
Prince Frederick, MD 20678

P.O. Box 33111
Baltimore, MD 21218

Mr. Loren F. Donatell
NRC Technical Training Center
5700 Brainerd Road
Chattanooga, TN 37411-4017

Carey Fleming, Esquire
Sr. Counsel - Nuclear Generation
Constellation Generation Group, LLC
750 East Pratt Street, 17th floor
Baltimore, MD 21202

Lou Larragoite
Calvert Cliffs Nuclear Power Plant
1650 Calvert Cliffs Parkway
Lusby, MD 20657-4702

Resident Inspector
U.S. Nuclear Regulatory
Commission
P.O. Box 287
St. Leonard, MD 20685

Mr. R. I. McLean, Administrator
Radioecology Environ Impact Prog
Department of Natural Resources
Nuclear Evaluations
580 Taylor Avenue
Tawes State Office Building
Annapolis, MD 21401

Regional Administrator, Region I
U.S. Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, PA 19406

Kristen A. Burger, Esquire
Maryland People's Counsel
6 St. Paul Centre
Suite 2102
Baltimore, MD 21202-1631

Patricia T. Birnie, Esquire
Co-Director
Maryland Safe Energy Coalition

REQUEST FOR ADDITIONAL INFORMATION

REGARDING MEASUREMENT UNCERTAINTY RECAPTURE POWER UPRATE

CALVERT CLIFFS NUCLEAR POWER PLANT, UNIT NOS. 1 AND 2

DOCKET NOS. 50-317 AND 50-318

By letter dated January 31, 2005, as supplemented on July 18, 2005, Calvert Cliffs Nuclear Power Plant (CCNPP), Inc. requested authorization to increase in the maximum steady-state thermal power at CCNPP, Unit Nos. 1 and 2, from 2700 megawatts thermal (MWt) to 2737 MWt, which is a 1.38% power uprate. To complete its review, the Nuclear Regulatory Commission staff requests the following information:

1. Discuss the effect, if any, from the proposed power uprate on the actuation setpoints for the diverse reactor scram, main turbine trip, and auxiliary feedwater system trip signals.
2. Provide a statement concerning whether CCNPP, Inc. and its vendor have ongoing processes to assure that the large-break and small-break loss-of-coolant accident analyses input values for CCNPP, Unit No. 1 conservatively bound the as-operated plant values for Unit No. 1. Provide a similar statement regarding CCNPP, Unit No. 2.
3. Discuss the results of the post-accident fuel cladding oxidation and the assumption regarding pre-accident oxidation levels to assure that the overall cladding oxidation remains below 17%.
4. In its letter dated July 18, 2005, the licensee stated (see answer to question no. 16) that the projected thermal power had not been updated for the purpose of calculating the projected reactor pressure vessel (RPV) neutron fluence values.

Provide the end-of-license (EOL) neutron fluence values for the RPVs based on either: (1) a direct neutron transport code calculation of the impact of operating at power uprate conditions, or (2) a qualitative assessment of the impact of the proposed power uprate and a bounding quantitative calculation of the EOL neutron fluence values.

Based on the results of the EOL RPV neutron fluence evaluation, revise the July 18, 2005, response to question no. 17, as necessary, as it relates to the projected EOL material properties (upper shelf energy, nil-ductility transition reference temperature) for the CCNPP, Unit Nos. 1 and 2, RPVs.