April 2, 2003

Mr. P. E. Katz, 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 NO. 2 - REQUEST FOR

> ADDITIONAL INFORMATION REGARDING THE RESPONSE OF MARCH 13, 2003, TO THE NUCLEAR REGULATORY COMMISSION (NRC) REQUEST FOR ADDITIONAL INFORMATION (RAI) DATED FEBRUARY 28, 2003, REGARDING THE RELAXATION OF THE ORDER OF FEBRUARY 11, 2003,

(TAC NOS. MB7752 AND MB7753)

Dear Mr. Katz:

The Calvert Cliffs Nuclear Power Plant, Inc. response of March 13, 2003, to the NRC RAI of February 28, 2003, is currently under review. The review relates to your request for relaxation of the Order dated February 11, 2003. In order to continue our review, we have identified the need for additional information. The enclosure identifies the information that is needed. We have discussed this with your staff who indicated that a response would be forthcoming.

Sincerely,

/RA/

Guy S. Vissing, Senior 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

Calvert Cliffs Nuclear Power Plant Unit Nos. 1 and 2

CC:

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

James Petro, Esquire Counsel Constellation Power Source 111 Market Street Baltimore, MD 21202

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Mark Geckle 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. Richard I. McLean, Manager Nuclear Programs Power Plant Research Program Maryland Dept. of Natural Resources Tawes State Office Building, B3 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 P.O. Box 33111 Baltimore, MD 21218

Mr. Loren F. Donatell NRC Technical Training Center 5700 Brainerd Road Chattanooga, TN 37411-4017 April 2, 2003

Mr. P. E. Katz, Vice President Calvert Cliffs Nuclear Power Plant, Inc. Calvert Cliffs Nuclear Power Plant 1650 Calvert Cliffs Parkway Lusby, MD 20657-4702

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REQUEST FOR ADDITIONAL INFORMATION

RELATED TO LICENSEE'S RESPONSE DATED MARCH 13, 2003

TO THE NUCLEAR REGULATORY COMMISSION (NRC) STAFF

REQUEST FOR ADDITIONAL INFORMATION (RAI) OF FEBRUARY 28, 2003

RELATED TO THE NRC ORDER DATED FEBRUARY 11, 2003

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

DOCKET NOS. 50-317 AND 50-318

- 1. Please provide a tabular listing of the maximum operating stress (across the cross-section) from the top of the J-groove weld to 2 inches above the weld. How does the yield strength of the nozzle material used in the calculations compare to the strength of the Calvert Cliffs nozzles, and what impact does the yield strength difference have on the calculated residual stresses?
- 2. Is the primary impediment to effective examination at elevations higher than 0.75 inch above the J-groove weld due to the counterbore step in the nozzles or the expansion points in the guide sleeves?
- 3. If the guide sleeves are removed, would there be additional geometric constraints on performing the examination required in the Order?
- 4. Since the Order allows either ultrasonic testing (UT) examination or a surface examination and you have identified hardship only for the UT examination, what would be the implications of performing a surface examination of the nozzle areas with limited UT coverage to give 100% coverage of all nozzles?
- 5. As stated in the response, the inspection contractor's evaluation of 260 cracks in reactor pressure vessel penetrations at other plants showed that all cracks were found located below 0.75 inch above the weld. Are the data evaluated inclusive of all data from all inspections by all vendors? Based on the data evaluated, has any analysis been performed to conclude that all 260 indications would still have been detected even if the scope of examination had been only 0.75 inch above the weld? What does industry experience with outside diameter primary water-stress-corrosion cracking (PWSCC) in vessel head penetration (VHP) nozzles indicate about the likelihood for cracking in the region of the VHP nozzle more than 0.75 inch above the top of the J-groove weld?