Calvert Cliffs Nuclear Power Plant
Constellation Generation Group, LLC

1650 Calvert Cliffs Parkway
Lusby, Maryland 20657

Constellation Energy

September 16, 2005

U. S. Nuclear Regulatory Commission
Washington, DC 20555

ATTENTION: Document Control Desk

SUBJECT: Calvert Cliffs Nuclear Power Plant
Unit Nos. 1 & 2; Docket Nos. 50-317 & 50-318
Response to Request for Additional Information: Technical Specification Changes to Modify Requirements Related to Positive Reactivity Additions (TAC Nos. MC7328 and MC7329)

REFERENCES:

(a) Letter from Mr. G. Vanderheyden (CCNPP) to Document Control Desk (NRC), dated June 7, 2005, License Amendment Request: Technical Specification Changes to Modify Requirements Related to Positive Reactivity Additions

(b) Letter from Mr. P. D. Milano (NRC) to Mr. G. Vanderheyden (CCNPP), dated August 19, 2005, Request for Additional Information Regarding Requirements Related to Positive Reactivity Additions (TAC Nos. MC7328 and MC7329)

In a letter dated June 7, 2005 (Reference a), we requested a change to Technical Specification 3.4.17 to correct an administrative error, specifically changing the reference in Limiting Condition for Operation (LCO) 3.4.17.b to LCO 3.1.1. The Nuclear Regulatory Commission (NRC) has requested additional information concerning this change (Reference b). Our response is below.

Requested Information

"LCO 3.4.17.b states that:

> No operations are permitted which could cause introduction of coolant into the RCS [Reactor Coolant System] with boron concentration less than that required to meet the minimum boron concentration of LCO 3.9.1

The licensee proposed to change the reference from LCO 3.9.1 to LCO 3.1.1, which indicates it as being an administrative error related to a previous license amendment request dated July 29, 2003. LCO 3.4.17 specifies conditions for the STE [special test exception] for RCS loops during Modes 4 and 5 operation, and LCO 3.9.1 specifies boron concentration requirements for refueling operations (Mode 6). Therefore, the licensee states that it is appropriate to reference LCO 3.1.1 since it specifies the shutdown margin requirements for Modes 3, 4, and 5. However, although LCO 3.1.1 provides implicit minimum boron

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concentration requirements through the shutdown margin requirements, this LCO does not explicitly specify the minimum boron concentration.

LCO 3.4.17.b should be revised to provide the minimum boron concentration for LCO 3.1.1."

Response

The minimum boron concentration for Modes 3, 4, and 5 is determined by a number of factors, including fuel burnup, reactor coolant temperature, cycle specific core loading, and control rod position. Therefore, it is not possible to determine one minimum boron concentration to support the range of conditions which could exist when using the special test exception provisions of LCO 3.4.17. The reference to LCO 3.1.1 is appropriate since that is the Technical Specification used to determine the appropriate boron concentration when in the Modes covered by LCO 3.4.17. However, as noted in the Request for Additional Information, LCO 3.1.1 refers to the shutdown margin and not the boron concentration. The Request for Additional Information also notes that LCO 3.1.1 provides implicit minimum boron concentration requirements through the shutdown margin requirements. Although the Request for Additional Information recommends providing a minimum boron concentration for LCO 3.4.17.b this is not practical for the reasons mentioned above. As an alternative, we propose aligning the wording of LCO 3.4.17.b with the requirements of LCO 3.1.1 by changing the term "minimum boron concentration" to "SDM" as shown on the marked up Technical Specification page (Attachment 1). We believe that this still meets the requirements for an administrative change, since for Modes 4 and 5 (the Modes of Applicability for LCO 3.4.17), the terms are equally applicable and this is essentially a nomenclature change. The wording proposed in Attachment (1) is similar to that used in other Technical Specifications (LCO 3.4.5.1.a, LCO 3.4.6.1.a, and LCO 3.4.7.1.a).

The markup proposed in Attachment (1) replaces the markup of Technical Specification page 3.4.17-1 provided in Reference (a). We believe that the information provided in this response does not change the administrative nature of the original request and does not change the No Significant Hazards Determination or the Environmental Assessment provided in Reference (a).

Should you have questions regarding this matter, please contact Mr. L. S. Larragoite at (410) 495-4922.

Very truly yours,

STATE OF MARYLAND :
: TO WIT:
COUNTY OF CALVERT :

I, Bruce S. Montgomery, being duly sworn, state that I am Manager - Calvert Cliffs Nuclear Power Plant, Inc. (CCNPP) Engineering Services, and that I am duly authorized to execute and file this License Amendment Request on behalf of CCNPP. To the best of my knowledge and belief, the statements contained in this document are true and correct. To the extent that these statements are not based on my personal knowledge, they are based upon information provided by other CCNPP employees and/or consultants. Such information has been reviewed in accordance with company practice and I believe it to be reliable.

Subscribed and sworn before me, a Notary Public in and for the State of Maryland and County of Calvert, this 16 day of Sept., 2005.

WITNESS, my Hand and Notarial Seal:

Notary Public

My Commission Expires: 7/1/06
Date

GV/PSF/bjd

Attachment: (1) Marked Up Technical Specification Page

cc: P. D. Milano, NRC
S. J. Collins, NRC
Resident Inspector, NRC
R. I. McLean, DNR

ATTACHMENT (1)

MARKED UP TECHNICAL SPECIFICATION PAGE

3.4.17-1

3.4 REACTOR COOLANT SYSTEM (RCS)

3.4.17 Special Test Exception (STE) RCS Loops - MODES 4 and 5

LCO 3.4.17 The reactor coolant circulation requirements of LCO 3.4.6, "RCS Loops-MODE 4," LCO 3.4.7, "RCS Loops-MODE 5, Loops Filled," and LCO 3.4.8, "RCS Loops-MODE 5, Loops Not Filled" may be suspended during the time intervals required: 1) for local leak rate testing of containment penetration number 41 pursuant to the requirements of the Containment Leakage Rate Testing Program; and 2) to permit maintenance on valves located in the common shutdown cooling suction line or on the shutdown cooling flow control valve (CV-306) provided:

a. Xenon reactivity is ≤ 0.1% Δk/k and is approaching stability;

b. No operations are permitted which could cause introduction of coolant into the RCS with boron concentration less than that required to meet the ~~minimum boron concentration~~ of LCO ~~3.9.1~~ 3.1.1;

c. The charging pumps are deenergized and the charging flow paths are closed; and

d. The SDM requirement of LCO 3.1.1 is verified every 8 hours.

APPLICABILITY: MODES 4 and 5.