



August 27, 2008

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
License Amendment Request: Replacement of the Trisodium Phosphate Buffer
with a Sodium Tetraborate Buffer

REFERENCES:

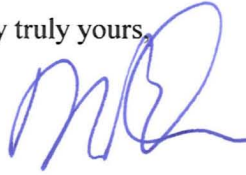
- (a) NRC Generic Letter 2004-02, "Potential Impact of Debris Blockage on Emergency Recirculation During Design Basis Accidents at Pressurized-Water Reactors," dated September 13, 2004
- (b) Letter from Mr. J. A. Spina (CCNPP) to Document Control Desk (NRC), dated June 18, 2008, Request for Extension for Completion of Activities Related to Generic Letter 2004-02

Pursuant to 10 CFR 50.90, Calvert Cliffs Nuclear Power Plant (CCNPP) hereby requests an amendment to Renewed Operating License Nos. DPR-53 and DPR-69 to change the containment buffering agent from trisodium phosphate (TSP) to sodium tetraborate (STB). The purpose of this change is to minimize the potential for sump screen blockage concerns under post-loss-of-coolant accident conditions due to a potential adverse chemical interaction between trisodium phosphate and certain insulation materials used in Containment. This request is an integral part of CCNPPs response to Generic Letter 2004-02 (Reference a) and represents one of the remaining modifications required to achieve full compliance with the requirements of Generic Letter 2004-02 as documented in Reference (b).

Calvert Cliffs Nuclear Power Plant has evaluated the proposed change in accordance with 10 CFR 50.91(a)(1) using the criteria of 10 CFR 50.92(c) and has determined that this proposed change involves no significant hazards considerations as described in Attachment (1). The proposed changes to the Technical Specifications are shown in Attachment (2). Conforming changes to the Technical Specification Bases will be made during implementation of the proposed change. The buffering agent calculation supporting the requested change is included as Attachment (3). As discussed in Reference (b), Calvert Cliffs Nuclear Power Plant requests approval of the proposed amendment as soon as possible with implementation to occur no later than June 1, 2009 (Unit 1) and the spring 2009 refueling outage for Unit 2.

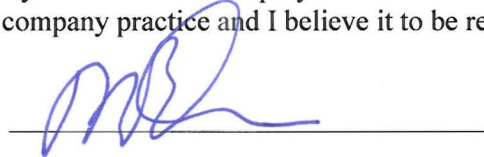
Should you have questions regarding this matter, please contact Mr. Jay S. Gaines at (410) 495-5219.

Very truly yours,



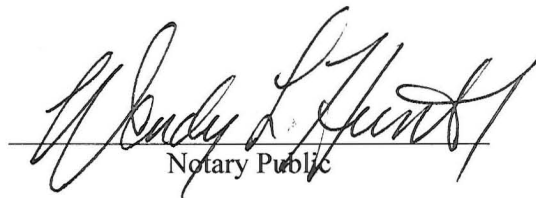
STATE OF MARYLAND :
: TO WIT:
COUNTY OF CALVERT :

I, Douglas R. Bauder, being duly sworn, state that I am Plant General Manager - Calvert Cliffs Nuclear Power Plant, Inc. (CCNPP), 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 27 day of August, 2008.

WITNESS my Hand and Notarial Seal:


Notary Public

My Commission Expires:

Wendy L. Hunter
NOTARY PUBLIC
Calvert County, Maryland
My Commission Expires 01/01/10

8/27/08
Date

DRB/RDW/bjd

Attachments: (1) Analysis of the Proposed Changes
(2) Markup of Technical Specification Pages
(3) Mass of Sodium Tetraborate Decahydrate Buffer Required for Post-LOCA Containment Building Sump pH Control

cc: D. V. Pickett, NRC
S. J. Collins, NRC

Resident Inspector, NRC
S. Gray, DNR