James A. Spina Vice President



Calvert Cliffs Nuclear Power Plant, Inc. 1650 Calvert Cliffs Parkway Lusby, Maryland 20657 410.495.5200 410.495.3500 Fax

October 10, 2008

U. S. Nuclear Regulatory Commission Washington, DC 20555

ATTENTION: Document Control Desk

- SUBJECT:Calvert Cliffs Nuclear Power Plant
Unit Nos. 1 and 2; Docket Nos. 50-317 and 50-318
Three-Month Supplemental Response to NRC Generic Letter 2008-01,
"Managing Gas Accumulation in Emergency Core Cooling, Decay Heat
Removal, and Containment Spray Systems"
- **REFERENCES:** (a) NRC Generic Letter 2008-01, dated January 11, 2008, "Managing Gas Accumulation in Emergency Core Cooling, Decay Heat Removal, and Containment Spray Systems"
 - (b) Letter from Mr. J. A. Spina (CCNPP) to Document Control Desk (NRC), dated April 11, 2008, Three-Month Response to NRC Generic Letter 2008-01, "Managing Gas Accumulation in Emergency Core Cooling, Decay Heat Removal, and Containment Spray Systems"
 - (c) Letter from Mr. J. A. Spina (CCNPP) to Document Control Desk (NRC), dated June 25, 2008, Change to Three-Month Response to NRC Generic Letter 2008-01, "Managing Gas Accumulation in Emergency Core Cooling, Decay Heat Removal, and Containment Spray Systems"
 - (d) Letter from Mr. M. G. Kowal (NRC) to Mr. J. A. Spina (CCNPP), dated August 4, 2008, Calvert Cliffs Nuclear Power Plant Unit 2 Re: Generic Letter 2008-01, "Managing Gas Accumulation in Emergency Core Cooling, Decay Heat Removal, and Containment Spray Systems," Proposed Alternative Course of Action (TAC No. MD7808)

Reference (a) requested each licensee to provide certain information in a written response, to be submitted in accordance with 10 CFR 50.54(f), within nine months of the date of the Generic Letter (GL). Additionally, Reference (a) requested that if a licensee cannot meet the requested response date, the licensee "shall provide a response within 3 months of the date of this GL." In the three-month response, the licensee was requested to describe the alternative course of action that it proposes to take, including the basis for the acceptability of the proposed alternative course of action.

In Reference (b), as revised in Reference (c), we provided our three-month response to the information requested in Nuclear Regulatory Commission (NRC) GL 2008-01 for Unit 2, including a description of

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our proposed alternative course of action. In Reference (d), the NRC staff found our proposed alternative course of action acceptable, with the exception of the clarifications and associated requests delineated in the enclosure to Reference (d). The clarifications were to be submitted in a three-month supplemental response. This letter provides the three-month supplemental response requested per Reference (d). Specifically, as requested in Reference (d), we are revising our proposed alternative course of action (References b and c) related to our nine-month initial response as follows:

- 1. The GL requested information for the portions of the subject systems for Unit 2 that are accessible prior to the next refueling outage for Unit 2, will be provided to the NRC in our nine-month initial submittal.
- 2. Except for the long-term actions described below, the remaining GL requested information for the subject systems for Unit 2 (i.e., GL requested information for the inaccessible portions of the subject systems) will be provided to the NRC in our nine-month supplemental (post-outage) submittal within 90 days following completion of the spring 2009 refueling outage.
- 3. In our nine-month initial submittal, we will address how we plan to track long-term actions related to adverse gas accumulation issues. Long-term actions we plan to track include:
 - a. The Technical Specifications Task Force traveler that may be necessary to reflect an improved understanding achieved during review of responses to the GL,
 - b. The industry assessment to determine if pump testing is necessary to determine the allowable limits of ingested gas volume in pump suction piping, and
 - c. The industry assessment to determine whether analysis development is needed to assess gas transport in the subject system piping as a function of system flow.
- 4. In our nine-month initial submittal and in our nine-month supplemental (post-outage) submittal, we will, consistent with the information requested in the GL, provide:
 - a. A description of the results of evaluations that were performed in response to the GL,
 - b. A description of corrective actions that we determined were necessary, and
 - c. A statement regarding which corrective actions were completed, the schedule for completing the remaining corrective actions and the basis for that schedule.

In our three-month response (Reference b) we proposed to defer walkdowns and examinations of sections of piping for the subject systems located in the Unit 2 Containment and in the Unit 2 27' West Penetration Room until the next Unit 2 refueling outage (Spring 2009). Subsequent to our three-month response, we identified sections of piping for the subject systems that are located in the Unit 2 5' West Penetration Room, which also require deferral of the necessary walkdowns and examinations until the next scheduled Unit 2 refueling outage. Although these sections of piping are located in the 5' West Penetration Room (overhead), it is more practical to access the piping from the 27' West Penetration Room, a locked high radiation area.

Our alternative course of action planned for the additional piping identified in the Unit 2 5' West Penetration Room is to defer the walkdowns and examinations until the next scheduled Unit 2 refueling outage. Plans are currently being formulated to complete these actions should an opportunity develop providing access prior to the next scheduled Unit 2 refueling outage.

The basis for acceptability remains as described in Reference (b) relative to the piping previously identified in the Unit 2 Containment and in the 27' West Penetration Room. This basis may also be applied to the additional piping identified in the Unit 2 5' West Penetration Room.

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Also, we identified sections of piping for the subject systems that are located in the Unit 1 Auxiliary Building [horizontal runs of the Unit 1 safety injection discharge piping and two horizontal runs of refueling water tank (RWT) normal suction piping]. This piping was inadvertently omitted from the scope of the Unit 1 walkdowns conducted. The required evaluations for this additional identified piping will not be complete by October 11, 2008 (nine months from the date of GL 2008-01).

Our alternative course of action planned for the subject piping identified in Unit 1 is to defer the walkdowns and examinations until the next available on-line maintenance opportunity (no later than August 30, 2009) for the safety injection system discharge piping and the next scheduled Unit 1 refueling outage (Spring 2010) for the RWT normal suction piping.

The basis for acceptability is as follows:

For the Unit 1 safety injection discharge piping horizontal runs:

The discharge piping designed high points (inverted loop seals) were inspected and found full. Also, points along this piping that had the potential for gas collection due to back leakage and stripping have been inspected and found full. Based on this, it is reasonable that subtle high points along horizontal runs of the same piping are also full. The August 30, 2009 completion date was established to ensure the subject activity is planned, scheduled and implemented in accordance with station procedures, commensurate with the risk significance associated with completing this task.

For the Unit 1 RWT normal suction piping located in the 27' West Penetration Room:

The RWT supply headers flow horizontally or down vertically to the common ECCS/CS suction headers at the (-)6" elevation. There are no designed high points in these pipe runs. The portions of the missed piping in the West Penetration Room represents a small portion of the overall pipe runs. The balance of these pipe runs have been inspected and local (high points of horizontal runs) high points have been found full. Also, we have not observed issues with gas ingestion from RWT suction piping. Based on the above, it is reasonable that the subject sections of horizontal runs are also full. During power operation, the 27' West Penetration Room is a locked high radiation area. Currently, Unit 1 does not have a scheduled outage to conduct the required walkdowns within the nine month period requested in the GL. The next scheduled outage is the spring 2010 Unit 1 refueling outage. Therefore, the sections of piping in the Unit 1 27' West Penetration Room identified above will be deferred until the next scheduled Unit 1 refueling outage.

Based upon the above, we believe that completing performance of the detailed walkdowns and subsequent evaluations of those portions of piping at Units 1 and 2, outside the requested nine-month period, is an acceptable alternative course of action.

For Unit 2, within 90 days after the end of the next scheduled Unit 2 refueling outage, we will submit a written response informing the NRC of the activities performed consistent with the actions and information requested by GL 2008-01.

For Unit 1, within 90 days after the end of the next scheduled Unit 1 refueling outage, we will submit a written response informing the NRC of the activities performed consistent with the actions and information requested by GL 2008-01.

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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, James A. Spina, being duly sworn, state that I am Vice President, Calvert Cliffs Nuclear Power Plant, Inc. (CCNPP), and that I am duly authorized to execute and file this response 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.

WITNESS my Hand and Notarial Seal:

Notary Public

Date

My Commission Expires:

MDF/ALS/bjd

cc: D. V. Pickett, NRC S. J. Collins, NRC Resident Inspector, NRC S. Gray, DNR