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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: Change to Technical Specifications Related to the
Removal of Hydrogen Control from the Design Basis

- REFERENCES:**
- (a) Letter from Mr. P. E. Katz (CCNPP) to Document Control Desk (NRC), dated March 28, 2003, "Request for Exemption to 10 CFR 50.44 and 10 CFR Part 50, Appendix E, Section VI and Proposed License Amendments for Relaxation of Post-Accident Hydrogen Monitoring and Control Requirements"
 - (b) Letter from Mr. G. Vanderheyden (CCNPP) to Document Control Desk (NRC), dated December 5, 2003, "Withdrawal for Request for Exemption to 10 CFR 50.44 and 10 CFR Part 50, Appendix E, Section VI"
 - (c) Letter from Mr. G. S. Vissing (NRC) to Mr. G. Vanderheyden (CCNPP), dated March 2, 2004, "Elimination of Requirements for Hydrogen Recombiners and Hydrogen Monitors (TAC Nos. MB8419 and MB8420)"

Pursuant to 10 CFR 50.90, Calvert Cliffs Nuclear Power Plant, Inc. hereby requests an Amendment to Renewed Operating License Nos. DPR-53 and DPR-69 to change Technical Specification Table 3.3.10-1, Technical Specification 3.8.1, and Technical Specification 5.6.7.

Reference (a) requested an exemption to the requirements for hydrogen control in the Containment and proposed a related license amendment. Reference (b) withdrew the request for exemption because the requirement for hydrogen control for Containments of this type at Calvert Cliffs had been removed from the Code of Federal Regulations. The proposed license amendment was not withdrawn. Reference (c) approved the proposed license amendment.

In the submittal of References (a) and (b), we inadvertently omitted several Technical Specification pages from the markup and final pages. The markup for the omitted pages is included as Attachment (2) to this letter. The technical basis and the no significant hazards discussion for the proposed change is included as Attachment (1). The Technical Specification Bases will be changed as appropriate to support this amendment.

Our Plant Operations Safety Review Committee and Nuclear Safety Review Board have approved these proposed changes to the Technical Specifications. They have concluded that implementation of these changes will not result in an undue risk to the health and safety of the public.

ADD

ATTACHMENT (1)

**TECHNICAL BASIS AND
NO SIGNIFICANT HAZARDS CONSIDERATION**

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TECHNICAL BASIS AND NO SIGNIFICANT HAZARDS CONSIDERATION

1.0 INTRODUCTION

Calvert Cliffs Nuclear Power Plant (CCNPP) proposes to change Technical Specification Table 3.3.10-1, Technical Specification 5.6.7, and Technical Specification 3.8.1. The proposed changes are related to License Amendment Nos. 262 and 239, which removed hydrogen control in Containment from the Calvert Cliffs design basis.

2.0 BACKGROUND

Amendment Nos. 262 and 239 were approved and issued by the Nuclear Regulatory Commission (NRC) on March 2, 2004 (Reference 1). These amendments removed the requirements for the containment hydrogen recombiners and the hydrogen analyzers as equipment required to control hydrogen in the Containment. The amendments required the hydrogen analyzers to be retained as non-safety-related equipment to record hydrogen concentrations in beyond design-basis accidents. However, all references to them in the Technical Specifications were to be removed. The amendments were issued in response to our exemption request and license amendment request dated March 28, 2003 (Reference 2), as supplemented by our letter withdrawing the exemption request dated December 5, 2003 (Reference 3).

The request to remove hydrogen control from the design basis (Reference 2) included a mark-up of proposed Technical Specification changes. However, related changes to Technical Specification Table 3.3.10-1, Technical Specification 5.6.7, and Technical Specification 3.8.1 were not included in the markup. Therefore, we are requesting an administrative change to correct this oversight.

3.0 TECHNICAL ANALYSIS

Technical Specification Table 3.3.10-1

This change is an administrative change to align the references in the table to Conditions in Technical Specification 3.3.10. The change to Technical Specification 3.3.10 (Reference 1) deleted Condition D, requiring a resequencing of the remainder of the Conditions and Required Actions in that specification. The proposed change should have also changed the conditions referenced in the Table 3.3.10-1 column headed "Conditions Referenced From Required Action E.1." However, due to an oversight, this change was not reflected in our request (Reference 2). We are, therefore, requesting a change to Technical Specification Table 3.3.10-1 to change the referenced Conditions to accurately reflect the necessary Conditions and Required Actions. This change is administrative in that it does not change the Required Actions for a given plant configuration, but now reflects the correct ones.

Technical Specification 5.6.7

This change is an administrative change of reference from Limiting Condition for Operation (LCO) 3.3.10 Condition G to LCO 3.3.10 Condition F. This proposed change results from the approved change to LCO 3.3.10 (Reference 1), which deleted Condition D and resequenced the remainder of the Conditions. Due to an oversight, this change was not reflected in our request (Reference 2). Since Technical Specification 3.3.10 Condition G no longer exists, the requirements in Technical Specification 5.6.7 are no longer appropriate, therefore, we are requesting a change to reflect the correct Condition.

Technical Specification 3.8.1

Amendment Nos. 262 and 239 removed hydrogen analyzers from the Technical Specifications. In proposing the Technical Specification changes, we overlooked references to the hydrogen analyzers in Technical Specification 3.8.1 where they are called "H₂ analyzer." As noted in Reference 1, removal of the hydrogen analyzers from the Technical Specifications was a complete removal and no action was

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stated that would have required partial retention of hydrogen analyzer requirements in any Technical Specification. The remaining reference to hydrogen analyzers is in "Technical Specification 3.8.1, AC Sources - Operating." The references to hydrogen analyzers are only as part of equipment lists supported by the Class 1E AC electrical power distribution system. Deletion of hydrogen analyzers by Amendment Nos. 262 and 239 means that the references in Technical Specification 3.8.1 should also be deleted.

Therefore, we are requesting deletion of references to the hydrogen analyzers from Technical Specification 3.8.1 because Reference 1 noted that this equipment was not required to be in the Technical Specification.

The submittal of these pages does not alter the analysis, the Determination of No Significant Hazards or the environmental impact statement in Reference (2).

4.0 NO SIGNIFICANT HAZARDS CONSIDERATION

The proposed change has been determined to not involve a significant hazards consideration, in that operation of the facility in accordance with the proposed amendment:

1. *would not involve a significant increase in the probability or consequences of an accident previously evaluated; or*

Amendment Nos. 262 and 239 were approved and issued by the Nuclear Regulatory Commission (NRC) on March 2, 2004. These amendments removed the requirements for the containment hydrogen recombiners and the hydrogen analyzers as equipment required to control hydrogen in the Containment. The amendments required the hydrogen analyzers to be retained as non-safety-related equipment to record hydrogen concentrations in beyond design-basis accidents. The request to remove hydrogen control from the design basis included a mark-up of proposed Technical Specification changes. However, related changes to Technical Specification Table 3.3.10-1, Technical Specification 5.6.7, and Technical Specification 3.8.1 were not included in the markup. Therefore, we are requesting an administrative change to correct this oversight.

Since the justification for these changes has been approved in Calvert Cliffs Amendment Nos. 262 and 239, there is no technical or safety issue associated with this request.

Therefore, the proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. *would not create the possibility of a new or different type of accident from any accident previously evaluated; or*

The proposed administrative amendment corrects references in a Technical Specification table and in a Technical Specification, and deletes reference to hydrogen analyzers. Since the justification for these changes has been approved in Calvert Cliffs Amendment Nos. 262 and 239, there is no technical or safety issue associated with this request. This request does not involve a change in the operation of the plant, and no new accident initiation mechanism is created by the proposed change, nor does the change involve a physical alteration of the plant.

Therefore, the proposed change does not create the possibility of a new or different type of accident from any accident previously evaluated.

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3. *would not involve a significant reduction in a margin of safety.*

Amendment Nos. 262 and 239 were approved and issued by the Nuclear Regulatory Commission (NRC) on March 2, 2004. These amendments removed the requirements for the containment hydrogen recombiners and the hydrogen analyzers as equipment required to control hydrogen in the Containment. The amendments required the hydrogen analyzers to be retained as non-safety-related equipment to record hydrogen concentrations in beyond design-basis accidents. The request to remove hydrogen control from the design basis included a mark-up of proposed Technical Specification changes. However, related changes to Technical Specification Table 3.3.10-1, Technical Specification 5.6.7, and Technical Specification 3.8.1 were not included in the markup. Therefore, we are requesting an administrative change to correct this oversight.

Because the hydrogen analyzers were removed from the Technical Specifications by Amendment Nos. 262 and 239, no margin of safety is impacted by the proposed administrative changes.

Therefore, the proposed change does not involve a significant reduction in a margin of safety.

5.0 ENVIRONMENTAL CONSIDERATION

We have determined that operation with the proposed changes would not result in any significant change in the types or amounts of any effluents that may be released off site, nor would it result in any significant increase in individual or cumulative occupational radiation exposure. Therefore, the proposed amendment is eligible for categorical exclusion as set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment is needed in connection with the proposed amendment.

6.0 REFERENCES

- (1) Letter from Mr. G. S. Vissing (NRC) to Mr. G. Vanderheyden (CCNPP), dated March 2, 2004, "Elimination of Requirements for Hydrogen Recombiners and Hydrogen Monitors (TAC Nos. MB8419 and MB8420)"
- (2) Letter from Mr. P. E. Katz (CCNPP) to Document Control Desk (NRC), dated March 28, 2003, "Request for Exemption to 10 CFR 50.44 and 10 CFR Part 50, Appendix E, Section VI and Proposed License Amendments for Relaxation of Post-Accident Hydrogen Monitoring and Control Requirements"
- (3) Letter from Mr. G. Vanderheyden (CCNPP) to Document Control Desk (NRC), dated December 5, 2003, "Withdrawal for Request for Exemption to 10 CFR 50.44 and 10 CFR Part 50, Appendix E, Section VI"

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MARKED UP TECHNICAL SPECIFICATION PAGES

5.6 Reporting Requirements

SDM, transient analysis limits, and accident analysis limits) of the safety analysis are met.

- d. The COLR, including any mid cycle revisions or supplements, shall be provided upon issuance for each reload cycle to the NRC.

5.6.6 Not Used

5.6.7 Post-Accident Monitoring Report

When a report is required by Condition B or  of LCO 3.3.10, "Post Accident Monitoring Instrumentation," a report shall be submitted within the following 14 days. The report shall outline the preplanned alternate method of monitoring, the cause of the inoperability, and the plans and schedule for restoring the instrumentation channels of the Function to OPERABLE status.

5.6.8 Tendon Surveillance Report

Any abnormal degradation of the containment structure detected during the tests required by the Pre-Stressed Concrete Containment Tendon Surveillance Program shall be reported to the NRC within 30 days. The report shall include a description of the tendon condition, the condition of the concrete (especially at tendon anchorages), the inspection procedures, the tolerances on cracking, and the corrective action taken.

5.6.9 Steam Generator Tube Inspection Report

- a. Following each inservice inspection of steam generator tubes, the number of tubes plugged or repaired in each steam generator shall be reported to the NRC within 15 days.

Table 3.3.10-1 (page 1 of 2)
Post-Accident Monitoring Instrumentation

FUNCTION	REQUIRED INDICATION CHANNELS	CONDITIONS REFERENCED FROM REQUIRED ACTION
		D E 1
1. Wide Range Logarithmic Neutron Flux	2	(P) E
2. Reactor Coolant Outlet Temperature	2	(P) E
3. Reactor Coolant Inlet Temperature	2	(P) E
4. RCS Subcooled Margin Monitor	1	N/A
5. Reactor Vessel Water Level	2	(G) F
6. Containment Water Level (wide range)	2	(P) E
7. Containment Pressure	2	(P) E
8. Containment Isolation Valve Position	2 per penetration flow path ^{(a)(b)}	(P) E
9. Containment Area Radiation (high range)	2	(G) F
10. Pressurizer Pressure (wide range)	2	(P) E
11. Steam Generator Pressure	2 per steam generator	(P) E
12. Pressurizer Level	2	(P) E
13. Steam Generator Water Level (wide range)	2 per steam generator	(P) E

Table 3.3.10-1 (page 2 of 2)
Post-Accident Monitoring Instrumentation

FUNCTION	REQUIRED INDICATION CHANNELS	CONDITIONS REFERENCED FROM REQUIRED ACTION D B.1
14. Condensate Storage Tank Level	2	(P) E
15. Core Exit Temperature-Quadrant 1	2 ^(c)	(P) E
16. Core Exit Temperature-Quadrant 2	2 ^(c)	(P) E
17. Core Exit Temperature-Quadrant 3	2 ^(c)	(P) E
18. Core Exit Temperature-Quadrant 4	2 ^(c)	(P) E
19. Pressurizer Pressure (low range)	2	(P) E

- (a) Not required for isolation valves whose associated penetration is isolated by at least one closed and de-activated automatic valve, closed manual valve, check valve with flow through the valve secured, blind flange, or equivalent.
- (b) Only one position indication channel is required for penetration flow paths with only one installed control room indication channel.
- (c) A channel consists of two or more core exit thermocouples.

3.8 ELECTRICAL POWER SYSTEMS

3.8.1 AC Sources-Operating

LCO 3.8.1 The following AC electrical sources shall be OPERABLE:

- a. Two qualified circuits between the offsite transmission network and the onsite Class 1E AC Electrical Power Distribution System;
- b. Two diesel generators (DGs) each capable of supplying one train of the onsite Class 1E AC Electrical Power Distribution System; and
- c. One qualified circuit between the offsite transmission network and the other unit's onsite Class 1E AC electrical power distribution subsystems needed to supply power to the Control Room Emergency Ventilation System (CREVS) ^{and} Control Room Emergency Temperature System (CRETS) ^{and} ~~H₂ Analyzer~~ and one DG from the other unit capable of supplying power to the CREVS ^{and} ~~CRETS and H₂ Analyzer~~.

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>D. LCO 3.8.1.c offsite circuit inoperable.</p>	<p>----- NOTE ----- Enter applicable Conditions and Required Actions of LCO 3.8.9, "Distribution Systems-Operating," when Condition D is entered with no AC power source to a train. -----</p>	
	<p>D.1 Perform SR 3.8.1.1 or SR 3.8.1.2 for required OPERABLE offsite circuit(s).</p>	<p>1 hour <u>AND</u> Once per 8 hours thereafter</p>
	<p><u>AND</u> D.2 Declare, CREVS_B ^(or) CRETS_B or H₂ Analyzer with no offsite power available inoperable when the redundant ^(or) CREVS_B CRETS_B or H₂ Analyzer is inoperable.</p>	<p>24 hours from discovery of no offsite power to one train concurrent with inoperability of redundant required feature(s)</p>
	<p><u>AND</u> D.3 Declare CREVS_B ^(and) CRETS_B and H₂ Analyzer supported by the inoperable offsite circuit inoperable.</p>	<p>72 hours</p>

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>E. LCO 3.8.1.c DG inoperable.</p>	<p>----- NOTE ----- Enter applicable Conditions and Required Actions of LCO 3.8.9, "Distribution Systems-Operating," when Condition E is entered with no AC power source to a train. -----</p>	
	<p>E.1 Verify both LCO 3.8.1.b DGs OPERABLE, the other unit's DG OPERABLE and the OC DG available.</p> <p><u>AND</u></p>	<p>1 hour</p> <p><u>AND</u></p> <p>Once per 24 hours thereafter</p>
	<p>E.2 Perform SR 3.8.1.1 or SR 3.8.1.2 for the OPERABLE required offsite circuit(s).</p> <p><u>AND</u></p>	<p>1 hour</p> <p><u>AND</u></p> <p>Once per 8 hours thereafter</p>
	<p>E.3 Declare CREVS^(or) CRETS, <u>or H₂ Analyzer</u> supported by the inoperable DG inoperable when the redundant CREVS^(or) CRETS, <u>or H₂ Analyzer</u> is inoperable.</p> <p><u>AND</u></p>	<p>4 hours from discovery of Condition E concurrent with inoperability of redundant required feature(s)</p>

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
E. (continued)	<p>E.4.1 Determine OPERABLE DG(s) is not inoperable due to common cause failures.</p> <p><u>OR</u></p> <p>E.4.2 Perform SR 3.8.1.3 for OPERABLE DG(s).</p> <p><u>AND</u></p> <p>E.5 Declare CREVS₃ CRETS₃ and H₂ Analyzer supported by the inoperable DG inoperable.</p>	<p>24 hours</p> <p>24 hours</p> <p>14 days</p>
F. Required Action and associated Completion Time of Required Action E.1 not met.	<p>F.1.1 Restore both LCO 3.8.1.b DGs and other unit's DG to OPERABLE status and OC DG to available status.</p> <p><u>OR</u></p> <p>F.1.2 Restore DG to OPERABLE status.</p> <p><u>OR</u></p> <p>F.1.3 Declare CREVS₃ CRETS₃ and H₂ Analyzer supported by the inoperable DG inoperable.</p>	<p>72 hours</p>

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>G. Two required LCO 3.8.1.a offsite circuits inoperable.</p> <p><u>OR</u></p> <p>One required LCO 3.8.1.a offsite circuit that provides power to the CREVS ^(and) CRETS, and H₂ Analyzer inoperable and the required LCO 3.8.1.c offsite circuit inoperable.</p>	<p>G.1 Declare required feature(s) inoperable when its redundant required feature(s) is inoperable.</p> <p><u>AND</u></p> <p>G.2 Restore one required offsite circuit to OPERABLE status.</p>	<p>12 hours from discovery of Condition G concurrent with inoperability of redundant required feature(s)</p> <p>24 hours</p>
<p>H. One required LCO 3.8.1.a offsite circuit inoperable.</p> <p><u>AND</u></p> <p>One LCO 3.8.1.b DG inoperable.</p>	<p>----- NOTE ----- Enter applicable Conditions and Required Actions of LCO 3.8.9, when Condition H is entered with no AC power source to any train. -----</p> <p>H.1 Restore required offsite circuit to OPERABLE status.</p> <p><u>OR</u></p> <p>H.2 Restore DG to OPERABLE status.</p>	<p>12 hours</p> <p>12 hours</p>

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>I. Two LCO 3.8.1.b DGs inoperable.</p> <p><u>OR</u></p> <p>LCO 3.8.1.b DG that provides power to the CREVS^{and}, CRETS, and H₂ Analyzer inoperable and LCO 3.8.1.c DG inoperable.</p>	<p>I.1 Restore one DG to OPERABLE status.</p>	<p>2 hours</p>
<p>J. Required Action and associated Completion Time of Condition A, C, F, G, H, or I not met.</p> <p><u>OR</u></p> <p>Required Action and associated Completion Time of Required Action B.2, B.3, B.4.1, B.4.2, or B.5 not met.</p> <p><u>OR</u></p> <p>Required Action and associated Completion Time of Required Action E.2, E.3, E.4.1, E.4.2, or E.5 not met.</p>	<p>J.1 Be in MODE 3.</p> <p><u>AND</u></p> <p>J.2 Be in MODE 5.</p>	<p>6 hours</p> <p>36 hours</p>