



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

January 25, 2013

Mr. George H. Gellrich, Vice President  
Calvert Cliffs Nuclear Power Plant, LLC  
Calvert Cliffs Nuclear Power Plant  
1650 Calvert Cliffs Parkway  
Lusby, MD 20657-4702

SUBJECT: CALVERT CLIFFS NUCLEAR POWER PLANT, UNIT NO. 2 – ISSUANCE OF  
EMERGENCY AMENDMENT REGARDING CONTAINMENT AIR COOLING  
TRAIN (TAC NO. MF0539)

Dear Mr. Gellrich:

The Commission has issued the enclosed Amendment No. 280 to Renewed Facility Operating License (FOL) No. DPR-69 for the Calvert Cliffs Nuclear Power Plant, Unit No. 2. This amendment consists of changes to Appendix C of the FOL in response to your application dated January 22, 2013, as supplemented by letter dated January 24, 2013.

The amendment revises Appendix C of the FOL by adding a license condition for Technical Specification 3.6.6, which will allow the "B" train of the Containment Cooling System to be considered operable with a single containment cooling fan and cooler by limiting the refueling water storage tank water temperature, containment average air temperature, containment air pressure, and saltwater inlet temperature for the period from January 26, to February 17, 2013.

A copy of the related Safety Evaluation (SE) is enclosed. The SE describes the emergency circumstances under which the amendment was issued and the final determination of no significant hazards. The Notice of Issuance, addressing the final no significant hazards determination and opportunity for a hearing, will be included in the Commission's next regular biweekly *Federal Register* notice.

Sincerely,

A handwritten signature in black ink, appearing to read "Nadiyah S. Morgan", written over a horizontal line.

Nadiyah S. Morgan, Project Manager  
Plant Licensing Branch I-1  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket No. 50-318

Enclosures:

1. Amendment No. 280 to DPR-69
2. SE

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DATED: January 25, 2013

AMENDMENT NO. 280 TO RENEWED FACILITY OPERATING LICENSE NO. DPR-69  
CALVERT CLIFFS UNIT NO. 2

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

CALVERT CLIFFS NUCLEAR POWER PLANT, LLC

DOCKET NO. 50-318

CALVERT CLIFFS NUCLEAR POWER PLANT, UNIT NO. 2

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 280  
Renewed License No. DPR-69

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Calvert Cliffs Nuclear Power Plant, Inc. (the licensee), dated January 22, 2013, as supplemented by letter dated January 24, 2013, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by the addition of a license condition to Appendix C, as indicated in the attachment to this license amendment, and paragraphs 2.C.(2) and 2.C.(5) of Renewed Facility Operating License No. DPR-69 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 280, are hereby incorporated into the renewed license. The licensee shall operate the facility in accordance with the Technical Specifications.

(5) Additional Conditions

The Additional Conditions contained in Appendix C as revised through Amendment No. 280 are hereby incorporated into this license. Calvert Cliffs Nuclear Power Plant, LLC shall operate the facility in accordance with the Additional Conditions.

3. This license amendment is effective as of the date of its issuance and shall be implemented within 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION



George Wilson, Chief  
Plant Licensing Branch I-1  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the License and Appendix C

Date of Issuance: January 25, 2013

ATTACHMENT TO LICENSE AMENDMENTS

AMENDMENT NO. 280 TO RENEWED FACILITY OPERATING LICENSE NO. DPR-69

DOCKET NO. 50-318

Replace the following pages of the Renewed Facility Operating License with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

Remove Page

3  
4

Insert Page

3  
4

Replace the following page of the Appendix C Additional Conditions with the attached revised page. The revised page is identified by amendment number and contains marginal lines indicating the areas of change.

Remove Pages

7

Insert Pages

7

- C. This license is deemed to contain and is subject to the conditions set forth in 10 CFR Chapter I and is subject to all applicable provisions of the Act, and the rules, regulations, and orders of the Commission, now and hereafter applicable; and is subject to the additional conditions specified and incorporated below:

(1) Maximum Power Level

The licensee is authorized to operate the facility at reactor steady-state core power levels not in excess of 2737 megawatts-thermal in accordance with the conditions specified herein.

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 280 are hereby incorporated into this license. The licensee shall operate the facility in accordance with the Technical Specifications.

- (a) For Surveillance Requirements (SRs) that are new, in Amendment 201 to Facility Operating License No. DPR-69, the first performance is due at the end of the first surveillance interval that begins at implementation of Amendment 201. For SRs that existed prior to Amendment 201, including SRs with modified acceptance criteria and SRs whose frequency of performance is being extended, the first performance is due at the end of the first surveillance interval that begins on the date the Surveillance was last performed prior to implementation of Amendment 201.

(3) Less Than Four Pump Operation

The licensee shall not operate the reactor at power levels in excess of five (5) percent of rated thermal power with less than four (4) reactor coolant pumps in operation. This condition shall remain in effect until the licensee has submitted safety analyses for less than four pump operation, and approval for such operation has been granted by the Commission by amendment of this license.

(4) Environmental Monitoring Program

If harmful effects or evidence of irreversible damage are detected by the biological monitoring program, hydrological monitoring program, and the radiological monitoring program specified in the Appendix B Technical Specifications, the licensee will provide to the staff a detailed analysis of the problem and a program of remedial action to be taken to eliminate or significantly reduce the detrimental effects or damage.

(5) Additional Conditions

The Additional Conditions contained in Appendix C as revised through Amendment No. 280 are hereby incorporated into this license. Calvert Cliffs Nuclear Power Plant, LLC shall operate the facility in accordance with the Additional Conditions.

(6) Secondary Water Chemistry Monitoring Program

The Calvert Cliffs Nuclear Power Plant, LLC, shall implement a secondary water chemistry monitoring program to inhibit steam generator tube degradation. This program shall include:

- a. Identification of a sampling schedule for the critical parameters and control points for these parameters;
- b. Identification of the procedures used to quantify parameters that are critical to control points;
- c. Identification of process sampling points;
- d. Procedure for recording and management of data;
- e. Procedures defining corrective actions for off control point chemistry conditions; and
- f. A procedure identifying the authority responsible for the interpretation of the data and the sequence and timing of administrative events required to initiate corrective action.

(7) Mitigation Strategy

The Calvert Cliffs Nuclear Power Plant, LLC, shall develop and maintain strategies for addressing large fires and explosions that include the following key areas:

- (a) Fire fighting response strategy with the following elements:
  1. Pre-defined coordinated fire response strategy and guidance
  2. Assessment of mutual aid fire fighting assets
  3. Designated staging areas for equipment and materials
  4. Command and control
  5. Training of response personnel
- (b) Operations to mitigate fuel damage considering the following:
  1. Protection and use of personnel assets
  2. Communications
  3. Minimizing fire spread

Appendix C (Cont'd.)

Additional Conditions

Facility Operating License No. DPR-69

<u>Amendment No.</u>	<u>Additional Conditions</u>	<u>Implementation Date</u>
280	<p>The approval of the emergency core cooling system evaluation performed in accordance with the methodology of Technical Specification 5.6.5.b.7 shall be valid only for Calvert Cliffs Unit 2, Cycle 19. To remove this condition, Calvert Cliffs shall obtain NRC approval of the analysis of once- and twice-burned fuel for core designs following Unit 2 Cycle 19.</p> <p>For the period from January 26, 2013 through February 17, 2013, for Technical Specification 3.6.6, an OPERABLE "A" train of the Containment Cooling system consists of two operable containment cooling fans and coolers and the associated instruments and controls. An OPERABLE "B" train of the Containment Cooling system consists of one operable containment cooling fan and cooler and the associated instruments and controls.</p> <p>In addition, the following limitations must be met for each Containment Cooling train to be considered OPERABLE:</p> <ol style="list-style-type: none"><li>(1) The Unit 2 RWT water temperature shall not exceed 80°F,</li><li>(2) The Unit 2 containment average air temperature shall not exceed 95°F,</li><li>(3) The Unit 2 initial containment pressure shall not exceed 1.0 psig, and</li><li>(4) The saltwater inlet average water temperature shall not exceed 80°F.</li></ol>	<p>This amendment is effective immediately and shall be implemented by January 26, 2013</p>





UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 280 TO RENEWED

FACILITY OPERATING LICENSE NO. DPR-69

CALVERT CLIFFS NUCLEAR POWER PLANT, LLC

CALVERT CLIFFS NUCLEAR POWER PLANT, UNIT NO. 2

DOCKET NO. 50-318

1.0 INTRODUCTION

By letter dated January 22, 2013, as supplemented by letter dated January 24, 2013, Calvert Cliffs Nuclear Power Plant, Inc., the licensee submitted a request for an emergency license amendment for a change to the Calvert Cliffs Nuclear Power Plant, Unit No. 2 (Calvert Cliffs) Appendix C of the Renewed Facility Operating License (FOL). The amendment revises Appendix C of the FOL by adding a license condition for Technical Specification (TS) 3.6.6, which will allow the "B" train of the Containment Cooling System to be considered operable with a single containment cooling fan and cooler by limiting the refueling water storage tank (RWT) water temperature, containment average air temperature, containment air pressure, and saltwater (SW) inlet temperature for the period from January 26, to February 17, 2013.

2.0 REGULATORY EVALUATION

2.1 Description of System

The function of the Containment Air Cooling system is to remove heat from the containment atmosphere during normal plant operation. In the event of a loss-of-coolant accident (LOCA), the system functions to limit the containment pressure rise to a level below the design value. In such an instance, the system also functions to reduce the leakage of airborne and gaseous radioactivity by providing a means of cooling the containment atmosphere.

The Containment Air Cooling system is independent of the Containment Spray system. It is sized such that, following a LOCA, three of the four cooling units will limit the containment pressure to less than the containment design pressure even if the Containment Spray system does not operate.

The Containment Air Cooling system includes four two-speed cooling units located entirely within the containment. Service water is circulated through the air cooling coils. Air is drawn through the coils by a vane-axial fan driven by a

direct coupled two-speed motor. Normal containment recirculation requirements are satisfied at high speed operation, whereas, after a LOCA, the low speed setting is used. All fan motors may be manually started or stopped from the control room. Upon occurrence of a LOCA, all four fan motors start automatically upon receipt of a Safety Injection Actuation Signal.

## 2.2 Regulatory Requirements

The construction permits for Calvert Cliffs were issued by the Atomic Energy Commission (AEC) on July 7, 1969, and the operating licenses were issued on August 13, 1976 for Unit No. 2. The AEC published the final rule that added 10 of the *Code of Federal Regulations* (CFR) Part 50, Appendix A, "General Design Criteria [GDC] for Nuclear Power Plants," in the *Federal Register* (36 FR 3255) on February 20, 1971, with the rule effective on May 21, 1971. As stated in SECY -92-223, dated September 18, 1992, the Commission decided not to apply the Appendix A GDC to plants with construction permits issued prior to May 21, 1971. The Calvert Cliffs Updated Final Safety Analysis Report (UFSAR) states that the plant was designed and constructed to meet the intent of the GDC published in July 1967. The plant GDC is discussed in the UFSAR Appendix 1C, "AEC Proposed General Design Criteria for Nuclear Power Plants." Modifications to the facility are evaluated in accordance with 10 CFR 50.59 to assess consistency with the current licensing basis, including the draft GDC, as applicable. Calvert Cliffs' licensing basis GDC, located in the UFSAR, relating directly to containment and containment cooling, and thus, to the requested license amendment include:

### **CRITERION 10 - CONTAINMENT (Category A)**

Containment shall be provided. The containment structure shall be designed to sustain the initial effects of gross equipment failures, such as a large coolant boundary break, without loss of required integrity and, together with other engineered safety features as may be necessary, to retain for as long as the situation requires the functional capability to protect the public.

### **CRITERION 41 - ENGINEERED SAFETY FEATURES PERFORMANCE CAPABILITY (Category A)**

Engineered safety features such as emergency core cooling and containment heat removal systems shall provide sufficient performance capability to accommodate partial loss of installed capacity and still fulfill the required safety function. As a minimum, each engineered safety feature shall provide this required safety function assuming a failure of a single active component.

### **CRITERION 49 - CONTAINMENT DESIGN BASIS (Category A)**

The containment structure, including access openings and penetrations, and any necessary containment heat removal systems shall be designed so that the containment structure can accommodate, without exceeding the design leakage rate, the pressures and temperatures resulting from the largest credible energy release following a LOCA, including a considerable margin for effects from metal-water or other chemical reactions that could occur as a consequence of failure of emergency core cooling systems.

**CRITERION 52 - CONTAINMENT HEAT REMOVAL SYSTEMS (Category A)**

Where active heat removal systems are needed under accident conditions to prevent exceeding containment design pressure, at least two systems, preferably of different principles, each with full capacity, shall be provided.

The Calvert Cliffs TS 3.6.6, "Containment Spray and Cooling Systems", states that two containment spray trains and two containment cooling trains shall be operable. The associated TS Bases indicates that both fan coolers in each containment cooling train are required to satisfy the limiting condition for operation requirement.

**3.0 TECHNICAL EVALUATION**

The safety function of the containment air cooling system is to remove heat from the containment atmosphere and thus limit containment pressure and temperature rise during design basis LOCA and main steam line break (MSLB) accidents. This limits the leakage of containment atmosphere and thus, airborne radioactivity as well as prevents over-pressure structural failure and preserves the functioning of environmentally qualified equipment in containment. Two independent trains are provided, each with two containment air cooling (CAC) units. These are also independent of and diverse from the containment spray system. The air cooling system is sized such that three of four CAC fan/cooler units in service would limit containment peak pressure to less than design pressure even without containment spray trains functioning. A safety injection actuation signal starts all four fan motors and aligns valves for operation of all four cooling units. The heat removal capability of the CAC units depends in part on service water temperature and the total needed containment heat removal capability depends also on initial containment air pressure, temperature and on RWT water temperature for containment spray. During the LOCA recirculation phase, the component cooling water (CC) is cooled by the SW system from the Chesapeake Bay and in turn, cools the spray flow through the shutdown cooling heat exchangers.

In its January 22, 2013, letter, the licensee stated that the Calvert Cliff number 24 containment air cooler failed on January 19, 2013 and that the Technical Specification (TS) 3.6.6 required action time of 7 days expires on January 26, 2013. The failure was determined to be within the fan motor windings, necessitating a plant outage for removal of the fan motor for repair or replacement. The licensee also stated that Calvert Cliffs was scheduled to shut down for a refueling outage starting on February 17, 2013. The January 22, 2013, letter also indicated that this fan motor was manufactured in 2008 and installed in 2009, but, that the other three fan motors were older models that had been rewound rather than replaced.

To support its license amendment request (LAR), the licensee stated in their January 22, 2013, letter that they re-performed the containment response analysis of record (AOR) as described in the (UFSAR) with changes in input assumptions to the GOTHIC computer code documented in a licensee calculation CA07956. These changes were summarized in the licensee's January 24, 2013, letter, as shown below.

<b>LOCA</b>	<b>AOR</b>	<b>CA07956</b>	<b>Proposed Conditions</b>
Number of CAC's	2 per train	1 per train	2 in Train A and 1 in Train B
Initial Containment Pressure (psig)	1.8	1	1
Initial Containment Temperature (° F)	125	100	95
RWT Temperature (° F)	100	80	80
SW Temperature (° F) as the inlet to the CCW HX for the cooling of Containment Spray	90	80	80
Mass & Energy Release	Unchanged	Westinghouse Values from CA 07786	Westinghouse Values from CA 07786
GOTHIC Version Used	7.2A	8	

<b>MSLB</b>	<b>AOR</b>	<b>CA07956</b>	<b>Proposed Conditions</b>
Number of CAC's	2 per train	1 per train	2 in Train A and 1 in Train B
Initial Containment Temperature (° F)	125	100	95
GOTHIC Version Used	7.2A	8	

The results of this re-analysis were provided in the licensee's January 22, 2013, letter and are shown in the following table.

	<b>Current LOCA Results</b>	<b>Proposed Amendment LOCA Results</b>	<b>Current MSLB Results</b>	<b>Proposed Amendment MSLB Results</b>	<b>Containment Design Basis</b>
Peak Containment Air Pressure (psig)	48.6	49.0	49.1	49.1	50
Peak Containment Air Temperature (°F)	271.6	272.0	354.2	344.2	276 (inside wall temperature)

The Calvert Cliffs TS 5.5.16 "Containment Leakage Rate Testing Program" states that the peak calculated containment internal pressure for the design basis LOCA,  $P_a$ , is 49.4 psig. The 49.0 psig peak pressure determined by the LOCA reanalysis for the proposed LAR is less than the value on which the containment leakage testing is based. The results of containment leakage testing remain valid for the 49.0 psig pressure in demonstrating containment integrity and dose analysis results are unaffected by the proposed LAR. The accident condition determined temperatures and pressures associated with the proposed LAR are below the containment design basis values and therefore, are enveloped by the existing design parameters.

The licensee's January 22, 2013, letter included a section titled "PRA Evaluation." As this LAR was not submitted as risk-informed, the information of that section was not reviewed or relied on in determining the acceptability of the requested change.

The failed fan motor, as described by the licensee, is sufficiently different from those in the other 3 CAC units that a common cause premature failure is considered highly unlikely and the failure does not suggest a change in assumed reliability of the other CACs. Given the seasonal prevailing air and salt water intake temperatures, assuming lower limiting values along with maintaining a lower containment air pressure limit would allow the remaining CAC in the affected containment cooling train to fulfill the function needed to limit design basis LOCA and MSLB accident pressures below containment design values with conservatism and margin comparable to the AOR. Based on this evaluation, the Nuclear Regulatory Commission (NRC) staff finds that the addition of a license condition for Technical Specification (TS) 3.6.6, which will allow the "B" train of the Containment Cooling System to be considered operable with a single containment cooling fan and cooler by limiting the refueling water storage tank water temperature, containment average air temperature, containment air pressure, and saltwater inlet temperature is acceptable.

#### 4.0 EMERGENCY SITUATION

The NRC's regulations in 10 CFR 50.91(a)(5) state that where the NRC finds that an emergency situation exists, in that failure to act in a timely way would result in derating or shutdown of a nuclear power plant, or in prevention of either resumption of operation or of increase in power output up to the plant's licensed power level, it may issue a license amendment involving no significant hazards consideration without prior notice and opportunity for a hearing or for public comment. In such a situation, the NRC will publish a notice of issuance under 10 CFR 2.106, providing for opportunity for a hearing and for public comment after issuance.

As discussed in the licensee's application dated January 22, 2013, as supplemented by letter dated January 24, 2013, the licensee requested that the NRC process the proposed amendment on an emergency basis and the licensee could not have reasonably avoided the situation. The licensee stated the following as an explanation for how the emergency situation occurred:

On Unit 2, No. 24 Containment Air Cooler fan motor became grounded and was declared inoperable at 0349 on Saturday, January 19, 2013. [TS] 3.6.6 Required Action C was entered with a Completion Time of 7 days to restore the Containment Air Cooling train to operable status. This Completion Time expires on Saturday, January 26, 2013 at 0349. Condition E would then be entered which requires the Unit be in Mode 3 within 6 hours, and Mode 4 in 12 hours.

Investigation of the breaker trip revealed that a fault existed within the overall motor circuit. Further testing confirmed that the fault did not exist in the cable, penetration or motor junction box. Testing did confirm the fault to be within the motor windings. The fault occurred shortly after restarting the motor. This ground fault most likely initiated as an end turn fault, which typically occurs during motor starts. This is a newly manufactured fan motor, not a rewind

motor. The potential cause of the grounded fan motor is believed to be a premature winding failure of an unknown origin until further forensic testing can be performed.

The grounded fan motor must be replaced. It cannot be repaired. In order to affect the necessary replacement the containment polar crane must be used and the equipment hatch must be opened; these activities require the Unit to be placed in Mode 5. Therefore, it is not feasible to replace the motor while Unit 2 is operating. Additionally, Unit 2 is scheduled to shutdown for a refueling outage on February 17, 2013 (Mode 4 is scheduled for 1800 that day). Failure to address the inoperable Containment Air Cooler fan motor in a timely manner will result in an unscheduled shutdown of Unit 2.

The NRC staff reviewed the licensee's basis for processing the proposed amendment as an emergency amendment and finds that the motor failure was unanticipated and would result in a shutdown of the plant. Furthermore, the NRC staff finds that: (1) the licensee used its best efforts to make a timely application; (2) the licensee could not reasonably have avoided the situation; and (3) the licensee has not abused the provisions of 10 CFR 50.91(a)(5). Based on these findings, and the determination that the amendment involves no significant hazards consideration as discussed below, the NRC staff has determined that a valid need exists for issuance of the license amendment using the emergency provisions of 10 CFR 50.91(a)(5).

#### 5.0 FINAL NO SIGNIFICANT HAZARDS CONSIDERATION

The NRC's regulations in 10 CFR 50.92 state that the NRC may make a final determination that a license amendment involves no significant hazards consideration if operation of the facility, in accordance with the amendment, would not: (1) involve a significant increase in the probability or consequences of an accident previously evaluated; or (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in a margin of safety.

As required by 10 CFR 50.91(a), an evaluation of the issue of no significant hazards consideration is presented below:

1. Does the proposed change involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No.

The proposed addition of a License Condition to restrict operating parameters related to a degraded Containment Air Cooling train does not alter the assumed initiators to any analyzed event. The probability of an accident previously evaluated will not be increased by this proposed change. This proposed change will not affect radiological dose consequence analyses. The radiological dose consequence analyses assume a certain containment atmosphere leak rate based on the maximum allowable containment leakage rate, which is not affected by the change in calculated peak containment internal pressure. The 10 CFR Part 50, Appendix J containment leak rate testing program will continue to ensure that containment leakage remains within the leakage assumed in the offsite dose

consequence analyses. The consequences of an accident previously evaluated will not be increased by this proposed change.

Therefore, operation of the facility in accordance with the proposed License Condition to restrict operating parameters related to a degraded Containment Air Cooling train will not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Does the proposed change create the possibility of a new or different kind of accident from any accident previously evaluated?

Response: No.

The proposed License Condition to restrict operating parameters related to a degraded Containment Air Cooling train has been analyzed to determine the impact of the restrictions on the post-accident containment temperature and pressure. The calculated peak containment pressure remains below the containment design pressure of 50 psig with these restrictions. This change does not involve any alteration in the plant configuration (no new or different type of equipment will be installed) or make changes in the methods governing normal plant operation. The change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

Therefore, operation of the facility in accordance with the proposed License Condition to restrict operating parameters related to a degraded Containment Air Cooling train would not create the possibility of a new or different kind of accident from any previously evaluated.

3. Does the proposed change involve a significant reduction in a margin of safety?

Response: No.

The calculated peak containment pressure remains below the containment design pressure of 50 psig. Since the radiological consequence analyses are based on the maximum allowable containment leakage rate, which is not being revised, the change in the calculated peak containment pressure does not represent a significant change in the margin of safety.

Therefore, operation of the facility in accordance with the proposed License Condition to restrict operating parameters related to a degraded Containment Air Cooling train does not involve a significant reduction in the margin of safety.

Based on the above evaluation, the NRC staff concludes that the three standards of 10 CFR 50.92(c) are satisfied. Therefore, the NRC staff has made a final determination that no significant hazards consideration is involved for the proposed amendment and that the amendment should be issued as allowed by the criteria contained in 10 CFR 50.91.

## 6.0 LICENSE CONDITION

In an email dated January 24, 2013, the licensee submitted the following license condition:

For the period from January 26, 2013 through February 17, 2013, for Technical Specification 3.6.6, an OPERABLE "A" train of the Containment Cooling system consists of two operable containment cooling fans and coolers and the associated instruments and controls. An OPERABLE "B" train of the Containment Cooling system consists of one operable containment cooling fan and cooler and the associated instruments and controls. In addition, the following limitations must be met for each Containment Cooling train to be considered OPERABLE:

- (1) The Unit 2 RWT water temperature shall not exceed 80°F,
- (2) The Unit 2 containment average air temperature shall not exceed 95°F,
- (3) The Unit 2 initial containment pressure shall not exceed 1.0 psig, and
- (4) The saltwater inlet average water temperature shall not exceed 80°F.

## 7.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Maryland State official was notified of the proposed issuance of the amendment. The State official had no comments.

## 8.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has made a finding in this document that the amendment involves no significant hazards consideration. Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

## 9.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) the amendments do not (a) involve a significant increase in the probability or consequences of an accident previously evaluated; or (b) create the possibility of a new or different kind of accident from any accident previously evaluated; or (c) involve a significant reduction in a margin of safety; (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (3) there is reasonable assurance that such activities will be conducted in compliance with the Commission's regulations, and (4) the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.



Principal Contributor: Jerome Bettie  
Gerard Purciarello  
Garry Armstrong  
Ravinder Grover

Date: January 25, 2013

January 25, 2013

Mr. George H. Gellrich, 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 - ISSUANCE OF  
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Sincerely,

/RA/

Nadiyah S. Morgan, Project Manager  
Plant Licensing Branch I-1  
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Docket No. 50-318

Enclosures:

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**ADAMS Accession No.: ML13023A053**

\*Via email

OFFICE	LPLI-1/PM	LPLI-1/LA	SCVB/BC	SBPB/BC	STSB/BC	OGC - NLO	LPLI-1/BC
NAME	NMorgan	KGoldstein*	RDennig	GCasto*	RElliott	LSubin	GWilson
DATE	1/25/13	1/25/13	1/24/13	1/25/13	1/24/13*	1/25/13	1/25/13

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