

February 24, 2005

Mr. George Vanderheyden, 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 NOS. 1 AND 2 -
AMENDMENT RE: INCORPORATING CORE OPERATING LIMITS
ANALYTICAL METHODOLOGY REFERENCES INTO TECHNICAL
SPECIFICATIONS (TAC NOS. MC4019 AND MC4020)

Dear Mr. Vanderheyden:

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 271 to Renewed Facility Operating License No. DPR-53 and Amendment No. 248 to Renewed Facility Operating License No. DPR-69 for the Calvert Cliffs Nuclear Power Plant, Unit Nos. 1 and 2 (CCNPP 1 and 2). These amendments consist of changes to the Technical Specifications (TSs) in response to your application dated July 15, 2004, as supplemented by your letter dated January 31, 2005.

The amendments add references to the list of approved core operating limits analytical methods in TS 5.6.5.b, "Core Operating Limits Report," for CCNPP 1 and 2.

A copy of the related Safety Evaluation is enclosed. A Notice of Issuance will be included in the Commission's next regular biweekly *Federal Register* notice.

Sincerely,

/RA/

Richard V. Guzman, Project Manager, Section 1
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket Nos. 50-317 and 50-318

Enclosures: 1. Amendment No. 271 to
License No. DPR-53
2. Amendment No. 248 to
License No. DPR-69
3. Safety Evaluation

cc w/encls: See next page

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* Provided SE input by memo. No substantive changes made.

Accession No.: ML050550010 Package No.: ML 050550023 TSs: ML

OFFICE	PDI-1/PM	PDI-2/LA	SRXB/SC*	IROB/SC	OGC	PDI-1/SC
NAME	RGuzman	SLittle	DCoe	TBoyce	DFruchter	RLaufer
DATE	2/11/05	2/22/05	2/11/05 SE DTD	2/23/05	2/22/05	2/24/05

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CALVERT CLIFFS NUCLEAR POWER PLANT, INC.

DOCKET NO. 50-317

CALVERT CLIFFS NUCLEAR POWER PLANT, UNIT NO. 1

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 271
Renewed License No. DPR-53

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 July 15, 2004, as supplemented by letter dated January 31, 2005, 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 changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.2. of Renewed Facility Operating License No. DPR-53 is hereby amended to read as follows:

2. Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 271, are hereby incorporated into the license. The licensee shall operate the facility in accordance with the Technical Specifications.

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

/RA/

Richard J. Laufer, Chief, Section 1
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: February 24, 2005

CALVERT CLIFFS NUCLEAR POWER PLANT, INC.

DOCKET NO. 50-318

CALVERT CLIFFS NUCLEAR POWER PLANT, UNIT NO. 2

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 248
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 July 15, 2004, as supplemented by letter dated January 31, 2005, 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 changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.2. 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. 248, are hereby incorporated into the license. The licensee shall operate the facility in accordance with the Technical Specifications.

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

/RA/

Richard J. Laufer, Chief, Section 1
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: February 24, 2005

ATTACHMENT TO LICENSE AMENDMENTS

AMENDMENT NO. 271 TO RENEWED FACILITY OPERATING LICENSE NO. DPR-53

AMENDMENT NO. 248 TO RENEWED FACILITY OPERATING LICENSE NO. DPR-69

DOCKET NOS. 50-317 AND 50-318

Replace the following pages of the Appendix A Technical Specifications with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

Remove Pages

5.6-8
5.6-9
5.6-10

Insert Pages

5.6-8
5.6-9
5.6-10

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 271 TO RENEWED
FACILITY OPERATING LICENSE NO. DPR-53
AND AMENDMENT NO. 248 TO RENEWED FACILITY OPERATING LICENSE NO. DPR-69
CALVERT CLIFFS NUCLEAR POWER PLANT, INC.
CALVERT CLIFFS NUCLEAR POWER PLANT, UNIT NOS. 1 AND 2
DOCKET NOS. 50-317 AND 50-318

1.0 INTRODUCTION

By letter dated July 15, 2004 (ADAMS Accession No. ML042020082), as supplemented by letter dated January 31, 2005 (ADAMS Accession No. ML050340036), the Calvert Cliffs Nuclear Power Plant, Inc. (CCNPPI or the licensee) submitted a request for changes to the Calvert Cliffs Nuclear Power Plant, Unit Nos. 1 and 2 (CCNPP 1 and 2), Technical Specifications (TSs).

The proposed changes would add references to the list of approved core operating limits analytical methods in TS 5.6.5.b, "Core Operating Limits Report (COLR)," for CCNPP 1 and 2. Specifically, the proposed changes would add five Westinghouse topical reports to the references listed in TS 5.6.5.b. These topical reports include Westinghouse nuclear physics codes PHOENIX-P, ANC and PARAGON for nuclear design and analysis of the pressurized-water reactor (PWR) cores and a topical report supporting the use of Zirconium Diboride (ZrB₂) burnable absorber coating on Uranium Oxide (UO₂) fuel pellets.

The supplemental letter dated January 31, 2005, provided additional information that clarified the application, did not expand the scope of the application as originally noticed, and did not change the staff's original proposed no significant hazards consideration determination as published in the *Federal Register* on December 29, 2004 (69 FR 78056).

2.0 REGULATORY EVALUATION

The Nuclear Regulatory Commission (NRC) finds that CCNPPI in its July 15, 2004, submittal identified the applicable regulatory requirements. The regulatory requirements and guidance which the NRC staff considered in its review of the application are as follows:

1. Title 10 of the *Code of Federal Regulations* (10 CFR) establishes the fundamental regulatory requirements with respect to the reactivity control systems. Specifically, General Design Criterion 10 (GDC-10), "Reactor design," in Appendix A, "General Design Criteria for Nuclear Power Plants," to 10 CFR Part 50 states, in part, that the

reactor core and associated coolant, control, and protection systems shall be designed with appropriate margin to assure that specified acceptable fuel design limits are not exceeded.

2. Section 50.36(c)(2)(ii) states, in part, that a TS limiting condition for operation of a nuclear reactor must be established for a process variable, design feature, or operating restriction that is an initial condition of a design-basis accident or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.
3. NRC Generic Letter 88-16 (GL 88-16), "Removal of Cycle-Specific Parameter Limits from Technical Specifications," provides guidance on modifying cycle-specific parameter limits in the TSs. Specifically, GL 88-12 provides COLR implementation guidance, which includes the requirement to list the NRC-approved analytical methods used to determine the core operating limits in the TSs. The analytical methods referenced in the TSs identify the topical report(s) by number, title, and date, or the staff's safety evaluation report for an NRC approved plant-specific methodology.

3.0 TECHNICAL EVALUATION

3.1 Licensee's Proposed Change

CCNPP TS 5.6.5.b lists NRC-approved analytical methodologies consistent with the guidance of GL 88-16 and Technical Specification Task Force (TSTF) 363. The licensee's proposed changes would add the following five topical reports to TS 5.6.5.b:

- WCAP-11596-P-A, "Qualification of the PHOENIX-P, ANC Nuclear Design System for Pressurized Water Reactor Cores," June 1988
- WCAP-10965-P-A, "ANC: A Westinghouse Advanced Nodal Computer Code," September 1986
- WCAP-10965-P-A, Addendum 1, "ANC: A Westinghouse Advanced Nodal Computer Code; Enhancements to ANC Rod Power Recovery," April 1989
- WCAP-16045-P-A, "Qualification of the Two-Dimensional Transport Code PARAGON," August 2004
- WCAP-16072-P-A, "Implementation of Zirconium Diboride Burnable Absorber Coatings in CE Nuclear Power Fuel Assembly Designs," August 2004

The above topical reports have been reviewed and approved by the NRC for licensing applications. The addition of these topical reports to CCNPP TS 5.6.5.b follows the guidance of GL 88-16 and TSTF-363 in that only the topical report numbers and titles will be listed in the TSs, with the detailed identification of the report revisions, supplement numbers, and approval dates specified in the COLR. These topical reports consist of (1) Westinghouse nuclear physics codes PHOENIX-P, ANC and PARAGON for nuclear design and analysis of the PWR cores and (2) a topical report supporting the use of ZrB₂ burnable absorber coating on UO₂ fuel pellets. The NRC staff's evaluation for CCNPP licensing application of these reports is discussed below.

3.2 Use of Westinghouse Nuclear Physics Code Packages

CCNPP 1 and 2 are PWRs with the Combustion Engineering (CE) design, and the nuclear designs and safety evaluation for reload cores have been performed using the CE reload methodology and nuclear physics code package described in CENPD-266-P-A, "The ROC and DIT Computer Codes for Nuclear Design." The licensee plans to use the Westinghouse nuclear physics codes, ANC, PHOENIX-P, and PARAGON, with the continued application of the CE reload and safety analysis methodology.

The PHOENIX-P and ANC codes are traditional Westinghouse neutronics methods, which have been approved by the NRC. ANC is a three-dimensional two-group diffusion theory nodal code used for nuclear design analyses for determining the core design parameters, such as the critical boron concentration, control rod worths, reactivity coefficients, assembly average powers and exposures, assembly peak rod powers, peaking factors, and axial power shapes. WCAP-10965-P-A and Addendum 1 describe the ANC code and enhancements to the neutronic solution.

PHOENIX-P is a two-dimensional, multi-group transport theory code traditionally used to calculate lattice physics parameters and provide nuclear input data to the ANC code. Topical Report WCAP-11596-P-A describes the PHOENIX-P/ANC nuclear design system for the PWR cores, and provides demonstration of the qualification of the PHOENIX-P/ANC nuclear analysis package. The qualification process covers an acceptable range of comparisons between the PHOENIX-P/ANC calculations and the operating reactor data measured during startup tests and during normal power operations from several representative reactor cycles from three-loop and four-loop Westinghouse-designed plants. The NRC has previously reviewed and concluded that the PHOENIX-P/ANC nuclear analysis system is acceptable for use in the PWR design analysis.

In Attachment 3 of its July 15, 2004, letter (Reference 1), the licensee provided supplemental information to demonstrate the applicability of the PHOENIX-P/ANC physics code package for CCNPP 1 and 2. This includes comparisons between the predictions made using the PHOENIX-P/ANC physics codes and the CCNPP Unit 2 Cycles 13 and 14 zero power physics test measurements and at power operating data. The zero power physics tests include critical boron concentrations, moderator temperature coefficient, control rod worth, and differential boron worth. The power operation data include boron letdown curves and axial power distributions. The comparisons between the measured and predicted hot full power (HFP) boron letdown curves at various cycle exposure show good agreement. In all the comparisons, the differences between the measured and predicted assembly power values is very small, except for only a few low-power fuel assemblies on the core periphery having relatively higher percentage differences. The maximum error for the potential limiting fuel assemblies are within the uncertainty allowance on the assembly power used in the safety analysis. The difference in the measured and predicted control rod worth are within the control element assembly (CEA) group uncertainty used in the current NRC-approved design methods. The differences between the measured and predicted values in the CEA worths are incorporated into the uncertainties and conservatively applied in the safety analysis methodology. Therefore, the NRC staff concludes that the PHOENIX-P/ANC physics code package is acceptable for CCNPP 1 and 2 licensing applications, and the referencing of Topical Reports WCAP-11596-P-A, WCAP-10965-P-A, and WCAP-10965-P-A, Addendum 1, to TS 5.6.5.b is acceptable.

PARAGON is a new neutron transport code that can be used with a nuclear design code system or as a stand-alone code, which can be used as a direct replacement for the PHOENIX-P code. WCAP-16045-P-A describes the PARAGON code, and confirms the qualification of the code both as a stand-alone transport code and as a substitute for the PHOENIX-P code as a nuclear data source for nodal code. The qualification process includes a comparison of PARAGON predicted values to measured data from several plants, including Calvert Cliffs. Benchmarking has shown that the PARAGON/ANC package is essentially the same as those obtained from the PHOENIX-P/ANC package.

The NRC staff has previously reviewed and concluded that WCAP-16045-P-A is acceptable for licensing applications with the safety evaluation stating that “the staff considers the new PARAGON code to be well qualified as a stand-alone code replacement for the PHOENIX-P lattice code, wherever the PHOENIX-P code is used in NRC-approved methodologies.” Therefore, the addition of WCAP-16045-P-A to TS 5.6.5.b is acceptable.

3.3 WCAP-16072-P-A

The licensee plans to change the burnable absorbers for CCNPP 1 and 2 from the current Erbia integral burnable absorber, which is mixed in the fuel, to a burnable absorber using ZrB_2 which is coated onto the outer surface of the UO_2 fuel pellets. Westinghouse has considerable fabrication and operational experience with the ZrB_2 integral fuel burnable absorber (IFBA) in the Westinghouse-designed plants. WCAP-16072-P-A describes the use of ZrB_2 burnable absorber in CE fuel assemblies. The NRC staff has approved WCAP-16072-P-A for licensing applications to implement ZrB_2 IFBA in CE 14x14 and 16x16 fuel assembly designs with conditions and limitations described in Section 4.0 of the NRC safety evaluation (SE) for WCAP-16072-P-A.

In its January 31, 2005, letter (Reference 2), the licensee provided its regulatory commitments to comply with the conditions and limitations specified in the NRC staff's SE for WCAP-16072-P-A for the implementation of ZrB_2 IFBA for CCNPP1 and 2. The NRC staff has reviewed these commitments and found them acceptable, and therefore, referencing WCAP-16072-P-A in TS 5.6.5.b is acceptable.

It should be noted that Condition 3 in the WCAP-16072-P-A SE requires that the moderator temperature coefficient (MTC) measured at HFP beginning of cycle (BOC) conditions be adjusted to the maximum HFP soluble boron concentration expected during the cycle, and that, for the first application of ZrB_2 IFBA in a CE 14x14 or 16x16 fuel assembly design, a direct HFP MTC measurement be made at the maximum HFP soluble boron concentration expected during the cycle in order to confirm conservative adjustment. The licensee stated that no action will be required by Calvert Cliffs, and that this commitment in the SE will be satisfied during the Cycle 18 operation of Arkansas One Unit 2 (ANO-2) as described in an ANO-2 license amendment request (Reference 3). ANO-2, a CE plant implementing ZrB_2 IFBA, is scheduled to commence operation at essentially the same time as Calvert Cliffs Unit 2 Cycle 16. The difference in reactor cooling system (RCS) boron concentration from BOC to cycle maximum is much larger for ANO-2 Cycle 18. Additionally, the difference between the MTC measured at BOC and the MTC measured at peak RCS boron concentration will be more significant at ANO-2 and can be used in evaluating the peak MTC confirmation method. In Reference 3, the ANO-2 licensee committed to perform an HFP MTC test within 7 days of reaching the highest RCS soluble boron concentration predicted during Cycle 18 full power operation. Also, in its letter dated

September 8, 2004 (Reference 4), Westinghouse committed to provide the NRC the measurement data from ANO-2 for the first application of ZrB₂ IFBA in a CE fuel assembly design. In a telephone conference call on December 1, 2004, CCNPPI also stated that should ANO-2 not perform the HFP MTC measurement during Cycle 18, CCNPPI will perform the measurement in its entirety. In addition, CCNPPI committed to update the plant procedures used to perform MTC surveillance to reflect the requirement to verify the peak positive full power MTC (Reference 2). Based on the ANO-2 and Westinghouse commitments, the staff finds the SE condition 3 is satisfied.

3.4 Conclusion

Based on the considerations discussed in Section 2.0 and 3.0 above, the NRC staff has concluded that the proposed changes to TS 5.6.5.b for CCNPP 1 and 2 to add several NRC-approved topical reports related to the use of Westinghouse nuclear physics codes ANC, PHOENIX-P, and PARAGON, and the implementation of Zirconium Diboride fuel coating for the integral fuel burnable absorber is acceptable.

4.0 FINAL NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

The Commission's regulations in 10 CFR 50.92 state that the Commission 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 any 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.

The amendment has been evaluated against the three standards in 10 CFR 50.92(c). In its analysis of the issue of no significant hazards consideration, as required by 10 CFR 50.91(a), the licensee has provided the following:

1. Operation of the facility in accordance with the proposed amendment[s] would not involve a significant increase in the probability or consequences of an accident previously evaluated.

The proposed amendment[s] adds references to Technical Specification 5.6.5.b. This Technical Specification lists methods that are used to determine core operating limits. These proposed additional references will allow the use of the Westinghouse nuclear physics codes and a burnable neutron absorber material at Calvert Cliffs Nuclear Power Plant.

The proposed additional references will allow the use of the Westinghouse nuclear physics codes PARAGON, PHOENIX-P, and ANC. These Westinghouse codes will be used for the design of reload cores and for safety evaluation of reload cores. Benchmarking has shown that results from these nuclear physics codes are essentially the same as those obtained from the current DIT/ROCS code systems. These codes will not increase the probability or consequences of an accident because plant systems will not be operated outside of design limits, no different equipment will be operated, and system interfaces will not change.

The use of these computer codes will not increase the consequences of an accident because Limiting Conditions for Operation (LCOs) will continue to restrict operation to within the regions that provides acceptable results, and Reactor Protective System (RPS) trip setpoints will restrict plant transients so that the consequences of accidents will be acceptable. Also, the consequences of the accidents will be calculated using NRC accepted methodologies.

These proposed additional references to Technical Specification 5.6.5.b will allow the use of the burnable neutron absorber material Zirconium Diboride. Zirconium Diboride absorbs neutrons, which reduces the thermal flux and power in the region with the Zirconium Diboride. Neutron absorption by Zirconium Diboride produces helium gas that is released into the fuel rod plenum. The effect of this helium production is taken into account in the fuel design and safety evaluations using codes reviewed and approved by the Nuclear Regulatory Commission.

Implementation of Zirconium Diboride may result in the peak most positive moderator temperature coefficient occurring after beginning of cycle. The core burnup characteristic is well understood as a result of extensive industry experience. Positive moderator temperature coefficient at the beginning of cycle is also within operational experience at Calvert Cliffs and as such, do not represent a significant change in the operation of the plant.

The proposed additional Technical Specification references are not accident initiators. The assumed accident initiators are not changed by the introduction of proposed additional Technical Specification references. Therefore, operation of the facility in accordance with the proposed amendment[s] will not involve a significant increase in the probability of an accident previously evaluated.

The use of the proposed methods will not significantly impact the fission product inventory and transport assumptions in the current licensing basis analyses. Therefore, the radiological consequences of an accident previously evaluated will not increase.

The use of the proposed methods will not increase the consequences of an accident because Limiting Conditions for Operation will continue to restrict operation to within the regions that provide acceptable results, and Reactor Protective System trip setpoints will restrict plant transients so that the consequences of accidents will not exceed the safety analysis acceptance criteria.

Therefore, the proposed Technical Specification changes do not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Operation of the facility in accordance with the proposed amendment[s] would not create the possibility of a new or different kind of accident from any accident previously evaluated.

These proposed additional references will allow the use of the Westinghouse nuclear physics codes PARAGON, PHOENIX-P, and ANC. These codes will be used to confirm the values of selected cycle-specific reactor physics parameter limits from the Technical Specifications and the Core Operating Limits Report. These codes will not change the physical plant or the modes of operation. Benchmarking has shown that results from these codes are essentially the same as those optioned from the current DIT/ROCS code package. The plant systems will not be operated outside of design limits, no different equipment will be operated, and system interfaces will not change. This code package will not create a new or different accident from those previously evaluated.

The proposed amendments also add the Zirconium Diboride burnable absorber topical report to the Technical Specification list of the approved topical reports used to generate the values in the Core Operating Limits Report. With this burnable absorber, the plant systems will not operate outside of design limits, no different equipment will be operated, and system interfaces will not change. This burnable absorber will not create a new or different accident from those previously evaluated.

Therefore, operation of the facility in accordance with the proposed amendment[s] would not create the possibility of a new or different kind of accident from any previously evaluated.

3. Operation of the facility in accordance with the proposed amendment[s] would not involve a significant reduction in a margin of safety.

Safety limits ensure that specified acceptable fuel design limits are not exceeded during steady state operation, normal operational transients, and anticipated operational occurrences. All fuel limits and design criteria will be met based on the approved methodologies defined in the topical reports. The RPS in combination with all LCOs, will continue to prevent any anticipated combination of transient conditions for Reactor Coolant System temperature, pressure, and thermal power level that would result in a violation of the safety limits.

The reload safety analyses determine the LCOs settings and RPS setpoints that establish the initial conditions and trip setpoints. These conditions and setpoints ensure that the Design Basis Events (postulated accident and anticipated operational occurrences) analyzed in the Updated Final Safety Analysis Report produced acceptable results.

The proposed amendment[s] add references to Technical Specification 5.6.5.b. This Technical Specification lists methods that are used to determine core operating limits. These proposed additional references will allow the use of the Westinghouse computer codes, PARAGON, PHOENIX-P, and ANC, and a burnable neutron absorber material Zirconium Diboride at Calvert Cliffs Nuclear Power Plant. These references were previously reviewed and approved by [the] Nuclear Regulatory Commission.

Therefore, the proposed changes will not involve a significant reduction in the margin of safety.

Based on the above discussion, the staff concludes that this amendment meets the criteria set forth in 50.92, and therefore, does not involve a significant hazard consideration.

5.0 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.

6.0 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 final no significant hazards finding with respect to this amendment. 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 amendments.

7.0 CONCLUSION

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

8.0 REFERENCES

1. Letter from B. S. Montgomery, Constellation Generation Group, LLC, to USNRC, "Calvert Cliffs Nuclear Power Plant, Unit Nos. 1 & 2; Docket Nos. 50-317 & 50-318, License Amendment Request: Incorporate Methodology References for the Implementation of PHOENIX-P, ANC, PARAGON, and Zirconium Diboride into the Technical Specifications," July 15, 2004 (ADAMS Accession No. ML042020082).
2. Letter from G. Vanderheyden, Constellation Generation Group, LLC, to USNRC, "Calvert Cliffs Nuclear Power Plant, Unit Nos. 1 & 2; Docket Nos. 50-317 & 50-318, Response to Request for Additional Information Concerning the License Amendment Request to Incorporate Methodology References for the Implementation of PHOENIX-P, ANC, PARAGON, and Zirconium Diboride into the Technical Specifications," January 31, 2005 (ADAMS Accession No. ML050340036).

3. Letter from J. S. Forbes, Entergy Operations, Inc., to USNRC, "License Amendment Request To Support Cycle 18 Core Reload Arkansas Nuclear One, Unit 2, Docket No. 50-368, License No. NPF-6 (2CAN070402)," July 8, 2004 (ADAMS Accession No. ML041960419).
4. Letter from J. Gresham, Westinghouse Electric Company, to USNRC, "Westinghouse's Response to Item 3 of Section 4.0 (CONDITIONS AND LIMITATIONS) of the Final Safety Evaluation for topical report WCAP-16072-P-A, Revision 0, 'Implementation of Zirconium Diboride Burnable Absorber Coatings in CE Nuclear Power Fuel Assembly Designs,' (LTR-NRC-04-52)" September 8, 2004.

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