



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

August 6, 2009

Mr. James A. Spina, 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: IMPLEMENTATION OF TSTF-511, REVISION 0,
"ELIMINATE WORKING HOUR RESTRICTIONS FROM TS 5.2.2 TO SUPPORT
COMPLIANCE WITH 10 CFR PART 26" (TAC NOS. ME1129 AND ME1130)

Dear Mr. Spina:

The Commission has issued the enclosed Amendment No. 292 to Renewed Facility Operating License No. DPR-53 and Amendment No. 268 to Renewed Facility Operating License No. DPR-69 for the Calvert Cliffs Nuclear Power Plant, Unit Nos. 1 and 2. These amendments consist of changes to the Technical Specifications (TSs) in response to your application transmitted by letter dated April 23, 2009.

The amendments revise the TSs by removing working hour restrictions from TS 5.2.2 to support compliance with recent revisions to Title 10 of the *Code of Federal Regulations*, Part 26, Subpart I. The amendments are consistent with the guidance contained in Nuclear Regulatory Commission (NRC) approved Technical Specifications Task Force Traveler 511 (TSTF-511). This TS improvement was made available by the NRC on December 30, 2008 (73 FR 79923) as part of the consolidated line item improvement process.

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,

A handwritten signature in black ink, reading "Douglas V. Pickett".

Douglas V. Pickett, Senior Project Manager
Plant Licensing Branch I-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-317 and 50-318

Enclosures:

1. Amendment No. 292 to DPR-53
2. Amendment No. 268 to DPR-69
3. Safety Evaluation

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

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. 292
Renewed License No. DPR-53

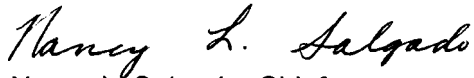
1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Calvert Cliffs Nuclear Power Plant, Inc. (the licensee) dated April 23, 2009, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's 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. 292, are hereby incorporated into the renewed 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 with the implementation of the new 10 CFR Part 26, Subpart I requirements.

FOR THE NUCLEAR REGULATORY COMMISSION



Nancy L. Salgado, Chief
Plant Licensing Branch I-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment:
Changes to the License and Technical
Specifications

Date of Issuance: August 6, 2009



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

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. 268
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 April 23, 2009, 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. 268, are hereby incorporated in the renewed 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 with the implementation of the new 10 CFR Part 26, Subpart I requirements.

FOR THE NUCLEAR REGULATORY COMMISSION



Nancy L. Salgado, Chief
Plant Licensing Branch I-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment:
Changes to the License and Technical
Specifications

Date of Issuance: August 6, 2009

ATTACHMENT TO LICENSE AMENDMENTS

AMENDMENT NO. 292 TO RENEWED FACILITY OPERATING LICENSE NO. DPR-53

AMENDMENT NO. 268 TO RENEWED FACILITY OPERATING LICENSE NO. DPR-69

DOCKET NOS. 50-317 AND 50-318

Replace the following page of the Facility Operating License with the attached revised page. The revised page is identified by amendment number and contains marginal lines indicating the areas of change.

Remove Page

3

Insert Page

3

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

5.2-2

5.2-3

5.2-4

Insert Pages

5.2-2

5.2-3

rules, regulations, and orders of the Commission, now or 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 steady-state reactor 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. 292, 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 227 to Facility Operating License No. DPR-53, the first performance is due at the end of the first surveillance interval that begins at implementation of Amendment 227. For SRs that existed prior to Amendment 227, 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 227.

(3) Additional Conditions

The Additional Conditions contained in Appendix C as revised through Amendment No. 267 are hereby incorporated into this license. Calvert Cliffs Nuclear Power Plant, Inc. shall operate the facility in accordance with the Additional Conditions.

(4) Secondary Water Chemistry Monitoring Program

The Calvert Cliffs Nuclear Power Plant, Inc., 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. 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. 268 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.

5.2 Organization

5.2.2 Unit Staff

The unit staff organization shall include the following:

- a. A total of three non-licensed operators shall be assigned to the Units 1 and 2 shift crews.
- b. Those licensed operators counted toward minimum shift crew composition required by 10 CFR 50.54(m)(2)(i) shall be licensed for both units.
- c. Shift crew composition may be less than the minimum requirement of 10 CFR 50.54(m)(2)(i), 5.2.2.a, and 5.2.2.g for a period of time not to exceed 2 hours in order to accommodate unexpected absence of on-duty shift crew members provided immediate action is taken to restore the shift crew composition to within the minimum requirements.
- d. A radiation protection technician shall be onsite when fuel is in the reactor. The position may be vacant for not more than 2 hours, in order to provide for unexpected absence, provided immediate action is taken to fill the required position.
- e. Deleted.
- f. The operations manager shall hold or have held an SRO license at Calvert Cliffs. The General Supervisor-Nuclear Plant Operations shall hold an SRO license.
- g. One Shift Technical Advisor (STA) shall be assigned to the shift crew when either unit is in MODE 1, 2, 3, or 4, and shall be filled as follows:
 - 1. By the Shift Supervisor (SS) or an on-shift SRO license holder, provided the individual meets the Commission Policy Statement on Engineering Expertise on Shift; or

5.2 Organization

2. By an individual with a Bachelors Degree or equivalent in a scientific or engineering discipline with specific training in plant design, and response and analysis of the plant transient and accidents; or
 3. By an SRO license holder previously approved by the Nuclear Regulatory Commission as an exception to the minimum STA education requirements of Specification 5.2.2.g.2, provided the following conditions are met:
 - i. With both units in MODE 1, 2, 3, or 4, the STA shall be an SRO license holder in addition to the two SRO license holders required,
 - ii. With one unit in MODE 1, 2, 3, or 4, and the other unit in MODE 5 or 6, the STA shall be an SRO license holder other than the SS, and
 - iii. With one unit in MODE 1, 2, 3, or 4, and the other unit defueled, the STA shall be an SRO license holder in addition to the one SRO license holder required.
-



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 292 TO RENEWED

FACILITY OPERATING LICENSE NO. DPR-53

AND AMENDMENT NO. 268 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 application dated April 23, 2009 (Agencywide Document and Management System (ADAMS) Accession No. ML091170049), Calvert Cliffs Nuclear Power Plant, Inc. (the licensee) requested changes to the Technical Specifications (TSs) for the Calvert Cliffs Nuclear Power Plant Unit Nos. 1 and 2 (CCNPP). The proposed changes would delete Paragraph e of TS 5.2.2, "Unit Staff."

The licensee stated that the application is consistent with Nuclear Regulatory Commission (NRC) approved Technical Specification Task Force (TSTF) Improved Standard Technical Specification Change Traveler, TSTF-511, Revision 0, "Eliminate Working Hour Restrictions from TS 5.2.2 to Support Compliance with 10 CFR Part 26." CCNPP TSs have minor differences when compared to TSTF-511. First, the equivalent CCNPP TS where work hour restrictions are located is TS 5.2.2, Paragraph e. This differs from TSTF-511, where work hour restrictions are located in STS 5.2.2 Paragraph d. Second, while the text of CCNPP, TS 5.2.2, paragraph e, is similar to TSTF-511, STS 5.2.2, Paragraph d, it is not an exact duplicate. The availability of this TS improvement was announced in the *Federal Register* on December 30, 2008 (73 FR 79923) as part of the consolidated line item improvement process.

2.0 REGULATORY EVALUATION

The history of NRC regulations pertaining to prevention of worker impairment is summarized in the *Federal Register* notice containing the final rule that amended 10 CFR Part 26 (73 FR 16966, March 31, 2008). 10 CFR Part 26, Subpart I provides the regulatory requirements for managing worker fatigue at nuclear power plants.

The NRC's regulatory requirements related to the content of the TSs are contained in 10 CFR Part 50.36. 10 CFR 50.36 requires that the TSs include items in the following categories: (1) safety limits, limiting safety systems settings, and limiting control settings;

(2) limiting conditions for operation (LCOs); (3) Surveillance Requirements (SRs); (4) design features; and (5) administrative controls. The administrative controls are the provisions relating to organization and management, procedures, recordkeeping, review and audit, and reporting necessary to assure operation of the facility in a safe manner.

The NRC's guidance for the format and content of licensee TSs can be found in NUREG-1432, Revision 3.0, "Standard Technical Specifications Combustion Engineering Plants," referred to as Standard Technical Specifications (STS). Section 5 of STS contains administrative controls. Paragraph d of Section 5.2.2 of STS contains requirements for administrative procedures to limit the working hours of personnel who perform safety-related functions. This paragraph represents NRC's guidance on how licensee TS requirements should address work hour controls. Licensees adhere to the guidance to varying degrees due to minor administrative differences and differences in each licensee's current licensing basis. The inconsistent level of adherence to NRC guidance has led to inconsistent TS interpretation and implementation. This has also made it difficult for NRC to enforce the requirements.

The new requirements of 10 CFR Part 26, Subpart I supersede the guidance for requirements found in Paragraph d of Section 5.2.2 of all STS. Subpart I distinguishes between work hour controls and fatigue management and strengthens the requirements for both. Subpart I requires nuclear power plant licensees to ensure against worker fatigue adversely affecting public health and safety and the common defense and security by establishing clear and enforceable requirements for the management of worker fatigue. Licensees are required to implement Subpart I by October 1, 2009, as announced in the Final rule that revised 10 CFR Part 26 (73 FR 16966, March 31, 2008). TSTF-511 proposed a change to STS that would delete Paragraph d of STS 5.2.2. This change was approved in a *Federal Register* notice on December 30, 2008 (73 FR 79923).

2.1 Adoption of TSTF-511, Revision 0, by CCNPP

Proper adoption of TSTF-511 and implementation of 10 CFR Part 26, Subpart I will provide reasonable assurance that the licensee will maintain limits on the working hours of personnel who perform safety-related functions. The licensee has committed to remove the plant-specific TS requirements concurrently with the implementation of the 10 CFR Part 26, Subpart I requirements.

3.0 TECHNICAL EVALUATION

Controls on work hours for personnel at nuclear power plants are necessary to prevent worker fatigue from adversely affecting public health and safety and the common defense and security. Work hour controls for CCNPP are currently located in Paragraph e of TS 5.2.2. When implemented, the regulatory requirements of 10 CFR 26, Subpart I replace the plant-specific TS requirements found in section 5.2.2 Paragraph e of CCNPP TS.

The licensee proposed deleting Paragraph e of TS 5.2.2. The licensee committed to implement the new requirements of 10 CFR Part 26, Subpart I concurrently with the deletion of the TS requirements on work hour controls. The NRC staff finds that reasonable controls for the implementation and for subsequent evaluation of proposed changes pertaining to the above commitment is best provided by the licensee's administrative processes, including its commitment management program (see Regulatory Issue Summary 2000-017, "Managing

Regulatory Commitments Made by Power Reactor Licensees to the NRC Staff"). The above commitment does not warrant the creation of regulatory requirements (items requiring prior NRC approval of subsequent changes).

CCNPP TS have minor differences when compared to TSTF-511. First, the equivalent CCNPP TS where work hour restrictions are located is TS 5.2.2, Paragraph e. This differs from TSTF-511, where work hour restrictions are located in STS 5.2.2 Paragraph d.

Second, while the text of CCNPP, TS 5.2.2, paragraph e, is similar to the text of TSTF-511, STS 5.2.2, paragraph d, it is not an exact duplicate. The most significant difference is as follows:

- TSTF-511, STS 5.2.2, paragraph d states that any deviations from the guidelines on working hours shall be authorized in advance by the plant manager or plant manager's designee. CCNPP, TS 5.2.2, paragraph e allows such deviations to be authorized by the plant general manager, or the plant general manager's designee.

These differences are insignificant as the intent of TSTF-511 is to delete TSs superseded by the revised regulations in 10 CFR Part 26, Subpart I.

The NRC staff evaluated the licensee's proposed change against the applicable regulatory requirements listed in Section 2.0. The staff also compared the proposed change to the change made to STS by TSTF-511. The staff considered the licensee's commitment to implement 10 CFR Part 26, Subpart I concurrently with the deletion of TS work hour control requirements in its evaluation of the proposed change. Given the licensee's commitment, there is reasonable assurance that the licensee will comply with the regulations for work hour controls, either through TS requirements or through the requirements of 10 CFR Part 26, Subpart I, at all times at CCNPP. Therefore, the licensee will continue to prevent worker fatigue from adversely affecting public health and safety and the common defense and security. Therefore, the staff finds the proposed change acceptable.

4.0 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.

5.0 ENVIRONMENTAL CONSIDERATION

The amendment changes recordkeeping, reporting, or administrative procedures. Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(10). 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.

6.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

7.0 REFERENCES

1. Constellation Energy's License Amendment Request to adopt TSTF-511, April 23, 2009 (Agencywide Document and Management System (ADAMS) Accession No. ML091170049).
2. *Federal Register* Notice, Notice of Availability published on December 30, 2008 (73 FR 79923).
3. TSTF-511, Revision 0, "Eliminate Working Hour Restrictions from TS 5.2.2 to Support Compliance with 10 CFR Part 26."

Principal Contributor: Kristy Bucholtz

Date: August 6, 2009

August 6, 2009

Mr. James A. Spina, 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: IMPLEMENTATION OF TSTF-511, REVISION 0,
"ELIMINATE WORKING HOUR RESTRICTIONS FROM TS 5.2.2 TO SUPPORT
COMPLIANCE WITH 10 CFR PART 26" (TAC NOS. ME1129 AND ME1130)

Dear Mr. Spina:

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The amendments revise the TSs by removing working hour restrictions from TS 5.2.2 to support compliance with recent revisions to Title 10 of the *Code of Federal Regulations*, Part 26, Subpart I. The amendments are consistent with the guidance contained in Nuclear Regulatory Commission (NRC) approved Technical Specifications Task Force Traveler 511 (TSTF-511). This TS improvement was made available by the NRC on December 30, 2008 (73 FR 79923) as part of the consolidated line item improvement process.

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/

Douglas V. Pickett, Senior Project Manager
Plant Licensing Branch I-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-317 and 50-318

Enclosures:

1. Amendment No. 292 To DPR-53
2. Amendment No. 268 To DPR-69
3. Safety Evaluation

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ADAMS Accession No. ML092100566

OFFICE	LPL1-1/PM	LPL1-1/LA	OGC	ITSB/BC	LPL1-1/BC
NAME	DPickett	SLittle	BHarris	RElliott memo signed on	NSalgado
DATE	08/04/09	08/03/09	08/03/09	05 /19/09	08 /06/ 09

OFFICIAL RECORD COPY

DATED: August 6, 2009

AMENDMENT NO. 292 TO RENEWED FACILITY OPERATING LICENSE NO. DPR-53
CALVERT CLIFFS UNIT 1

AMENDMENT NO. 268 TO RENEWED FACILITY OPERATING LICENSE NO. DPR-69
CALVERT CLIFFS UNIT 2

PUBLIC

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