

February 25, 2003

Mr. P. E. Katz, 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: SHUTDOWN COOLING (TAC NOS. MB6412 AND MB6413)

Dear Mr. Katz:

The Commission has issued the enclosed Amendment No. 256 to Renewed Facility Operating License No. DPR-53 and Amendment No. 233 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 in response to your application transmitted by letter dated September 20, 2002.

These amendments adopt the generic changes approved by Technical Specification Task Force (TSTF) change travelers TSTF-349, Revision 1, and TSTF-361, Revision 2, for NUREG-1430, Revision 1, "Standard Technical Specifications, Babcock and Wilcox Plants," dated April 1995, and incorporated into NUREG-1430, Revision 2, dated June 2001. Specifically, Section 3.9.5, "Shutdown Cooling (SDC) and Coolant Circulation - Low Water Level," is revised to add two notes to allow operational changes in the shutdown cooling system.

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/

Peter S. Tam, Senior Project Manager, Section 1
Project Directorate 1
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket Nos. 50-317 and 50-318

Enclosures: 1. Amendment No. 256 to DPR-53
2. Amendment No. 233 to DPR-69
3. Safety Evaluation

cc w/encls: See next page

February 25, 2003

Mr. P. E. Katz, 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: SHUTDOWN COOLING (TAC NOS. MB6412 AND MB6413)

Dear Mr. Katz:

The Commission has issued the enclosed Amendment No. 256 to Renewed Facility Operating License No. DPR-53 and Amendment No. 233 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 in response to your application transmitted by letter dated September 20, 2002.

These amendments adopt the generic changes approved by Technical Specification Task Force (TSTF) change travelers TSTF-349, Revision 1, and TSTF-361, Revision 2, for NUREG-1430, Revision 1, "Standard Technical Specifications, Babcock and Wilcox Plants," dated April 1995, and incorporated into NUREG-1430, Revision 2, dated June 2001. Specifically, Section 3.9.5, "Shutdown Cooling (SDC) and Coolant Circulation - Low Water Level," is revised to add two notes to allow operational changes in the shutdown cooling system.

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/

Peter S. Tam, Senior Project Manager, Section 1
Project Directorate 1
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket Nos. 50-317 and 50-318

Enclosures: 1. Amendment No. 256 to DPR-53
2. Amendment No. 233 to DPR-69
3. Safety Evaluation

cc w/encls: See next page

C:\ORPCheckout\FileNET\ML030560015.wpd

Accession Number: ML030560015

*See previous concurrence

OFFICE	PDI-1/PM	PDI-1/LA	RORP/SC*	OGC*	PDI-1/SC	
NAME	PTam	SLittle	RDennig**	AHodgdon	RLaufer	
DATE	2/24/03	2/23/03	1/8/03	1/27/03	2/24/03	

OFFICIAL RECORD COPY

**SE transmitted by memo of 01/08/03

DATED: February 25, 2003

AMENDMENT NO. 256 TO RENEWED FACILITY OPERATING LICENSE NO. DPR-53
CALVERT CLIFFS UNIT 1

AMENDMENT NO. 233 TO RENEWED FACILITY OPERATING LICENSE NO. DPR-69
CALVERT CLIFFS UNIT 2

PUBLIC
PDI-1 R/F
RLaufer
SLittle
DSkay
OGC
GHill (2)
WBeckner
TTjader
ACRS
BPlatchek, RI

cc: Plant Service list

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. 256
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 September 20, 2002, 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. 256, 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 25, 2003

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. 233
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 September 20, 2002, 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. 233, are hereby incorporated in 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 25, 2003

ATTACHMENT TO LICENSE AMENDMENTS

AMENDMENT NO. 256 TO RENEWED FACILITY OPERATING LICENSE NO. DPR-53

AMENDMENT NO. 233 TO RENEWED FACILITY OPERATING LICENSE NO. DPR-69

DOCKET NOS. 50-317 AND 50-318

Replace the following pages of 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

3.9.5-1
3.9.5-2
3.9.5-3

Insert Pages

3.9.5-1
3.9.5-2
3.9.5-3

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 256 TO RENEWED
FACILITY OPERATING LICENSE NO. DPR-53
AND AMENDMENT NO. 233 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 September 20, 2002, Calvert Cliffs Nuclear Power Plant, Inc. (the licensee) submitted a request for changes to the Calvert Cliffs Nuclear Power Plant, Unit Nos. 1 and 2, Technical Specifications (TSs). The requested changes would adopt the generic TS changes approved by Technical Specification Task Force (TSTF) change travelers TSTF-349, Revision 1, and TSTF-361, Revision 2, for NUREG-1430, Revision 1, "Standard Technical Specifications, Babcock and Wilcox Plants," dated April 1995, and incorporated into NUREG-1430, Revision 2, dated June 2001. Specifically, these proposed changes would revise TS Section 3.9.5, "Shutdown Cooling (SDC) and Coolant Circulation - Low Water Level," for Units 1 and 2 to add two notes to allow operational changes in the SDC system to support operations and testing.

TS Section 3.9.5 currently requires that two SDC loops be operable and one be in operation whenever the water level is lower than 23 feet above the irradiated fuel in the reactor vessel. The two proposed notes would: (1) allow SDC pumps to be de-energized for up to 15 minutes when switching from one train to another; and, (2) allow one SDC loop to be inoperable for up to 2 hours for surveillance testing, provided that the other loop is operable and in operation.

In addition, the licensee stated that Section 3.9.5 Bases will be revised to incorporate the changes associated with change travelers TSTF-349, Revision 1, and TSTF-361, Revision 2.

2.0 REGULATORY EVALUATION

Section 182a of the Atomic Energy Act requires that TSs be included in nuclear power plant operating licenses. In Title 10 of the *Code of Federal Regulations*, Part 50, Section 36 (10 CFR 50.36), the Nuclear Regulatory Commission (NRC, or Commission) established its regulatory requirements related to the content of TSs. Pursuant to 10 CFR 50.36, TSs are required to include items in the following five specific categories related to station operation: (1) safety limits, limiting safety system settings, and limiting control settings; (2) limiting conditions for operation (LCOs); (3) surveillance requirements (SRs); (4) design features; and (5) administrative controls. On February 6, 1987, the Commission issued an "Interim Policy Statement on Technical Specification Improvements for Nuclear Power Reactors," setting forth

criteria for use in determining the content of TSs. During the period 1989 to 1992, utility groups and the NRC staff developed improved Standard Technical Specifications (STS). On July 22, 1993, the Commission issued its Final Policy Statement, which described the safety benefits of the improved STS, and encouraged licensees to use the improved STS as a basis for plant-specific license amendments, and for complete conversions to plant-specific improved TSs. The Calvert Cliffs units converted to the improved STS in 1998.

The industry and the NRC staff have worked to refine the improved STS, and many generic changes have been developed. These approved generic changes have improved the adoption process for the STS plants for which the changes apply. Generic changes to the STS NUREGs are proposed to the NRC by Nuclear Energy Institute TSTF. After NRC approval, these TSTF changes, such as TSTF-349, Revision 1, and TSTF-361, Revision 2, are made available for adoption by plants.

3.0 TECHNICAL EVALUATION

The NRC staff has reviewed the licensee's regulatory and technical analyses in support of its proposed license amendment, which are described in the licensee's September 20, 2002, application. The evaluation below supports the conclusion 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.

The SDC System is used to remove core decay heat and reactor coolant sensible heat during unit cooldown and cold shutdown, and to provide adequate mixing of borated coolant. Currently, Section 3.9.5 requires two SDC loops to be operable and one in operation when a unit is in Mode 6 with <23 feet of water above the top of irradiated fuel assemblies in the reactor vessel. The licensee proposed to add two notes to allow operational changes in the SDC system to support operations and testing. The two proposed notes would: (1) allow SDC pumps to be de-energized for up to 15 minutes when switching from one train to another; and, (2) allow one SDC loop to be inoperable for up to 2 hours for surveillance testing, provided that the other loop is operable and in operation.

The first proposed change would allow both SDC pumps to be de-energized for no more than 15 minutes in order to switch from one pump to another. This is a short period of time to be without coolant flow through the reactor core. There are three restrictions to entering this condition: (1) the core outlet temperature must be maintained more than 10 degrees below saturation temperature, to ensure that bulk boiling does not occur; (2) no operations are permitted that would reduce boron concentration, so that the Updated Final Safety Analysis Report (UFSAR) analysis is applicable; and (3) no further draining of the reactor coolant system (RCS) is permitted while switching pumps. These restrictions will ensure that the SDC system will continue to adequately remove heat from the RCS, even with both pumps de-energized for a short period of time.

The second proposed change would allow one of the SDC loops to be inoperable for up to 2 hours for required surveillance testing, provided the other SDC loop is operable and operating. The loss of one loop for a limited time will reduce the heat removal capability of the system. Therefore, plant configuration and activities need to be carefully considered before entering this

condition. Consideration must be given to such factors as: time to bulk boiling in the core, potential RCS draining evolutions, and the capability to inject borated water into the core if needed.

The NRC staff notes that both of these proposed changes are consistent with allowances that are currently in TS Section 3.4.8, "RSC - Loops Mode 5, Loops Not Filled," which is consistent with the plant condition allowed by TS Section 3.9.5.

Based on the above evaluations, the NRC staff agrees that the SDC loops and pumps can be removed from service, as proposed by the licensee, for a limited amount of time with operational restrictions as described above. Under such conditions, the UFSAR safety analysis assumptions will remain applicable. The approval of these proposed changes is consistent with the guidance of TSTF-349, Revision 1, and TSTF-361, Revision 2. Therefore, the proposed changes are acceptable.

4.0 STATE CONSULTATION

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

5.0 ENVIRONMENTAL CONSIDERATION

The amendments change 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 amendments involve 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 previously issued a proposed finding that the amendments involve no significant hazards consideration, and there has been no public comment on such finding (67 FR 66007). Accordingly, the amendments meet 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.

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 amendments will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: T. R. Tjader

Date: February 25, 2003

Calvert Cliffs Nuclear Power Plant
Unit Nos. 1 and 2

cc:

President
Calvert County Board of
Commissioners
175 Main Street
Prince Frederick, MD 20678

James Petro, Esquire
Counsel
Constellation Power Source
111 Market Street
Baltimore, MD 21202

Jay E. Silberg, Esquire
Shaw, Pittman, Potts, and Trowbridge
2300 N Street, NW
Washington, DC 20037

Mark Geckle
Calvert Cliffs Nuclear Power Plant
1650 Calvert Cliffs Parkway
Lusby, MD 20657-4702

Resident Inspector
U.S. Nuclear Regulatory
Commission
P.O. Box 287
St. Leonard, MD 20685

Mr. Richard I. McLean, Manager
Nuclear Programs
Power Plant Research Program
Maryland Dept. of Natural Resources
Tawes State Office Building, B3
Annapolis, MD 21401

Regional Administrator, Region I
U.S. Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, PA 19406

Kristen A. Burger, Esquire
Maryland People's Counsel
6 St. Paul Centre
Suite 2102
Baltimore, MD 21202-1631

Patricia T. Birnie, Esquire
Co-Director
Maryland Safe Energy Coalition
P.O. Box 33111
Baltimore, MD 21218

Mr. Loren F. Donatell
NRC Technical Training Center
5700 Brainerd Road
Chattanooga, TN 37411-4017