

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 2700 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. 287, 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 2700 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. 264 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.

3.7 PLANT SYSTEMS

3.7.8 Control Room Emergency Ventilation System (CREVS)

LCO 3.7.8 Two CREVS trains shall be OPERABLE.

----- NOTES -----

1. Only one CREVS redundant component is required to be OPERABLE during movement of irradiated fuel assemblies when both Units are in MODE 5 or 6, or defueled.
  2. Only one CREVS train is required to be OPERABLE for the movement of irradiated fuel assemblies.
  3. The control room envelope (CRE) boundary may be opened intermittently under administrative control.
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APPLICABILITY: MODES 1, 2, 3, 4,  
During movement of irradiated fuel assemblies.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or more ducts with one outside air intake isolation valve inoperable in MODE 1, 2, 3, or 4.	A.1 Close the OPERABLE outside air intake valve in each affected duct.	Immediately
B. Toilet area exhaust isolation valve inoperable.	B.1 Restore valve to OPERABLE status.	24 hours

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
C. One exhaust to atmosphere isolation valve inoperable in MODE 1, 2, 3, or 4.	C.1 Restore valve to OPERABLE status.	7 days
D. One or more CREVS trains inoperable due to inoperable CRE boundary in MODE 1, 2, 3, or 4.	D.1 Initiate action to implement mitigating actions.	Immediately
	<u>AND</u>	
	D.2 Verify mitigating actions ensure CRE occupant exposures to radiological, chemical, and smoke hazards will not exceed limits.	24 hours
E. One CREVS train inoperable for reasons other than Condition A, B, C, or D in MODE 1, 2, 3, or 4.	<u>AND</u>	
	D.3 Restore CRE boundary to OPERABLE status.	90 days
	E.1 Restore CREVS train to OPERABLE status.	7 days

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>F. Required Action and associated Completion Time of Condition A, B, C, D, or E not met in MODE 1, 2, 3, or 4.</p>	<p>F.1 Be in MODE 3. <u>AND</u> F.2 Be in MODE 5.</p>	<p>6 hours  36 hours</p>
<p>G. Required Action and associated Completion Time of Condition B not met during movement of irradiated fuel assemblies.</p> <p><u>OR</u></p> <p>One or more CREVS trains inoperable due to an inoperable CRE boundary during movement of irradiated fuel assemblies.</p>	<p>G.1 Suspend movement of irradiated fuel assemblies.</p>	<p>Immediately</p>

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>H. Two CREVS trains inoperable for reasons other than Condition A, B, C, or D in MODE 1, 2, 3, 4 or during movement of irradiated fuel assemblies.</p> <p><u>OR</u></p> <p>One or more ducts with two outside air intake isolation valves inoperable in MODE 1, 2, 3, 4 or during movement of irradiated fuel assemblies.</p> <p><u>OR</u></p> <p>Two exhaust to atmosphere isolation valves inoperable in MODE 1, 2, 3, 4 or during movement of irradiated fuel assemblies.</p>	<p>H.1 Enter LCO 3.0.3.</p>	<p>Immediately</p>
	<p><u>AND</u></p> <p>H.2 Suspend movement of irradiated fuel assemblies.</p>	<p>Immediately</p>

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.7.8.1	Operate each required CREVS filter train for $\geq 15$ minutes.	31 days
SR 3.7.8.2	Perform required CREVS filter testing in accordance with the Ventilation Filter Testing Program (VFTP).	In accordance with the VFTP
SR 3.7.8.3	Verify each CREVS train actuates on an actual or simulated actuation signal.	24 months
SR 3.7.8.4	Perform required CRE unfiltered air inleakage testing in accordance with the Control Room Envelope Habitability Program.	In accordance with the Control Room Envelope Habitability Program

## 5.5 Programs and Manuals

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- b. Air lock testing acceptance criteria are:
1. Overall air lock leakage rate is  $\leq 0.05 L_a$  when tested at  $\geq P_a$ .
  2. For each door, leakage rate is  $\leq 0.0002 L_a$  when pressurized to  $\geq 15$  psig.

The provisions of SR 3.0.2 do not apply to the test frequencies specified in the Containment Leakage Rate Testing Program.

The provisions of SR 3.0.3 are applicable to the Containment Leakage Rate Testing Program.

### 5.5.17 Control Room Envelope Habitability Program

A Control Room Envelope (CRE) Habitability Program shall be established and implemented to ensure that CRE habitability is maintained such that, with an OPERABLE Control Room Emergency Ventilation System (CREVS), CRE occupants can control the reactor safely under normal conditions and maintain it in a safe condition following a radiological event, hazardous chemical release, or a smoke challenge. The program shall ensure that adequate radiation protection is provided to permit access and occupancy of the CRE under design basis accident (DBA) conditions without personnel receiving radiation exposures in excess of 5 rem whole body or its equivalent to any part of the body for the duration of the accident. The program shall include the following elements:

- a. The definition of CRE and the CRE boundary.
- b. Requirements for maintaining CRE boundary in its design condition including configuration control and preventive maintenance.
- c. Requirements for (i) determining the unfiltered air inleakage past the CRE boundary into the CRE in accordance with the testing methods and at the Frequencies specified in Sections C.1 and C.2 of Regulatory Guide 1.197, "Demonstrating Control Room Envelope Integrity at Nuclear Power Reactors,"

## 5.5 Programs and Manuals

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Revision 0, May 2003, and (ii) assessing CRE habitability at the Frequencies specified in Sections C.1 and C.2 of Regulatory Guide 1.197, Revision 0.

- d. License controlled programs will be used to verify the integrity of the CRE boundary. Conditions that generate relevant information from those programs will be entered into the corrective action process and shall be trended and used as part of the 36 month assessments of the CRE boundary.
  - e. The quantitative limits on unfiltered air leakage into the CRE. These limits shall be stated in a manner to allow direct comparison to the unfiltered air leakage measured by the testing described in paragraph c. The unfiltered air leakage limit for radiological challenges is the leakage flow rate assumed in the licensing basis analyses of DBA consequences. Unfiltered air leakage limits for hazardous chemicals must ensure that exposure of CRE occupants to these hazards will be within the assumptions in the licensing basis.
  - f. The provisions of SR 3.0.2 are applicable to the Frequencies for assessing CRE habitability, determining CRE unfiltered leakage, and assessing the CRE boundary as required by paragraphs c and d respectively.
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<u>Amendment No.</u>	<u>Additional Conditions</u>	<u>Implementation Date</u>
246	This amendment requires the licensee to incorporate in the Updated Final Safety Analysis Report (UFSAR) changes associated with the aircraft hazards analysis which was evaluated by the staff in the Safety Evaluation dated August 29, 2001.	Next update of the UFSAR
248	This amendment requires the licensee to incorporate in the Updated Final Safety Analysis Report (UFSAR) changes associated with the loss of feedwater flow analysis which was evaluated by the staff in the safety evaluation dated February 26, 2002.	Next update of the UFSAR
267	This amendment requires the licensee develop a long-term coupon surveillance program for the Carborundum samples. This program must verify that the Carborundum degradation rates assumed in the licensee's analyses to prove subcriticality, as required by 10 CFR 50.68, remain valid over the seventy-year life span of the Unit I spent fuel pool. The licensee must submit this modified coupon surveillance program to the NRC under the 10 CFR 50.90 requirements for its review and approval.	3 years after approval of this amendment
287	Upon implementation of Amendment No. 287 adopting TSTF-448, Revision 3, the determination of Control Room envelope unfiltered air inleakage as required by Surveillance Requirement (SR) 3.7.8.4 in accordance with Technical Specification 5.5.17.c.(i), and the assessment of Control Room envelope habitability as required by Technical Specification 5.5.17.c.(ii) shall be considered met. Following implementation:  (a) The first performance of SR 3.7.8.4 in accordance with Technical Specification 5.5.17.c.(i), shall be within the specified	Within 60 days following completion of the installation and testing of the plant modifications described in Amendment No. 281 issued on August 29, 2007.

Amendment No.

Additional Conditions

Implementation Date

Frequency of 6 years (plus the 18 month allowance of SR 3.0.2) as measured from December 13, 2004, the date of the most successful tracer gas test, or within the next 18 months if the time period since the most recent successful tracer gas test is greater than 6 years.

(b) The first performance of the periodic assessment of Control Room envelope habitability per Technical Specification 5.5.17.c.(ii) shall be within the next 9 months, because the time period since the most recent successful tracer gas test (December 13, 2004) is greater than 3 years.

<u>Amendment No.</u>	<u>Additional Conditions</u>	<u>Implementation Date</u>
221	This amendment requires the licensee to incorporate in the Updated Final Safety Analysis Report (UFSAR) changes associated with the aircraft hazards analysis which was evaluated by the staff in the Safety Evaluation dated August 29, 2001.	Next update of the UFSAR
224	This amendment requires the licensee to incorporate in the Updated Final Safety Analysis Report (UFSAR) changes associated with the loss of feedwater flow analysis which was evaluated by the staff in the safety evaluation dated February 26, 2002.	Next update of the UFSAR
264	<p>Upon implementation of Amendment No. 264 adopting TSTF-448, Revision 3, the determination of Control Room envelope unfiltered air inleakage as required by Surveillance Requirement (SR) 3.7.8.4 in accordance with Technical Specification 5.5.17.c.(i), and the assessment of Control Room envelope habitability as required by Technical Specification 5.5.17.c.(ii) shall be considered met. Following implementation:</p> <p>(a) The first performance of SR 3.7.8.4 in accordance with Technical Specification 5.5.17.c.(i), shall be within the specified Frequency of 6 years (plus the 18 month allowance of SR 3.0.2) as measured from December 13, 2004, the date of the most successful tracer gas test, or within the next 18 months if the time period since the most recent successful tracer gas test is greater than 6 years.</p> <p>(b) The first performance of the periodic assessment of Control Room envelope habitability per Technical Specification 5.5.17.c.(ii) shall be within the next 9 months, because the time period since the most recent successful tracer gas test (December 13, 2004) is greater than 3 years.</p>	Within 60 days following completion of the installation and testing of the plant modifications described in Amendment No. 258 issued on August 29, 2007.