

Mr. Charles H. Cruse
 Vice President - Nuclear Energy
 Baltimore Gas and Electric Company
 Calvert Cliffs Nuclear Power Plant
 1650 Calvert Cliffs Parkway
 Lusby, MD 20657-4702

March 17, 1998

SUBJECT: ISSUANCE OF AMENDMENTS FOR CALVERT CLIFFS NUCLEAR POWER PLANT
 UNIT NO. 1 (TAC NO. M99849) AND UNIT NO. 2 (TAC NO. M99850)

Dear Mr. Cruse:

The Commission has issued the enclosed Amendment No. 226 to Facility Operating License No. DPR-53 and Amendment No. 200 to Facility Operating License No. DPR-69 for the Calvert Cliffs Nuclear Power Plant, Unit Nos. 1 and 2, respectively. The amendments consist of changes to the Technical Specifications (TSs) in response to your application transmitted by letter dated October 22, 1997.

The amendments change the TSs to incorporate both steady state and transient degraded voltage setpoints as opposed to the current single degraded voltage setpoints. Additionally, the TS decreases the 4 kV voltage range of the emergency diesel generators to assure that the new steady state degraded voltage relays are not actuated during testing.

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,

ORIGINAL SIGNED BY:

Alexander W. Dromerick, Senior Project Manager
 Project Directorate I-1
 Division of Reactor Projects - I/II
 Office of Nuclear Reactor Regulation

Docket Nos. 50-317
 and 50-318

- Enclosures: 1. Amendment No. 226 to DPR-53
 2. Amendment No. 200 to DPR-69
 3. Safety Evaluation

cc w/encls: See next page

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NAME	ADromerick/rsl	SLittle	SBajwa		
DATE	02/19/98	02/17/98	02/17/98	02/17/98	

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DATED: March 17, 1998

AMENDMENT NO. 226 TO FACILITY OPERATING LICENSE NO. DPR-53-CALVERT CLIFFS
UNIT 1

AMENDMENT NO. 200 TO FACILITY OPERATING LICENSE NO. DPR-69-CALVERT CLIFFS
UNIT 2

Docket File

PUBLIC

PDI-1 Reading

J. Zwolinski, 14/E/4

S. Bajwa

S. Little

A. Dromerick

N. K. Trehan

OGC

G. Hill (2), T-5 C3

W. Beckner, 013H3

ACRS

L. Doerflein, Region I

cc: Plant Service list

DATED: March 17, 1998

AMENDMENT NO. 226 TO FACILITY OPERATING LICENSE NO. DPR-53-CALVERT CLIFFS
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AMENDMENT NO. 200 TO FACILITY OPERATING LICENSE NO. DPR-69-CALVERT CLIFFS
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OFFICE	PM:PDI-1	LA:PDI-1	D:PDI-1	OGC
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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

March 17, 1998

Mr. Charles H. Cruse
Vice President - Nuclear Energy
Baltimore Gas and Electric Company
Calvert Cliffs Nuclear Power Plant
1650 Calvert Cliffs Parkway
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UNIT NO. 1 (TAC NO. M99849) AND UNIT NO. 2 (TAC NO. M99850)

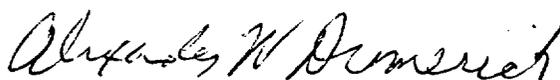
Dear Mr. Cruse:

The Commission has issued the enclosed Amendment No.226 to Facility Operating License No. DPR-53 and Amendment No. 200 to Facility Operating License No. DPR-69 for the Calvert Cliffs Nuclear Power Plant, Unit Nos. 1 and 2, respectively. The amendments consist of changes to the Technical Specifications (TSs) in response to your application transmitted by letter dated October 22, 1997.

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and 50-318

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cc w/encls: See next page

Mr. Charles H. Cruse
Baltimore Gas & Electric Company

Calvert Cliffs Nuclear Power Plant

cc:

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

BALTIMORE GAS AND ELECTRIC COMPANY

DOCKET NO. 50-317

CALVERT CLIFFS NUCLEAR POWER PLANT UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 226
License No. DPR-53

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Baltimore Gas and Electric Company (the licensee) dated October 22, 1997, 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 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. 226, 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 during the spring 1998 refueling outage.

FOR THE NUCLEAR REGULATORY COMMISSION



S. Singh Bajwa, Director
Project Directorate I-1
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: March 17, 1998



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

BALTIMORE GAS AND ELECTRIC COMPANY

DOCKET NO. 50-318

CALVERT CLIFFS NUCLEAR POWER PLANT, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 200
License No. DPR-69

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Baltimore Gas and Electric Company (the licensee) dated October 22, 1997, 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 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. 200, 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 during the spring 1998 refueling outage.

FOR THE NUCLEAR REGULATORY COMMISSION



S. Singh Bajwa, Director
Project Directorate I-1
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: March 17, 1998

ATTACHMENT TO LICENSE AMENDMENTS

AMENDMENT NO226 FACILITY OPERATING LICENSE NO. DPR-53

AMENDMENT NO200 FACILITY OPERATING LICENSE NO. DPR-69

DOCKET NOS. 50-317 AND 50-318

Revise Appendix A as follows:

Remove Pages

3/4 3-12
3/4 3-17
3/4 3-21
3/4 8-4

Insert Pages

3/4 3-12
3/4 3-17
3/4 3-21
3/4 8-4

*Pages that did not change, but are overleaf.

TABLE 3.3-3 (Continued)

ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION

<u>FUNCTIONAL UNIT</u>	<u>TOTAL NO. OF CHANNELS</u>	<u>CHANNELS TO TRIP</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>APPLICABLE MODES</u>	<u>ACTION</u>
6. CONTAINMENT PURGE VALVES ISOLATION					
a. Manual (Purge Valve Control Switches)	1/valve	1/valve	1/valve	6**	8
b. Containment Radiation - High Area Monitor	4	2	3	6**	8
7. LOSS OF POWER					
a. 4.16 kv Emergency Bus Undervoltage (Loss of Voltage)	4/Bus	2/Bus	3/Bus	1, 2, 3	7*
b. 4.16 kv Emergency Bus Undervoltage (Transient Degraded Voltage)	4/Bus	2/Bus	3/Bus	1, 2, 3	7*
c. 4.16 kv Emergency Bus Undervoltage (Steady State Degraded Voltage)	4/Bus	2/Bus	3/Bus	1, 2, 3	7*

TABLE 3.3-4 (Continued)

ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION TRIP VALUES

<u>FUNCTIONAL UNIT</u>	<u>TRIP SETPOINT</u>	<u>ALLOWABLE VALUES</u>
5. CONTAINMENT SUMP RECIRCULATION (RAS)		
a. Manual RAS (Trip Buttons)	Not Applicable	Not Applicable
b. Refueling Water Tank - Low	≥ 24 inches above tank bottom	≥ 24 inches above tank bottom
6. CONTAINMENT PURGE VALVES ISOLATION		
a. Manual (PURGE Valve Control Switches)	Not Applicable	Not Applicable
b. Containment Radiation - High Area Monitor	≤ 220 mr/hr	≤ 220 mr/hr
7. LOSS OF POWER		
a. 4.16 kv Emergency Bus Undervoltage (Loss of Voltage)	2450 ± 105 volts with a 2 ± 0.2 second time delay	2450 ± 105 volts with a 2 ± 0.2 second time delay
b. 4.16 kv Emergency Bus Undervoltage (Transient Degraded Voltage)	3710 ± 80 volts with a 8 ± 0.4 second time delay	3710 ± 80 volts with a 8 ± 0.4 second time delay
c. 4.16 kv Emergency Bus Undervoltage (Steady State Degraded Voltage)	3900 ± 80 volts with a 101 ± 3.5 second time delay	3900 ± 80 volts with a 101 ± 3.5 second time delay

TABLE 4.3-2 (Continued)

ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>FUNCTIONAL UNIT</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>MODES IN WHICH SURVEILLANCE REQUIRED</u>
7. LOSS OF POWER				
a. 4.16 kv Emergency Bus Undervoltage (Loss of Voltage)	NA	REFUELING INTERVAL	Q	1, 2, 3
b. 4.16 kv Emergency Bus Undervoltage (Transient Degraded Voltage)	NA	REFUELING INTERVAL	Q	1, 2, 3
c. 4.16 kv Emergency Bus Undervoltage (Steady State Degraded Voltage)	NA	REFUELING INTERVAL	Q	1, 2, 3
8. CVCS ISOLATION				
West Penetration Room/Letdown Heat Exchanger Room Pressure - High	NA	REFUELING INTERVAL	Q	1, 2, 3, 4
9. AUXILIARY FEEDWATER				
a. Manual (Trip Buttons)	NA	NA	REFUELING INTERVAL	NA
b. Steam Generator Level - Low	S	REFUELING INTERVAL	Q	1, 2, 3
c. Steam Generator ΔP - High	S	REFUELING INTERVAL	Q	1, 2, 3
d. Automatic Actuation Logic	NA	NA	Q ⁽¹⁾	1, 2, 3

3/4.8 ELECTRICAL POWER SYSTEMS

SURVEILLANCE REQUIREMENTS

4.8.1.1.1 Each required independent circuit between the offsite transmission network and the onsite Class 1E Distribution System shall be:

- a. Demonstrated **OPERABLE**, as follows:
 1. For each 500 kV offsite circuit, at least once per 7 days by verifying correct breaker alignments and indicated power availability.
 2. For the 69 kV SMECO offsite power circuit, within one hour of substitution for a 500 kV offsite power circuit, and at least once per 8 hours thereafter during use by verifying correct breaker alignments and indicated power availability; and
- b. Demonstrated **OPERABLE** at least once per **REFUELING INTERVAL** during shutdown by manually transferring unit power supply from the normal circuit to the alternate circuit.

4.8.1.1.2 Each diesel generator shall be demonstrated **OPERABLE**:

- a. At least once per 31 days on a **STAGGERED TEST BASIS** by:
 1. Verifying the fuel level in the day fuel tank.
 2. Verifying the fuel level in the fuel storage tank.
 3. Verifying the fuel transfer pump can be started and transfers fuel from the storage system to the day tank.
 4. Verifying the diesel starts and achieves a generator voltage and frequency of 4160 +240, -100 volts and 60 ± 1.2 Hz, respectively.*
 5. Verifying the generator is synchronized, loaded to ≥ 4000 kW for No. 1A Emergency Diesel Generator or ≥ 2700 kW for No. 1B Emergency Diesel Generator, and operates for ≥ 60 minutes.
 6. Verifying the diesel generator is aligned to provide standby power to the associated emergency busses.
 7. Verifying that the automatic load sequencer timer is **OPERABLE** with the interval between each load block within $\pm 10\%$ of its design interval.

* All engine starts for the purpose of this Surveillance Requirement may be preceded by an engine prelube period and/or other warmup procedures recommended by the manufacturer so that mechanical wear and stress on the diesel engine is minimized.

TABLE 3.3-3 (Continued)**ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION**

<u>FUNCTIONAL UNIT</u>	<u>TOTAL NO. OF CHANNELS</u>	<u>CHANNELS TO TRIP</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>APPLICABLE MODES</u>	<u>ACTION</u>
6. CONTAINMENT PURGE VALVES ISOLATION					
a. Manual (Purge Valve Control Switches)	1/valve	1/valve	1/valve	6**	8
b. Containment Radiation - High Area Monitor	4	2	3	6**	8
7. LOSS OF POWER					
a. 4.16 kv Emergency Bus Undervoltage (Loss of Voltage)	4/Bus	2/Bus	3/Bus	1, 2, 3	7*
b. 4.16 kv Emergency Bus Undervoltage (Transient Degraded Voltage)	4/Bus	2/Bus	3/Bus	1, 2, 3	7*
c. 4.16 kv Emergency Bus Undervoltage (Steady State Degraded Voltage)	4/Bus	2/Bus	3/Bus	1, 2, 3	7*

TABLE 3.3-4 (Continued)

ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION TRIP VALUES

<u>FUNCTIONAL UNIT</u>	<u>TRIP SETPOINT</u>	<u>ALLOWABLE VALUES</u>
5. CONTAINMENT SUMP RECIRCULATION (RAS)		
a. Manual RAS (Trip Buttons)	Not Applicable	Not Applicable
b. Refueling Water Tank - Low	≥ 24 inches above tank bottom	≥ 24 inches above tank bottom
6. CONTAINMENT PURGE VALVES ISOLATION		
a. Manual (Purge Valve Control Switches)	Not Applicable	Not Applicable
b. Containment Radiation - High Area Monitor	≤ 220 mr/hr	≤ 220 mr/hr
7. LOSS OF POWER		
a. 4.16 kv Emergency Bus Undervoltage (Loss of Voltage)	2450 \pm 105 volts with a 2 \pm 0.2 second time delay	2450 \pm 105 volts with a 2 \pm 0.2 second time delay
b. 4.16 kv Emergency Bus Undervoltage (Transient Degraded Voltage)	3710 \pm 80 volts with a 8 \pm 0.4 second time delay	3710 \pm 80 volts with a 8 \pm 0.4 second time delay
c. 4.16 kv Emergency Bus Undervoltage (Steady State Degraded Voltage)	3900 \pm 80 volts with a 101 \pm 3.5 second time delay	3900 \pm 80 volts with a 101 \pm 3.5 second time delay

TABLE 4.3-2 (Continued)

ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>FUNCTIONAL UNIT</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>MODES IN WHICH SURVEILLANCE REQUIRED</u>
7. LOSS OF POWER				
a. 4.16 kv Emergency Bus Undervoltage (Loss of Voltage)	NA	REFUELING INTERVAL	Q	1, 2, 3
b. 4.16 kv Emergency Bus Undervoltage (Transient Degraded Voltage)	NA	REFUELING INTERVAL	Q	1, 2, 3
c. 4.16 kv Emergency Bus Undervoltage (Steady State Degraded Voltage)	NA	REFUELING INTERVAL	Q	1, 2, 3
8. CVCS ISOLATION				
West Penetration Room/Letdown Heat Exchanger Room Pressure - High	NA	REFUELING INTERVAL	Q	1, 2, 3, 4
9. AUXILIARY FEEDWATER				
a. Manual (Trip Buttons)	NA	NA	REFUELING INTERVAL	NA
b. Steam Generator Level - Low	S	REFUELING INTERVAL	Q	1, 2, 3
c. Steam Generator ΔP - High	S	REFUELING INTERVAL	Q	1, 2, 3
d. Automatic Actuation Logic	NA	NA	Q ⁽¹⁾	1, 2, 3

3/4.8 ELECTRICAL POWER SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

2. For the 69 kV SMECO offsite power circuit, within one hour of substitution for a 500 kV offsite power circuit, and at least once per 8 hours thereafter during use by verifying correct breaker alignments and indicated power availability; and
- b. Demonstrated **OPERABLE** at least once per **REFUELING INTERVAL** during shutdown by manually transferring unit power supply from the normal circuit to the alternate circuit.
- 4.8.1.1.2 Each diesel generator shall be demonstrated **OPERABLE**:
- a. At least once per 31 days on a **STAGGERED TEST BASIS** by:
 1. Verifying the fuel level in the day fuel tank.
 2. Verifying the fuel level in the fuel storage tank.
 3. Verifying the fuel transfer pump can be started and transfers fuel from the storage system to the day tank.
 4. Verifying the diesel starts and achieves a generator voltage and frequency of 4160 +240, -100 volts and 60 ± 1.2 Hz, respectively.*
 5. Verifying the generator is synchronized, loaded to ≥ 2700 kW, and operates for ≥ 60 minutes.
 6. Verifying the diesel generator is aligned to provide standby power to the associated emergency busses.
 7. Verifying that the automatic load sequencer timer is **OPERABLE** with the interval between each load block within $\pm 10\%$ of its design interval.
 - b. At least once per 92 days by verifying that a sample of diesel fuel from the fuel storage tank is within the acceptable limits specified in Table 1 of ASTM D975-81 when checked for viscosity, water and sediment.

* All engine starts for the purpose of this Surveillance Requirement may be preceded by an engine prelube period and/or other warmup procedures recommended by the manufacturer so that mechanical wear and stress on the diesel engine is minimized.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 226 TO FACILITY OPERATING LICENSE NO. DPR-53
AND AMENDMENT NO. 200 TO FACILITY OPERATING LICENSE NO. DPR-69
BALTIMORE GAS AND ELECTRIC COMPANY
CALVERT CLIFFS NUCLEAR POWER PLANT, UNIT NOS. 1 AND 2
DOCKET NOS. 50-317 AND 50-318

1.0 INTRODUCTION

An Electrical Distribution System Functional Inspection (EDSFI) identified a weakness associated with the 4 kV emergency bus degraded voltage relay settings at Calvert Cliffs Nuclear Power Plant, Unit Nos. 1 and 2. Based on the review of voltage calculations, the inspection determined that 75% of rated equipment voltage was not always available for starting of safety-related motors. To address the concerns, the licensee, in a letter dated October 22, 1997, proposed a Technical Specification change to incorporate both steady state and transient degraded voltage setpoints, as opposed to the current single degraded voltage setpoint. Additionally, the licensee proposed to decrease the 4 kV voltage settings to ensure that the new steady state relays are not actuated during testing of the emergency diesel generators (EDG). The licensee also proposed that the changes described with this amendment apply to the Improved Technical Specifications (ITS) and submitted the affected ITS and associated bases.

2.0 DISCUSSION AND EVALUATION

At Calvert Cliffs, each 4 kV emergency bus is monitored for loss of voltage and degraded voltage by eight relays. Four relays provide loss of voltage input signals to the Engineered Safety Features Actuation System (ESFAS), and the four remaining relays provide degraded voltage input signals to ESFAS. The safety function of the relays is to ensure that the preferred power source is disconnected from the 4 kV emergency buses during loss of voltage and degraded voltage conditions. The relay inputs to ESFAS also ensure that the EDGs are started and loaded. These actions ensure that the minimum terminal voltage necessary to start and run all safety-related equipment is maintained. An EDSFI identified an apparent weakness in the adequacy of degraded voltage relay settings. The inspection determined that 75% rated equipment voltage was not always available for starting of safety-related motors. Design requirements for safety-related electrical equipment states that equipment must be capable of starting at 75% of nominal voltage. To ensure that adequate terminal voltage to all safety-related equipment is available, the licensee is replacing the existing loss of voltage and degraded voltage relays for each channel with a single three element relay for each channel. Two of the elements in each new relay monitor for loss of voltage and degraded voltage similar to the existing scheme. The third element monitors for steady state degraded voltage.

The licensee has proposed to change the degraded (transient) voltage setpoint from 3628 +/-25 Volts to 3710 +/-80 Volts in Current TS Table 3.3-4. Design requirements for safety-related electrical equipment states that equipment must be capable of starting at 75% of nominal

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voltage. Based on the most recent calculations, a minimum voltage of 3630 Volts is required to ensure at least 75% of rated equipment voltage is available to No. 13 Charging pump, which is the most limiting electrical load. The new setpoint ensures that at least 75% of the required terminal voltage is available to the most limiting load.

The licensee has also proposed to revise Current Technical Specifications Table 3.3-4 to include the new Steady State Degraded Voltage element of the 3 element relay. The licensee has established the new steady state degraded voltage relay setpoint at 3900 +/-80 Volts. The setpoint ensures that there is at least 90% of load equipment voltage available to No. 13 Charging pump. The time delay associated with this actuation OS 101 +/-3.5 seconds. The time delay provides adequate time for voltage regulator to recover bus voltage following a voltage swing on the 500 kV system and time for the EDG voltage regulator to stabilize. The transient and steady state degraded voltage relay settings have been established to include calibration tolerances, potential transformer correction factors, test equipment uncertainties, and relay drift.

The licensee has also proposed to revise Current Surveillance Requirement 4.8.1.1.2.a.4 to require a more conservative voltage range during EDG testing. The surveillance requirement verifies that the EDG voltage regulator is maintaining an acceptable voltage. The licensee proposed acceptable range of 4160 +/-420 Volts to 4160 +240/-100 Volts. The low end value provides adequate margin to ensure the steady state degraded voltage relays do not actuate during EDG surveillance testing. The upper end value is established at 4400 Volts and ensures that the 4 kV motors are operated within their voltage rating of 4 kV +/- 10 percent.

The licensee has also proposed to convert the above Sections of the TS to the Improved Technical Specifications (ITS) NUREG-1432, "Standard Technical Specification - Combustion Engineering Plants." In the process, they identified certain changes in the electrical area that are different from the ITS. The addition of four sensor modules and measurement channels per EDG for the Steady State Degraded Voltage function and the designation of the existing degraded voltage function to Transient Degraded Voltage function and associated Basis reflect the plant-specific design. The ITS specifies two loss-of-voltage (LOV) functions; i.e., loss of voltage and degraded voltage, for each 4.16 kV vital bus. Based on the above changes, the Calvert Cliffs TS now specifies three LOVs Functions; i.e., Loss of voltage, Transient Degraded voltage, and Steady State Degraded voltage, for each 4.16 kV emergency bus.

The staff evaluated the licensee's submittal and concluded that the transient degraded voltage setpoint and new steady state degraded voltage features ensures adequate terminal voltage to all safety-related electrical equipment during steady state and transient voltage conditions and the change is, therefore, acceptable. The staff also evaluated the new EDG voltage range and concluded that the low end value provides adequate margin to ensure that the steady state degraded voltage relays do not actuate during EDG surveillance testing and the upper end value ensures that the 4 kV motors are operated within their voltage rating and the change is, therefore, acceptable. The staff also finds that the conversion of this portion of the current TS to ITS is in accordance with the Improved Standard Technical Specifications and the Calvert Cliffs plant-specific design and is, therefore, acceptable.

3.0 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.

4.0 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 and changes surveillance requirements. 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 (62 FR 61838). 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.

5.0 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.

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