

NUCLEAR REGULATORY COMMISSION WASHINGTON, D. C. 20555

BALTIMORE GAS AND ELECTRIC COMPANY

DOCKET NO. 50-317

CALVERT CLIFFS NUCLEAR POWER PLANT UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 114 License No. DPR-53

- The Nuclear Regulatory Tommission (the Commission) has found that:
 - A. The applications for amendment by Baltimore Gas & Electric Company (the licensee) dated April 26, 1985 and June 28, 1985, comply with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission: rules and regulations set forth in 10 CFR Chapter I:
 - P. The facility will operate in conformity with the applications, 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.

 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 Appendix A, as revised through Amendment No. 114 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.

FOR THE NUCLEAR REGULATORY COMMISSION

Ashok C. Thadani, Director PWR Project Directorate #8 Division of PWR Licensing-B

Attachment: Changes to the Technical Specifications

Date of Issuance: February 20, 1986

ATTACHMENT TO LICENSE AMENDMENT NO. 114

FACILTIY OPERATING LICENSE NO. DPR-53

DOCKET NO. 50-317

Replace the following pages of the Appendix "A" Technical Specifications with the enclosed pages. The revised pages are identified by amendment number and contain vertical lines indicating the areas of change. The corresponding overleaf pages are provided to maintain document completeness.

Remove Pages

Insert Pages

3/4 8-8 through 3/4 8-11

3/4 8-8 through 3/4 8-11

A.C. DISTRIBUTION - SHUTDOWN

LIMITING CONDITION FOR OPERATION

- 3.8.2.2 As a minimum, the following A.C. electrical busses shall be OPERABLE and energized from sources of power other than a diesel generator but aligned to an OPERABLE diesel generator:
 - 1 4160 volt Emergency Bus
 - 1 480 volt Emergency Bus
 - 2 120 volt A.C. Vital Busses

APPLICABILITY: MODES 5 and 6

ACTION:

With less than the above complement of A.C. busses OPERABLE and energized, establish CONTAINMENT INTEGRITY within 8 hours.

SURVEILLANCE REQUIREMENTS

4.8.2.2 The specified A.C. busses shall be determined OPERABLE and energized from A.C. sources other than the diesel generators at least once per 7 days by verifying correct breaker alignment and indicated power availability.

D.C. DISTRIBUTION - OPERATING

LIMITING CONDITION FOR OPERATION

3.8.2.3 The following D.C. bus trains shall be energized and OPERABLE:

- 125-volt D.C. bus No. 11, the associated 125-volt D.C. battery bank or as necessary the Reserve Battery, and one associated full capacity charger.
- 125-volt D.C. bus No. 12, the associated 125-volt D.C. battery bank or as necessary the Reserve Battery, and one associated full capacity charger.
- 125-volt D.C. bus No. 21, the associated 125-volt D.C. battery bank or as necessary the Reserve Battery, and one associated full capacity charger.
- 125-volt D.C. bus No. 22, the associated 125-volt D.C. battery bank or as necessary the Reserve Battery, and one associated full capacity charger.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

- With one 125-volt bus inoperable, restore the inoperable bus to a. OPERABLE status within 2 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- With one 125-volt D.C. battery inoperable and the associated 125b. volt D.C. bus not being supplied by the Reserve Battery except during surveillance testing per Specification 4.8.2.3.2.d.1:
 - Restore the inoperable battery to OPERABLE status within 2 hours, or replace the inoperable battery with the OPERABLE Reserve Battery within the next 2 hours, or
 - Be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- With both 125-volt battery chargers from the same D.C. bus inoperable:
 - Except when necessary during surveillance testing per Specification 4.8.2.3.2.d.1, restore at least one 125-volt D.C. battery charger to OPERABLE status within 2 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
 - During surveillance testing per Specification 4.8.2.3.2.d.1, restore at least one 125-volt D.C. battery charger to OPERABLE status within 4 hours or be in at least HOT STANDBY within 6 hours and in COLD SHUTDOWN within the following 30 hours.

LIMITING CONDITION FOR OPERATION (Continued)

With single cells having a voltage decrease of more than 0.10 volts from the previous performance discharge test (4.8.2.3.2.f.) value. but still > 2.10 volts per surveillance requirement 4.8.2.3.2.b.1.. either restore/replace cells or replace the affected battery with the Reserve Battery within 24 hours or be in HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

- 4.8.2.3.1 Each D.C. bus train shall be determined OPERABLE and energized at least once per 7 days by verifying correct breaker alignment and indicated power availability.
- 4.8.2.3.2 Each 125-volt battery bank and charger and the Reserve Battery shall be demonstrated OPERABLE:
 - At least once per 7 days by verifying that:
 - The electrolyte level of each pilot cell is between the minimum and maximum level indication marks.
 - The pilot cell specific gravity, corrected to 77°F and full 2. electrolyte level is > 1.200.
 - The pilot cell voltage is > 2.10 volts. 3.
 - The overall battery voltage is > 125 volts.
 - b. At least once per 92 days by verifying that:
 - The voltage of each connected cell is > 2.10 volts under float charge and has not decreased more than 0.10 volts from the value observed during the latest performance discharge test (4.8.2.3.2.f).
 - The specific gravity, corrected to 77°F and full electrolyte level, of each connected cell is > 1.200 and has not decreased more than 0.02 from the value observed during the previous test.
 - The electrolyte level of each connected cell is between the minimum and maximum level indication marks.
 - At least once per 18 months by verifying that:
 - The cells, cell plates and battery racks show no visual indication of physical damage or deterioration.
 - The cell-to-cell and terminal connections are clean, tight, and coated with anti-corrosion material.

SURVEILLANCE REQUIREMENTS (Continued)

- At least once per 18 months by verifying that the battery capacity, with the charger disconnected, is adequate to either:
 - Supply and maintain in OFERABLE status all of the actual emergency loads for at least 2 hours when the battery is subjected to a battery service test. At the completion of this test, surveillance 4.8.2.3.2.e shall be performed for the affected battery. The battery shall be charged to at least 95% capacity in < 24 hours, or
 - Supply a dummy load of the following profile for at least 2. 2 hours while maintaining the battery terminal voltage > 105 volts:
 - a) Batteries 11, 21 and Reserve:

First minute > 827 amperes Next 1 minute > 461 amperes Next 117 minutes > 251 amperes Next 1 minute > 325 amperes

b) Battery 12

First minute > 214 amperes Next 119 minutes > 195 amperes

c) Battery 22

First minute > 256 amperes Next 119 minutes > 236 amperes

- d) At the completion of this test, the battery shall be charged to at least 95% capacity in < 24 hours, excluding the stabilization time.
- At least once per 18 months, the battery charger* shall be demonstrated capable of recharging the battery at a rate of < 400 amperes while supplying normal D.C. loads or equivalent or greater dummy load.
- f. At least once per 60 months by verifying that the battery capacity is at least 80% of the manufacturer's rating when subjected to a performance discharge test. This performance discharge test shall be performed subsequent to the satisfactory completion of the required battery service test.

^{*}Not applicable to the charger associated with the Reserve Battery.

D.C. DISTRIBUTION - SHUTDOWN

LIMITING CONDITION FOR OPERATION

- 3.8.2.4 As a minimum, the following D.C. electrical equipment and busses shall be energized and OPERABLE:
 - 2 125-volt D.C. busses, and
 - 2 125-volt battery banks, one of which may be the Reserve Battery, and one associated charger per bank supplying the above D.C. busses.

APPLICABILITY: MODES 5 and 6.

ACTION:

With less than the above complement of D.C. equipment and busses OPERABLE. establish CONTAINMENT INTEGRITY within 8 hours.

- 4.8.2.4.1 The above required 125-volt D.C. busses shall be determined OPERABLE and energized at least once per 7 days by verifying correct breaker alignment and indicated power availability.
- 4.8.2.4.2 The above required 125-volt battery banks and chargers shall be demonstrated OPERABLE per Surveillance Requirement 4.8.2.3.2.



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

BALTIMORE GAS AND ELECTRIC COMPANY

DOCKET NO. 50-318

CALVERT CLIFFS NUCLEAR POWER PLANT UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 97 License No. DPR-69

- The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The applications for amendment by Baltimore Gas & Electric Company (the licensee) dated April 26, 1985 and June 28, 1985, comply 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 applications, 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.

 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 Appendix A, as revised through Amendment No. 97, 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.

FOR THE NUCLEAR REGULATORY COMMISSION

shok C. Thadani, Director PWR Project Directorate #8 Division of PWR Licensing-B

Attachment: Changes to the Technical Specifications

Date of Issuance: February 20, 1986

FACILTIY OPERATING LICENSE NO. DPR-69

DOCKET NO. 50-318

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A.C. DISTRIBUTION - SHUTDOWN

LIMITING CONDITION FOR OPERATION

- 3.8.2.2 As a minimum, the following A.C. electrical busses shall be OPERABLE and energized from sources of power other than a diesel generator but aligned to an OPERABLE diesel generator:
 - 1 4160 volt Emergency Bus
 - 1 480 volt Emergency Bus
 - 2 120 volt A.C. Vital Busses

APPLICABILITY: MODES 5 and 6

ACTION:

With less than the above complement of A.C. busses OPERABLE and energized. establish CONTAINMENT INTEGRITY within 8 hours.

SURVEILLANCE REQUIREMENTS

4.8.2.2 The specified A.C. busses shall be determined OPERABLE and energized from A.C. sources other than the diesel generators at least once per 7 days by verifying correct breaker alignment and indicated power availability.

D.C. DISTRIBUTION - OPERATING

LIMITING CONDITION FOR OPERATION

- 3.8.2.3 The following D.C. bus trains shall be energized and OPERABLE:
 - a. 125-volt D.C. bus No. 11, the associated 125-volt D.C. battery bank or as necessary the Reserve Battery, and one associated full capacity charger.
 - b. 125-volt D.C. bus No. 12, the associated 125-volt D.C. battery bank or as necessary the Reserve Battery, and one associated full capacity charger.
 - c. 125-volt D.C. bus No. 21, the associated 125-volt D.C. battery bank or as necessary the Reserve Battery, and one associated full capacity charger.
 - d. 125-volt D.C. bus No. 22, the associated 125-volt D.C. battery bank or as necessary the Reserve Battery, and one associated full capacity charger.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

- a. With one 125-volt bus inoperable, restore the inoperable bus to OPERABLE status within 2 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- b. With one 125-volt D.C. battery inoperable and the associated 125-volt D.C. bus not being supplied by the Reserve Battery except during surveillance testing per Specification 4.8.2.3.2.d.1:
 - Restore the inoperable battery to OPERABLE status within 2 hours, or replace the inoperable battery with the OPERABLE Reserve Battery within the next 2 hours, or
 - Be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- c. With both 125-volt battery chargers from the same D.C. bus inoperable:
 - Except when necessary during surveillance testing per Specification 4.8.2.3.2.d.1, restore at least one 125-volt D.C. battery charger to OPERABLE status within 2 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
 - During surveillance testing per Specification 4.8.2.3.2.d.l, restore at least one 125-volt D.C. battery charger to OPERABLE status within 4 hours or be in at least HOT STANDBY within 6 hours and in COLD SHUTDOWN within the following 30 hours.

LIMITING CONDITION FOR OPERATION (Continued)

With single cells having a voltage decrease of more than 0.10 volts from the previous performance discharge test (4.8.2.3.2.f.) value. but still > 2.10 volts per surveillance requirement 4.8.2.3.2.b.1. either restore/replace cells or replace the affected battery with the Reserve Battery within 24 hours or be in HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

- 4.8.2.3.1 Each D.C. bus train shall be determined OPERABLE and energized at least once per 7 days by verifying correct breaker alignment and indicated power availability.
- 4.8.2.3.2 Each 125-volt battery bank and charger and the Reserve Battery shall be demonstrated OPERABLE:
 - a. At least once per 7 days by verifying that:
 - The electrolyte level of each pilot cell is between the minimum and maximum level indication marks.
 - The pilot cell specific gravity, corrected to 77°F and full electrolyte level is > 1.200.
 - The pilot cell voltage is > 2.10 volts.
 - The overall battery voltage is > 125 volts.
 - At least once per 92 days by verifying that:
 - The voltage of each connected cell is > 2.10 volts under float charge and has not decreased more than 0.10 volts from the value observed during the latest performance discharge test (4.8.2.3.2.f).
 - The specific gravity, corrected to 77°F and full electrolyte level, of each connected cell is > 1.200 and has not decreased more than 0.02 from the value observed during the previous test.
 - The electrolyte level of each connected cell is between the minimum and maximum level indication marks.
 - At least once per 18 months by verifying that:
 - The cells, cell plates and battery racks show no visual indication of physical damage or deterioration.
 - The cell-to-cell and terminal connections are clean, tight, and coated with anti-corrosion material.

SURVEILLANCE REQUIREMENTS (Continued)

- d. At least once per 18 months by verifying that the battery capacity, with the charger disconnected, is adequate to either:
 - 1. Supply and maintain in OPERABLE status all of the actual emergency loads for at least 2 hours when the battery is subjected to a battery service test. At the completion of this test, surveillance 4.8.2.3.2 e shall be performed for the affected battery. The battery shall be charged to at least 95% capacity in < 24 hours, or
 - Supply a dummy load of the following profile for at least 2 hours while maintaining the battery terminal voltage > 105 volts:
 - a) Batteries 11, 21 and Reserve:

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First minute > 214 amperes Next 119 minutes > 195 amperes

c) Battery 22

First minute > 256 amperes Next 119 minutes > 236 amperes

- d) At the completion of this test, the battery shall be charged to at least 95% capacity in < 24 hours, excluding the stabilization time.
- e. At least once per 18 months, the battery charger* shall be demonstrated capable of recharging the battery at a rate of < 400 amperes while supplying normal D.C. loads or equivalent or greater dummy load.
- At least once per 60 months by verifying that the battery capacity is at least 80% of the manufacturer's rating when subjected to a performance discharge test. This performance discharge test shall be performed subsequent to the satisfactory completion of the required battery service test.

^{*}Not applicable to the charger associated with the Reserve Battery.

D.C. DISTRIBUTION - SHUTDOWN

LIMITING CONDITION FOR OPERATION

- 3.8.2.4 As a minimum, the following O.C. electrical equipment and busses shall be energized and OPERABLE:
 - 2 125-volt D.C. busses, and
 - 2 125-volt battery banks, one of which may be the Reserve Battery, and one associated charger per bank supplying the above D.C. busses.

APPLICABILITY: MODES 5 and 6.

ACTION:

With less than the above complement of D.C. equipment and busses OPERABLE, lestablish CONTAINMENT INTEGRITY within 8 hours.

- 4.8.2.4.1 The above required 125-volt D.C. busses shall be determined OPERASLE and energized at least once per 7 days by verifying correct breaker alignment and indicated power availability.
- 4.8.2.4.2 The above required 125-volt battery banks and chargers shall be demonstrated OPERABLE per Surveillance Requirement 4.8.2.3.2.