

NOV 19 1981

DCS MS-016

Docket Nos. 50-317 ✓
and 50-318

Mr. A. E. Lundvall, Jr.
Vice President - Supply
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Dear Mr. Lundvall:

The Commission has issued the enclosed Amendment Nos. 61 and 43 to Facility Operating License Nos. DPR-53 and DPR-69 for Calvert Cliffs Nuclear Power Plant, Unit Nos. 1 and 2. These amendments consist of changes to the Technical Specifications in response to your application dated August 1, 1980, as supplemented by your letter dated June 5, 1981.

The amendments revise the Appendix A Technical Specifications (TS) to reflect changes in the fire protection features.

By letter dated September 14, 1979, we issued Amendment Nos. 41 and 23 to Facility Operating License Nos. DPR-53 and DPR-69 for the Calvert Cliffs Nuclear Power Plant, Units Nos. 1 and 2. These amendments provided license conditions which resulted from our Safety Evaluation Report, also dated September 14, 1979, concerning fire protection for Calvert Cliffs Units 1 and 2. We also requested in our letter of September 14, 1979 that you propose revised Technical Specifications related to facility modifications required by Amendment Nos. 41 and 23, by August 1, 1980.

Subsequently, on August 1, 1980 you submitted the requested proposed Technical Specifications. These proposed Technical Specifications were revised via your letter of June 5, 1981. We have reviewed the proposed Technical Specifications and conclude that they are consistent with findings presented in our Safety Evaluation Report dated September 14, 1979.

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SURNAME
DATE

We have further determined that the enclosed amendments do not authorize a change in effluent types or total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendments involve an action which is insignificant from the standpoint of environmental impact and, pursuant to 10 CFR 51.5(d)(4), that an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of these amendments.

The amendments do not involve significant new safety information of a type not considered by a previous Commission safety review of the facilities. They do not involve a significant increase in the probability or consequences of an accident, do not involve a significant decrease in a safety margin, and therefore do not involve a significant hazards consideration. We have also concluded that there is reasonable assurance that the health and safety of the public will not be endangered by this action.

A copy of the Notice of Issuance is enclosed.

Sincerely,

Original signed by:

David H. Jaffe, Project Manager
Operating Reactors Branch #3
Division of Licensing

Enclosures:

- 1. Amendment No. 61 to DPR-53
- 2. Amendment No. 43 to DPR-69
- 3. Notice of Issuance

cc: w/enclosures
See next page

OFFICE	ORB#3:DL PKreutzer	ORB#3:DL DJaffe	ORB#5:DL TWambach	CEB RAnand	ORB#3:DL RAClark	AD:OR:DL TMNovak	OELD Worsham
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DATE	10/23/81	10/23/81	10/30/81	10/2/81	10/3/81	10/4/81	10/4/81

FRN+AMDT only

Baltimore Gas and Electric Company

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cc w/enclosure(s) and incoming
dated: 8/1/80, 6/5/81
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Energy and Coastal Zone Administration
Department of Natural Resources
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UNITED STATES
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. 61
License No. DPR-53

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Baltimore Gas & Electric Company (the licensee) dated August 1, 1980 as supplemented on June 5, 1981, 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.

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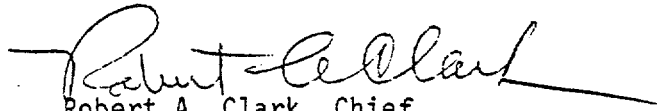
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-53 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 61, 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 November 17, 1981.

FOR THE NUCLEAR REGULATORY COMMISSION



Robert A. Clark, Chief
Operating Reactors Branch #3
Division of Licensing

Attachment:
Changes to the
Technical Specifications

Date of Issuance: November 12, 1981

ATTACHMENT TO LICENSE AMENDMENT NO. 61

FACILITY OPERATING LICENSE NO. DPR-53

DOCKET NO. 50-317

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

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INSTRUMENTATION

FIRE DETECTION INSTRUMENTATION

LIMITING CONDITION FOR OPERATION

3.3.3.7 As a minimum, the fire detection instrumentation for each fire detection zone shown in Table 3.3-11 shall be OPERABLE.

APPLICABILITY: Whenever equipment in that fire detection zone is required to be OPERABLE.

ACTION:

With one or more of the fire detection instrument(s) shown in Table 3.3-11 inoperable:

- a. Within 1 hour establish a fire watch patrol to inspect the zone(s) with the inoperable instrument(s) at least once per hour, unless the instrument(s) is located inside the containment, then inspect the containment at least once per 8 hours or monitor the containment air temperature at least once per hour at the locations listed in Specification 4.6.1.5; or unless the instrument(s) is located in fire detection zones equipped with automatic wet pipe sprinkler systems alarmed and supervised to the Control Room, then within 1 hour and at least per 24 hours thereafter, inspect the zone(s) with inoperable instruments and verify that the automatic sprinkler system, including the water flow alarm and supervisory system, is operable by channel functional test.
- b. Restore the inoperable instrument(s) to OPERABLE status within 14 days or, in lieu of any other report required by Specification 6.9.1, prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next 30 days outlining the action taken, the cause of the inoperability and the plans and schedule for restoring the instrument(s) to OPERABLE status.
- c. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.3.3.7.1 At least once per 6 months, at least 25% of the above required fire detection instruments which are accessible during plant operation shall be demonstrated OPERABLE by performance of a CHANNEL FUNCTIONAL TEST. Detectors selected for testing shall be selected on a rotating basis such that all detectors will be tested over a two year period. If in any detection zone there are less than four detectors, at least one different detector in that zone shall be tested every six months. For each detector found inoperable during functional testing, at least an additional 10% of all detectors or 10 detectors, whichever is less, shall also be tested. Fire detectors which are inaccessible during plant operation shall be demonstrated OPERABLE by the performance of a CHANNEL FUNCTIONAL TEST during each COLD SHUTDOWN exceeding 24 hours unless performed during the previous six months.

INSTRUMENTATION

SURVEILLANCE REQUIREMENTS (Continued)

4.3.3.7.2 The NFPA Code 72D Class B supervised circuits supervision associated with the detector alarms of each of the above required fire detection instruments shall be demonstrated OPERABLE at least once per 6 months.

4.3.3.7.3 The non-supervised circuits, associated with detector alarms, between the instrument and the control room shall be demonstrated OPERABLE at least once per 31 days.

TABLE 3.3-11
FIRE DETECTION INSTRUMENTS
UNIT 1

<u>INSTRUMENT LOCATION</u>	<u>MINIMUM INSTRUMENTS OPERABLE</u>		
	<u>HEAT</u>	<u>FLAME</u>	<u>SMOKE</u>
Spent Fuel Pool Heat Exchanger Room 320			3
Main Control Room			6
Control Room Vent Duct "A"			2
Main Plant Exhaust Equip Room 524			8
Control Room HVAC Equip Room 512			4
Passage and Filter Room 323			3
Unit 1 Cont SW Elec Pen Area*	4		
Unit 1 Cont NE Elec Pen Area*	4		
Unit 1 Cont East RCPS*	16		
Unit 1 Cont West RCPS*	16		
Control Room Vent Duct "B"			1
West Passage 319 Elev 27'-0"			6
E/W Corridor 104 Elev (-) 10'-0"			5
Intake Structure			48
Unit 1 Waste Proc Control Room 111			1
Coolant Waste Rec/Mon TK Pp Room 110			2
11 Diesel Generator**	2		
12 Diesel Generator**	2		
Unit 1 Cable Tunnel Elev 83'-0"			4
Cable Chase 1A			1
Cable Chase 1B			1
Unit 1 C.S.R. & Cable Chase 1C**	2		10
Unit 1 Personnel Access Area Room 525			3
Unit 1 Switchgear Elev 27'-0" Room 317**			6
Unit 1 Switchgear Elev 45'-0" Room 430**			8
Unit 1 Elec Equip Room 529			3
Unit 1 East Elec Pen Room 429			3
Unit 1 West Elec Pen Room 423			3
Unit 1 Refueling Water TK Pump Room 439			2
Unit 1 East Piping Pen Rooms 227 and 316		3	5
Unit 1 Purge Air Supply Room 318			2
Unit 1 West Piping Pen Rooms 221 and 326		2	3
Unit 1 Letdown Heat Exchanger Room 324			1
Unit 1 Volume Control TK Room 218			1
Unit 1 ECCS Pump Rooms 118 and 122			7
Unit 1 Coolant Waste Rec TK Room 114		4	
Unit 1 ECCS Pump Rooms 119 and 122			7
Unit 1 Elev 27'-0" Swgr Room Vent Duct	1		
Unit 1 Elev 45'-0" swgr Room Vent Duct	1		

*Detection instruments located within the containment are not required to be OPERABLE during the performance of Type A Containment Leakage Rate Tests.

**Detectors which automatically actuate fire suppression systems.

PLANT SYSTEMS

3/4.7.10 WATERTIGHT DOORS

LIMITING CONDITION FOR OPERATION

3.7.10 The following watertight doors shall be closed except when the door is being used for normal entry and exit:

- a. ECCS Pump Room Doors (4).
- b. Service Water Pump Room to Heater Bay Doors (2).
- c. Auxiliary Feed Pump Room to Heater Bay Doors (2).
- d. Emergency Escape Hatch, Service Water Pump Room from Penetration Room.
- e. Main Steam Piping Area from Piping Penetration Room Door.
- f. Passage to Main Steam Piping Area Door.
- g. Warehouse to Intake Structure Door, Elevation 12'.
- h. Outside to Intake Structure Door.
- i. Warehouse to Intake Structure Door Elevation 29'.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

With one or more of the above doors open, restore the door to its closed position within 24 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.7.10 The above watertight doors shall be determined closed at least once per 12 hours.

PLANT SYSTEMS

3/4.7.11 FIRE SUPPRESSION SYSTEMS

FIRE SUPPRESSION WATER SYSTEM

LIMITING CONDITION FOR OPERATION

3.7.11.1 The fire suppression water system shall be OPERABLE with:

- a. Two high pressure pumps, each with a capacity of 2500 gpm, with their discharge aligned to the fire suppression header,
- b. Two water supplies, each with a minimum contained volume of 300,000 gallons, and
- c. An OPERABLE flow path capable of taking suction from the Pretreated Water Storage Tanks Numbers 11 and 12 and transferring the water through distribution piping with OPERABLE sectionalizing control or isolation valves to the yard hydrant curb valves and the first valve ahead of the water flow alarm device on each sprinkler, hose standpipe or spray system riser required to be OPERABLE per Specifications 3.7.11.2, 3.7.11.4, and 3.7.11.5.

APPLICABILITY: At all times.

ACTION:

- a. With one pump and/or one water supply inoperable, restore the inoperable equipment to OPERABLE status within 7 days or, in lieu of any other report required by Specification 6.9.1, prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next 30 days outlining the plans and procedures to be used to provide for the loss of redundancy in this system. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.
- b. With the fire suppression water system otherwise inoperable:
 1. Establish a backup fire suppression water system within 24 hours, and
 2. In lieu of any other report required by Specification 6.9.1, submit a Special Report in accordance with Specification 6.9.2;
 - a) By telephone within 24 hours,
 - b) Confirmed by telegraph, mailgram or facsimile transmission no later than the first working day following the event, and
 - c) In writing within 14 days following the event, outlining the action taken, the cause of the inoperability and the plans and schedule for restoring the system to OPERABLE status.

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS

- 4.7.11.1.1 The fire suppression water system shall be demonstrated OPERABLE:
- a. At least once per 7 days by verifying the contained water supply volume.
 - b. At least once per 31 days on a STAGGERED TEST BASIS by starting the electric motor driven pump and operating it for at least 15 minutes on recirculation flow. This test shall be performed on a STAGGERED TEST BASIS with the test required by 4.7.11.1.2.a.2.
 - c. At least once per 31 days by verifying that each valve (manual, power operated or automatic) in the flow path that is not locked, sealed, or otherwise secured in position, is in its correct position.
 - d. At least once per 12 months by performance of a system flush of the filled portions of the system.
 - e. At least once per 12 months by cycling each testable valve in the flow path through at least one complete cycle of full travel.
 - f. At least once per 18 months by performing a system functional test which includes simulated automatic actuation of the system throughout its operating sequence, and:
 1. Verifying that each automatic valve in the flow path actuates to its correct position,
 2. Verifying that each pump develops at least 2500 gpm at a discharge pressure of 125 psig,
 3. Cycling each valve in the flow path that is not testable during plant operation through at least one complete cycle of full travel, and
 4. Verifying that each high pressure pump starts (sequentially) to maintain the fire suppression water system pressure \geq 80 psig.
 - g. At least once per 3 years by performing a flow test of the system in accordance with Chapter 5, Section 11 of the Fire Protection Handbook, 14th Edition, published by the National Fire Protection Association.

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

4.7.11.1.2 The fire pump diesel engine shall be demonstrated OPERABLE:

- a. At least once per 31 days by verifying:
 - 1. The diesel fuel oil day storage tank contains at least 174 gallons of fuel, and
 - 2. The diesel starts from ambient conditions and operates for at least 30 minutes on recirculation flow. This test shall be performed on a STAGGERED TEST BASIS with the test required by Specification 4.7.11.1.1.b.
- b. At least once per 92 days by verifying that a sample of diesel fuel from the fuel storage tank, obtained in accordance with ASTM-D270-65, is within the acceptable limits specified in Table 1 of ASTM D975-74 when checked for viscosity, water and sediment.
- c. At least once per 18 months, during shutdown, by:
 - 1. Subjecting the diesel to an inspection in accordance with procedures prepared in conjunction with its manufacturer's recommendations for the class of service, and
 - 2. Verifying the diesel starts from ambient conditions on the auto-start signal and operates for \geq 20 minutes while loaded with the fire pump.

4.7.11.1.3 The fire pump diesel starting 24-volt battery bank and charger shall be demonstrated OPERABLE:

- a. At least once per 7 days by verifying that:
 - 1. The electrolyte level of each battery is above the plates, and
 - 2. The overall battery voltage is \geq 24 volts.
- b. At least once per 92 days by verifying that the specific gravity is appropriate for continued service of the battery.
- c. At least once per 18 months by verifying that:
 - 1. The batteries, cell plates and battery racks show no visual indication of physical damage or abnormal deterioration, and
 - 2. The battery-to-battery and terminal connections are clean, tight, free of corrosion and coated with anti-corrosion material.

PLANT SYSTEMS

SPRAY AND/OR SPRINKLER SYSTEMS

LIMITING CONDITION FOR OPERATION

3.7.11.2 The spray and/or sprinkler systems shown in Table 3.7-5 shall be OPERABLE:

APPLICABILITY: Whenever equipment in the spray/sprinkler protected areas is required to be OPERABLE.

ACTION:

- a. With one or more of the required spray and/or sprinkler systems inoperable, within one hour establish a continuous fire watch with backup fire suppression equipment for those areas in which redundant safe shutdown systems or components could be damaged; for other areas, establish an hourly fire watch patrol. Restore the system to OPERABLE status within 14 days or, in lieu of any other report required by Specification 6.9.1, prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next 30 days outlining the action taken, the cause of the inoperability and the plans and schedule for restoring the system to OPERABLE status.
- b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.7.11.2 Each of the above required spray and/or sprinkler systems shall be demonstrated OPERABLE:

- a. At least once per 31 days by verifying that each valve (manual, power operated or automatic) in the flow path, not locked sealed or otherwise secured in position, is in its correct position.
- b. At least once per 12 months by cycling each testable valve in the flow path through at least one complete cycle of full travel.
- c. At least once per 18 months:
 1. By performing a system functional test which includes simulated automatic actuation of the system, and:
 - a) Verifying that the automatic valves in the flow path actuate to their correct positions on a simulated test signal, and

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

- b) Cycling each valve in the flow path that is not testable during plant operation through at least one complete cycle of full travel.
2. By a visual inspection of the area in the vicinity of each nozzle(s) to verify the spray pattern will not be obstructed.

TABLE 3.7-5

FIRE PROTECTION SPRINKLERS

UNIT 1

<u>SPRINKLER LOCATION</u>	<u>CONTROL VALVE ELEVATION</u>
11 Diesel Generator	45'-0"
12 Diesel Generator	45'-0"
Unit 1 East Pipe Pen Room 227/316*	5'-0"
Unit 1 Aux Feed Pump Room 603*	12'-0"
Unit 1 East Piping Area Room 428*	45'-0"
Unit 1 East Electrical Penetration Room 429*	45'-0"
Unit 1 West Electrical Penetration Room 423*	45'-0"
Unit 1 Main Steam Piping Room 315*	45'-0"
Unit 1 Component Cooling Pump Room 228*	5'-0"
Unit 1 East Piping Area 224*	5'-0"
Unit 1 Radiation Exhaust Vent Equipment Room 225*	5'-0"
Unit 1 Service Water Pump Room 226*	5'-0"
Unit 1 Boric Acid Tank and Pump Room 217*	5'-0"
Unit 1 Reactor Coolant Makeup Pump Room 216*	5'-0"
Unit 1 Charging Pump Room 115*	(-)10'-0"
Unit 1 Misc Waste Mon Room 113*	(-)10'-0"
Cask and Eqpt Loading Area Rooms 419, 420, 425 & 426*	45'-0"
Solid Waste Processing*	45'-0"
Corridors 200, 202, 212 and 219*	5'-0"
Corridors 100, 103 and 116*	(-)10'-0"
Cable Chase 1A*	45'-0"
Cable Chase 1B*	45'-0"
Unit 1 ECCS Pump Room 119*	(-)15'-0"
Hot Instrument Shop Room 222*	5'-0"
Hot Machine Shop Room 223*	5'-0"

* Sprinklers required to ensure the OPERABILITY of redundant safe shutdown equipment.

PLANT SYSTEMS

HALON SYSTEMS

LIMITING CONDITION FOR OPERATION

3.7.11.3 The following Halon systems shall be OPERABLE with the storage tanks having at least 95% of full charge weight (or level) and 90% of full charge pressure.

- a. Cable spreading rooms total flood system, and associated vertical cable chase 1C, Unit 1.
- b. 460 volt switchgear rooms 27 & 45' elevation Unit 1.

APPLICABILITY: Whenever equipment protected by the Halon system is required to be OPERABLE.

ACTION:

- a. With both the primary and backup Halon systems protecting the areas inoperable, within one hour establish an hourly fire watch with backup fire suppression equipment for those areas protected by the inoperable Halon system. Restore the system to OPERABLE status within 14 days, or, in lieu of any other report required by Specification 6.9.1, prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next 30 days outlining the action taken, the cause of the inoperability and the plans and schedule for restoring the system to OPERABLE status.
- b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.7.11.3 Each of the above required Halon systems shall be demonstrated OPERABLE:

- a. At least once per 31 days by verifying that each valve (manual, power operated or automatic) in the flow path is in its correct position.
- b. At least once per 6 months by verifying Halon storage tank weight (level) and pressure.
- c. At least once per 18 months by:
 1. Verifying the system, including associated ventilation dampers and fire door release mechanisms, actuates manually and automatically, upon receipt of a simulated actuation signal, and
 2. Performance of a flow test through headers and nozzles to assure no blockage.

PLANT SYSTEMS

FIRE HOSE STATIONS

LIMITING CONDITION FOR OPERATION

3.7.11.4 The fire hose stations shown in Table 3.7-6 shall be OPERABLE.

APPLICABILITY: Whenever equipment in the areas protected by the fire hose stations is required to be OPERABLE.

ACTION:

- a. With one or more of the fire hose stations shown in Table 3.7-6 inoperable, route an additional equivalent capacity fire hose to the unprotected area(s) from an OPERABLE hose station within 1 hour. Restore the fire hose station(s) to OPERABLE status within 14 days, or, in lieu of any other report required by Specification 6.9.1, prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next 30 days outlining the action taken, the cause of the inoperability and the plans and schedule for restoring the fire hose station(s) to OPERABLE status.
- b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.7.11.4 Each of the fire hose stations shown in Table 3.7-6 shall be demonstrated OPERABLE;

- a. At least once per 31 days by visual inspection of the station to assure all required equipment is at the station. Hose stations located in the containment shall be visually inspected on each scheduled reactor shutdown, but not more frequently than every 31 days.
- b. At least once per 18 months by:
 1. Removing the hose for inspection and re-racking, and
 2. Replacement of all degraded gaskets in couplings.
- c. At least once per 3 years by:
 1. Partially opening each hose station valve to verify valve OPERABILITY and no flow blockage.
 2. Conducting a hose hydrostatic test at a pressure at least 50 psig greater than the maximum pressure available at that hose station or replacement with a new hose.

TABLE 3.7-6

FIRE HOSE STATIONS

<u>LOCATION</u>	<u>ELEVATION</u>	<u>NUMBER OF HOSE STATIONS</u>
1. Containment	10'	2
	45'	2
	69'	2
2. Auxiliary Building	-15'*	1
	-10'*	2
	5'	6
	27'	3
	45'	5
3. Turbine Building, Heater Bay Outside Service Water Pump Rooms and Aux Feeder Water Pipe Rooms	69'*	4
	12'	3
	27'	2
	45'	3
	10'*	1
4. Intake Structure		

*Fire Hose Stations required for primary protection to ensure the OPERABILITY of safety related equipment.

PLANT SYSTEMS

YARD FIRE HYDRANTS AND HYDRANT HOSE HOUSES

LIMITING CONDITION FOR OPERATION

3.7.11.5 The following yard fire hydrants and associated hydrant hose houses shall be OPERABLE.

APPLICABILITY: Whenever equipment in the areas protected by the yard fire hydrants is required to be OPERABLE.

- a. #6 yard hydrant and associated hydrant hose house, which provides primary protection for Unit 2 RWT blockhouse.
- b. #7 yard hydrant and associated hydrant hose house, which provides primary protection for Unit 1 RWT blockhouse.

ACTION:

- a. With one or more of the yard fire hydrants or associated hydrant hose houses inoperable, within 1 hour have sufficient additional lengths of 2-1/2 inch diameter hose located in an adjacent OPERABLE hydrant hose house to provide service to the unprotected area(s) if the inoperable fire hydrant or associated hydrant hose house is the primary means of fire suppression. Restore the hydrant or hose house to OPERABLE status within 14 days or, in lieu of any other report required by Specification 6.9.1, prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next 30 days outlining the action taken, the cause of the inoperability, and the plans and schedule for restoring the hydrant or hose house to OPERABLE status.
- b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.7.11.5 Each of the yard fire hydrants and associated hydrant hose houses shall be demonstrated OPERABLE:

- a. At least once per 31 days by visual inspection of the hydrant hose house to assure all required equipment is at the hose house.
- b. At least once per 6 months (once during March, April or May and once during September, October or November) by visually inspecting each yard fire hydrant and verifying that the hydrant barrel is dry and that the hydrant is not damaged.

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

- c. At least once per 12 months by:
1. Conducting a hose hydrostatic test at a pressure at least 50 psig greater than the maximum pressure available at any yard fire hydrant.
 2. Inspecting all the gaskets and replacing any degraded gaskets in the couplings.
 3. Performing a flow check of each hydrant to verify its OPERABILITY.

PLANT SYSTEMS

3/4.7.12 PENETRATION FIRE BARRIERS

LIMITING CONDITIONS FOR OPERATION

3.7.12 All fire barrier penetrations (i.e., cable penetration barriers, fire-doors and fire dampers), in fire zone boundaries, protecting safe shutdown areas shall be OPERABLE.

APPLICABILITY: At all times.

ACTION:

- a. With one or more of the above required fire barrier penetrations inoperable within one hour either establish a continuous fire watch on at least one side of the affected penetration, or verify the OPERABILITY of fire detectors on at least one side of the inoperable fire barrier and establish an hourly fire watch patrol; or verify the operability of automatic sprinkler systems (including the water flow alarm and supervisory system) on both sides of the INOPERABLE fire barrier. Restore the inoperable fire barrier penetration(s) to operable status within 7 days or, in lieu of any other report required by Specification 6.9.1, prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next 30 days outlining the action taken, the cause of the inoperable penetration and plans and schedule for restoring the fire barrier penetration(s) to operable status.
- b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.7.12 Each of the above required fire barrier penetrations shall be verified to be OPERABLE:

- a. At least once per 18 months by a visual inspection.
- b. Prior to returning a fire barrier penetration to functional status following repairs or maintenance by performance of a visual inspection of the affected fire barrier penetration(s).

PLANT SYSTEMS

BASES

environment. The operation of this system and the resultant effect on offsite dosage calculations was assumed in the accident analyses.

3/4.7.8 HYDRAULIC SNUBBERS

The hydraulic snubbers are required OPERABLE to ensure that the structural integrity of the reactor coolant system and all other safety related systems is maintained during and following a seismic or other event initiating dynamic loads. The only snubbers excluded from this inspection program are those installed on nonsafety related systems and then only if their failure or failure of the system on which they are installed, would have no adverse effect on any safety related system.

The inspection frequency applicable to snubbers containing seals fabricated from materials which have been demonstrated compatible with their operating environment is based upon maintaining a constant level of snubber protection. Therefore, the required inspection interval varies inversely with the observed snubber failures. The number of inoperable snubbers found during an inspection of these snubbers determines the time interval for the next required inspection of these snubbers. Inspections performed before that interval has elapsed may be used as a new reference point to determine the next inspection. However, the results of such early inspections performed before the original required time interval has elapsed (nominal time less 25%) may not be used to lengthen the required inspection interval. Any inspection whose results require a shorter inspection interval will override the previous schedule.

To provide further assurance of snubber reliability, a representative sample of the installed snubbers will be functionally tested during plant shutdowns at 18 month intervals. These tests will include stroking of the snubbers to verify proper piston movement, lock-up and bleed. Observed failures of these sample snubbers will require functional testing of additional units. To minimize personnel exposures, snubbers installed in high radiation zones or in especially difficult to remove locations may be exempted from these functional testing requirements provided the OPERABILITY of these snubbers was demonstrated during functional testing at either the completion of their fabrication or at a subsequent date.

PLANT SYSTEMS

BASES

3/4.7.9 SEALED SOURCE CONTAMINATION

The limitations on removable contamination for sources requiring leak testing, including alpha emitters, is based on 10 CFR 70.39(c) limits for plutonium. This limitation will ensure that leakage from byproduct, source, and special nuclear material sources will not exceed allowable intake values.

3/4.7.10 WATERTIGHT DOORS

This specification is provided to ensure the protection of safety related equipment from the effects of water or steam escaping from ruptured pipes or components in adjoining rooms.

3/4.7.11 FIRE SUPPRESSION SYSTEMS

The OPERABILITY of the fire suppression systems ensures that adequate fire suppression capability is available to confine and extinguish fires occurring in any portion of the facility where safety related equipment is located. The fire suppression system consists of the water system, spray and/or sprinklers, Halon and fire hose stations. The collective capability of the fire suppression systems is adequate to minimize potential damage to safety related equipment and is a major element in the facility fire protection program.

In the event that portions of the fire suppression systems are inoperable, alternate backup fire fighting equipment is required to be made available in the affected areas until the inoperable equipment is restored to service. Where a continuous fire watch is required in lieu of fire protection equipment and habitability due to heat or radiation is a concern, the fire watch should be stationed in a habitable area as close as possible to the inoperable equipment.

In the event the fire suppression water system becomes inoperable, immediate corrective measures must be taken since this system provides the major fire suppression capability of the plant. The requirement for a twenty-four hour report to the Commission provides for prompt evaluation of the acceptability of the corrective measures to provide adequate fire suppression capability for the continued protection of the nuclear plant.



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. 43
License No. DPR-69

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Baltimore Gas & Electric Company (the licensee) dated August 1, 1980 as supplemented on June 5, 1981, 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. 43 , 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 November 17, 1981.

FOR THE NUCLEAR REGULATORY COMMISSION


Robert A. Clark, Chief
Operating Reactors Branch #3
Division of Licensing

Attachment:
Changes to the
Technical Specifications

Date of Issuance: November 12, 1981

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INSTRUMENTATION

FIRE DETECTION INSTRUMENTATION

LIMITING CONDITION FOR OPERATION

3.3.3.7 As a minimum, the fire detection instrumentation for each fire detection zone shown in Table 3.3-11 shall be OPERABLE.

APPLICABILITY: Whenever equipment in that fire detection zone is required to be OPERABLE.

ACTION:

With one or more of the fire detection instrument(s) shown in Table 3.3-11 inoperable:

- a. Within 1 hour establish a fire watch patrol to inspect the zone(s) with the inoperable instrument(s) at least once per hour, unless the instrument(s) is located inside the containment, then inspect the containment at least once per 8 hours or monitor the containment air temperature at least once per hour at the locations listed in Specification 4.6.1.5; or unless the instrument(s) is located in fire detection zones equipped with automatic wet pipe sprinkler systems alarmed and supervised to the Control Room, then within 1 hour and at least per 24 hours thereafter, inspect the zone(s) with inoperable instruments and verify that the automatic sprinkler system, including the water flow alarm and supervisory system, is operable by channel functional test.
- b. Restore the inoperable instrument(s) to OPERABLE status within 14 days or, in lieu of any other report required by Specification 6.9.1, prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next 30 days outlining the action taken, the cause of the inoperability and the plans and schedule for restoring the instrument(s) to OPERABLE status.
- c. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.3.3.7.1 At least once per 6 months, at least 25% of the above required fire detection instruments which are accessible during plant operation shall be demonstrated OPERABLE by performance of a CHANNEL FUNCTIONAL TEST. Detectors selected for testing shall be selected on a rotating basis such that all detectors will be tested over a two year period. If in any detection zone there are less than four detectors, at least one different detector in that zone shall be tested every six months. For each detector found inoperable during functional testing, at least an additional 10% of all detectors or 10 detectors, whichever is less, shall also be tested. Fire detectors which are inaccessible during plant operation shall be demonstrated OPERABLE by the performance of a CHANNEL FUNCTIONAL TEST during each COLD SHUTDOWN exceeding 24 hours unless performed during the previous six months.

INSTRUMENTATION

SURVEILLANCE REQUIREMENTS (Continued)

4.3.3.7.2 The NFPA Code 72D Class B supervised circuits supervision associated with the detector alarms of each of the above required fire detection instruments shall be demonstrated OPERABLE at least once per 6 months.

4.3.3.7.3 The non-supervised circuits, associated with detector alarms, between the instrument and the control room shall be demonstrated OPERABLE at least once per 31 days.

TABLE 3.3-11
FIRE DETECTION INSTRUMENTS
UNIT 2

<u>INSTRUMENT LOCATION</u>	<u>MINIMUM INSTRUMENTS OPERABLE*</u>		
	<u>HEAT</u>	<u>FLAME</u>	<u>SMOKE</u>
Unit 2 East Elec Pen Room 409			3
Unit 2 West Elec Pen Room 414			3
Unit 2 Switchgear Elev 27'-0" Room 311**			6
Unit 2 Switchgear Elev 45'-0" Room 407**			8
Unit 2 Elec Equip Room 532			3
Unit 2 Cont SE Elec Pen Area*	4		
Unit 2 Cont NW Elec Pen Area*	4		
Unit 2 Cont East RCPS*	16		
Unit 2 Cont West RCPS*	16		
Unit 2 Main Plant Exh Equip Room 526			8
Unit 2 Personnel Access Area Room 527			3
Cable Tunnel U-2 Elev 83'-0"			4
Cable Chase 2A			1
Cable Chase 2B			1
Unit 2 C.S.R. & Cable Chase 2C**	2		10
Unit 2 Letdown Heat Exchanger Room 322			1
Unit 2 Volume Control Tank Room 214			1
Unit 2 Cool Waste Rec TK Room 107		4	
Unit 2 ECCS Pump Rooms 101 and 120			7
Unit 2 Pump Room 108 Elev (-) 10'-0"			1
Unit 2 Intake Structure			48
Unit 2 Elev 27'-0" Swgr Room Vent Duct	1		
Unit 2 Elev 45'-0" Swgr Room Vent Duct	1		
Unit 2 ECCS Pp Rooms 102 and 120			7
21 Diesel Generator	2		
Unit 2 Refueling Water Tk Pp Room 440			2
Unit 2 East Pp Pen Rooms 206 and 310		3	5
Unit 2 Purge Air Supply Room 312			2
Unit 2 West Piping Pen Rooms 211 and 321		2	3

*Detection instruments located within the containment are not required to be OPERABLE during the performance of Type A Containment Leakage Rate Tests.
**Detectors which automatically actuate fire suppression systems.

PLANT SYSTEMS

3/4.7.10 WATERTIGHT DOORS

LIMITING CONDITION FOR OPERATION

3.7.10 The following watertight doors shall be closed except when the door is being used for normal entry and exit:

- a. ECCS Pump Room Doors (4).
- b. Service Water Pump Room to Heater Bay Doors (2).
- c. Auxiliary Feed Pump Room to Heater Bay Doors (2).
- d. Emergency Escape Hatch, Service Water Pump Room from Penetration Room.
- e. Main Steam Piping Area from Piping Penetration Room Door.
- f. Passage to Main Steam Piping Area Door.
- g. Warehouse to Intake Structure Door, Elevation 12'.
- h. Outside to Intake Structure Door.
- i. Warehouse to Intake Structure Door Elevation 29'.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

With one or more of the above doors open, restore the door to its closed position within 24 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.7.10 The above watertight doors shall be determined closed at least once per 12 hours.

PLANT SYSTEMS

3/4.7.11 FIRE SUPPRESSION SYSTEMS

FIRE SUPPRESSION WATER SYSTEM

LIMITING CONDITION FOR OPERATION

3.7.11.1 The fire suppression water system shall be OPERABLE with:

- a. Two high pressure pumps, each with a capacity of 2500 gpm, with their discharge aligned to the fire suppression header,
- b. Two water supplies, each with a minimum contained volume of 300,000 gallons, and
- c. An OPERABLE flow path capable of taking suction from the Pretreated Water Storage Tanks Numbers 11 and 12 and transferring the water through distribution piping with OPERABLE sectionalizing control or isolation valves to the yard hydrant curb valves and the first valve ahead of the water flow alarm device on each sprinkler, hose standpipe or spray system riser required to be OPERABLE per Specifications 3.7.11.2, 3.7.11.4, and 3.7.11.5.

APPLICABILITY: At all times.

ACTION:

- a. With one pump and/or one water supply inoperable, restore the inoperable equipment to OPERABLE status within 7 days or, in lieu of any other report required by Specification 6.9.1, prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next 30 days outlining the plans and procedures to be used to provide for the loss of redundancy in this system. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.
- b. With the fire suppression water system otherwise inoperable:
 1. Establish a backup fire suppression water system within 24 hours, and
 2. In lieu of any other report required by Specification 6.9.1, submit a Special Report in accordance with Specification 6.9.2;
 - a) By telephone within 24 hours,
 - b) Confirmed by telegraph, mailgram or facsimile transmission no later than the first working day following the event, and
 - c) In writing within 14 days following the event, outlining the action taken, the cause of the inoperability and the plans and schedule for restoring the system to OPERABLE status.

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS

4.7.11.1.1 The fire suppression water system shall be demonstrated OPERABLE:

- a. At least once per 7 days by verifying the contained water supply volume.
- b. At least once per 31 days on a STAGGERED TEST BASIS by starting the electric motor driven pump and operating it for at least 15 minutes on recirculation flow. This test shall be performed on a STAGGERED TEST BASIS with the test required by 4.7.11.1.2.a.2.
- c. At least once per 31 days by verifying that each valve (manual, power operated or automatic) in the flow path that is not locked, sealed, or otherwise secured in position, is in its correct position.
- d. At least once per 12 months by performance of a system flush of the filled portions of the system.
- e. At least once per 12 months by cycling each testable valve in the flow path through at least one complete cycle of full travel.
- f. At least once per 18 months by performing a system functional test which includes simulated automatic actuation of the system throughout its operating sequence, and:
 1. Verifying that each automatic valve in the flow path actuates to its correct position,
 2. Verifying that each pump develops at least 2500 gpm at a discharge pressure of 125 psig,
 3. Cycling each valve in the flow path that is not testable during plant operation through at least one complete cycle of full travel, and
 4. Verifying that each high pressure pump starts (sequentially) to maintain the fire suppression water system pressure \geq 80 psig.
- g. At least once per 3 years by performing a flow test of the system in accordance with Chapter 5, Section 11 of the Fire Protection Handbook, 14th Edition, published by the National Fire Protection Association.

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

4.7.11.1.2 The fire pump diesel engine shall be demonstrated OPERABLE:

- a. At least once per 31 days by verifying:
 1. The diesel fuel oil day storage tank contains at least 174 gallons of fuel, and
 2. The diesel starts from ambient conditions and operates for at least 30 minutes on recirculation flow. This test shall be performed on a STAGGERED TEST BASIS with the test required by Specification 4.7.11.1.1.b.
- b. At least once per 92 days by verifying that a sample of diesel fuel from the fuel storage tank, obtained in accordance with ASTM-D270-65, is within the acceptable limits specified in Table 1 of ASTM D975-74 when checked for viscosity, water and sediment.
- c. At least once per 18 months, during shutdown, by:
 1. Subjecting the diesel to an inspection in accordance with procedures prepared in conjunction with its manufacturer's recommendations for the class of service, and
 2. Verifying the diesel starts from ambient conditions on the auto-start signal and operates for \geq 20 minutes while loaded with the fire pump.

4.7.11.1.3 The fire pump diesel starting 24-volt battery bank and charger shall be demonstrated OPERABLE:

- a. At least once per 7 days by verifying that:
 1. The electrolyte level of each battery is above the plates, and
 2. The overall battery voltage is \geq 24 volts.
- b. At least once per 92 days by verifying that the specific gravity is appropriate for continued service of the battery.
- c. At least once per 18 months by verifying that:
 1. The batteries, cell plates and battery racks show no visual indication of physical damage or abnormal deterioration, and
 2. The battery-to-battery and terminal connections are clean, tight, free of corrosion and coated with anti-corrosion material.

PLANT SYSTEMS

SPRAY AND/OR SPRINKLER SYSTEMS

LIMITING CONDITION FOR OPERATION

3.7.11.2 The spray and/or sprinkler systems shown in Table 3.7-5 shall be OPERABLE:

APPLICABILITY: Whenever equipment in the spray/sprinkler protected areas is required to be OPERABLE.

ACTION:

- a. With one or more of the required spray and/or sprinkler systems inoperable, within one hour establish a continuous fire watch with backup fire suppression equipment for those areas in which redundant safe shutdown systems or components could be damaged; for other areas, establish an hourly fire watch patrol. Restore the system to OPERABLE status within 14 days or, in lieu of any other report required by Specification 6.9.1, prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next 30 days outlining the action taken, the cause of the inoperability and the plans and schedule for restoring the system to OPERABLE status.
- b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.7.11.2 Each of the above required spray and/or sprinkler systems shall be demonstrated OPERABLE:

- a. At least once per 31 days by verifying that each valve (manual, power operated or automatic) in the flow path, not locked sealed or otherwise secured in position, is in its correct position.
- b. At least once per 12 months by cycling each testable valve in the flow path through at least one complete cycle of full travel.
- c. At least once per 18 months:
 1. By performing a system functional test which includes simulated automatic actuation of the system, and:
 - a) Verifying that the automatic valves in the flow path actuate to their correct positions on a simulated test signal, and

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

- b) Cycling each valve in the flow path that is not testable during plant operation through at least one complete cycle of full travel.
2. By a visual inspection of the area in the vicinity of each nozzle(s) to verify the spray pattern will not be obstructed.

TABLE 3.7-5

FIRE PROTECTION SPRINKLERS

UNIT 2

<u>SPRINKLER LOCATION</u>	<u>CONTROL VALVE ELEVATION</u>
Unit 2 Aux Feed Pump Room 605*	12'-0"
Unit 2 East Piping Area Room 408*	45'-0"
Unit 2 East Elec Pen Room 409*	45'-0"
Unit 2 West Elec Pen Room 414*	45'-0"
Cable Chase 2A*	45'-0"
Cable Chase 2B*	45'-0"
Unit 2 Main Steam Piping Room 309*	45'-0"
Unit 2 Component Cooling Pp Room 201	5'-0"
Unit 2 East Piping Area 203*	5'-0"
Unit 2 Rad Exh Vent Equip Room 204*	5'-0"
Unit 2 Service Water Pp Room 205*	5'-0"
Unit 2 Boric Acid TK and Pp Room 215*	5'-0"
Unit 2 Reactor Coolant Makeup Pump Room 216A*	5'-0"
Unit 2 Charging Pump Room 105*	(-)10'-0"
Unit 2 Misc Waste Monitor TK Room 106*	(-)10'-0"
Unit 2 ECCS Pump Room 101*	(-)15'-0"
21 Diesel Generator	45'-0"
Unit 2 East Pipe Pen Room 206/310*	5'-0"

NOTE: Sprinklers protecting all rooms listed under heading "Unit 2" will be made operational later in 1981 except for "21 Diesel Generator" which is now operational.

*Sprinklers required to ensure the OPERABILITY of redundant safe shutdown equipment.

PLANT SYSTEMS

HALON SYSTEMS

LIMITING CONDITION FOR OPERATION

3.7.11.3 The following Halon systems shall be OPERABLE with the storage tanks having at least 95% of full charge weight (or level) and 90% of full charge pressure.

- a. Cable spreading rooms total flood system, and associated vertical cable chase 1C, Unit 2.
- b. 460 volt switchgear rooms 27 & 45' elevation Unit 2.

APPLICABILITY: Whenever equipment protected by the Halon system is required to be OPERABLE.

ACTION:

- a. With both the primary and backup Halon systems protecting the areas inoperable, within one hour establish an hourly fire watch with backup fire suppression equipment for those areas protected by the inoperable Halon system. Restore the system to OPERABLE status within 14 days, or, in lieu of any other report required by Specification 6.9.1, prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next 30 days outlining the action taken, the cause of the inoperability and the plans and schedule for restoring the system to OPERABLE status.
- b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.7.11.3 Each of the above required Halon systems shall be demonstrated OPERABLE:

- a. At least once per 31 days by verifying that each valve (manual, power operated or automatic) in the flow path is in its correct position.
- b. At least once per 6 months by verifying Halon storage tank weight (level) and pressure.
- c. At least once per 18 months by:
 1. Verifying the system, including associated ventilation dampers and fire door release mechanisms, actuates manually and automatically, upon receipt of a simulated actuation signal, and
 2. Performance of a flow test through headers and nozzles to assure no blockage.

PLANT SYSTEMS

FIRE HOSE STATIONS

LIMITING CONDITION FOR OPERATION

3.7.11.4 The fire hose stations shown in Table 3.7-6 shall be OPERABLE.

APPLICABILITY: Whenever equipment in the areas protected by the fire hose stations is required to be OPERABLE.

ACTION:

- a. With one or more of the fire hose stations shown in Table 3.7-6 inoperable, route an additional equivalent capacity fire hose to the unprotected area(s) from an OPERABLE hose station within 1 hour. Restore the fire hose station(s) to OPERABLE status within 14 days, or, in lieu of any other report required by Specification 6.9.1, prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next 30 days outlining the action taken, the cause of the inoperability and the plans and schedule for restoring the fire hose station(s) to OPERABLE status.
- b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.7.11.4 Each of the fire hose stations shown in Table 3.7-6 shall be demonstrated OPERABLE;

- a. At least once per 31 days by visual inspection of the station to assure all required equipment is at the station. Hose stations located in the containment shall be visually inspected on each scheduled reactor shutdown, but not more frequently than every 31 days.
- b. At least once per 18 months by:
 1. Removing the hose for inspection and re-racking, and
 2. Replacement of all degraded gaskets in couplings.
- c. At least once per 3 years by:
 1. Partially opening each hose station valve to verify valve OPERABILITY and no flow blockage.
 2. Conducting a hose hydrostatic test at a pressure at least 50 psig greater than the maximum pressure available at that hose station or replacement with a new hose.

TABLE 3.7-6

FIRE HOSE STATIONS

UNIT 2

<u>LOCATION</u>	<u>ELEVATION</u>	<u>NUMBER OF HOSE STATIONS</u>
1. Containment	10'	2
	45'	2
	69'	2
2. Auxiliary Building	-15'*	1
	-10'*	2
	5'	3
	27'	2
	45'	4
	69**	3
3. Turbine Building, Heater Bay Outside Service Water Pump Rooms and Aux Feeder Water Pipe Rooms	12'	2
Outside Switchgear Room	27'	1
Outside Switchgear Room	45'	2
4. Intake Structure	10'*	1

*Fire Hose Stations required for primary protection to ensure the OPERABILITY of safety related equipment.

PLANT SYSTEMS

YARD FIRE HYDRANTS AND HYDRANT HOSE HOUSES

LIMITING CONDITION FOR OPERATION

3:7:11.5 The following yard fire hydrants and associated hydrant hose houses shall be OPERABLE.

APPLICABILITY: Whenever equipment in the areas protected by the yard fire hydrants is required to be OPERABLE.

- a. #6 yard hydrant and associated hydrant hose house, which provides primary protection for Unit 2 RWT blockhouse.
- b. #7 yard hydrant and associated hydrant hose house, which provides primary protection for Unit 1 RWT blockhouse.

ACTION:

- a. With one or more of the yard fire hydrants or associated hydrant hose houses inoperable, within 1 hour have sufficient additional lengths of 2-1/2 inch diameter hose located in an adjacent OPERABLE hydrant hose house to provide service to the unprotected area(s) if the inoperable fire hydrant or associated hydrant hose house is the primary means of fire suppression. Restore the hydrant or hose house to OPERABLE status within 14 days or, in lieu of any other report required by Specification 6.9.1, prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next 30 days outlining the action taken, the cause of the inoperability, and the plans and schedule for restoring the hydrant or hose house to OPERABLE status.
- b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.7.11.5 Each of the yard fire hydrants and associated hydrant hose houses shall be demonstrated OPERABLE:

- a. At least once per 31 days by visual inspection of the hydrant hose house to assure all required equipment is at the hose house.
- b. At least once per 6 months (once during March, April or May and once during September, October or November) by visually inspecting each yard fire hydrant and verifying that the hydrant barrel is dry and that the hydrant is not damaged.

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

c. At least once per 12 months by:

1. Conducting a hose hydrostatic test at a pressure at least 50 psig greater than the maximum pressure available at any yard fire hydrant.
2. Inspecting all the gaskets and replacing any degraded gaskets in the couplings.
3. Performing a flow check of each hydrant to verify its OPERABILITY.

PLANT SYSTEMS

3/4.7.12 PENETRATION FIRE BARRIERS

LIMITING CONDITIONS FOR OPERATION

3.7.12 All fire barrier penetrations (i.e., cable penetration barriers, fire-doors and fire dampers), in fire zone boundaries, protecting safe shutdown areas shall be OPERABLE.

APPLICABILITY: At all times.

ACTION:

- a. With one or more of the above required fire barrier penetrations inoperable within one hour either establish a continuous fire watch on at least one side of the affected penetration, or verify the OPERABILITY of fire detectors on at least one side of the inoperable fire barrier and establish an hourly fire watch patrol; or verify the operability of automatic sprinkler systems (including the water flow alarm and supervisory system) on both sides of the INOPERABLE fire barrier. Restore the inoperable fire barrier penetration(s) to operable status within 7 days or, in lieu of any other report required by Specification 6.9.1, prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next 30 days outlining the action taken, the cause of the inoperable penetration and plans and schedule for restoring the fire barrier penetration(s) to operable status.
- b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.7.12 Each of the above required fire barrier penetrations shall be verified to be OPERABLE:

- a. At least once per 18 months by a visual inspection.
- b. Prior to returning a fire barrier penetration to functional status following repairs or maintenance by performance of a visual inspection of the affected fire barrier penetration(s).

PLANT SYSTEMS

BASES

environment. The operation of this system and the resultant effect on offsite dosage calculations was assumed in the accident analyses.

3/4.7.8 HYDRAULIC SNUBBERS

The hydraulic snubbers are required OPERABLE to ensure that the structural integrity of the reactor coolant system and all other safety related systems is maintained during and following a seismic or other event initiating dynamic loads. The only snubbers excluded from this inspection program are those installed on nonsafety related systems and then only if their failure or failure of the system on which they are installed, would have no adverse effect on any safety related system.

The inspection frequency applicable to snubbers containing seals fabricated from materials which have been demonstrated compatible with their operating environment is based upon maintaining a constant level of snubber protection. Therefore, the required inspection interval varies inversely with the observed snubber failures. The number of inoperable snubbers found during an inspection of these snubbers determines the time interval for the next required inspection of these snubbers. Inspections performed before that interval has elapsed may be used as a new reference point to determine the next inspection. However, the results of such early inspections performed before the original required time interval has elapsed (nominal time less 25%) may not be used to lengthen the required inspection interval. Any inspection whose results require a shorter inspection interval will override the previous schedule.

To provide further assurance of snubber reliability, a representative sample of the installed snubbers will be functionally tested during plant shutdowns at 18 month intervals. These tests will include stroking of the snubbers to verify proper piston movement, lock-up and bleed. Observed failures of these sample snubbers will require functional testing of additional units. To minimize personnel exposures, snubbers installed in high radiation zones or in especially difficult to remove locations may be exempted from these functional testing requirements provided the OPERABILITY of these snubbers was demonstrated during functional testing at either the completion of their fabrication or at a subsequent date.

PLANT SYSTEMS

BASES

3/4.7.9 SEALED SOURCE CONTAMINATION

The limitations on removable contamination for sources requiring leak testing, including alpha emitters, is based on 10 CFR 70.39(c) limits for plutonium. This limitation will ensure that leakage from byproduct, source, and special nuclear material sources will not exceed allowable intake values.

3/4.7.10 WATERTIGHT DOORS

This specification is provided to ensure the protection of safety related equipment from the effects of water or steam escaping from ruptured pipes or components in adjoining rooms.

3/4.7.11 FIRE SUPPRESSION SYSTEMS

The OPERABILITY of the fire suppression systems ensures that adequate fire suppression capability is available to confine and extinguish fires occurring in any portion of the facility where safety related equipment is located. The fire suppression system consists of the water system, spray and/or sprinklers, Halon and fire hose stations. The collective capability of the fire suppression systems is adequate to minimize potential damage to safety related equipment and is a major element in the facility fire protection program.

In the event that portions of the fire suppression systems are inoperable, alternate backup fire fighting equipment is required to be made available in the affected areas until the inoperable equipment is restored to service. Where a continuous fire watch is required in lieu of fire protection equipment and habitability due to heat or radiation is a concern, the fire watch should be stationed in a habitable area as close as possible to the inoperable equipment.

In the event the fire suppression water system becomes inoperable, immediate corrective measures must be taken since this system provides the major fire suppression capability of the plant. The requirement for a twenty-four hour report to the Commission provides for prompt evaluation of the acceptability of the corrective measures to provide adequate fire suppression capability for the continued protection of the nuclear plant.

UNITED STATES NUCLEAR REGULATORY COMMISSION
DOCKET NOS. 50-317 AND 50-318
BALTIMORE GAS AND ELECTRIC COMPANY
NOTICE OF ISSUANCE OF AMENDMENTS TO FACILITY
OPERATING LICENSES

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment Nos. 61 and 43 to Facility Operating Licenses Nos. DPR-53 and DPR-69, issued to Baltimore Gas and Electric Company, which revised Technical Specifications for operation of the Calvert Cliffs Nuclear Power Plant, Units Nos. 1 and 2 located in Calvert County, Maryland. The amendments were effective on November 17, 1981.

The amendments revise the Appendix A Technical Specifications to reflect changes in fire protection features.

The application for the amendments complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the license amendments. Prior public notice of the amendments was not required since the amendments do not involve a significant hazards consideration.

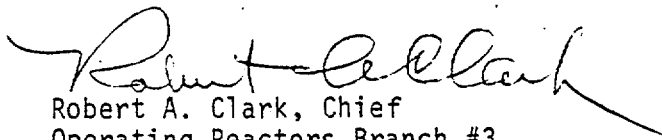
The Commission has determined that the issuance of these amendments will not result in any significant environmental impact and that pursuant to 10 CFR §51.5(d)(4) an environmental impact statement, or negative declaration and environmental impact appraisal need not be prepared in connection with issuance of the amendments.

For further details with respect to this action, see (1) the application for amendment dated August 1, 1980 as supplemented June 5, 1981, (2) Amendment Nos. 61 and 43 to License Nos. DPR-53 and DPR-69, and (3) the Commission's related letter dated November 12, 1981.

All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, N. W., Washington, D.C. and at the Calvert County Library, Prince Frederick, Maryland. A copy of items (2) and (3) may be obtained upon request addressed to the U. S. Nuclear Regulatory Commission, Washington, D.C. 20555, Attention: Director, Division of Licensing.

Dated at Bethesda, Maryland, the 12th day of November, 1981.

FOR THE NUCLEAR REGULATORY COMMISSION


Robert A. Clark, Chief
Operating Reactors Branch #3
Division of Licensing

ATTACHMENT TO LICENSE AMENDMENT NO. 43

FACILITY OPERATING LICENSE NO. DPR-69

DOCKET NO. 50-318

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

Pages

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