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Docket No. 50-317 50-318 / L PDR TERA NSIC DEisenhut PMKreutzer (3) DJaffe RAC1ark **CMiles** Chairman, ASLAB

DISTRIBUTION:

Mr. A. E. Lundvall, Jr. Vice President - Supply Baltimore Gas & Electric Company P.O. Box 1475 Baltimore, Maryland 21203

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Dear Mr. Lundvall:

Enclosures:

The Commission has issued the enclosed Amendment Nos.5.9 and 4.1 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 applications dated January 29 and July 30, 1981.

These amendments add conditions to the licenses requiring implementation of a secondary water chemistry monitoring program to inhibit steam generator tube degradation; delete secondary water chemistry from the Technical Specifications; delete two snubbers from the list of safety related snubbers; add measures to prevent inadvertent reactor coolant system boron dilution; clarify identification of valves associated with the control room ventilation system; and a change to the basis for auxiliary feedwater flow requirements.

Copies of the Safety Evaluation and the Notice of Issuance are also enclosed.

Sincerely.

Original signed by

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

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

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Docket No. 50-317/50-318

Docketing and Service Section Office of the Secretary of the Commission

SUBJECT: BALTIMORE GAS AND ELECTRIC COMPANY, Calvert Cliffs Nuclear Power Plant, Units No. 1 and 2.

Two signed originals of the <u>Federal Register</u> Notice identified below are enclosed for your transmittal to the Office of the Federal Register for publication. Additional conformed copies (12) of the Notice are enclosed for your use.

- □ Notice of Receipt of Application for Construction Permit(s) and Operating License(s).
- □ Notice of Receipt of Partial Application for Construction Permit(s) and Facility License(s): Time for Submission of Views on Antitrust Matters.
- □ Notice of Availability of Applicant's Environmental Report.
- □ Notice of Proposed Issuance of Amendment to Facility Operating License.
- Notice of Receipt of Application for Facility License(s); Notice of Availability of Applicant's Environmental Report; and Notice of Consideration of Issuance of Facility License(s) and Notice of Opportunity for Hearing.
- □ Notice of Availability of NRC Draft/Final Environmental Statement.
- □ Notice of Limited Work Authorization.
- □ Notice of Availability of Safety Evaluation Report.
- □ Notice of Issuance of Construction Permit(s).
- □ Notice of Issuance of Facility Operating License(s) or Amendment(s).
- © Other: <u>Amendment Nos. 59 and 41.</u> Referenced documents have been provided PDR.

Division	of	Licensing
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	En	closure:
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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. 59 License No. DPR-53

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The applications for amendment by Baltimore Gas & Electric Company (the licensee) dated January 29 and July 30, 1981, 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, Facility License No. DPR-53 is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, by amending paragraph 2.C.(2), and by adding paragraph 2.C.(5) to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 59, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

(5) Secondary Water Chemistry Monitoring Program

The licensee shall implement a secondary water chemistry monitoring program to inhibit steam generator tube degradation. This program shall include:

- Identification of a sampling schedule for the critical parameters and control points for these parameters.
- b. Identification of the procedures used to quantify parameters that are critical to control points.
- c. Identification of process sampling points.
- d. Procedure for recording and management of data.
- e. Procedures defining corrective actions for off control point chemistry conditions; and
- f. A procedure identifying the authority responsible for the interpretation of the data and the sequence and timing of administrative events required to initiate corrective action.
- 3. This license amendment is effective as of the date of its issuance.

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 4, 1981

2.

ATTACHMENT TO LICENSE AMENDMENT NO. 59

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.

Pages

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3/4 7-10 3/4 7-11 3/4 7-12 3/4 7-17 3/4 7-31 3/4 9-8 3/4 10-5 B 3/4 7-2 PLANT SYSTEMS

MAIN STEAM LINE ISOLATION VALVES

LIMITING CONDITION FOR OPERATION

3.7.1.5 Each main steam line isolation valve shall be OPERABLE.

APPLICABILITY: MODES 1, 2 and 3.

ACTION:

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MODE 1 - With one main steam line isolation valve inoperable, POWER OPERATION may continue provided the inoperable valve is either restored to OPERABLE status or closed within 4 hours; otherwise, be in HOT SHUTDOWN within the next 12 hours.

MODES 2 - With one main steam line isolation valve inoperable, suband 3 sequent operation in MODES 1, 2 or 3 may proceed provided:

- a. The isolation valve is maintained closed.
- b. The provisions of Specification 3.0.4 are not applicable.

Otherwise, be in HOT SHUTDOWN within the next 12 hours.

SURVEILLANCE REQUIREMENTS

4.7.1.5 Each main steam line isolation valve shall be demonstrated OPERABLE by verifying full closure within 3.6 seconds when tested pursuant to Specification 4.0.5.

CALVERT CLIFFS-UNIT 1

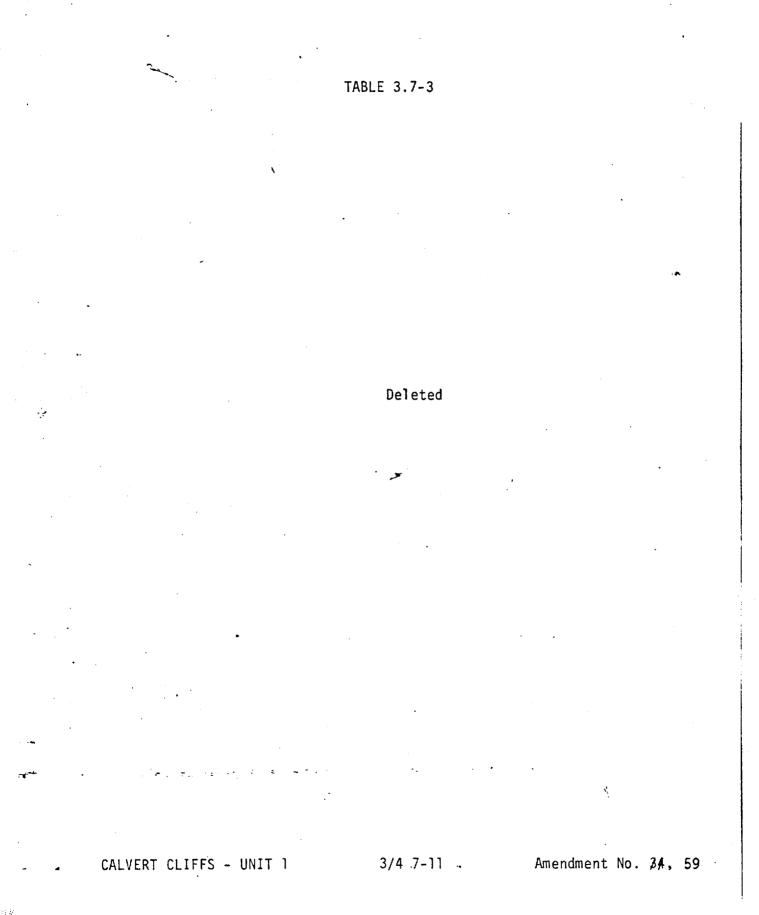
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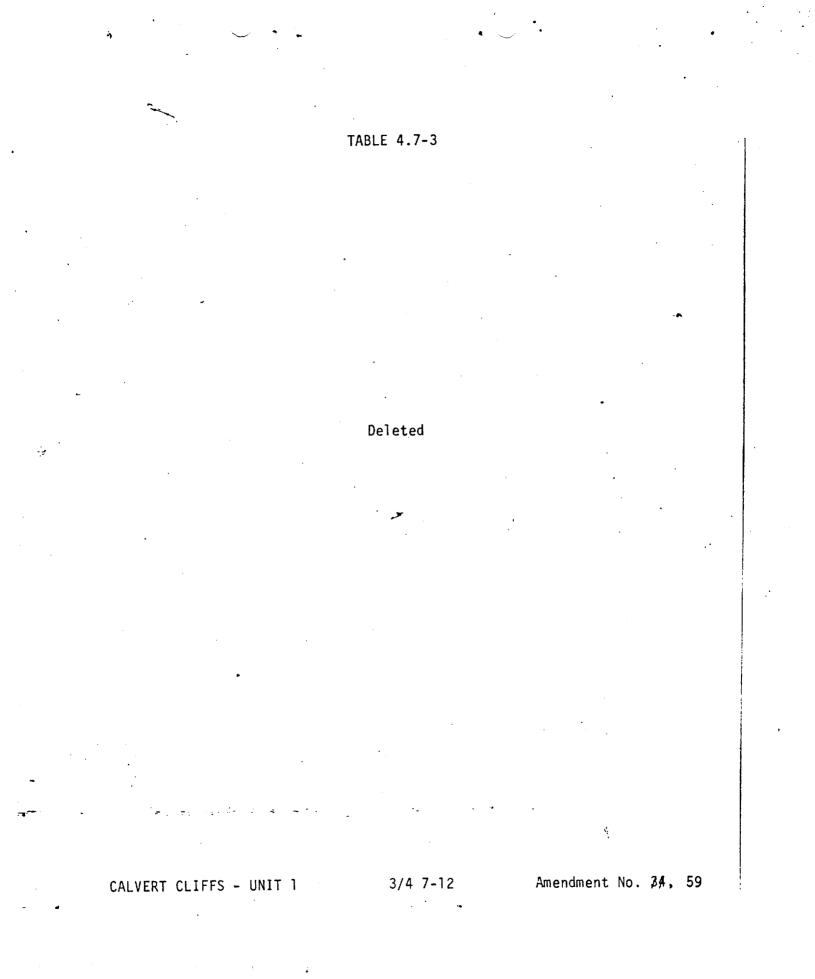
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Amendment No. 34, 59

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PLANT SYSTEMS

3/4.7.6 CONTROL ROOM EMERGENCY VENTILATION SYSTEM

LIMITING CONDITION FOR OPERATION

3.7.6.1 The control room emergency ventilation system shall be OPERABLE with:

- Two filter trains. a.
- b. Two air conditioning units,
- Two isolation valves in each control room outside air intake c. duct.
- Two isolation valves in the common exhaust to atmosphere duct, d. and
- One isolation valve in the toilet area exhaust duct. e.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

- a. With one filter train inoperable, restore the inoperable train to OPERABLE status within 7 days or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- With one air conditioning unit inoperable, restore the inoperable b. unit to OPERABLE status within 7 days or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- c. With one isolation valve per control room outside air intake duct inoperable, operation may continue provided the other isolation valve in the same duct is maintained closed; otherwise, be in at least HOT STANDBY within 6 hours and in COLD SHUTDOWN within the following 30 hours.
- With one common exhaust to atmosphere duct isolation valve ind. operable, restore the inoperable valve to OPERABLE status within 7 days or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- e. With the toilet area exhaust duct isolation valve inoperable, restore the inoperable valve to OPERABLE status within 24 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

CALVERT CLIFFS - UNIT 1 3/4 7-17

Amendment No. 59

PLANT SYSTEMS

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SURVEILLANCE REQUIREMENTS

4.7.6.1 The control room emergency ventilation system shall be demonstrated OPERABLE:

- a. At least once per 12 hours by verifying that the control room air temperature is $< 120^{\circ}F$.
- b. At least once per 31 days by initiating flow through each HEPA filter and charcoal adsorber train and verifying that each train operates for at least 15 minutes.
- c. At least once per 18 months or (1) after any structural maintenance on the HEPA filter or charcoal adsorber housing, or (2) following painting, fire or chemical release in any ventilation zone communicating with the system by:
 - Verifying that the charcoal adsorbers remove > 99% of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with ANSI N510-1975 while operating the ventilation system at a flow rate of 2000 cfm + 10%.
 - 2. Verifying that the HEPA filter banks remove \geq 99% of the DOP when they are tested in-place in accordance with ANSI N510-1975 while operating the ventilation system at a flow rate of 2000 cfm + 10%.
 - 3. Verifying within 31 days after removal that a laboratory analysis of a carbon sample from either at least one test canister or at least two carbon samples removed from one of the charcoal adsorbers demonstrates a removal efficiency of > 90% for radioactive methyl iodide when the sample is tested in accordance with ANSI N510-1975 (130°C, 95% R.H.). The carbon samples not obtained from test canisters shall be prepared by either:
 - a) Emptying one entire bed from a removed adsorber tray, mixing the adsorbent thoroughly, and obtaining samples at least two inches in diameter and with a length equal to the thickness of the bed, or
 - b) Emptying a longitudinal sample from an adsorber tray, mixing the adsorbent thoroughly, and obtaining samples at least two inches in diameter and with a length equal to the thickness of the bed.

CALVERT CLIFFS-UNIT 1

3/4 7-18

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-	SNUBBER NO.	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE (A or I)	HIGH RADIATION ZONE** (Yes or No)	ESPECIALLY DIFFICULT TO REMOVE (Yes or No)
	1-36-1 "	SUCTION #11 AUX. FEED PUMP 12'	A	No	No
	1-36-1A	SUCTION #11 AUX. FEED PUMP 12'	A	No	No ·
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	·	1	· · · · · · · · · · · · · · · · · · ·	. :	
		· · · · · · · · · · · · · · · · · · ·			
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	1-38-4	PRESSURIZER SAMPLE LINES 38'	Ι	Yes	No
	1-38-5	PRESSURIZER SAMPLE LINES 24'	Ţ	Yes	No
	1-38-6	PRESSURIZER SAMPLE LINES 37'	I	Yes	No
	1-24-1	DIESEL GENERATOR #12 EXHAUST 92'	Α	No	No .
	1-24-2	DIESEL GENERATOR #11 EXHAUST 92'	А	No	No

TABLE 3.7-4 SAFETY RELATED HYDRAULIC SNUBBERS*

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TAB	LE	3.	7-4

1.

SAFETY RELATED HYDRAULIC SNUBBERS*

FFS-UNIT	SNUBBER NO.	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE (A or I)	HIGH RADIATION ZONE** (Yes or No)	ESPECIALLY DIFFICULT TO REMOVE (Yes or No)
	1-24-3	EMERGENCY DIESEL #12 EXHAUST 61	Α	No	No
	1-24-3A	EMERGENCY DIESEL #12 EXHAUST 61'	Α	No	No
	1-24-4	EMERGENCY DIESEL #11 EXHAUST 61'	A	No	No
	1-24-4A	EMERGENCY DIESEL #11 EXHAUST 61'	A	No	No
	1-24-5	DIESEL GENERATOR #21 EXHAUST 92'	A	No	No
	1-24-6	DIESEL GENERATOR #21 EXHAUST 62'	Ϋ́Α	No	No
1	1-24-6A	DIESEL GENERATOR #21 EXHAUST 62'	A	No	No
)	1-41-1	SUCTION #13 CHARGING PUMP -10'	Α	No	No
	1-41-2	AUX. SPRAY 65'	. I	Yes	No
	1-41-3	AUX. SPRAY 65'	I	Yes	No .·

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CALVERT CLIFFS-UNIT]

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3/4 7-32

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REFUELING OPERATIONS

CRANE TRAVEL - SPENT FUEL STORAGE POOL BUILDING

LIMITING CONDITION FOR OPERATION

3.9.7 Loads in excess of 1600 pounds shall be prohibited from travel over fuel assemblies in the storage pool.

APPLICABILITY: With fuel assemblies in the storage pool.

ACTION:

With the requirements of the above specification not satisfied, place the crane load in a safe condition. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

4.9.7 The weight of each load, other than a fuel assembly and CEA, shall be verified to be \leq 1600 pounds prior to moving it over fuel assemblies.

CALVERT CLIFFS - UNIT 1

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REFUELING OPERATIONS

SHUTDOWN COOLING AND COOLANT CIRCULATION

LIMITING CONDITION FOR OPERATION

3.9.8.1 At least one shutdown cooling loop shall be in operation.*

APPLICABILITY: MODE 6 at all reactor water levels.

ACTION:

a. -With less than one shutdown cooling loop in operation*, suspend all operations involving an increase in the reactor decay heat load or a reduction in boron concentration of the Reactor Coolant System and, specifically, the charging pumps shall be de-energized and the charging flow paths shall be closed. Close all containment penetrations providing direct access from the containment atmosphere to the outside atmosphere within 4 hours. The shutdown cooling pumps may be de-energized during the time intervals required for local leak rate testing of containment penetration number 41 pursuant to the requirements of Specification 4.6.1.2.d and/or to permit maintenance on valves located in the common shutdown cooling suction line, provided (1) no operations are permitted which could cause dilution of the reactor coolant system boron concentration and, specifically, the charging pumps shall be de-energized and the charging flow paths shall be closed, (2) all CORE ALTERATIONS are suspended, (3) all containment penetrations providing direct access from the containment atmosphere to the outside atmosphere are maintained closed, and (4) the water level above the top of the irradiated fuel is greater than 23 feet.

b. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

4.9.8.1 A shutdown cooling loop shall be determined to be in operation and circulating reactor coolant at a flow rate of \geq 3000 gpm** at least once per 4 hours.

* The shutdown cooling loop may be removed from operation for up to 1 hour per 8 hour period during the performance of CORE ALTERATIONS in the vicinity of the reactor pressure vessel hot legs.

 $** \ge 1500$ gpm when the Reactor Coolant System is drained to a level below the midplane of the hot leg.

CALVERT CLIFFS - UNIT]

Amendment No. 38, 58, ⁵⁹

SPECIAL TEST EXCEPTIONS

COOLANT CIRCULATION

LIMITING CONDITION FOR OPERATION

3.10.5 The reactor coolant circulation requirements of Specification 3.4.1 may be suspended and all reactor coolant pumps and shutdown cooling pumps may be de-energized during the time intervals required 1) for local leak rate testing of containment penetration number 41 pursuant to the requirements of Specification 4.6.1.2.d and 2) to permit maintenance on valves located in the common shotdown cooling suction line or on the shutdown cooling flow control valve (CV-306) provided:

- a. No operations are permitted which could cause dilution of the reactor coolant system boron concentration, and specifically, the charging pumps shall be de-energized and the charging flow paths shall be closed,
- b. The xenon reactivity is $\leq 0.1\% \Delta k/k$ and is approaching stability, and
- c. The SHUTDOWN MARGIN requirement of Specification 3.1.1.2 is verified at least once per 8 hours when no shutdown cooling or reactor coolant pumps are in operation.

APPLICABILITY: MODES 4 and 5.

ACTION:

With the requirements of the above specification not satisfied, suspend all operations involving local leak rate testing of containment penetration number 41, maintenance on valves located in the common shutdown cooling suction line, and maintenance on valve CV-306.

SURVEILLANCE REQUIREMENTS

4.10.5.1 The charging pumps shall be verified de=energized and the charging flow paths shall be verified closed at least once per hour.

4.10.5.2 The xeon reactivity shall be determined to be $\leq 0.1\% \Delta k/k$ and approaching stability within 1 hour prior to suspending reactor coolant circulation.

CALVERT CLIFFS - UNIT 1

3/4 10-5

Amendment No. 59

3/4.7 PLANT SYSTEMS

BASES

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3/4.7.1 TURBINE CYCLE

3/4.7.1.1 SAFETY VALVES

The OPERABILITY of the main steam line code safety valves ensures that the secondary system pressure will be limited to within its design pressure of 1000 psig during the most severe anticipated system operational transient. The maximum relieving capacity is associated with a turbine trip from 100% RATED THERMAL POWER coincident with an assumed loss of condenser heat sink (i.e., no steam bypass to the condenser).

The specified valve lift settings and relieving capacities are in accordance with the requirements of Section III of the ASME Boiler and Pressure Code, 1971 Edition. The total relieving capacity for all valves on all of the steam lines is 12.18×10^6 lbs/hr which is 108 percent of the total secondary steam flow of 11.23×10^6 lbs/hr at 100% RATED THERMAL POWER. A minimum of 2 OPERABLE safety valves per steam generator ensures that sufficient relieving capacity is available for removing decay heat.

STARTUP and/or POWER OPERATION is allowable with safety valves inoperable within the limitations of the ACTION requirements on the basis of the reduction in secondary system steam flow and THERMAL POWER required by the reduced reactor trip settings of the Power Level-High channels. The reactor trip setpoint reductions are derived on the following bases:

For two loop operation

$$SP = \frac{(X) - (Y)(V)}{X} \times 106.5$$

For single loop operation (two reactor coolant pumps operating in the same loop)

$$SP = \frac{(X) - (Y)(U)}{X} \times 46.8$$

where:

SP

= reduced reactor trip setpoint in percent of RATED
THERMAL POWER

= maximum number of inoperable safety valves per steam
line

CALVERT CLIFFS - UNIT 1

B 3/4 7-1

PLANT SYSTEMS

BASES

- U = maximum number of inoperable safety valves per operating steam line
- 106.5 = Power Level-High Trip Setpoint for two loop operation
- 46.8 = Power Level-High Trip Setpoint for single loop operation with two reactor coolant pumps operating in the same loop
- X = Total relieving capacity of all safety valves per steam line in lbs/hour
- Y = Maximum relieving capacity of any one safety value in lbs/hour

3/4.7.1.2 AUXILIARY FEEDWATER SYSTEM

The OPERABILITY of the auxiliary feedwater system ensures that the Reactor Coolant System can be cooled down to less than 300°F from normal operating conditions in the event of a total loss of offsite power.

Each steam driven auxiliary feedwater pump is capable of delivering a total feedwater flow of 700 gpm at a Total Dynamic Head of 2490 ft to the entrance of the steam generators. A capacity of 450 gpm, however, is sufficient to ensure that adequate feedwater flow is available to remove decay heat and reduce the Reactor Coolant System temperature to less than 300°F when the shutdown cooling system may be placed into operation.

3/4.7.1.3 CONDENSATE STORAGE TANK

The OPERABILITY of the condensate storage tank with the minimum water volume ensures that sufficient water is available to maintain the RCS at HOT STANDBY conditions for 6 hours with steam discharge to atmosphere with concurrent with total loss of offsite power. The contained water volume limit includes an allowance for water not usable because of tank discharge line location or other physical characteristics.

3/4.7.1.4 ACTIVITY

The limitations on secondary system specific activity ensure that the resultant off-site radiation dose will be limited to a small fraction

CALVERT CLIFFS-UNIT 1

B 3/4 7-2

Amendment No. 59



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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. 41 License No. DPR-69

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The applications for amendment by Baltimore Gas & Electric Company (the licensee) dated January 29 and July 30, 1981, 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, Facility License No. DPR-69 is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, by amending paragraph 2.C.(2), and by adding paragraph 2.C.(7) to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 41, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

(5) Secondary Water Chemistry Monitoring Program

The licensee shall implement a secondary water chemistry monitoring program to inhibit steam generator tube degradation. This program shall include:

- Identification of a sampling schedule for the critical a. parameters and control points for these parameters.
- Identification of the procedures used to quantify parab. meters that are critical to control points.
- Identification of process sampling points. c.
- d. Procedure for recording and management of data.
- e. Procedures defining corrective actions for off control point chemistry conditions: and
- A procedure identifying the authority responsible for f. the interpretation of the data and the sequence and timing of administrative events required to initiate corrective action.
- 3. This license amendment is effective as of the date of its issuance.

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 4, 1981

2.

ATTACHMENT TO LICENSE AMENDMENT NO. 41

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.

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PLANT SYSTEMS

MAIN STEAM LINE ISOLATION VALVES

LIMITING CONDITION FOR OPERATION

3.7.1.5 Each main steam line isolation valve shall be OPERABLE.

APPLICABILITY: MODES 1, 2 and 3.

ACTION:

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MODE 1 - With one main steam line isolation valve inoperable, POWER OPERATION may continue provided the inoperable valve is either restored to OPERABLE status or closed within 4 hours; otherwise, be in HOT SHUTDOWN within the next 12 hours.

MODES 2 - With one main steam line isolation valve inoperable, suband 3 sequent operation in MODES 1, 2 or 3 may proceed provided:

a. The isolation valve is maintained closed.

 The provisions of Specification 3.0.4 are not applicable.

Otherwise, be in HOT SHUTDOWN within the next 12 hours.

SURVEILLANCE REQUIREMENTS

4.7.1.5 Each main steam line isolation valve shall be demonstrated OPERABLE by verifying full closure within 3.6 seconds when tested pursuant to Specification 4.0.5.

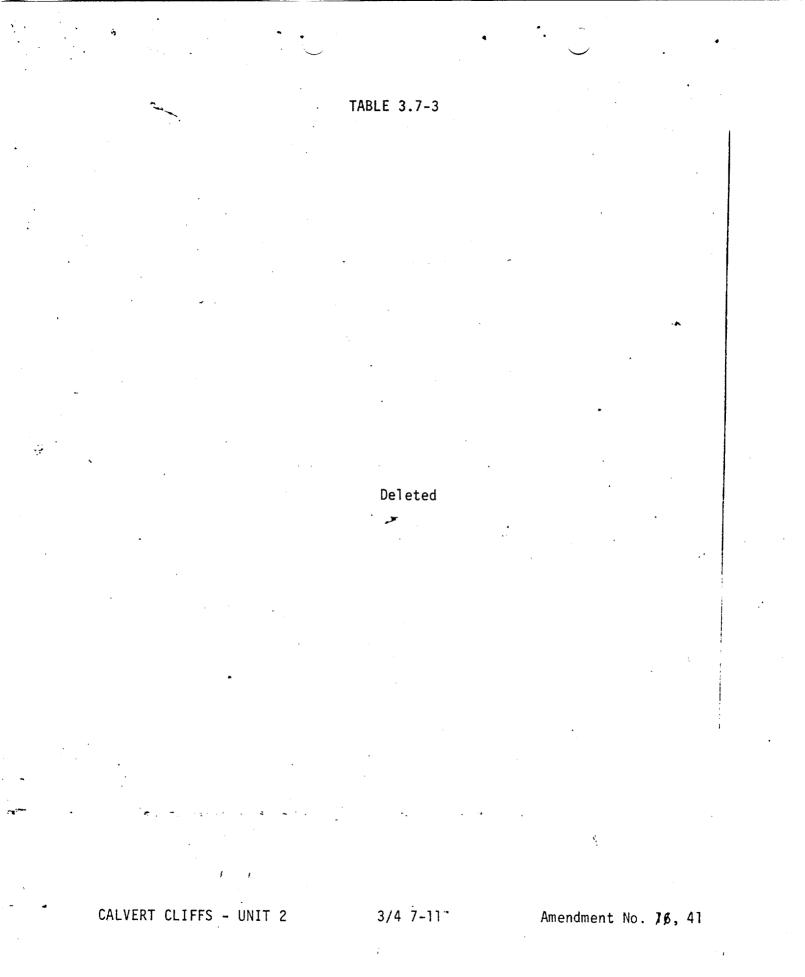
CALVERT CLIFFS-UNIT 2

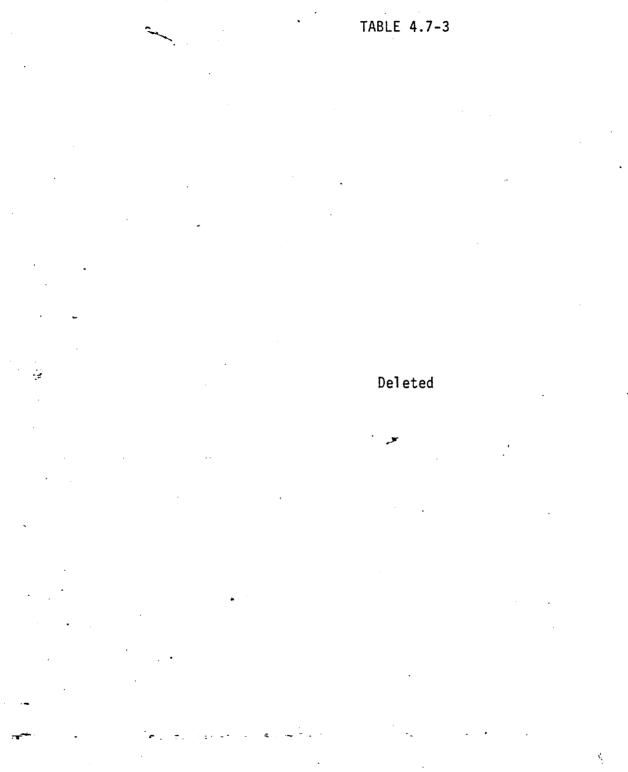
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Amendment No. 76, 41

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CALVERT CLIFFS - UNIT 2

PLANT SYSTEMS

3/4.7.6 CONTROL ROOM EMERGENCY VENTILATION SYSTEM

LIMITING CONDITION FOR OPERATION

3.7.6.1 The control room emergency ventilation system shall be OPERABLE with:

a. Two filter trains,

- b. Two air conditioning units,
- Two isolation valves in each control room outside air intake с. duct.
- d. Two isolation valves in the common exhaust to atmosphere duct, and

One isolation valve in the toilet area exhaust duct.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

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- a. With one filter train inoperable, restore the inoperable train to OPERABLE status within 7 days or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- With one air conditioning unit inoperable, restore the inoperable b. . unit to OPERABLE status within 7 days or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- With one isolation valve per control room outside air intake duct c. inoperable, operation may continue provided the other isolation valve in the same duct is maintained closed; otherwise, be in at least HOT STANDBY within 6 hours and in COLD SHUTDOWN within the following 30 hours.
- d. With one common exhaust to atmosphere duct isolation valve inoperable, restore the inoperable valve to OPERABLE status within 7 days or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- e: With the toilet area exhaust duct isolation valve inoperable, restore the inoperable valve to OPERABLE status within 24 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

CALVERT CLIFFS - UNIT 2 3/4 7-17

Amendment No. 41

PLANE SYSTEMS

SURVEILLANCE REQUIREMENTS

4.7.6.1 The control room emergency ventilation system shall be demonstrated OPERABLE:

- a. At least once per 12 hours by verifying that the control room air temperature is $\leq 120^{\circ}$ F.
- b. At least once per 31 days by initiating flow through each HEPA filter and charcoal adsorber train and verifying that each train operates for at least 15 minutes.
- c. At least once per 18 months or (1) after any structural maintenance on the HEPA filter or charcoal adsorber housing, or (2) following painting, fire or chemical release in any ventilation zone communicating with the system by:
 - Verifying that the charcoal adsorbers remove > 99% of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with ANSI N510-1975 while operating the ventilation system at a flow rate of 2000 cfm + 10%.
 - 2. Verifying that the HEPA filter banks remove \geq 99% of the DOP when they are tested in-place in accordance with ANSI N510-1975 while operating the ventilation system at a flow rate of 2000 cfm + 10%.
 - 3. Verifying within 31 days after removal that a laboratory analysis of a carbon sample from either at least one test canister or at least two carbon samples removed from one of the charcoal adsorbers demonstrates a removal efficiency 'of > 90% for radioactive methyl iodide when the sample is tested in accordance with ANSI N510-1975 (130°C, 95% R.H.). The carbon samples not obtained from test canisters shall be prepared by either:
 - a) Emptying one entire bed from a removed adsorber tray, mixing the adsorbent thoroughly, and obtaining samples at least two inches in diameter and with a length equal to the thickness of the bed, or
 - b) Emptying a longitudinal sample from an adsorber tray, mixing the adsorbent thoroughly, and obtaining samples at least two inches in diameter and with a length equal to the thickness of the bed.

CALVERT CLIFFS - UNIT 2

, TABLE 3.7-4

e.

SAFELY RELATED HYDRAULIC SNUBBERS*

SNUBBER	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR	HIGH RADIATION ZONE**	ESPECIALLY DIFFICULT TO REMOVE
	1	(A or I)	(Yes or No)	(Yes or No)
2-15-5	COMP. COOLING PUMP #22 DISCH. 18'-6"	A	No	Yes
2-15-6	COMP. COOLING PUMPS DISCH. HEADER 14'-5"	A	No	Yes
2-15-7	COMP. COOLING PUMPS DISCH. HEADER 14'-5"	A	No	Yes
2-15-8	COMP. COOLING TO LIQUID WASTE EVAP. 64'	A	No	No
2-15-9	COMP. COOLING TO LIQUID WAST EVAP	. 64' A	No	No
2-36-1	STEAM SUPPLY TO #22 AUX. SGFP 12'	¥ A	No	No
2-36-1A	STEAM SUPPLY TO #22 AUX. SGFP 12'	Α	No	No
2-36-2	STEAM SUPPLY TO #21 AUX. SGFP 12'	· A	No	No
2-36-2A	STEAM SUPPLY TO #21 AUX. SGFP 12'	A	No	No
2-36-4	AFW INLET TO #21 STEAM GENERATOR 65'	I	Yes	No
2-36-4A	AFW INLET TO #21 STEAM GENERATOR 65'	·I	Yes	No
2-36-5	AFW INLET TO #22 STEAM GENERATOR 65'	I	Yes	No
2-38-2	RCS AUX. PIPING TO SAMPLE COOLER 54'1"	I	Yes	No

CALVERT CLIFFS-UNIT 2

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Amendment No.29, 41

TABLE 3.7-4

SAFETY RELATED HYDRAULIC SNUBBERS	SAFETY	RELATED	HYDRAULIC	SNUBBERS ³
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SNUBBER	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE (A or I)	HIGH RADIATION ZONE** (Yes or No)	ESPECIALLY DIFFICULT TO REMOVE (Yes or No)
	•			
2-41-1	CHARGING LINE OUTLET OF REGEN HEAT EXCHG 40'	Ι	Yes	No
2-45-1	F:W. INLET TO #21 STEAM GENERATOR 40'-4"	I	Yes	No
2-45-1A	F.W. INLET TO #21 STEAM GENERATOR 40'-4"	I	Yes .	No
2-45-2	F.W. INLET TO #22 STEAM GENERATOR 55'	۲ ۱	Yes	No
2-45-,3	F.W. INLET TO #22 STEAM GENERATOR 55'	I	Yes	No
2-52-1	#21 S.I. PUMPS SUCTION FROM CONT. SUMP 5'-7"	A	No	No
2-52-2	LPSI PUMP #21 SUCTION 0'-6"	A ·	No	No
2-52-2A	LPSI PUMP #21 SUCTION 0'-6"	А	No	No
2-52-3	LPSI PUMP #22 DISCHARGE 4'-0"	A	No	No
2-52-3A	LPSI PUMP #22 DISCHARGE 4'-0"	Α	No	No
2-52-4	HPSI PUMP #22 SUCTION 5'-10"	Α	No ^{\$}	No
2-52-5	HPSI PUMP #23 SUCTION 4'-9"	Α	No	No
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CALVERT CLIFFS-UNIT 2

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REFUELING OPERATIONS

CRANE TRAVEL - SPENT FUEL STORAGE POOL BUILDING

LIMITING CONDITION FOR OPERATION

3.9.7 Loads in excess of 1600 pounds shall be prohibited from travel over fuel assemblies in the storage pool.

APPLICABILITY: With fuel assemblies in the storage pool.

ACTION:

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With the requirements of the above specification not satisfied, place the crane load in a safe condition. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

4.9.7 The weight of each load, other than a fuel assembly and CEA, shall be verified to be \leq 1600 pounds prior to moving it over fuel assemblies.

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REFUELING OPERATIONS

SHUTDOWN COOLING AND COOLANT CIRCULATION

LIMITING CONDITION FOR OPERATION

3.9.8.1 At least one shutdown cooling loop shall be in operation.*

APPLICABILITY: MODE 6 at all reactor water levels.

ACTION:

- a. With less than one shutdown cooling loop in operation*, suspend all operations involving an increase in the reactor decay heat load or a reduction in boron concentration of the Reactor <u>Coolant System</u> and, specifically, the charging pumps shall be de-energized and the charging flow paths shall be closed. Close all containment penetrations providing direct access from the containment atmosphere to the outside atmosphere within 4 hours. The shutdown cooling pumps may be de-energized during the time intervals required for local leak rate testing of containment penetration number 41 pursuant to the requirements of Specification 4.6.1.2.d and/or to permit maintenance on valves located in the common shutdown cooling suction line, provided (1) no operations are permitted which could cause dilution of the reactor coolant system boron concentration and, specifically, the charging pumps shall be de-energized and the charging flow paths shall be closed, (2) all CORE ALTERATIONS are suspended, (3) all containment penetrations providing direct access from the containment atmosphere to the outside atmosphere are maintained closed, and (4) the water level above the top of the irradiated fuel is greater than 23 feet.
- b. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

4.9.8.1 A shutdown cooling loop shall be determined to be in operation and circulating reactor coolant at a flow rate of \geq 3000 gpm** at least once per 4 hours.

* The shutdown cooling loop may be removed from operation for up to 1 hour per 8 hour period during the performance of CORE ALTERATIONS in the vicinity of the reactor pressure vessel hot legs.

 $** \ge 1500$ gpm when the Reactor Coolant System is drained to a level below the midplane of the hot leg.

CALVERT CLIFFS - UNIT 2

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SPECIAL TEST EXCEPTIONS

COOLANT CIRCULATION

LIMITING CONDITION FOR OPERATION

3.10.5 The reactor coolant circulation requirements of Specification 3.4.1 may be suspended and all reactor coolant pumps and shutdown cooling pumps may be de-energized during the time intervals required 1) for local leak rate testing of containment penetration number 41 pursuant to the requirements of Specification 4.6.1.2.d and 2) to permit maintenance on valves located in the common shotdown cooling suction line or on the shutdown cooling flow control valve (CV-306) provided:

- a. No operations are permitted which could cause dilution of the reactor coolant system boron concentration, and specifically, the charging pumps shall be de-energized and the charging flow paths shall be closed,
- b. The xenon reactivity is $\leq 0.1\% \Delta k/k$ and is approaching stability, and
- c. The SHUTDOWN MARGIN requirement of Specification 3.1.1.2 is verified at least once per 8 hours when no shutdown cooling or reactor coolant pumps are in operation.

APPLICABILITY: MODES 4 and 5.

ACTION:

With the requirements of the above specification not satisfied, suspend all operations involving local leak rate testing of containment penetration number 41, maintenance on valves located in the common shutdown cooling suction line, and maintenance on valve CV-306.

SURVEILLANCE REQUIREMENTS

4.10.5.1 The charging pumps shall be verified de=energized and the charging flow paths shall be verified closed at least once per hour.

4.10.5.2 The xeon reactivity shall be determined to be $\leq 0.1\% \Delta k/k$ and approaching stability within 1 hour prior to suspending reactor coolant circulation.

CALVERT CLIFFS - UNIT 2

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3/4.7 PLANT SYSTEMS

BASES

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3/4.7.1 TURBINE CYCLE

3/4.7.1.1 SAFETY VALVES

The OPERABILITY of the main steam line code safety valves ensures that the secondary system pressure will be limited to within its design pressure of 1000 psig during the most severe anticipated system operational transient. The maximum relieving capacity is associated with a turbine trip from 100% RATED THERMAL POWER coincident with an assumed loss of condenser heat sink (i.e., no steam bypass to the condenser).

The specified valve lift settings and relieving capacities are in accordance with the requirements of Section III of the ASME Boiler and Pressure Code, 1971 Edition. The total relieving capacity for all valves on all of the steam lines is 12.18×10^6 lbs/hr which is 108 percent of the total secondary steam flow of 11.23×10^6 lbs/hr at 100% RATED THERMAL POWER. A minimum of 2 OPERABLE safety valves per steam generator ensures that sufficient relieving capacity is available for removing decay heat.

STARTUP and/or POWER OPERATION is allowable with safety values inoperable within the limitations of the ACTION requirements on the basis of the reduction in secondary system steam flow and THERMAL POWER required by the reduced reactor trip settings of the Power Level-High channels. The reactor trip setpoint reductions are derived on the following bases:

For two loop operation

$$SP = \frac{(X) - (Y)(V)}{X} \times 106.5$$

For single loop operation (two reactor coolant pumps operating in the same loop)

$$SP = \frac{(X) - (Y)(U)}{X} \times 46.8$$

where:

SP = reduced reactor trip setpoint in percent of RATED THERMAL POWER

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maximum number of inoperable safety valves per steam line

CALVERT CLIFFS-UNIT 2

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 PLANT SYSTEMS

 BASES

 U = maximum number of inoperable safety valves per operating steam line

 106.5 = Power Level-High Trip Setpoint for two loop operation

 46.8 = Power Level-High Trip Setpoint for single loop operation with two reactor coolant pumps operating in the same loop

 X = Total relieving capacity of all safety valves per

Y = Maximum relieving capacity of any one safety value in lbs/hour

3/4.7.1.2 AUXILIARY FEEDWATER SYSTEM

The OPERABILITY of the auxiliary feedwater system ensures that the Reactor Coolant System can be cooled^{*}down to less than 300°F from normal operating conditions in the event of a total loss of off-site power.

steam line in lbs/hour

Each steam driven auxiliary feedwater pump is capable of delivering a total feedwater flow of 700 GPM at a Total Dynamic Head of 2490 ft to the entrance of the steam generators. A capacity of 450 gpm, however, is sufficient to ensure that adequate feedwater flow is available to remove decay heat and reduce the Reactor Coolant System temperature to less than 300°F when the shutdown cooling system may be placed into operation.

3/4.7.1.3 CONDENSATE STORAGE TANK

The OPERABILITY of the condensate storage tank with the minimum water volume ensures that sufficient water is available to maintain the RCS at HOT STANDBY conditions for 6 hours with steam discharge to atmosphere with concurrent with total loss of off-site power. The contained water volume limit includes an allowance for water not usable because of tank discharge line location or other physical characteristics.

3/4.7.1.4 ACTIVITY

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The limitations on secondary system specific activity ensure that the resultant off-site radiation dose will be limited to a small fraction

CALVERT CLIFFS-UNIT 2

Amendment No. 41



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NOS. 59 AND 41 TO

FACILITY OPERATING LICENSE NOS. DPR-53 AND DPR-69

BALTIMORE GAS AND ELECTRIC COMPANY

CALVERT CLIFFS NUCLEAR POWER PLANT, UNIT NOS. 1 AND 2

DOCKET NOS. 50-317 AND 50-318

Introduction:

By application for license amendment dated January 29, 1981, the Baltimore Gas and Electric Company (BG&E) requested changes to the Technical Specifications (TS) for Calvert Cliffs Units 1 and 2. This application addresses four unrelated issues, three of which were subsequently resolved. The final issue, deletion of two snubbers from the applicable TS requirements, is addressed herein.

In addition, by application for license amendment dated July 30, 1981 BG&E requested changes to the TS for Calvert Cliffs Units 1 and 2. The July 30, 1981 application addresses several unrelated issues; we herein provide our evaluation of the TS changes relating to (1) secondary water chemistry, (2) measures to prevent inadvertent reactor coolant system boron dilution, (3) clarification concerning the operability of valves associated with the control room ventilation system, (4) deletion of a snubber from the applicable Technical Specifications, and (5) changes to the basis for the auxiliary feedwater flow requirements.

Discussion and Evaluation:

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We herein provide our evaluation of the TS change request contained in the applications for license amendments dated January 29, 1981 and July 30, 1981.

Secondary Water Chemistry - Application of July 30, 1981

By letter dated July 23, 1979, the NRC informed BG&E that a change in NRC policy had been implemented concerning the requirements for secondary system water chemistry control. The previous NRC position had been that secondary system water chemistry limits, Limiting Conditions for Operation, and Surveillance Requirements should be incorporated in the TS. These requirements were incorporated into the TS as Sections 3.7.1.6 and 4.7.1.6 via License Amendments 34 and 16 for Calvert Cliffs Units 1 and 2, respectively. License Amendments 34 and 16 were issued on August 7, 1978. The intent of the provisions was to provide added assurance that the licensee would properly monitor and control secondary water chemistry to limit corrosion of steam generator tubes.

In a number of instances, at other facilities, the TS have significantly restricted the operational flexibility of some plants with little or no benefit with regard to limiting corrosion of steam generator tubes. Based on these experiences and the knowledge gained in recent years, we have concluded that TS limits are not the most effective way of assuring that steam generator tube corrosion will be minimized.

Due to the complexity of the corrosion phenomena involved, and the stateof-the-art as it exists today, we believe that, in lieu of TS, a more effective approach would be to institute a license condition that requires the implementation of a secondary water chemistry monitoring and control program containing appropriate procedures and administrative controls. The license condition developed by the NRC is as follows:

"The licensee shall implement a secondary water chemistry monitoring program to inhibit steam generator tube degradation. This program shall include:

- 1. Identification of a sampling schedule for the critical parameters and control points for these parameters;
- 2. Identification of the procedures used to quantify parameters that are critical to control points;
- 3. Identification of process sampling points;
- 4. Procedure for the recording and management of data;
- 5. Procedures defining corrective actions for off control point chemistry conditions; and
- 6. A procedure identifying the authority responsible for the interpretation of the data, and the sequence and timing of administrative events required to initiate-corrective action."

The required program and procedures would be developed by the licensees, with any needed input from their reactor vendors or other consultants, and thus could more readily account for site and plant specific factors that affect chemistry conditions in the steam generators. In our view, such a license condition would provide assurance that licensees would devote proper attention to controlling secondary water chemistry, while also providing the needed flexibility to allow them to more effectively deal with any off-normal conditions that might arise. Moreover, we have concluded that such a license condition, in conjunction with existing TS on steam generator tube leakage and inservice inspection, would provide the most practical and comprehensive means of assuring that steam generator tube integrity would be maintained. In the BG&E application of July 30, 1981, license conditions for secondary system water chemistry control were proposed which are identical to the license conditions developed by the NRC. Accordingly, it is appropriate that these conditions be incorporated into the Facility Operating License for Calvert Cliffs Unit 1 as Paragraph 2.C.(5) and into the Facility Operating License for Calvert Cliffs Unit 2 as Paragraph 2.C.(7).

<u>Measures to Prevent Inadvertent Primary System Boron Dilution - Application</u> of July 30, 1981

Calvert Cliffs Units 1 and 2 TS 3.9.8.1 and 3.10.5 address measures to be taken when the shutdown cooling loops are not operable. Under TS 3.9.8.1 and 3.10.5, these measures include the suspension of all operations which could result in primary system boron dilution; however, no specific measures are presently specified to prevent primary system boron dilution. TS 4.10.5.1 presently provides a Surveillance Requirement associated with TS 3.10.5 in that, when reactor coolant circulation and shutdown cooling are suspended, surveillance includes assuring that "...charging pumps shall be verified de-energized and charging flow paths shall be verified closed at least once per hour." The de-energizing of the charging pumps and closing the associated flow paths isolates the only significant source of boron dilution capability via the chemical and volume control system. BG&E has proposed that the Surveillance Requirements of TS 4.10.5.1 be added to the Limiting Conditions for Operation (LCO's) of TS 3.9.8.1 and 3.10.5. We find this change to be acceptable in that it clarifies the minimum actions needed to prevent primary system boron dilution when shutdown cooling is not available. Moreover, the proposed change in no way affects the reliability of safety related equipment nor does it preclude the licensee from taking additional measures to preclude inadvertent dilution of the reactor coolant system boron concentration.

Clarification Concerning the Operability of Valves Associated with the Control Room Ventilation System - Application of July 30, 1981

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Calvert Cliffs Units 1 and 2 TS 3.7.6.1 provides the minimum operability requirements for equipment associated with the control room emergency ventilation system. Item d of TS 3.7.6.1 requires that "Two isolation valves in the control room exhaust duct..." be operable; however, this requirement does not specify which two valves are being addressed. By application dated July 30, 1981, BG&E requested that the phrase "control room exhaust duct" be replaced in TS 3.7.6.1d by the phrase "common exhaust to atmosphere" in order to specifically identify the valves for which the operability requirement is applicable.

A review of Calvert Cliffs Units 1 and 2 Piping and Instrumentation Diagram M-65 (sheet 1 of 3) indicates that the control room ventilation system exhausts to the atmosphere via a common air duct. The common air duct is isolated by two valves which are automatically closed, upon high radiation, by actuator 0-P0-5370. In this way, the control room exhaust to atmosphere is isolated, as is the control room air intake, upon high radiation. We concur that the proposed change to TS 3.7.6.1d provides clarification by identifying which control room exhaust duct isolation valves are required to be operable. The proposed change in no way affects the reliability of the subject equipment and is therefore acceptable.

Deletion of Snubbers from Applicable TS - Applications of January 29, 1981 and July 30, 1981

By application dated January 29, 1981 BG&E requested that Snubbers 1-38-1 and 1-38-2 be deleted from the list of safety related snubbers, contained in TS Table 3.7-4, that are subject to operability and surveillance requirements. Snubbers 1-38-1 and 1-38-2 provided support for the Unit 1 pressurizer sample control valves' packing leak-off lines; these lines have been removed since they are no longer needed. In addition, by application dated July 30, 1981, BG&E requested that Snubber 2-38-1 be deleted from TS Table 3.7-4. Snubber 2-38-1 had been attached to a Unit 2 valve packing leak-off line which had also been removed.

For Snubbers 1-38-1, 1-38-2 and 2-38-1, removal of corresponding lines made it appropriate to remove the snubbers since they were no longer needed. We concur with removal of Snubbers 1-38-1, 1-38-2 and 2-38-1 since the support of other safety related piping is not affected. Accordingly, deletion of Snubbers 1-38-1, 1-38-2 and 2-38-1 from TS Table 3.7-4 is appropriate.

Change to the Basis for the Auxiliary Feedwater Flow Requirement - Application of July 30, 1981

By application dated July 30, 1981, BG&E requested a change to the basis for the auxiliary feedwater TS 3/4,7.1.2, for Calvert Cliffs Unit 1 and 2. At the present time, the basis for the Calvert Cliffs Units 1 and 2 auxiliary feedwater system, contained in Bases 3/4.7.1.2, indicates that each auxiliary feedwater pump is capable of delivering 700 gpm, at a total dynamic head of 2490 ft, to the entrance of the steam generators. This Bases is as stated in the Calvert Cliffs FSAR, Section 10.2.3. Calculations, however, indicate that a total flow of 450 gpm is sufficient to cool the reactor primary system to 300°F, at which point shutdown cooling can be utilized. We concur with BG&E that 450 gpm is the minimum level of operability for the auxiliary feedwater system, with regard to total, deliverable, flow to the steam generators. Accordingly, we find it appropriate to amend Bases 3/4.7.1.2 by providing the following:

"A capacity of 450 gpm, however, is sufficient to ensure adequate feedwater flow is available to remove decay heat and reduce the Reactor Coolant System temperature to less than 300°F when the shutdown cooling system may be placed into operation."

Environmental Consideration

We have determined that the 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.

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Conclusion

We have concluded, based on the considerations discussed above, that: (1) because the amendments do not involve a significant increase in the probability or consequences of accidents previously considered and do not involve a significant decrease in a safety margin, the amendments do not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (3) such activities will be conducted in compliance with the Commission's regulations and the issuance of these amendments will not be inimical to the common defense and security or to the health and safety of the public.

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Date: November 4, 1981

UNITED STATES NUCLEAR REGULATORY COMMISSION DOCKET NOS. 50-317 AND 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. 59 and 41 to Facility Operating Licenses Nos. DPR-53 and DPR-69, issued to Baltimore Gas and Electric Company, which revise Technical Specifications and add license conditions for operation of the Calvert Cliffs Nuclear Power Plant, Units Nos. 1 and 2 located in Calvert County, Maryland. The amendments are effective as of the date of issuance.

These amendments add conditions to the licenses requiring implementation of a secondary water chemistry monitoring program to inhibit steam generator tube degradation; delete secondary water chemistry from the Technical Specifications; delete two snubbers from the list of safety related snubbers; add measures to prevent inadvertent reactor coolant system boron dilution; clarify identification of valves associated with the control room ventilation system; and a change to the basis for auxiliary feedwater flow requirements.

The applications for the amendments comply 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.

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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 applications for amendments dated January 29 and July 30, 1981, (2) Amendment Nos. 59 and 41 to License Nos. DPR-53 and DPR-69, and (3) the Commission's related Safety Evaluation. 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.

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Dated at Bethesda, Maryland, this 4th day of November, 1981.

FOR THE NUCLEAR REGULATORY COMMISSION

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