

DCS MS-016

APR 19 1984

Docket Nos. 50-317
and 50-318

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

Dear Mr. Lundvall:

The Commission has issued the enclosed Amendment Nos. 92 and 73 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 partial response to your application dated December 22, 1983 as supplemented by two letters dated January 27, 1984.

These amendments to the Technical Specifications reflect (1) changes to surveillance requirements for safety related hydraulic sway arrestors (snubbers); (2) a change to the Limiting Conditions for Operation (LCO) for the emergency diesel generator fuel oil storage system to allow removal of the storage tanks from service for inspection; (3) clarification of the surveillance requirements for the 125V DC batteries and chargers; (4) clarification of the LCO and surveillance requirements for the off-site electrical power sources; (5) a change to the list of containment isolation valves to allow intermittent opening of certain valves, under administrative control during reactor operation, to allow testing of the containment hydrogen sampling capability; and (6) deletion of an outdated LCO associated with the control room emergency ventilation system (Unit 1 only).

Your application for license amendment dated December 22, 1983 included proposed Technical Specifications (TS) for the reactor coolant system (RCS) vents. These TS were among several requested for submittal in the NRC's Generic Letter (GL) 83-37, "NUREG-0737 Technical Specifications," dated November 1, 1983. We will review your proposed TS for RCS vents along with the remainder of your GL 83-37 TS, when these are received.

A copy of the related Safety Evaluation is enclosed. The notice of issuance will be included in the Commission's next monthly Federal Register notice.

Sincerely,

Original signed by

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

snubbers / sway
struts
H. Shaw

4/18/84

ORAB/mj
G. Holahan

4/19/84

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PDR ADDCK 05000317
P PDR

Enclosures:

1. Amendment No. 92 to DPR-53
2. Amendment No. 73 to DPR-69
3. Safety Evaluation

cc: See next page

ORB#3:DL
PMKreutzer
4/11/84

ORB#3:DL
DJaffe/pn
4/11/84

ORB#3:DL
JRMiller
4/11/84

OELD
J.G. [unclear]
4/11/84

AD:OR:DL
GCLainas
4/11/84

*Changes made
4/18/84
with notes
changes to SEC*

4/18/84

Baltimore Gas and Electric Company

cc:

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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. 92
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 December 22, 1983, as supplemented by two letters dated January 27, 1984, 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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P PDR

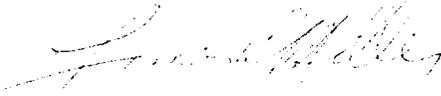
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-53 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 92, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



James R. Miller, Chief
Operating Reactors Branch #3
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: April 19, 1984

ATTACHMENT TO LICENSE AMENDMENT NO. 92

FACILITY OPERATING LICENSE NO. DPR-53

DOCKET NO. 50-317

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

Pages

3/4 6-23
3/4 6-24
3/4 7-17
3/4 7-61a
3/4 8-1
3/4 8-2
3/4 8-8
3/4 8-9
3/4 8-10

TABLE 3.6-1 (Continued)
CONTAINMENT ISOLATION VALVES

<u>PENETRATION NO.</u>	<u>ISOLATION CHANNEL</u>	<u>ISOLATION VALVE IDENTIFICATION NO.</u>	<u>FUNCTION</u>	<u>ISOLATION TIME (SECONDS)</u>
44	NA	238-1	Fire Protection	NA
	NA	238-1		NA
	NA	MOV-6200 *		NA
47A	NA	SV-6540A *	Hydrogen Sample Outlet	NA
	NA	SV-6507A *		NA
47B	NA	SV-6540E *	Hydrogen Sample Outlet	NA
	NA	SV-6507E *		NA
47C	NA	SV-6540F *	Hydrogen Sample Outlet	NA
	NA	SV-6507F *		NA
47D	NA	SV-6540G *	Hydrogen Sample Return	NA
	NA	SV-6507G *		NA
48A	SIAS-B	MOV-6900	Containment Vent Isolation	<20**
	SIAS-A	MOV-6901		<20**

CALVERT CLIFFS - UNIT 1

3/4 6-24

Amendment No. 8/5 9 3

TABLE 3.6-1 (Continued)

CONTAINMENT ISOLATION VALVES

<u>PENETRATION NO.</u>	<u>ISOLATION CHANNEL</u>	<u>ISOLATION VALVE IDENTIFICATION NO.</u>	<u>FUNCTION</u>	<u>ISOLATION TIME (SECONDS)</u>
48B	NA NA	238-1 MOV-6903	Hydrogen Purge Inlet	NA NA
49A	NA NA	SV-6540B* SV-6507B*	Hydrogen Sample	NA NA
49B	NA NA	SV-6540C* SV-6507C*	Hydrogen Sample	NA NA
49C	NA NA	SV-6540D* SV-6507D*	Hydrogen Sample	NA NA
50	NA NA	Blind Flange Blind Flange	ILRT	NA NA
59	NA NA	29M3-1 29M3-1	Refueling Pool Inlet	NA NA
60	NA NA	130-2 19-1	Steam to Reactor Head Laydown	NA NA

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

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.
- b. With one air conditioning unit inoperable, restore the inoperable 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.
- 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.

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS

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

- a. At least once per 62 days, on a staggered test basis, by deenergizing the backup control room air conditioner and verifying that the emergency control room air conditioners maintain the air temperature $\leq 104^{\circ}\text{F}$ for at least 12 hours when in the recirculation mode.
- 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:
 1. Verifying that the charcoal adsorbers remove $\geq 99\%$ 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 $2000 \text{ cfm} \pm 10\%$.
 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 $2000 \text{ cfm} \pm 10\%$.
 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 $\geq 90\%$ 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 emptying a representative sample from an adsorber test tray section, mixing the adsorbent thoroughly, and obtaining samples at least two inches in diameter and with a length equal to the thickness of the bed. Successive samples will be removed from different test tray sections.

TABLE 3.7-4

SAFETY RELATED HYDRAULIC SNUBBERS*

<u>SNUBBER NO.</u>	<u>SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION</u>	<u>ACCESSIBLE OR INACCESSIBLE (A or I)</u>	<u>HIGH RADIATION ZONE** (Yes or No)</u>	<u>ESPECIALLY DIFFICULT TO REMOVE (Yes or No)</u>
1-83-55	MAIN STEAM LINE ENCAPSULATION 27'	A	No	No
1-83-56	MAIN STEAM LINE ENCAPSULATION 27'	A	No	No
1-83-57	MAIN STEAM LINE ENCAPSULATION 27'	A	No	No
1-83-58	MAIN STEAM LINE ENCAPSULATION 27'	A	No	No
1-83-67	MAIN STEAM FROM S.G. #12 61'	I	Yes	No
1-83-69	MAIN STEAM FROM S.G. #12 61'	I	Yes	No
1-83-70	MAIN STEAM FROM S.G. #12 61'	I	Yes	No
1-83-71	MAIN STEAM FROM S.G. #12 61'	I	Yes	No
1-83-73	MSIV #11 HYDRAULIC SUPPLY 38'	A	No	No
1-83-74	MSIV #11 HYDRAULIC SUPPLY 38'	A	No	No

TABLE 3.7-4
SAFETY RELATED HYDRAULIC SNUBBERS*

<u>SNUBBER NO.</u>	<u>SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION</u>	<u>ACCESSIBLE OR INACCESSIBLE (A or I)</u>	<u>HIGH RADIATION ZONE** (Yes or No)</u>	<u>ESPECIALLY DIFFICULT TO REMOVE (Yes or No)</u>
1-83-75	AUXILIARY STEAM ISOLATION VALVE BYPASS 32'	A	No	No
1-83-76	AUXILIARY FEED PUMP STEAM SUPPLY FROM S.G. #12 40'	A	No	No
1-83-76A	AUXILIARY FEED PUMP STEAM SUPPLY FROM S.G. #12 40'	A	No	No
1-83-77	AUXILIARY FEED PUMP STEAM SUPPLY FROM S.G. #12 40'	A	No	No
1-83-78	#11 AUXILIARY FEED PUMP TURBINE STEAM SUPPLY 16'	A	No	No

*Snubbers may be added to safety related systems without prior License Amendment to Table 3.7-4 provided that a revision to Table 3.7-4 is included with the next License Amendment request. Snubbers may be removed from safety related systems for the purpose of replacement by sway struts in accordance with the NRC's Safety Evaluation dated April 19, 1984 provided that a revision to Table 3.7-4 is included with the next License Amendment request.

**Modification to this table due to changes in high radiation areas shall be submitted to the NRC as part of the next License Amendment request.

3/4.8 ELECTRICAL POWER SYSTEMS

3/4.8.1 A. C. SOURCES

OPERATING

LIMITING CONDITION FOR OPERATION

3.8.1.1 As a minimum, the following A.C. electrical power sources shall be OPERABLE:

- a. Two physically independent circuits between the offsite transmission network and the onsite Class 1E distribution system consisting of either:
 1. Two 500 Kv offsite power circuits, or as necessary
 2. The 69 Kv SMECO offsite power circuit described in the January 14, 1977 Safety Evaluation and one 500 KV offsite power circuit, and
- b. Two separate and independent diesel generators (one of which may be a swing diesel generator capable of serving either Unit 1 or Unit 2) each with:
 1. Separate day fuel tanks containing a minimum volume of 375 gallons of fuel,
 2. A common fuel storage system consisting of two independent storage tanks each containing a minimum volume of 18,250 gallons of fuel*, and
 3. A separate fuel transfer pump.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

- a. With one 500 Kv offsite circuit or diesel generator of the above required A.C. electrical power sources inoperable, demonstrate the OPERABILITY of the remaining A.C. sources by performing Surveillance Requirements 4.8.1.1.1.a and 4.8.1.1.2.a.4 within one hour and at least once per 8 hours thereafter; restore at least two offsite circuits and two diesel generators to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

*For the duration of the April 1984 Unit 2 refueling outage, with Unit 2 in MODE 5 or 6, Technical Specification 3.8.1.1.b(2) will be satisfied by:

A common fuel oil storage system consisting of one seismic class 1 fuel oil storage tank with a minimum volume of 36,500 gallons of fuel and an alternate fuel source with 8,000 gallons of fuel connected in such a manner as not to degrade system integrity in the event of a rupture of the alternate fuel source or its connecting piping. The tornado-missile protected fuel source shall not be made inoperable until May 15, 1984.

ELECTRICAL POWER SYSTEMS

LIMITING CONDITION FOR OPERATION (Continued)

ACTION: (Continued)

- b. With one 500 Kv offsite circuit and one diesel generator of the above required A.C. electrical power sources inoperable, demonstrate the OPERABILITY of the remaining A.C. sources by performing Surveillance Requirements 4.8.1.1.1.a and 4.8.1.1.2.a.4 within one hour and at least once per 8 hours thereafter; restore at least one of the inoperable sources to OPERABLE status within 12 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. Restore at least two offsite circuits and two diesel generators to OPERABLE status within 72 hours from the time of initial loss or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- c. With two of the 500 Kv above required offsite A.C. circuits inoperable, demonstrate the OPERABILITY of two diesel generators by performing Surveillance Requirement 4.8.1.1.2.a.4 within one hour and at least once per 8 hours thereafter, unless the diesel generators are already operating; restore at least one of the inoperable offsite sources to OPERABLE status within 24 hours or be in at least HOT STANDBY within the next 6 hours. With only one offsite source restored, restore at least two offsite circuits to OPERABLE status within 72 hours from time of initial loss or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. . .
- d. With two of the above required diesel generators inoperable, demonstrate the OPERABILITY of two offsite A.C. circuits by performing Surveillance Requirement 4.8.1.1.1.a within one hour and at least once per 8 hours thereafter; restore at least one of the inoperable diesel generators to OPERABLE status within 2 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. Restore at least two diesel generators to OPERABLE status within 72 hours from time of initial loss or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

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

ELECTRICAL POWER SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

- a. Demonstrated OPERABLE, as follows:
 - 1. For each 500 Kv offsite circuit, at least once per 7 days by verifying correct breaker alignments and indicated power availability,
 - 2. For the 69 Kv SMECO offsite power circuit, within one hour of substitution for a 500 Kv offsite power circuit, and at least once per 8 hours thereafter during use by verifying correct breaker alignments and indicated power availability, and,
- b. Demonstrated OPERABLE at least once per 18 months during shutdown by manually transferring unit power supply from the normal circuit to the alternate circuit.

4.8.1.1.2 Each diesel generator shall be demonstrated OPERABLE:

ELECTRICAL POWER SYSTEMS

A.C. DISTRIBUTION - SHUTDOWN

LIMITING CONDITION FOR OPERATION

3.8.2.2 As a minimum, the following A.C. electrical busses shall be OPERABLE and energized from sources of power other than a diesel generator but aligned to an OPERABLE diesel generator:

- 1 - 4160 volt Emergency Bus
- 1 - 480 volt Emergency Bus
- 2 - 120 volt A.C. Vital Busses

APPLICABILITY: MODES 5 and 6

ACTION:

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

SURVEILLANCE REQUIREMENTS

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

ELECTRICAL POWER SYSTEMS

D. C. DISTRIBUTION - OPERATING

LIMITING CONDITION FOR OPERATION

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

- a. 125-volt D.C. bus No. 11, a 125-volt D.C. battery bank and a full capacity charger.
- b. 125-volt D.C. bus No. 12, a 125-volt D.C. battery bank and a full capacity charger.
- c. 125-volt D.C. bus No. 21, a 125-volt D.C. battery bank and a full capacity charger.
- d. 125-volt D.C. bus No. 22, a 125-volt D.C. battery bank and a full capacity charger.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

- a. With one 125-volt D.C. bus inoperable, restore the inoperable bus to OPERABLE status within 2 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- b. With one 125-volt D.C. battery inoperable except during surveillance testing per Specifications 4.8.2.3.2.c.2, 4.8.2.3.2.d and 4.8.2.3.2.f:
 1. Restore the inoperable battery to OPERABLE status within 2 hours, or replace the inoperable battery with the OPERABLE Reserve Battery within the next 2 hours, or
 2. Be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- c. With both 125-volt D.C. battery chargers from the same D.C. bus inoperable:
 1. Except when necessary during surveillance testing per Specification 4.8.2.3.2.d.1, restore at least one 125-volt D.C. battery charger to OPERABLE status within 2 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
 2. During surveillance testing per Specification 4.8.2.3.2.d.1, restore at least one 125-volt D.C. battery charger to OPERABLE status within 4 hours or be in at least HOT STANDBY within 6 hours and in COLD SHUTDOWN within the following 30 hours.
- d. With one 125-volt D.C. battery inoperable during surveillance testing of the battery per Specification 4.8.2.3.2.c.2 and 4.8.2.3.2.d.2, operation may continue provided the associated bus is being powered by an operable charger and reserve battery.

ELECTRICAL POWER SYSTEMS

LIMITING CONDITION FOR OPERATION (Continued)

- e. With one 125-volt D.C. battery inoperable during surveillance testing of the battery per Specification 4.8.2.3.2.f., operation may continue provided the associated bus is being powered by the Reserve Battery and an OPERABLE charger.
- f. With single cells having a voltage decrease of more than 0.10 volts from the previous performance discharge test (4.8.2.3.2.f.) value, but still ≥ 2.10 volts per surveillance requirement 4.8.2.3.2.b.1., either restore/replace cells or replace the affected battery with the Reserve Battery within 24 hours or be in HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.8.2.3.1 Each D.C. bus train shall be determined OPERABLE and energized at least once per 7 days by verifying correct breaker alignment and indicated power availability.

4.8.2.3.2 Each 125-volt battery bank and charger and the Reserve Battery shall be demonstrated OPERABLE;

a. At least once per 7 days by verifying that:

1. The electrolyte level of each pilot cell is between the minimum and maximum level indication marks.
2. The pilot cell specific gravity, corrected to 77°F and full electrolyte level is ≥ 1.200 .
3. The pilot cell voltage is ≥ 2.10 volts.
4. The overall battery voltage is ≥ 125 volts.

b. At least once per 92 days by verifying that:

1. The voltage of each connected cell is ≥ 2.10 volts under float charge and has not decreased more than 0.10 volts from the value observed during the latest performance discharge test (4.8.2.3.2.f).
2. The specific gravity, corrected to 77°F and full electrolyte level, of each connected cell is ≥ 1.200 and has not decreased more than 0.02 from the value observed during the previous test.
3. The electrolyte level of each connected cell is between the minimum and maximum level indication marks.

ELECTRICAL POWER SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

- c. At least once per 18 months by verifying that:
1. The cells, cell plates and battery racks show no visual indication of physical damage or deterioration.
 2. The cell-to-cell and terminal connections are clean, tight, and coated with anti-corrosion material.
- d. At least once per 18 months by verifying that the battery capacity, with the charger disconnected, is adequate to either:
1. Supply and maintain in OPERABLE status all of the actual emergency loads for at least 2 hours when the battery is subjected to a battery service test. At the completion of this test, surveillance 4.8.2.3.2.e shall be performed for the affected battery. The battery shall be charged to at least 95% capacity in ≤ 24 hours, or
 2. Supply a dummy load of the following profile for at least 2 hours while maintaining the battery terminal voltage ≥ 100 volts:
 - a) Batteries 11, 21 and Reserve:
First minute ≥ 827 amperes
Next 1 minute ≥ 461 amperes
Next 117 minutes ≥ 251 amperes
Next 1 minute ≥ 325 amperes
 - b) Batteries 12 and 22:
First minute ≥ 193 amperes
Next 119 minutes ≥ 160 amperes
 - c) At the completion of this test, the battery shall be charged to at least 95% capacity in ≤ 24 hours, excluding the stabilization time.
- e. At least once per 18 months, the battery charger* shall be demonstrated capable of recharging the battery at a rate of ≤ 400 amperes while supplying normal D.C. loads or equivalent or greater dummy load.
- f. At least once per 60 months by verifying that the battery capacity is at least 80% of the manufacturer's rating when subjected to a performance discharge test. This performance discharge test shall be performed subsequent to the satisfactory completion of the required battery service test.

*Not applicable to the charger associated with the Reserve Battery.



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. 73
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 December 22, 1983, as supplemented by two letters dated January 27, 1984, 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.

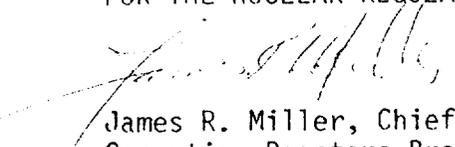
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.2 of Facility Operating License No. DPR-69 is hereby amended to read as follows:

2. Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 73, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION


James R. Miller, Chief
Operating Reactors Branch #3
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: April 19, 1984

ATTACHMENT TO LICENSE AMENDMENT NO. 73

FACILITY OPERATING LICENSE NO. DPR-69

DOCKET NO. 50-318

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

Pages

3/4 6-23
3/4 6-24
3/4 7-26
3/4 7-26b
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3/4 8-1
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3/4 8-2a (new)
3/4 8-8
3/4 8-9
3/4 8-10

TABLE 3.6-1 (Continued)

CONTAINMENT ISOLATION VALVES

<u>PENETRATION NO.</u>	<u>ISOLATION CHANNEL</u>	<u>ISOLATION VALVE IDENTIFICATION NO.</u>	<u>FUNCTION</u>	<u>ISOLATION TIME (SECONDS)</u>
44	NA NA NA	238-1 238-1 MOV-6200 *	Fire Protection	NA NA NA
47A	NA NA	SV-6540A * SV-6507A *	Hydrogen Sample Outlet	NA NA
47B	NA NA	SV-6540E * SV-6507E *	Hydrogen Sample Outlet	NA NA
47C	NA NA	SV-6540F * SV-6507F *	Hydrogen Sample Outlet	NA NA
47D	NA NA	SV-6540G * SV-6507G *	Hydrogen Sample Return	NA NA
48A	NA NA	MOV-6900 MOV-6901	Hydrogen Purge Outlet	NA NA

TABLE 3.6-1 (Continued)

CONTAINMENT ISOLATION VALVES

<u>PENETRATION NO.</u>	<u>ISOLATION CHANNEL</u>	<u>ISOLATION VALVE IDENTIFICATION NO.</u>	<u>FUNCTION</u>	<u>ISOLATION TIME (SECONDS)</u>
48B	NA NA	238-1 MOV-6903	Hydrogen Purge Inlet	NA NA
49A	NA NA	SV-6540B * SV-6507B *	Hydrogen Sample	NA NA
49B	NA NA	SV-6540C * SV-6507C *	Hydrogen Sample	NA NA
49C	NA NA	SV-6540D * SV-6507D *	Hydrogen Sample	NA NA
50	NA NA	Blind Flange Blind Flange	ILRT	NA NA
59	NA NA	29M3-1 29M3-1	Refueling Pool Inlet	NA NA
60	NA NA	130-2 19-1	Steam to Reactor Head Laydown	NA NA

PLANT SYSTEMS

3/4.7.8 SNUBBERS

LIMITING CONDITION FOR OPERATION

3.7.8.1 All snubbers listed in Table 3.7-4 shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3 and 4. (MODES 5 and 6 for snubbers located on systems required OPERABLE in those MODES.)

ACTION: With one or more snubbers inoperable, within 72 hours replace or restore the inoperable snubber(s) to OPERABLE status, and perform an engineering evaluation* per Specification 4.7.8.b. and c. on the supported component or declare the supported system inoperable and follow the appropriate ACTION statement for that system.

SURVEILLANCE REQUIREMENTS

4.7.8.1 Each snubber shall be demonstrated OPERABLE by performance of the following augmented inservice inspection program and the requirements of Specification 4.0.5.

a. Visual Inspections

Visual inspections shall be performed in accordance with the following schedule:

<u>No. Inoperable Snubbers per Inspection Period</u>	<u>Subsequent Visual** Inspection Period#</u>
0	18 months + 25%
1	12 months + 25%
2	6 months + 25%
3, 4	124 days + 25%
5, 6, 7	62 days + 25%
8 or more	31 days + 25%

The snubbers may be categorized into two groups: Those accessible and those inaccessible during reactor operation. Each group may be inspected independently in accordance with the above schedule.

* A documented, visual inspection shall be sufficient to meet the requirements for an engineering evaluation. Additional analyses, as needed, shall be completed in a reasonable period of time.

** The inspection interval shall not be lengthened more than two steps at a time.

The provisions of Specification 4.0.2 are not applicable.

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

b. Visual Inspection Acceptance Criteria

Visual inspections shall verify (1) that there are no visible indications of damage or impaired OPERABILITY, and (2) that the snubber installation exhibits no visual indications of detachment from foundations or supporting structures. Snubbers which appear inoperable as a result of visual inspections may be determined OPERABLE for the purpose of establishing the next visual inspection interval, providing that (1) the cause of the rejection is clearly established and remedied for that particular snubber and for other snubbers that may be generically susceptible; and/or (2) the affected snubber is functionally tested in the as found condition and determined OPERABLE per Specification 4.7.8.d, as applicable. When the fluid port of a hydraulic snubber is found to be uncovered, the snubber shall be determined inoperable unless it can be determined OPERABLE via functional testing for the purpose of establishing the next visual inspection interval.

For the snubber(s) found inoperable, an engineering evaluation shall be performed on the component(s) which are supported by the snubber(s). The scope of this engineering evaluation shall be consistent with the licensee's engineering judgment and may be limited to a visual inspection of the supported component(s). The purpose of this engineering evaluation shall be to determine if the component(s) supported by the snubber(s) were adversely affected by the inoperability of the snubber(s) in order to ensure that the supported component remains capable of meeting the designed service.

c. Functional Tests

At least once per 18 months during shutdown, a representative sample of 10% of the snubbers in use in the plant shall be functionally tested either in place or in a bench test.* For each snubber that does not meet the functional test acceptance criteria of Specification 4.7.8.d, an additional 5% of the snubbers shall be functionally tested until no more failures are found or until all snubbers have been functionally tested.

*The Steam Generator snubbers 2-63-11 through 2-63-26 need not be functionally tested until the refueling outage following June 30, 1985.

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

Snubbers identified in Table 3.7-4 as "Especially Difficult to Remove" or in "High Exposure Zones" shall also be included in the representative sample.*

In addition to the regular sample, snubbers which failed the previous functional test shall be retested during the next test period. If a spare snubber has been installed in place of a failed snubber, then both the failed snubber (if it is repaired and installed in another position) and the spare snubber shall be retested during the next test period. Failure of these snubbers shall not entail functional testing of additional snubbers.

If any snubber selected for functional testing either fails to lock up or fails to move, i.e., frozen in place, the cause will be evaluated and if caused by manufacturer or design deficiency all generically susceptible snubbers of the same design subject to the same defect shall be functionally tested. This testing requirement shall be independent of the requirements stated above for snubbers not meeting the functional test acceptance criteria.

For the snubber(s) found inoperable, an engineering evaluation shall be performed on the component(s) which are supported by the snubber(s). The scope of this engineering evaluation shall be consistent with the licensee's engineering judgment and may be limited to a visual inspection of the supported component(s). The purpose of this engineering evaluation shall be to determine if the component(s) supported by the snubber(s) were adversely affected by the inoperability of the snubber(s) in order to ensure that the supported component remains capable of meeting the designed service.

d. Hydraulic Snubbers Functional Test Acceptance Criteria

The hydraulic snubber functional test shall verify that:

1. Activation (restraining action) is achieved within the specified range of velocity or acceleration in both tension and compression.
2. Snubber bleed, or release rate, where required, is within the specified range in compression or tension. For snubbers specifically required to not displace under continuous load, the ability of the snubber to withstand load without displacement shall be verified.

* Permanent or other exemptions from functional testing for individual snubbers in these categories may be granted by the Commission only if a justifiable basis for exemption is presented and/or snubber life destructive testing was performed to qualify snubber operability for all design conditions at either the completion of their fabrication or at a subsequent date.

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

e. Snubber Service Life Monitoring*

A record of the service life of each snubber, the date at which the designated service life commences and the installation and maintenance records on which the designated service life is based shall be maintained as required by Specification 6.10.2.m.

At least once per 18 months, the installation and maintenance records for each snubber listed in Table 3.7-4 shall be reviewed to verify that the indicated service life has not been exceeded or will not be exceeded prior to the next scheduled snubber service life review.** If the indicated service life will be exceeded prior to the next scheduled snubber service life review, the snubber service life shall be re-evaluated or the snubber shall be replaced or reconditioned so as to extend its service life beyond the date of the next scheduled service life review. This reevaluation, replacement, or reconditioning shall be indicated in the records.

* The Snubber Service Life Program shall be fully implemented by January 1, 1983.

**The provisions of Specification 4.0.2 are applicable.

TABLE 3.7-4

SAFETY RELATED HYDRAULIC SNUBBERS*

<u>SNUBBER NO.</u>	<u>SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION</u>	<u>ACCESSIBLE OR INACCESSIBLE (A or I)</u>	<u>HIGH RADIATION ZONE** (Yes or No)</u>	<u>ESPECIALLY DIFFICULT TO REMOVE (Yes or No)</u>
2-11-1	SRW DISCH. FM #22 CONTAINMENT COOLER 30'-7"	A	No	No
2-11-2	SRW DISCH. FM #22 CONTAINMENT COOLER 30'-7"	A	No	No
2-11-3	SRW DISCH. FM #22 CONTAINMENT COOLER 25'	A	No	Yes
2-11-4	SERVICE WATER FROM TURBINE BLDG. 22'-9"	A	No	No
2-11-6	SERVICE WATER PUMP #23 SUCTION 12'-8"	A	No	No
2-11-7	SERVICE WATER PUMP #23 SUCTION 12'-11"	A	No	No
2-11-8	SERVICE WATER FROM TURBINE BLDG. 19'-7"	A	No	No
2-11-10	SRW DISCH. FM. CONTAINMENT COOLERS 13'-5"	A	No	No

TABLE 3.7-4

SAFETY RELATED HYDRAULIC SNUBBERS*

<u>SNUBBER NO.</u>	<u>SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION</u>	<u>ACCESSIBLE OR INACCESSIBLE (A or I)</u>	<u>HIGH RADIATION ZONE** (Yes or No)</u>	<u>ESPECIALLY DIFFICULT TO REMOVE (Yes or No)</u>
2-11-11	SERVICE WATER PUMP DISCH. HEADER 11'-8"	A	No	No
2-11-14	SERVICE WATER PUMP DISCH. HEADER 10'-6"	A	No	No
2-11-15	SERVICE WATER PUMP DISCH. HEADER 10'-6"	A	No	No
2-11-16	SERVICE WATER PUMP #21 DISCHARGE 8'-7"	A	No	No
2-11-16A	SERVICE WATER PUMP #21 DISCHARGE 8'-7"	A	No	No

TABLE 3.7-4

SAFETY RELATED HYDRAULIC SNUBBERS*

<u>SNUBBER NO.</u>	<u>SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION</u>	<u>ACCESSIBLE OR INACCESSIBLE (A or I)</u>	<u>HIGH RADIATION ZONE** (Yes or No)</u>	<u>ESPECIALLY DIFFICULT TO REMOVE (Yes or No)</u>
2-12-1	OUTLET #21 SERVICE WATER HEAT EXCHG. 11'-5"	A	No	No
2-12-2	OUTLET #22 SERVICE WATER HEAT EXCHG. 11'-2"	A	No	No
2-12-3	OUTLET #22 COMP. COOLING HEAT EXCHG. 14'-9"	A	No	Yes
2-12-4	OUTLET #21 COMP. COOLING HEAT EXCHG. 16'-6"	A	No	Yes
2-15-1	SUCTION HEADER-COMP. COOLING PUMPS 24'-9"	A	No	Yes
2-15-2	SUCTION HEADER-COMP. COOLING PUMPS 22'-8"	A	No	Yes
2-15-3	SUCTION HEADER-COMP. COOLING PUMPS 22'-7"	A	No	Yes
2-15-4	COMP. COOLING PUMPS - DISCH. HEADER 19'-8"	A	No	Yes

CALVERT CLIFFS-UNIT 2

3/4 7-30

Amendment No. 73

TABLE 3.7-4

SAFETY RELATED HYDRAULIC SNUBBERS*

CALVERT CLIFFS - UNIT 2	SNUBBER NO.	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR	HIGH RADIATION	ESPECIALLY DIFFICULT
			INACCESSIBLE (A or I)	ZONE** (Yes or No)	TO REMOVE (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
3/4 7-31	2-15-9	COMP. COOLING TO LIQUID WASTE EVAP. 64'	A	No	No
	2-15-10	COMP. COOLING TO LIQUID WASTE 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'	A	No	No
Amendment No. 29, 41, 58, 70, 73	2-36-3	UNIT 2 AFW PUMP ROOM 18'	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

TABLE 3.7-4

SAFETY RELATED HYDRAULIC SNUBBERS*

CALVERT CLIFFS - UNIT 2	SNUBBER NO.	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR	HIGH RADIATION	ESPECIALLY DIFFICULT
			INACCESSIBLE (A or I)	ZONE** (Yes or No)	TO REMOVE (Yes or No)
	2-41-1	CHARGING LINE OUTLET OF REGEN HEAT EXCHG 40'	I	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'	I	Yes	No
	2-45-3	F.W. INLET TO #22 STEAM GENERATOR 55'	I	Yes	No
3/4 7-32	2-45-4	UNIT 2 MSIV PENETRATION RM 29'	A	No	No
	2-45-4A	UNIT 2 MSIV PENETRATION RM 29'	A	No	No
	2-45-5	UNIT 2 MSIV PENETRATION RM 29'	A	No	No
	2-45-6	UNIT 2 MSIV PENETRATION RM 29'	A	No	No
	2-45-7	OVERHEAD 5' UNDER MSIV ROOM 26'	I	No	Yes
Amendment No. 58	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"	A	No	No
	2-52-3	LPSI PUMP #22 DISCHARGE 4'-0"	A	No	No
	2-52-3A	LPSI PUMP #22 DISCHARGE 4'-0"	A	No	No

TABLE 3.7-4

SAFETY RELATED HYDRAULIC SNUBBERS*

<u>SNUBBER NO.</u>	<u>SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION</u>	<u>ACCESSIBLE OR INACCESSIBLE (A or I)</u>	<u>HIGH RADIATION ZONE** (Yes or No)</u>	<u>ESPECIALLY DIFFICULT TO REMOVE (Yes or No)</u>
2-52-62	SHUTDOWN COOLING TO LPSI RETURN HDR 31'-0"	I	Yes	No
2-52-63	SHUTDOWN COOLING TO LPSI RETURN HDR 25'-0"	I	Yes	No
2-52-64	SHUTDOWN COOLING TO LPSI RETURN HDR 20'-0"	I	Yes	No
2-52-65	SHUTDOWN COOLING TO LPSI RETURN HDR 31'-0"	I	Yes	No
2-52-66	SHUTDOWN COOLING TO LPSI RETURN HDR 31'-0"	I	Yes	No
2-52-67	SHUTDOWN COOLING TO LPSI RETURN HDR 20'-0"	I	Yes	No
2-52-68	S.I. LOOP 21B CHECK VALVE LEAKAGE 47'-2"	I	Yes	No
2-52-69	S.I. LOOP 21A CHECK VALVE LEAKAGE 48'-10"	I	Yes	No
2-52-70	REFUELING WATER TANK (UPPER PENETRATION) 57'-6"	I	Yes	No

CALVERT CLIFFS-UNIT 2

2/4. 7-39

Amendment No. 73

TABLE 3.7-4

SAFETY RELATED HYDRAULIC SNUBBERS*

<u>SNUBBER NO.</u>	<u>SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION</u>	<u>ACCESSIBLE OR INACCESSIBLE (A or I)</u>	<u>HIGH RADIATION ZONE** (Yes or No)</u>	<u>ESPECIALLY DIFFICULT TO REMOVE (Yes or No)</u>
2-54-1	PRESS RELIEF DISCH HDR TO QUENCH TANK 30' 7 3/4"	I	Yes	No
2-54-2	PRESS RELIEF DISCH HDR TO QUENCH TANK 44'-0"	I	Yes	No
2-54-3	DISCH HDR ERV 402 & RV 200 89'-0"	I	Yes	No
2-54-5	DISCH RELIEF VALVE RV 200 90'-0"	I	Yes	No
2-54-5A	DISCH RELIEF VALVE RV 200 90'-0"	I	Yes	No
2-54-6	DISCH RELIEF VALVE RV 201 89'-0"	I	Yes	No
2-54-8	DISCH RELIEF VALVE RV 201 89'-0"	I	Yes	No
2-54-9	DISCH HDR ERV 404 & RV 201 89'-0"	I	Yes	No
2-54-10	DISCH HDR ERV 404 & RV 201 89'-0"	I	Yes	No
2-60-3	SERVICE WATER OUTLET CONT. COOLER #22 65'	I	Yes	No
2-60-4	SERVICE WATER OUTLET CONT. COOLER #22 55'	I	Yes	No
2-60-5	SERVICE WATER OUTLET CONT. COOLER #24 66'	I	Yes	No
2-60-6	SERVICE WATER OUTLET CONT. COOLER #24 66'	I	Yes	No

CALVERT CLIFFS-UNIT 2

3/4 7-40

CALVERT CLIFFS-UNIT 2

3/4 7.41

Amendment No. 17, 73

TABLE 3.7-4

SAFETY RELATED HYDRAULIC SNUBBERS*

<u>SNUBBER NO.</u>	<u>SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION</u>	<u>ACCESSIBLE OR INACCESSIBLE (A or I)</u>	<u>HIGH RADIATION ZONE** (Yes or No)</u>	<u>ESPECIALLY DIFFICULT TO REMOVE (Yes or No)</u>
2-60-7	SERVICE WATER OUTLET CONT. COOLER #23 65'	I	Yes	No
2-60-8	SERVICE WATER INLET CONT. COOLER #21 43'	I	Yes	No
2-60-9	SPRAY TO CONT. CHARCOAL FILTER #23 66'	I	Yes	No
2-60-12	SPRAY TO CONT. CHARCOAL FILTER #23 72'	I	Yes	No
2-60-14	SPRAY TO CONT. CHARCOAL FILTER #23 66'	I	Yes	No
2-60-15	SPRAY TO CONT. CHARCOAL FILTER #23 66'	I	Yes	No
2-60-18	SPRAY TO CONT. CHARCOAL FILTER #23 68'	I	Yes	No

TABLE 3.7-4

SAFETY RELATED HYDRAULIC SNUBBERS*

<u>SNUBBER NO.</u>	<u>SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION</u>	<u>ACCESSIBLE OR INACCESSIBLE (A or I)</u>	<u>HIGH RADIATION ZONE** (Yes or No)</u>	<u>ESPECIALLY DIFFICULT TO REMOVE (Yes or No)</u>
2-60-18A	SPRAY TO CONT. CHARCOAL FILTER #23 66'	I	Yes	No
2-60-21	SERVICE WATER OUTLET CONT. COOLER #23 67'	I	Yes	No
2-60-22	SERVICE WATER OUTLET CONT. COOLER #21 43'	I	Yes	No
2-60-22A	SERVICE WATER OUTLET CONT. COOLER #21 43'	I	Yes	No
2-60-24	SERVICE WATER OUTLET CONT. COOLER #21 44'	I	Yes	No
2-60-24A	SERVICE WATER OUTLET CONT. COOLER #21 44'	I	Yes	No
2-60-26	SERVICE WATER INLET CONT. COOLER #21 44'	I	Yes	No
2-60-26A	SERVICE WATER INLET CONT. COOLER #21 44'	I	Yes	No

CALVERT CLIFFS-UNIT 2

3/4 7-42

Amendment No. 73

TABLE 3.7-4

SAFETY RELATED HYDRAULIC SNUBBERS*

<u>SNUBBER NO.</u>	<u>SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION</u>	<u>ACCESSIBLE OR INACCESSIBLE (A or I)</u>	<u>HIGH RADIATION ZONE** (Yes or No)</u>	<u>ESPECIALLY DIFFICULT TO REMOVE (Yes or No)</u>
2-60-28	SPRAY TO CONT. CHARCOAL FILTER #22 77'	I	Yes	No
2-61-1	HPSI PUMP #23 SUCT. FROM S/D COOLING H.X. #22 9'9"	A	No	No
2-61-2	HPSI PUMP #23 SUCT. FROM S/D COOLING H.X. #22 9'9"	A	No	No
2-61-3	CONT. SPRAY PUMP #22 DISCH 3'6"	A	No	No
2-61-4	CONT. SPRAY HDR PENETRATION PIPING 10'0"	A	No	No
2-61-5	CONT. SPRAY HDR DOWNSTREAM S/D COOL H.X. #22 17'5"	A	No	No
2-61-5A	CONT. SPRAY HDR DOWNSTREAM S/D COOL H.X. #22 17'5"	A	No	No

TABLE 3.7-4

SAFETY RELATED HYDRAULIC SNUBBERS*

<u>SNUBBER NO.</u>	<u>SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION</u>	<u>ACCESSIBLE OR INACCESSIBLE (A or I)</u>	<u>HIGH RADIATION ZONE** (Yes or No)</u>	<u>ESPECIALLY DIFFICULT TO REMOVE (Yes or No)</u>
2-61-16	CONT. SPRAY HDR FOR SPRAY RING #22 70'	I	Yes	No
2-61-18	CONT. SPRAY HDR FOR SPRAY RING #22 39'	I	Yes	Yes

TABLE 3.7-4

SAFETY RELATED HYDRAULIC SNUBBERS*

<u>SNUBBER NO.</u>	<u>SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION</u>	<u>ACCESSIBLE OR INACCESSIBLE (A or I)</u>	<u>HIGH RADIATION ZONE** (Yes or No)</u>	<u>ESPECIALLY DIFFICULT TO REMOVE (Yes or No)</u>
2-61-19	CONT. SPRAY HDR FOR SPRAY RING #22 39'	I	Yes	Yes
2-63-1	S/G #22 BLOWDOWN LINE 34' 11'	A	No	No
2-63-2	S/G #22 BLOWDOWN LINE 27' 10'	A	No	No
2-63-3	NITROGEN LINE TO S/G #22 77'6"	I	Yes	No
2-63-4	NITROGEN LINE TO S/G #22 77'6"	I	Yes	No
2-63-5	S/G #21 SURFACE BLOWDOWN LINE 76'9"	I	Yes	No
2-63-6	S/G #21 SURFACE BLOWDOWN LINE 76'9"	I	Yes	No
2-63-11	STEAM GENERATOR #21 75'	I	Yes	Yes
2-63-12	STEAM GENERATOR #21 75'	I	Yes	Yes
2-63-13	STEAM GENERATOR #21 75'	I	Yes	Yes
2-63-14	STEAM GENERATOR #21 75'	I	Yes	Yes
2-63-15	STEAM GENERATOR #21 75'	I	Yes	Yes
2-63-16	STEAM GENERATOR #21 75'	I	Yes	Yes
2-63-17	STEAM GENERATOR #21 75'	I	Yes	Yes

TABLE 3.7-4

SAFETY RELATED HYDRAULIC SNUBBERS*

<u>SNUBBER NO.</u>	<u>SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION</u>	<u>ACCESSIBLE OR INACCESSIBLE (A or I)</u>	<u>HIGH RADIATION ZONE** (Yes or No)</u>	<u>ESPECIALLY DIFFICULT TO REMOVE (Yes or No)</u>
2-63-18	STEAM GENERATOR #21 75'	I	Yes	Yes
2-63-19	STEAM GENERATOR #22 75'	I	Yes	Yes
2-63-20	STEAM GENERATOR #22 75'	I	Yes	Yes
2-63-21	STEAM GENERATOR #22 75'	I	Yes	Yes
2-63-22	STEAM GENERATOR #22 75'	I	Yes	Yes
2-63-23	STEAM GENERATOR #22 75'	I	Yes	Yes
2-63-24	STEAM GENERATOR #22 75'	I	Yes	Yes
2-63-25	STEAM GENERATOR #22 75'	I	Yes	Yes
2-63-26	STEAM GENERATOR #22 75'	I	Yes	Yes
2-64-1	PRESSURIZER REL PIPING UPSTREAM MOV 403 81'6"	I	Yes	No
2-64-2	PRESSURIZER REL PIPING TO RV 200 79'11"	I	Yes	No
2-64-3	PRESSURIZER REL PIPING DOWNSTREAM MOV 405 84'3"	I	Yes	No

CALVERT CLIFFS-UNIT 2

3/4 7-46

Amendment No. 31, 32, 73

TABLE 3.7-4

SAFETY RELATED HYDRAULIC SNUBBERS*

<u>SNUBBER NO.</u>	<u>SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION</u>	<u>ACCESSIBLE OR INACCESSIBLE (A or I)</u>	<u>HIGH RADIATION ZONE** (Yes or No)</u>	<u>ESPECIALLY DIFFICULT TO REMOVE (Yes or No)</u>
2-83B-2	MSIV #21 HYDRAULIC SUPPLY 27'	A	No	No
2-83B-3	MSIV #21 HYDRAULIC RETURN 27'	A	No	No

* Snubbers may be added to safety related systems without prior License Amendment to Table 3.7-4 provided that a revision to Table 3.7-4 is included with the next License Amendment request. Snubbers may be removed from safety related systems for the purpose of replacement by sway struts in accordance with the NRC's Safety Evaluation dated _____ provided that a revision to Table 3.7-4 is included with the next License Amendment request.

**Modifications to this table due to changes in high radiation areas shall be submitted to the NRC as part of the next License Amendment request.

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3/4.8 ELECTRICAL POWER SYSTEMS

3/4.8.1 A.C. SOURCES

OPERATING

LIMITING CONDITION FOR OPERATION

3.8.1.1 As a minimum, the following A.C. electrical power sources shall be OPERABLE:

- a. Two physically independent circuits between the offsite transmission network and the onsite Class 1E distribution system consisting of either:
 1. Two 500 Kv offsite power circuits, or as necessary
 2. The 69 Kv SMECO offsite power circuit described in the January 14, 1977 Safety Evaluation and one 500 KV offsite power circuit, and
- b. Two separate and independent diesel generators (one of which may be a swing diesel generator capable of serving either Unit 1 or Unit 2) each with:
 1. Separate day fuel tanks containing a minimum volume of 375 gallons of fuel,
 2. A common fuel storage system consisting of two independent storage tanks each containing a minimum volume of 18,250 gallons of fuel, and
 3. A separate fuel transfer pump.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

- a. With one 500 Kv offsite circuit or diesel generator of the above required A.C. electrical power sources inoperable, demonstrate the OPERABILITY of the remaining A.C. sources by performing Surveillance Requirements 4.8.1.1.1.a and 4.8.1.1.2.a.4 within one hour and at least once per 8 hours thereafter; restore at least two offsite circuits and two diesel generators to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- b. With one 500 Kv offsite circuit and one diesel generator of the above required A.C. electrical power sources inoperable, demonstrate the OPERABILITY of the remaining A.C. sources by performing Surveillance Requirements 4.8.1.1.1.a and 4.8.1.1.2.a.4 within one hour and at least once per 8 hours thereafter; restore at least one of the inoperable sources to OPERABLE status within 12 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. Restore at least two offsite circuits and two diesel generators to OPERABLE status within 72 hours from the time of initial loss or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

ELECTRICAL POWER SYSTEMS

LIMITING CONDITION FOR OPERATION (Continued)

ACTION: (Continued)

- c. With two of the 500 Kv above required offsite A.C. circuits inoperable, demonstrate the OPERABILITY of two diesel generators by performing Surveillance Requirement 4.8.1.1.2.a.4 within one hour and at least once per 8 hours thereafter, unless the diesel generators are already operating; restore at least one of the inoperable offsite sources to OPERABLE status within 24 hours or be in at least HOT STANDBY within the next 6 hours. With only one offsite source restored, restore at least two offsite circuits to OPERABLE status within 72 hours from time of initial loss or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- d. With two of the above required diesel generators inoperable, demonstrate the OPERABILITY of two offsite A.C. circuits by performing Surveillance Requirement 4.8.1.1.1.a within one hour and at least once per 8 hours thereafter; restore at least one of the inoperable diesel generators to OPERABLE status within 2 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. Restore at least two diesel generators to OPERABLE status within 72 hours from time of initial loss or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

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

- a. Demonstrated OPERABLE, as follows:
 1. For each 500 Kv offsite circuit, at least once per 7 days by verifying correct breaker alignments and indicated power availability,
 2. For the 69 Kv SMECO offsite power circuit, within one hour of substitution for a 500 Kv offsite power circuit, and at least once per 8 hours thereafter during use by verifying correct breaker alignments and indicated power availability, and
- b. Demonstrated OPERABLE at least once per 18 months during shutdown by manually transferring unit power supply from the normal circuit to the alternate circuit.

4.8.1.1.2 Each diesel generator shall be demonstrated OPERABLE:

ELECTRICAL POWER SYSTEMS

A.C. DISTRIBUTION - SHUTDOWN

LIMITING CONDITION FOR OPERATION

3.8.2.2 As a minimum, the following A.C. electrical busses shall be OPERABLE and energized from sources of power other than a diesel generator but aligned to an OPERABLE diesel generator:

- 1 - 4160 volt Emergency Bus
- 1 - 480 volt Emergency Bus
- 2 - 120 volt A.C. Vital Busses

APPLICABILITY: MODES 5 and 6

ACTION:

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

SURVEILLANCE REQUIREMENTS

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

ELECTRICAL POWER SYSTEMS

D. C. DISTRIBUTION - OPERATING

LIMITING CONDITION FOR OPERATION

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

- a. 125-volt D.C. bus No. 11, a 125-volt D.C. battery bank and a full capacity charger.
- b. 125-volt D.C. bus No. 12, a 125-volt D.C. battery bank and a full capacity charger.
- c. 125-volt D.C. bus No. 21, a 125-volt D.C. battery bank and a full capacity charger.
- d. 125-volt D.C. bus No. 22, a 125-volt D.C. battery bank and a full capacity charger.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

- a. With one 125-volt D.C. bus inoperable, restore the inoperable bus to OPERABLE status within 2 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- b. With one 125-volt D.C. battery inoperable except during surveillance testing per Specifications 4.8.2.3.2.c.2, 4.8.2.3.2.d and 4.8.2.3.2.f:
 1. Restore the inoperable battery to OPERABLE status within 2 hours, or replace the inoperable battery with the OPERABLE Reserve Battery within the next 2 hours, or
 2. Be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- c. With both 125-volt D.C. battery chargers from the same D.C. bus inoperable:
 1. Except when necessary during surveillance testing per Specification 4.8.2.3.2.d.1, restore at least one 125-volt D.C. battery charger to OPERABLE status within 2 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
 2. During surveillance testing per Specification 4.8.2.3.2.d.1, restore at least one 125-volt D.C. battery charger to OPERABLE status within 4 hours or be in at least HOT STANDBY within 6 hours and in COLD SHUTDOWN within the following 30 hours.
- d. With one 125-volt D.C. battery inoperable during surveillance testing of the battery per Specification 4.8.2.3.2.c.2 and 4.8.2.3.2.d.2, operation may continue provided the associated bus is being powered by an operable charger and reserve battery.

ELECTRICAL POWER SYSTEMS

LIMITING CONDITION FOR OPERATION (Continued)

- e. With one 125-volt D.C. battery inoperable during surveillance testing of the battery per Specification 4.8.2.3.2.f., operation may continue provided the associated bus is being powered by the Reserve Battery and an OPERABLE charger.
- f. With single cells having a voltage decrease of more than 0.10 volts from the previous performance discharge test (4.8.2.3.2.f.) value, but still ≥ 2.10 volts per surveillance requirement 4.8.2.3.2.b.1., either restore/replace cells or replace the affected battery with the Reserve Battery within 24 hours or be in HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.8.2.3.1 Each D.C. bus train shall be determined OPERABLE and energized at least once per 7 days by verifying correct breaker alignment and indicated power availability.

4.8.2.3.2 Each 125-volt battery bank and charger and the Reserve Battery shall be demonstrated OPERABLE;

a. At least once per 7 days by verifying that:

- 1. The electrolyte level of each pilot cell is between the minimum and maximum level indication marks.
- 2. The pilot cell specific gravity, corrected to 77°F and full electrolyte level is ≥ 1.200 .
- 3. The pilot cell voltage is ≥ 2.10 volts.
- 4. The overall battery voltage is ≥ 125 volts.

b. At least once per 92 days by verifying that:

- 1. The voltage of each connected cell is ≥ 2.10 volts under float charge and has not decreased more than 0.10 volts from the value observed during the latest performance discharge test (4.8.2.3.2.f).
- 2. The specific gravity, corrected to 77°F and full electrolyte level, of each connected cell is ≥ 1.200 and has not decreased more than 0.02 from the value observed during the previous test.
- 3. The electrolyte level of each connected cell is between the minimum and maximum level indication marks.

ELECTRICAL POWER SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

- c. At least once per 18 months by verifying that:
1. The cells, cell plates and battery racks show no visual indication of physical damage or deterioration.
 2. The cell-to-cell and terminal connections are clean, tight, and coated with anti-corrosion material.
- d. At least once per 18 months by verifying that the battery capacity, with the charger disconnected, is adequate to either:
1. Supply and maintain in OPERABLE status all of the actual emergency loads for at least 2 hours when the battery is subjected to a battery service test. At the completion of this test, surveillance 4.8.2.3.2.e shall be performed for the affected battery. The battery shall be charged to at least 95% capacity in ≤ 24 hours, or
 2. Supply a dummy load of the following profile for at least 2 hours while maintaining the battery terminal voltage ≥ 100 volts:
 - a) Batteries 11, 21 and Reserve:
First minute ≥ 827 amperes
Next 1 minute ≥ 461 amperes
Next 117 minutes ≥ 251 amperes
Next 1 minute ≥ 325 amperes
 - b) Batteries 12 and 22:
First minute ≥ 193 amperes
Next 119 minutes ≥ 160 amperes
 - c) At the completion of this test, the battery shall be charged to at least 95% capacity in ≤ 24 hours, excluding the stabilization time.
- e. At least once per 18 months, the battery charger* shall be demonstrated capable of recharging the battery at a rate of ≤ 400 amperes while supplying normal D.C. loads or equivalent or greater dummy load.
- f. At least once per 60 months by verifying that the battery capacity is at least 80% of the manufacturer's rating when subjected to a performance discharge test. This performance discharge test shall be performed subsequent to the satisfactory completion of the required battery service test.

*Not applicable to the charger associated with the Reserve Battery.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NOS. 92 AND 73

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 December 22, 1983, Baltimore Gas and Electric Company (BG&E) requested changes to the Technical Specifications (TS) for Calvert Cliffs Units 1 and 2. The application was supplemented by two letters dated January 27, 1984. The proposed amendments would change the TS to reflect: (1) changes to surveillance requirements for safety related hydraulic sway arrestors (snubbers), (2) a change to the Limiting Conditions for Operation (LCO) for the emergency fuel oil storage system to allow removal of the storage tanks from service for inspection, (3) clarification of the surveillance requirements for the 125V DC batteries and chargers, (4) clarification of the LCO and surveillance requirements for the off-site electrical power sources, (5) a change to the list of containment isolation valves to allow intermittent opening of certain valves, under administrative control during reactor operation, to allow testing of the containment hydrogen sampling capability and, (6) deletion of an outdated LCO associated with the control room emergency ventilation system (Unit 1 only).

Discussion and Evaluation

The first TS change topic relates to the safety related hydraulic sway arrestors (snubbers) addressed in TS 3/4.7.8.1, "Snubbers". Two types of changes are proposed to this TS. First, a number of snubbers addressed in 3/4.7.8.1 have been proposed for removal. These snubbers have been re-evaluated by the licensee and have been found to be suitable for replacement by rigid sway struts due to the low thermal expansion attributable to the supported equipment. Since sway struts, unlike snubbers, are completely passive (they have no moving parts), they need not be addressed by TS surveillance. Moreover, since these sway struts are similar in design to those already in safety-related service at Calvert Cliffs and since no changes will be made in mounting configuration, no decrease in the seismic resistance of the associated systems will occur.

The second change associated with Unit 2 TS 3/4.7.8.1 involves the deletion of common-reservoirs notations from those designated snubbers in Unit 2 TS Table 3.7-4. These sixteen snubbers, associated with the Steam Generators,

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will be modified such that each snubber will have its own reservoir. The reservoirs, together with all associated fittings, will be designed, manufactured, mounted and maintained to the same seismic standards as the snubbers which they serve. Removal of these common reservoirs and replacement with individual units improves the seismic design in that it eliminates the possibility that a single reservoir failure would result in eight snubbers being inoperable.

Since these sixteen snubbers are the only snubbers served by common reservoirs, the surveillance requirements for these common reservoirs specified in TS 4.7.8.1f have been proposed for deletion. Although the actual modifications will not be undertaken until the April 1984 Unit 2 outage, the licensee has committed to undertake this surveillance every 31 days $\pm 25\%$ until such time as the modifications are undertaken. The proposed changes in the snubbers addressed above and their associated TS assure an equivalent degree of seismic resistance. For this reason we find the proposed changes to TS 3/4.7.8.1 to be acceptable.

The second topic addressed herein involves the fuel oil storage system for the on-site emergency AC power diesel generators.

Indication of leaks in fuel oil tank bottoms at other non-BG&E fossil facilities has pointed out the necessity of periodic inspection of fuel oil storage tanks. A plan to inspect these tanks by visual inspection and statistical metallurgical sample of the tank bottoms using ultrasonic depth meters has been developed. This program cannot be undertaken at present due to the requirements of TS 3.8.1.1b, "A.C. Sources". In this TS, the operability of each diesel generator in Modes 1, 2, 3, or 4 requires, "A common fuel storage system consisting of two independent storage tanks each containing a minimum volume of 18,250 gallons of fuel..." Therefore, if only one fuel oil storage tank is available, it renders all of the diesels inoperable. TS 3.8.1.1.b requires either returning the diesels to operable status within two hours or being in hot standby within the next six hours. This clearly makes any inspection of a fuel oil storage tank which requires that the tank be drained impossible without first shutting down both units. Moreover, it is unlikely that simultaneous unit outage of greater than ten days will be scheduled for Calvert Cliffs.

In order to permit the desired tank inspections, the licensee has proposed a change to TS 3.8.1.1b. The proposed change requires that two redundant sources of diesel fuel oil be maintained even with one of the two fuel oil storage tanks out of service for inspection. This will be accomplished by use of an 8,000 gallon alternate fuel source, enough to run two diesels for 21.1 hours at full load. The required minimum fuel oil volume in the remaining (operable) safety-grade fuel oil storage tank would be 36,500 gallons. Furthermore, it limits the period of time these inspections can be performed to the April 1984 Unit 2 refueling outage when the Unit 2 reactor is in Mode 5 or 6, a period expected to last approximately two

months. The proposed change also requires the alternate fuel source to be connected to the existing safety-related fuel oil source so as not to degrade the system integrity in the event of a rupture of the alternate fuel oil source or its connecting piping. In addition, since only one fuel oil tank is protected from tornado missiles, this tank is required to be maintained operable until May 15, 1984. This requirement is necessary since the tornado probability is comparatively high during the month of April and is judged to be appropriately low by May 15.

Although redundancy with regard to the safety grade fuel oil supply would be decreased in that, during the inspection, only a single safety grade fuel oil source would be operable (the 8,000 gallon source would be non-safety grade), this situation is compensated for by the following factors: (1) the 36,500 gallon fuel oil supply now required to be maintained in two safety grade tanks would represent the minimum capacity for the remaining operable safety grade fuel oil tank, (2) an additional 8,000 gallon non-safety grade fuel oil source would be available, and (3) during the two months during which the tank inspections would be undertaken, Unit 2 would be in a refueling outage, such that the potential need for emergency AC power would be reduced together with a corresponding reduction in the need for fuel oil. Thus, overall, there is no significant reduction in the availability of fuel oil for emergency AC power diesel generators. Since an equivalent, reliable, source of fuel oil would be maintained, the proposed changes to TS 3.8.1.1b are acceptable.

The third topic addressed herein involves proposed changes to TS 3/4.8.2.3, "D.C. Distribution - Operating." The first such change, TS 3.8.2.3, Action c, involves the remedial action to be taken in the event that both battery chargers on a 120V DC bus become inoperable. This remedial action requires the reactor to be shut down if a battery charger cannot be restored to operable status within 2 hours. This requirement directly conflicts with TS 4.8.2.3.2d which allows the 18 month battery capacity test to be performed by actually powering the emergency loads associated with a 125V DC bus. Performing the capacity test in this manner requires that both battery chargers associated with the 125V DC battery to be tested be rendered inoperable. The licensee has requested a change to Action "c" to allow both battery chargers on a 125V DC bus to be inoperable for the purpose of performing a "live load" battery capacity test (TS 4.8.2.3.2.d.1). This proposed change represents an insignificant decrease in reliability with regard to supplying emergency loads on the 125V DC buses in that the duration of the subject test is expected to last approximately 4 hours and would be conducted at approximately 18 month intervals.

The second proposed change relates to TS 3.8.2.3, Action d which requires a 125V DC bus whose battery has been made inoperable for the purpose of testing (TS 4.8.2.3.2.c.2 and 4.8.2.3.2.d.2) to be powered by an operable battery charger. The licensee has indicated that, when the 125V DC batteries are removed from service for testing, the associated bus is powered by the

reserve battery and an operable charger. The licensee has therefore requested that Action d be modified to require an operable charger and the reserve battery to power a bus whose battery has been removed from service for surveillance. In this regard, since the reserve battery would power a bus whose battery has been removed from service to perform an 18-month capacity test using a "dummy load" (TS 4.8.2.3.2.d.2), the need to recharge the tested battery in less than or equal to 24 hours becomes less significant since the bus would be powered by a fully qualified, reserve battery. The licensee has proposed to exclude a stabilization period of approximately 36 hours from the recharging interval. While the battery would still be demonstrated to be capable of being recharged in 24 hours, an additional stabilization time would be implemented, prior to returning the battery to service, to allow the battery parameters to return to normal. This period would serve to extend the life of the battery. While the battery capacity test is performed on the dummy load, and during subsequent recharging, the reserve battery can still serve as the power supply to the bus. Using this configuration will allow the discharged battery to be charged in a normal manner, using the reserve battery charger versus using the DC bus battery chargers for the 24 hour period specified in the TS. This will prolong the life of the station batteries and improve overall battery system reliability. Additionally, if the reserve battery remains on the bus during the recharging period, safety will be improved by ensuring an essentially fully charged battery is on the DC bus at all times. The requirements of TS 4.8.2.3.2.d and 4.8.2.3.2.e have been renumbered to accommodate these changes together with the references to these sections elsewhere in TS 3/4.8.2.3.

Finally, the licensee has proposed that the 18-month battery charger test described in TS 4.8.2.3.2.e be changed to allow the option for use of dummy loads that are equal to or greater than that required to recharge a battery at a rate of less than or equal to 400 amperes while supplying normal DC loads. At the present time, the battery charger test is to be performed by demonstrating the capability of recharging the battery at a rate of less than or equal to 400 amperes while supplying normal DC loads.

The use of dummy loads for 125V DC battery tests is presently permitted under TS 4.8.2.3.2.d. Moreover, the proposed change to the TS would allow the battery chargers to be tested "off-line" while the DC bus in question is being powered by a fully charged reserve battery. Under the existing requirements, the charger would be tested on the DC bus with a discharged battery, thus degrading the capacity of that bus until the battery is fully recharged. For this reason, the proposed change to TS 4.8.2.3.2.e would improve the availability of DC power during the performance of the battery charger test.

As indicated above, the proposed changes to TS 3/4.8.2.3 maintain or improve the reliability of the DC power supply. The proposed changes to TS 3/4.8.2.3 are therefore acceptable.

The fourth topic addressed herein relates to proposed changes to TS 3/4.8.1. "A.C. Sources - Operating." The first proposed change is intended to provide a clarification to the LCO. At the present time, TS 3.8.1.1 allows use of a 69kV offsite power source (supplies by SMECO) to substitute for a 500kV offsite power circuit. This "credit" is presently implemented by references within action statements a, b, and c. The licensee has proposed that the references in the action statements be removed and the ability to use the SMECO line be incorporated directly in the LCO.

In the Commission's November 2, 1981 Safety Evaluation (SE) issued in support of License Amendments 58 and 40 for Units 1 and 2, the Commission concluded that the SMECO line met all requirements for use as "...an independent, preferred source of offsite electrical power as stated in General Design Criterion 17, Appendix A to 10 CFR Part 50." The present referencing of the SMECO line in the Action Statements of TS 3.8.1.1 implies operation in a degraded mode. This is inconsistent with the Commission's November 2, 1981 SE which concluded that the SMECO line was fully acceptable. The November 2, 1981 SE concluded that no significant hazards considerations were associated with use of the SMECO line, however as indicated in the LCO, the 500kV circuit represents the preferred power source. Finally, the licensee has proposed changes to TS 4.8.1.1.1. One such change provides a new surveillance requirement in the TS for the SMECO line. This surveillance requires that the SMECO offsite power source be demonstrated operable as follows:

For the 69kV SMECO offsite power circuit, within one hour of substitution for a 500kV offsite power circuit, and at least once per 8 hours thereafter during use by verifying correct breaker alignments and indicated power availability.

While this requirement would be new to the TS, it represents an existing commitment by the licensee as documented in the NRC's SE dated November 2, 1981. The proposed change to TS 4.8.1.1.1 also deletes mention of a test to assure operability of the automatic shift from the normal to alternate circuit. This test is already performed under TS 4.8.1.1.2.c.3 and thus its deletion does not affect plant safety.

As indicated above, the proposed changes to TS 3/4.8.1 do not reduce the reliability of off-site power. For the reasons stated above, the proposed changes to TS 3/4.8.1.1 are acceptable.

The fifth topic addressed herein involves a proposed change to TS 3/4.6.4.1, "Containment Isolation Valves." This proposed change would allow operation of the Hydrogen Sample and Hydrogen Sample Return containment isolation valves for brief periods under administrative control. These valves are currently required to be closed during reactor startup and operation. These penetrations are described in Section 5.2.2 and Table 5-3 of the Updated Final Safety Analysis Report as a Type II isolation valve configuration which satisfies the criteria of General Design Criterion 56 of 10 CFR 50.

Each penetration line is $\frac{1}{4}$ inch in diameter, as described in Table 5-3 of the Updated FSAR. These valves must be operated to obtain or return a gaseous sample for the Post Accident Sampling System (PASS) or the containment hydrogen analyzers.

The proposed change only involves the use of certain containment isolation valves and does not involve a change in design or equipment or in procedures. This is because the valves are normally closed during reactor operation. A key must be inserted to physically open each valve under administrative control. Also, both containment isolation valves must be opened for each penetration to expose the containment atmosphere to either the PASS or the Hydrogen Analyzers. This provides a dual protection for ensuring containment integrity is maintained.

Based on the above considerations, the proposed changes to 3/4.6.4.1 are acceptable.

The final topic addressed herein applies to Unit 1 TS 3/4.7.6, "Control Room Emergency Ventilation System." The proposed change would delete the following interim LCO which expired with startup of Unit 2 following the October 1982 refueling outage:

For the duration of the October 1982 Unit 2 refueling outage with Unit 2 in MODES 5 or 6 and one air conditioning unit inoperable, restore the inoperable unit to operable status within 21 days or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

Since this TS is no longer applicable to Unit 1, its deletion from the Unit 1 TS has no effect on plant safety. Deletion of this TS is a purely administrative action and is acceptable.

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 the amendments.

Conclusion

We have concluded, based on the considerations discussed above, that:
(1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (2) such

activities will be conducted in compliance with the Commission's regulations and the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

Date: April 19, 1984

Principal Contributor:
D. Jaffe