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. 77 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 June 17, July 30, August 2 and August 26, 1982 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:
 - 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.

ū	ESIGNATED	ORIGINAL		
Certified	Ву			

- 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. 77 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

Robert A. Clark, Chief

Operating Reactors Branch #3

Division of Licensing

Attachment: Changes to the Technical Specifications

Date of Issuance: September 23, 1982

ATTACHMENT TO LICENSE AMENDMENT NO. 77

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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TABLE 3.7-4
SAFETY RELATED HYDRAULIC SNUBBERS*

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

TABLE 3.7-4
SAFETY RELATED HYDRAULIC SNUBBERS*

ALVERT CL	NO.	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE	HIGH RADIATION ZONE**	ESPECIALLY DIFFICULT TO REMOVE	***
CLIFFS			(A or I)	(Yes or No)	(Yes or No)	
	1-24-3	EMERGENCY DIESEL #12 EXHAUST 61'	A	No	No	
TINU	1-24-3A	EMERGENCY DIESEL #12 EXHAUST 61'	A	No	No	
_	1-24-4	EMERGENCY DIESEL #11 EXHAUST 61'	A	No	No	
	1-24-4A	EMERGENCY DIESEL #11 EXHAUST 61'	Α	No	No	*
	1-24-5	DIESEL GENERATOR #21 EXHAUST 92'	A	No	No	
3/4	1-24-6	DIESEL GENERATOR #21 EXHAUST 62'	Α	No	No	
7-32	1-24-6A	DIESEL GENERATOR #21 EXHAUST 62'	A	No	No	
12	1-28-1	UNIT 1 AFW PUMP ROOM 22'	A	No	No	1
	1-28-2	UNIT 1 AFW PUMP ROOM 22'	A	No	No	
Am	1-28-3	UNIT 1 AFW PUMP ROOM 22'	A	No	No	
Amendment	1-41-1	SUCTION #13 CHARGING PUMP -10'	A	No	No	
ent	1-41-2	AUX. SPRAY 65'	I	Yes	No	
No.	1-41-3	AUX. SPRAY 65'	I	Yes	No	
~	1					

TABLE 3.7-4 SAFETY RELATED HYDRAULIC SNUBBERS*

RT CLIF	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)
CLIFFS-UNIT	1-41-4	AUX. SPRAY 65'	I	Yes	No
1 1	1-41-5	AUX. SPRAY 49'	I	Yes	No
	1-41-6	CHARGING LINE LOOP 12B 38'	I	Yes	No
	1-41-7	CHARGING LINE LOOP 12B 46'	I	Yes	No
	1-41-8	CHARGING LINE LOOP 12B 46'	I	Yes	No
	1-41-9	CHARGING LINE LOOP 12B 46'	I	Yes	No
3/4 7					
7-33	1-41-12	CHARGING LINE LOOP 11A 24'	I	Yes	No
	1-41-13	CHARGING LINE LOOP 11A 24'	I	Yes	No
	1-41-14	CHARGING LINE LOOP 11A 24'	I	Yes	, No
An	1-41-15	CHARGING LINE LOOP 11A 24'	I	Yes	No
Amendment	1-41-16	CHARGING LINE LOOP 11A 31'	1	Yes	No
ent	1-41-17	CHARGING LINE LOOP 11A 34'	1	Yes	No
No.	1-41-18	LETDOWN LINE 24'	I	Yes	No I

TABLE 3.7-4
SAFETY RELATED HYDRAULIC SNUBBERS*

CALVERT	SNUBBER NO.	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE	HIGH RADIATION ZONE**	ESPECIALLY DIFFICULT TO REMOVE
			(A or I)	(Yes or No)	(Yes or No)
CLIFFS	1-45-1	FEEDWATER INLET TO S.G. #11 40'	I	Yes	No
<u></u>	1-45-1A	FEEDWATER INLET TO S.G. #11 40'	I	Yes	No
TINU	1-45-2	FEEDWATER INLET TO S.G. #12 50'	I	Yes	No
	1-45-3	FEEDWATER INLET TO S.G. #12 55'	I	Yes	No
	1-45-4	UNIT 1 MSIV PENETRATION RM 29'	A	No	No 1
3/4	1-45-5	OVERHEAD 5' UNDER MSIV ROOM 26'	I	No	Yes
7-34	1-45-6	AUX. FEEDWATER INLET TO S.G. #12 62'	I	Yes	No
Ą	1-45-7	AUX. FEEDWATER INLET TO S.G. #11 65'	I	Yes	No
Amendment	1-45-7A	AUX. FEEDWATER INLET TO S.G. #11 65'	I	Yes	No
nt No.	1-45-8	STEAM SUPPLY #12 AUX. FEED PUMP 12'	A	No	No
30,	1-45-9	UNIT 1 MSIV PENETRATION RM 29'	A	No	No 🕴
37,	1-45-10	UNIT 1 MSIV PENETRATION RM 29'	A	No	No
77	1-45-10A	UNIT 1 MSIV PENETRATION RM 29'	A	No	No

TABLE 3,7-4 SAFETY RELATED HYDRAULIC SNUBBERS*

IFFS-UNIT	SNUBBER NO.	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE (A or 1)	HIGH RADIATION ZONE** (Yes or No)	ESPECIALLY DIFFICULT TO REMOVE (Yes or No)	***
	1-64-98	RCP 11A and 11B MOTORS 56'	I	Yes	No	
	1-64-99	RCP 11A and 11B MOTORS 56'	I .	Yes	No	
	1-64-100	RCP 12A and 12B MOTORS 56'	I	Yes	No	
	1-64-101	RCP 12A and 12B MOTORS 56'	I	Yes	No	
	1-64-102	RCP 12A and 12B MOTORS 56'	I	Yes	No	
3/4	1-64-103	RCP 12A and 12B MOTORS 56'	1	Yes	No	
7-57	1-67-1	#11 SPENT FUEL POOL COOL. PUMP SUCTION - RWT 27'	Α	No	No	-
	1-67-2	INLET - SPENT FUEL POOL COOLER #12 27'	Α	No	No	
Ame	1-67-2A	INLET - SPENT FUEL POOL COOLER #12 27'	٨	No	No	
Amendment APR 2	1-67-3	WATER TO REFUELING POOL #11 38'	1	Yes	No	
4 NO 979	1-67-4	WATER TO REFUELING POOL #11 40'	1	Yes	No	

TABLE 3.7-4
SAFETY RELATED HYDRAULIC SNUBBERS*

ALV		SAFETY RELATED HYD	RAULIC SNUBBERS*		
ALVERT CLI	SNUBBER NO.	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE	HIGH RADIATION ZONE**	ESPECIALLY DIFFICULT TO REMOVE
CLIFFS			(A or I)	(Yes or No)	(Yes or No)
_	1-83-1	MAIN STEAM FROM S.G. #11 27'	Α	No	Yes
TINU	1-83-2	MAIN STEAM FROM S.G. #11 27'	Α	No	Yes
-	1-83-3	MAIN STEAM FROM S.G. #12 27'	Α	No	Yes
	1-83-4	MAIN STEAM FROM S.G. #12 27'	Α	No	No
ω	1-83-5	MAIN STEAM FROM S.G. #11 27'	Α .	No	Yes
3/4 7	1-83-6	MAIN STEAM FROM S.G. #12 27'	Α	No	No
7-58	1-83-11	MAIN STEAM LINE 27' PENETRATION TUNNEL	I	No	Yes
	1-83-12	MAIN STEAM LINE 27' PENETRATION TUNNEL	I	No	Yes
Amendment	1-83-14	MAIN STEAM LINE 27' PENETRATION TUNNEL	I	No	Yes
nent No.	1-83-15	MAIN STEAM LINE 27' PENETRATION TUNNEL	I	No	Yes
. 28,	1-83-16	MAIN STEAM LINE 27' PENETRATION TUNNEL	I	No	Yes
46, 77	1-83-17	MAIN STEAM LINE 27' PENETRATION TUNNEL	I	No	Yes
	1-83-19	MAIN STEAM LINE 27' PENETRATION TUNNEL	I	No ·	Yes

TABLE 3.7-4
SAFETY RELATED HYDRAULIC SNUBBERS*

SNUBBER NO.	ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE (A or I)	HIGH RADIATION ZONE** (Yes or No)	ESPECIALLY DIFFICULT TU REMOVE (Yes or No)
1-83-55	MAIN STEAM LINE ENCAPSULATION 27'	А	No	No
1-83-56	MAIN STEAM LINE ENCAPSULATION 27'	A	No	No
1-83-57	MAIN STEAM LINE ENCAPSULATION 27'	Α	No	No
1-83-58	MAIN STEAM LINE ENCAPSULATION 27'	A	No	No
			V	
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-/3	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*

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)
1-83-75	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.

^{**}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.

TABLE 3.7-4
SAFETY RELATED HYDRAULIC SNUBBERS*

CAL		SAFETY RELATED HY	DRAULIC SNUBBERS*			
CALVERT (SNUBBER NO.	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE	HIGH RADIATION ZONE**	ESPECIALLY DIFFICULT TO REMOVE	
CLIFFS			(A or I)	(Yes or No)	(Yes or No)	
	1-83-38	MS FROM S.G. #12 TO AUX. FEED PUMP 27'	Α	No	No	1
UNIT 1	1-83-40	MS FROM S.G. #12 TO AUX. FEED PUMP 27'	Α	No	No	
	1-83-40A	MS FROM S.G. #12 TO AUX. FEED PUMP 27'	Α	No	No	
3/4	1-83-41	AUX. FEED PUMP ISO. VALVE BYPASS 27'	Α	No	No	
7-60	1-83-44	STEAM SUPPLY TO AUX. FEED PUMP 27'	A	No	No	
	1-83-47	AUX. FEED PUMP ISO. VALVE BYPASS 27'	A	No	No	
Ame	1-83-48	AUX. FEED PUMP ISO. VALVE BYPASS 27'	A	No	No	
Amendment	1-83-49	MAIN STEAM LINE ENCAPSULATION 27	· A	No	Yes	1
	1-83-50	MAIN STEAM LINE ENCAPSULATION 27	· A	No	Yes	
No. 77	1-83-51	MAIN STEAM LINE ENCAPSULATION 27	· A	No	Yes	
7	1-83-52	MAIN STEAM LINE ENCAPSULATION 27	· A	No	Yes	
	1-83-53	MAIN STEAM LINE ENCAPSULATION 27	· A	No	Yes	
	1-83-54	MAIN STEAM LINE ENCAPSULATION 27	· A	No .	No	^

TABLE 3.7-4
SAFETY RELATED HYDRAULIC SNUBBERS*

CAL	SAFETY RELATED HYDRAULIC SNUBBERS*				
CALVERT (SNUBBER NO.	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE	HIGH RADIATION ZONE**	ESPECIALLY DIFFICULT TO REMOVE
CLIFFS - U			(A or I)	(Yes or No)	(Yes or No)
	1-83-20	MAIN STEAM LINE 27' PENETRATION TUNNEL	I	No	Yes
I TINU	1-83-21	MAIN STEAM LINE 27! PENETRATION TUNNEL	I	No	Yes
	1-83-22	MAIN STEAM LINE 27' PENETRATION TUNNEL	I	No	Yes
3/4	1-83-23	MAIN STEAM LINE 27' PENETRATION TUNNEL	1	No	Yes
4 7-59	1-83-24	MAIN STEAM LINE 27' PENETRATION TUNNEL	-1	No	Yes
	1-83-29	#11 AFPT STEAM SUPPLY HEADER 12'	A	No	No
	1-83-30	MSIV #12 HYDRAULIC SUPPLY 5'	Α	No	No
Amen	1-83-31	MSIV #12 HYDRAULIC SUPPLY 5'	A	No	No
Amendment	1-83-32	MSIV #12 HYDRAULIC SUPPLY 5'	Α	No	No
t No.	1-83-33	MSIV #12 HYDRAULIC SUPPLY 5'	A	No	No
. 77	1-83-34	MSIV #12 HYDRAULIC SUPPLY 27'	Α	No	No ,
	1-83-35	MSIV #12 HYDRAULIC SUPPLY 27'	A	No	No
	1-83-36	MSIV #12 HYDRAULIC SUPPLY 27'	Α	No	No
	1-83-37	MSIV #12 HYDRAULIC SUPPLY 27'	A	No	No

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NUCLEAR REGULATORY COMMISSION WASHINGTON, D. C. 20555

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BALTIMORE GAS AND ELECTRIC COMPANY

DOCKET NO. 50-318

CALVERT CLIFFS NUCLEAR POWER PLANT UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 58 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 July 30, August 2 and August 26, 1982 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.

	DESIGNATED	ORIGINAL	
Cortified	By		

- 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. 58 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

Robert A. Clark, Chief

Operating Reactors Branch #3

Division of Licensing

Attachment: Changes to the Technical Specifications

Date of Issuance: September 23, 1982

ATTACHMENT TO LICENSE AMENDMENT NO. 58

FACILITY OPERATING LICENSE NO. DPR-69

DOCKET NO. 50-318

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

Pages

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TABLE 3.7-4
SAFETY RELATED HYDRAULIC SNUBBERS*

CALVERT	SNUBBER NO.	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE	HIGH RADIATION ZONE**	ESPECIALLY DIFFICULT TO REMOVE
R			(A or I)	(Yes or No)	(Yes or No)
CLIFFS	2-15-5	COMP. COOLING PUMP #22 DISCH. 18'-6"	Α	No	Yes
TINU - 8	2-15-6	COMP. COOLING PUMPS DISCH. HEADER 14'-5"	Α	No	Yes
1 2	2-15-7	COMP. COOLING PUMPS DISCH. HEADER 14'-5"	Α	No	Yes
	2-15-8	COMP. COOLING TO LIQUID WASTE EVAP. 64'	Α	No	No
3/4	2-15-9	COMP. COOLING TO LIQUID WASTE EVAP. 64'	Α	No	No
7-31	2-36-1	STEAM SUPPLY TO #22 AUX. SGFP 12'	Α	No	No
	2-36-1A	STEAM SUPPLY TO #22 AUX. SGFP 12'	Α	No	No
D	2-36-2	STEAM SUPPLY TO #21 AUX. SGFP 12'	A	No	No
mend	2-36-2A	STEAM SUPPLY TO #21 AUX. SGFP 12'	A	No	No
Amendment	2-36-3	UNIT 2 AFW PUMP ROOM 18'	Α	No	No [
No.	2-36-4	AFW INLET TO #21 STEAM GENERATOR 65'	ı	Yes	No
29, 41,	2-36-4A	AFW INLET TO #21 STEAM GENERATOR 65'	Ι	Yes	No
58	2-36-5	AFW INLET TO #22 STEAM GENERATOR 65'	1	Yes	No

TABLE 3.7-4
SAFETY RELATED HYDRAULIC SNUBBERS*

CALVERT	SNUBBER NO.	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE	HIGH RADIATION ZONE**	ESPECIALLY DIFFICULT TO REMOVE	
			(A or I)	(Yes or No)	(Yes or No)	- 7
CLIFFS	2-41-1	CHARGING LINE OUTLET OF REGEN HEAT EXCHG 40'	I	Yes	No	
- UNIT	2-45-1	F.W. INLET TO #21 STEAM GENERATOR 40'-4"	I	Yes	No	
7 2	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	Y
3/4	2-45-3	F.W. INLET TO #22 STEAM GENERATOR 55'	I	Yes	No	
7-	2-45-4	UNIT 2 MSIV PENETRATION RM 29'	A	No	No	1
32	2-45-4A	UNIT 2 MSIV PENETRATION RM 29'	Α	No	No	
	2-45-5	UNIT 2 MSIV PENETRATION RM 29'	Α	No	No	
Ame	2-45-6	UNIT 2 MSIV PENETRATION RM 29'	Α	No	No	
Amendment	2-45-7	OVERHEAD 5' UNDER MSIV ROOM 26'	I	No	Yes	
nt No.	2-52-1	#21 S.I. PUMPS SUCTION FROM CONT. SUMP 5'-7"	Α	No	No	
58	2-52-2	LPSI PUMP #21 SUCTION o'-6"	Α	No	No	*
	2-52-2A	LPSI PUMP #21 SUCTION 0'-6"	Α	No	No	
	2-52-3	LPSI PUMP #22 DISCHARGE 4'-0"	Α	No	No 🐧	
	2-52-3A	LPSI PUMP #22 DISCHARGE 4'-0"	A	No ·	No	

TABLE 3.7-4
SAFETY RELATED HYDRAULIC SNUBBERS*

CALVERT	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)
CLIFFS	2-52-4	HPSI PUMP #22 SUCTION 5'-10"	A	No	No
FS -	2-52-5	HPSI PUMP #23 SUCTION 4'-9"	Α	No	No
TINU	2-52-5A	HPSI PUMP #23 SUCTION 4'-9"	Α	No	No
7 2	2-52-6	HPSI PUMP #23 SUCTION 3'-6"	Α	No	No
	2-52-7	HPSI PUMP #23 SUCTION 3'-6"	A	No	No
	2-52-8	HPSI PUMP #23 SUCTION 5'-3"	Α	No	No
3/4	2-52-9	S/D COOLING TO HPSI PUMP #23 SUCTION 3'-6"	A	No	No
7-33	2-52-10	LPSI PUMP #22 DISCHARGE 0'-6"	Α	No	No
	2-52-10A	LPSI PUMP #22 DISCHARGE 0'-6"	A	No	No
	2-52-11	LPSI PUMP DISCHARGE HEADER 0'-6"	A	No	No
Amendment No. 58	2-52-12	LPSI PUMP #22 SUCT. FROM SPENT FUEL POOL 18'-4"	A	No	No
	2-52-13	LPSI PUMP DISCH HEADER TO SPENT FUEL POOL 20'-4"	Α	No	No
	2-52-13A	LPSI PUMP DISCH HEADER TO SPENT FUEL POOL 20'-4"	A	No	No
	2-52-14	HPSI PUMP DISCHARGE HEADER 20'-2"	A	No	No

TABLE 3.7-4 SAFETY RELATED HYDRAULIC SNUBBERS*

ERT CLIFFS-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)
TINU-S	2-52-15	LPSI PUMP DISCH HEADER TO #22 S.I. TANKS 18'-4"	Α	No	No
2	2-52-16	LPSI DISCH TO S.I. TANK #22A 29'-0"	Α	No	No
	2-52-16A	LPSI DISCH TO S.I. TANK #22A 29'-0"	Α	No	No
3/4	2-52-17	LPSI DISCH TO S.I. TANK #22B 29'-0"	A	No	No
4 7-34	2-52-17A	LPSI DISCH TO S.I. TANK #22B 29'-0"	Α	No	No
	2-52-18	LPSI PUMP SUCTION FROM S/D COOLING 1'-3"	Α	No	No
	2-52-19	S/D COOLING HDR TO LPSI PUMPS 1'-4"	Α	No	No
	2-52-20	S/D COOLING HDR TO LPSI PUMPS 0'-6"	Α	No	No
	2-52-20A	S/D COOLING HDR TO LPSI PUMPS 0'-6"	A	No	No
	2-52-21	LPSI PUMP SUCTION FROM S/D COOLING 3'-4"	Α	No	No

TABLE 3.7-4

SAFETY RELATED HYDRAULIC SNUBBERS*

CALVERT	SNUBBER NO.	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE	HIGH RADIATION ZONE**	ESPECIALLY DIFFICULT TO REMOVE
			(A or I)	(Yes or No)	(Yes or No)
CLIFFS	2-67-2A	SUPPLY TO REFUELING POOL #21 40'0"	I	Yes	No
- UNIT	2-67-3	RETURN LINE FROM REFUELING POOL #21 26'10"	I	Yes	No
1 2	2-67-4	RETURN LINE FROM REFUELING POOL #21 26'10"	I	Yes	No
	2-71-8	UNIT 2 LOOP #22A DRAIN LINE 25'	I	Yes	No I
3/4 7-51	2-83-1	MS PIPING FROM S/G #22 (UPSTREAM MSIV) 27'	Α	No	No
	2-83-2	MS PIPING FROM S/G #22 (UPSTREAM MSIV) 27'	Α	No	No
	2-83-2A	MS PIPING FROM S/G #22 (UPSTREAM MSIV) 27'	Α	No	No
Ame	2-83-3	MS PIPING FROM S/G #21 (UPSTREAM MSIV) 27'	Α	No	No
Amendment	2-83-4	MS PIPING FROM S/G #21 (UPSTREAM MSIV) 27'	Α	No	No
t No. 58	2-83-4A	MS PIPING FROM S/G #21 (UPSTREAM MSIV) 27'	A	No	No •
	2-83-13	MAIN STEAM LINE 27' PENETRATION TUNNEL	ı	No	Yes
	2-83-13A	MAIN STEAM LINE 27' PENETRATION TUNNEL	I	No	Yes

TABLE 3.7-4

SAFETY RELATED HYDRAULIC SNUBBERS*

CALVERT	SNUBBER NO.	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE	HIGH RADIATION ZONE**	ESPECIALLY DIFFICULT TO REMOVE
RT			(A or I)	(Yes or No)	(Yes or No)
CLIFFS	2-83-14	MAIN STEAM LINE 27' PENETRATION TUNNEL	I	No	Yes
TINU -	2-83-14A	MAIN STEAM LINE 27' PENETRATION TUNNEL	I	No	Yes
T 2	2-83-15	MAIN STEAM LINE 27' PENETRATION TUNNEL	I	No	Yes
	2-83-15A	MAIN STEAM LINE 27' PENETRATION TUNNEL	I	No	Yes
3/4	2-83-16	MAIN STEAM LINE 27' PENETRATION TUNNEL	I	No	Yes
7-51a	2-83-16A	MAIN STEAM LINE 27' PENETRATION TUNNEL	I	No	Yes
	2-83-17	MAIN STEAM LINE 27' PENETRATION TUNNEL	I	No	Yes
Amer	2-83-17A	MAIN STEAM LINE 27' PENETRATION TUNNEL	I	No	Yes
Amendment	2-83-18	MAIN STEAM LINE 27' PENETRATION TUNNEL	I	No	Yes
No. 58	2-83-18A	MAIN STEAM LINE 27' PENETRATION TUNNEL	I	No	Yes
w	2-83-25	STEAM SUPPLY TO AUX. FEED PUMPS (UPSTREAM MOV 4071) 27'	A	No	No

TABLE 3.7-4
SAFETY RELATED HYDRAULIC SNUBBERS*

LVERT CL	SNUBBER NO.	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE	HIGH RADIATION ZONE**	ESPECIALLY DIFFICULT TO REMOVE	
CLIFFS-UNIT 2			(A or I)	(Yes or No)	(Yes or No)	
	2-83-25A	STEAM SUPPLY TO AUX. FEED PUMPS (UPSTREAM MOV 4071) 27'	Α	No	No	
	2-83-26	STEAM TO AUX. FEED PUMPS (DOWN- STREAM MOV 4070) 27'	A	No	No	
	2-83-28	STEAM TO AUX. FEED PUMPS (UPSTEAM MOV 4070) 27'	Α	No	No	
3/4.	2-83-29	MOV 4070 BY-PASS LINE 27'	A	No	No	
. 7-52	2-83-29A	MOV 4070 BY-PASS LINE 27'	A	No	No	
	2-83-30	STEAM SUPPLY TO #22 AFP 27'	Α	No	No I	
	2-83-31	M.S. PIPING FROM S/G #22 45'	I	Yes	No	
	2-83-32	M.S. PIPING FROM S/G #22 45'	1	Yes	No .	
	2-83-33	M.S. PIPING FROM S/G #22 45'	I	Yes	No	
men	2-83-34	M.S. PIPING FROM S/G #22 45'	I	Yes	No	
Amendment !	2-83-45	STEAM TO AUX. FEED PUMPS (DOWNSTREA MOV 4070) 27'	M A	. No	No .	
No. 6	2-83B-1	MSIV #22 HYDRAULIC SUPPLY 27'	A	No	No	

TABLE 3.7-4

SAFETY RELATED HYDRAULIC SNUBBERS*

SNUBBER NO.	SYSTEM SNUBBER INSTALLED ON, LOCATION AND ELEVATION	ACCESSIBLE OR INACCESSIBLE	HIGH RADIATION ZONE**	ESPECIALLY DIFFICULT TO REMOVE
		(A or I)	(Yes or No)	(Yes or No)
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.

^{**}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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