



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

BALTIMORE GAS AND ELECTRIC COMPANY

DOCKET NO. 50-317

CALVERT CLIFFS NUCLEAR POWER PLANT, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 138
License No. DPR-53

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Baltimore Gas and Electric Company (the licensee) dated January 20, 1987, as supplemented on January 12 and June 28, 1988, 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-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.138 , 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. Capra

Robert A. Capra, Director
Project Directorate 1-1
Division of Reactor Projects, I/II

Attachment:
Changes to the Technical
Specifications

Date of Issuance: May 31, 1989



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

BALTIMORE GAS AND ELECTRIC COMPANY

DOCKET NO. 50-318

CALVERT CLIFFS NUCLEAR POWER PLANT, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 121
License No. DPR-69

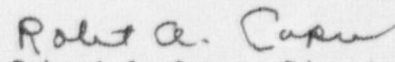
1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Baltimore Gas and Electric Company (the licensee) dated January 20, 1987, as supplemented on January 12 and June 28, 1988, complies with the standards and requirements of the Atomic Energy Act 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.121, 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. Capra, Director
Project Directorate I-1
Division of Reactor Projects, I/II

Attachment:
Changes to the Technical
Specifications

Date of Issuance: May 31, 1989

ATTACHMENT TO LICENSE AMENDMENTS

AMENDMENT NO. 138 FACILITY OPERATING LICENSE NO. DPR-53

AMENDMENT NO. 121 FACILITY OPERATING LICENSE NO. DPR-69

DOCKET NOS. 50-317 AND 50-318

Revise Appendix A as follows:

Remove Pages

3/4 3-13
3/4 3-14*
3/4 3-17*
3/4 3-18
3/4 3-23
3/4 3-24*
3/4 6-19*
3/4 6-20
3/4 6-21
3/4 6-22*

Insert Pages

3/4 3-13
3/4 3-14*
3/4 3-17*
3/4 3-18
3/4 3-23
3/4 3-24*
3/4 6-19*
3/4 6-20
3/4 6-21
3/4 6-22*

*Overleaf pages provided for continuity purposes only.

TABLE 3.3-3 (Continued)

ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION

FUNCTIONAL UNIT	TOTAL NO. OF CHANNELS	CHANNELS TO TRIP	MINIMUM CHANNELS OPERABLE	APPLICABLE MODES ACTION
6. CONTAINMENT PURGE VALVES ISOLATION				
a. Manual (Purge Valve Control Switches)	2/Penetration	1/Penetration	2/Penetration	6** 8
b. Containment Radiation - High Area Monitor	4	2	3	6** 8
7. LOSS OF POWER				
a. 4.16 kv Emergency Bus Undervoltage (Loss of Voltage)	4/Bus	2/Bus	3/Bus	1, 2, 3 7*
b. 4.16 kv Emergency Bus Undervoltage (Degraded Voltage)	4/Bus	2/Bus	3/Bus	1, 2, 3 7*

** Must be OPERABLE only in MODE 6 when the valves are required OPERABLE and they are open.

TABLE 3.3-3 (Continued)

ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION

FUNCTIONAL UNIT	TOTAL NO. OF CHANNELS	CHANNELS TO TRIP	MINIMUM CHANNELS OPERABLE	APPLICABLE MODES	ACTION
8. CVCS ISOLATION					
a. Manual (CVCS Isolation Valve Control Switches)	1/Valve	1/Valve	1/Valve	1, 2, 3, 4	6
b. West Penetration Room/Letdown Heat Exchanger Room Pressure - High	4	2	3	1, 2, 3, 4	7*
9. AUXILIARY FEEDWATER ACTUATION SYSTEM (AFAS)					
a. Manual (Trip Buttons)	2 sets of 2 per S/G	1 set of 2 per S/G	2 sets of 2 per S/G	1, 2, 3	6
b. Steam Generator level - Low	4/S/G	2/S/G	3/S/G	1, 2, 3	7
c. Steam Generator ΔP High	4/S/G	2/S/G	3/S/G	1, 2, 3	7

TABLE 3.3-4
ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION TRIP VALUES

FUNCTIONAL UNIT	TRIP SETPOINT	ALLOWABLE VALUES
1. SAFETY INJECTION (SIAS)		
a. Manual (Trip Buttons)	Not Applicable	Not Applicable
b. Containment Pressure - High	≤ 4.75 psig	≤ 4.75 psig
c. Pressurizer Pressure - Low	> 1725 psia	> 1725 psia
2. CONTAINMENT SPRAY (CSAS)		
a. Manual (Trip Buttons)	Not Applicable	Not Applicable
b. Containment Pressure -- High	≤ 4.75 psig	≤ 4.75 psig
3. CONTAINMENT ISOLATION (CIS) #		
a. Manual CIS (Trip Buttons)	Not Applicable	Not Applicable
b. Containment Pressure - High	≤ 4.75 psig	≤ 4.75 psig
4. MAIN STEAM LINE ISOLATION		
a. Manual (MSIV Hand Switches and Feed Head Isolation Hand Switches)	Not Applicable	Not Applicable
b. Steam Generator Pressure - Low	> 685 psia	> 685 psia

Containment isolation of non-essential penetrations is also initiated by SIAS (functional units 1.a and 1.c).

TABLE 3.3-4 (Continued)

ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION TRIP VALUES

FUNCTIONAL UNIT	TRIP VALUE	ALLOWABLE VALUES
5. CONTAINMENT SUMP RECIRCULATION (RAS)		
a. Manual RAS (Trip Buttons)	Not Applicable	Not Applicable
b. Refueling Water Tank - Low	≥ 24 inches above tank bottom	≥ 24 inches above tank bottom
6. CONTAINMENT PURGE VALVES ISOLATION		
a. Manual (Purge Valve Control Switches)	Not Applicable	Not Applicable
b. Containment Radiation - High Area Monitor	≤ 220 mr/hr	≤ 220 mr/hr
7. LOSS OF POWER		
a. 4.16 kv Emergency Bus Undervoltage (Loss of Voltage)	2450 ± 105 volts with a 2 ± 0.2 second time delay	2450 ± 105 volts with a 2 ± 0.2 second time delay
b. 4.16 kv Emergency Bus Undervoltage (Degraded Voltage)	3628 ± 25 volts with a 8 ± 0.4 second time delay	3628 ± 25 volts with a 8 ± 0.4 second time delay

TABLE 4.3-2 (Continued)

ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION SURVEILLANCE REQUIREMENTS

FUNCTIONAL UNIT	CHANNEL CHECK	CHANNEL CALIBRATION	CHANNEL FUNCTIONAL TEST	MODES IN WHICH SURVEILLANCE REQUIRED
5. CONTAINMENT SUMP RECIRCULATION (RAS)				
a. Manual RAS (Trip Buttons)	NA	NA	R	NA
b. Refueling Water Tank - Low	NA	R	M	1, 2, 3
c. Automatic Actuation Logic	NA	NA	M(1)	1, 2, 3
6. CONTAINMENT PURGE VALVES ISOLATION				
a. Manual (Purge Valve Control Switches)	NA	NA	R	NA
b. Containment Radiation - High Area Monitor	S	R	M	6**
7. LOSS OF POWER				
a. 4.16 kv Emergency Bus Undervoltage (Loss of Voltage)	NA	R	M	1, 2, 3
b. 4.16 kv Emergency Bus Undervoltage (Degraded Voltage)	NA	R	M	1, 2, 3
8. CVCS ISOLATION				
West Penetration Room/Letdown Heat Exchanger Room Pressure - High	NA	R	M	1, 2, 3, 4
9. AUXILIARY FEEDWATER				
a. Manual (Trip Buttons)	NA	NA	R	NA
b. Steam Generator Level - Low	S	R	M	1, 2, 3
c. Steam Generator ΔP - High	S	R	M	1, 2, 3
d. Automatic Actuation Logic	NA	NA	M(1)	1, 2, 3

** Must be OPERABLE only in MODE 6 when the valves are required OPERABLE and they are open.

TABLE 4.3-2 (Continued)

TABLE NOTATION

- (1) The logic circuits shall be tested manually at least once per 31 days.
- (3) SIAS logic circuits A-5, B-5, A-10 and B-10 may be exempted from testing during operation; however, these logic circuits shall be tested at least once per 18 months during shutdown.
- (4) CIS logic circuits A-5 and B-5 may be exempted from testing during operation; however, these logic circuits shall be tested at least once per 18 months during shutdown.
- (5) SGIS logic circuits A-1 and B-1 may be exempted from testing during operation; however, these logic circuits shall be tested at least once per 18 months during shutdown.
- (6) CSAS logic circuits A-3 and B-3 may be exempted from testing during operation; however, these logic circuits shall be tested at least once per 18 months during shutdown.

TABLE 3.6-1

CONTAINMENT ISOLATION VALVES

PENETRATION NO.	ISOLATION CHANNEL	ISOLATION VALVE IDENTIFICATION NO.	FUNCTION	ISOLATION TIME (SECONDS)
1A	SIAS A	PS-5465-CV	R.C. and Pressurizer Sampling	<7
	SIAS A	PS-5466-CV		<7
	SIAS A	PS-5467-CV		<7
	SIAS B	PS-5464-CV		<7
1B	SIAS A	WGS-2180-CV	Containment Vent Header to Waste Gas	<7
	SIAS B	WGS-2181-CV		<7
1C	SIAS A	CVC-506-CV	RCP Seals Controlled Bleedoff	<7
	SIAS B	CVC-505-CV		<7
1D	NA	PS-6529-SV*	Post Accident Sampling Liquid Return to RC Drain Tank	NA
2A	SIAS A	CVC-515-CV	Letdown Line	<13
	SIAS B	CVC-516-CV		<13
	NA	CVC-105		NA
	NA	CVC-103		NA
2B	NA	CVC-517-CV	Charging Line	NA
	NA	CVC-518-CV		NA
	NA	CVC-519-CV		NA
	NA	CVC-435-RV		NA
	NA	CVC-184		NA

TABLE 3.6-1 (Continued)
CONTAINMENT ISOLATION VALVES

<u>PENETRATION NUMBER</u>	<u>ISOLATION CHANNELS</u>	<u>ISOLATION VALVE IDENTIFICATION NO.</u>	<u>FUNCTION</u>	<u>ISOLATION TIME (SECONDS)</u>
7A	NA NA	Blind Flange ILRT-1	ILRT	NA NA
7B	NA NA	Blind Flange ILRT-2	ILRT	NA NA
8	SIAS A SIAS B	EAD-5462-MOV EAD-5463-MOV	Containment Normal Sump	< 13 < 13
9	NA NA	SI-340 SI-326	Containment Spray	NA NA
10	NA NA	SI-330 SI-316	Containment Spray	NA NA
13	CRS A CRS B	CPA-1410-CV(3) CPA-1411-CV(3)	Purge Air Inlet	< 7** < 7**

TABLE 3.6-1 (Continued)

CONTAINMENT ISOLATION VALVES

PENETRATION NUMBER	ISOLATION CHANNELS	ISOLATION VALVE IDENTIFICATION NO.	FUNCTION	ISOLATION TIME (SECONDS)
14	CRS A CRS B	CPA-1412-CV(3) CPA-1413-CV(3)	Purge Air Outlet	≤ 7** ≤ 7**
15	SIAS A SIAS B	RE-5291-CV RE-5292-CV	Purge Air Monitor	≤ 7 ≤ 7
16	CIS A	CC-3832-CV	Component Cooling Water Inlet	≤ 18
18	CIS B	CC-3833-CV	Component Cooling Water Outlet	≤ 18
19A	NA CIS A	IA-337 IA-2080-MOV	Instrument Air	NA ≤ 13
19B	NA NA	PA-1040* PA-1044*	Plant Air	NA NA
20A	NA NA NA NA NA	N ₂ -344 N ₂ -612-CV* N ₂ -622-CV* N ₂ -632-CV* N ₂ -642-CV*	Nitrogen Supply	NA NA NA NA NA

TABLE 3.6-1 (Continued)

CONTAINMENT ISOLATION VALVES

PENETRATION NO.	ISOLATION CHANNEL	ISOLATION VALVE IDENTIFICATION NO.	FUNCTION	ISOLATION TIME (SECONDS)
20B	NA NA	N2-389 N2-345	Nitrogen Supply	NA NA
20C	NA NA	N2-346 N2-392	Nitrogen Supply	NA NA
23	SIAS A	RCW-4260-CV	R.C. Drain Tank Drains	<7
24	SIAS B	PS-6531-V	Oxygen Sample Line	<7
37	NA NA	PSW-1019 PSW-1008	Plant Water	NA NA
38	NA	DW-5460-CV*	Demineralized Water	NA
39	NA NA	SI-463 SI-455	Safety Injection Tank Test Line	NA NA
41	NA NA	SI-652-MOV (2) SI-651-MOV (2)	Shutdown Cooling	NA NA

TABLE 3.3-3 (Continued)

FUNCTIONAL UNIT	ENGINEERED SAFETY FEATURE	ACTUATION	SYSTEM	INSTRUMENTATION	APPLICABLE	
					MODES	ACTION
		TOTAL NO. OF CHANNELS	CHANNELS TO TRIP	MINIMUM CHANNELS OPERABLE		
6. CONTAINMENT PURGE VALVES ISOLATION						
a. Manual (Purge Valve Control Switches)		2/Penetration	1/Penetration	2/Penetration	6**	8
b. Containment Radiation - High Area Monitor		4	2	3	6**	8
7. LOSS OF POWER						
a. 4.16 kv Emergency Bus Undervoltage (Loss of Voltage)		4/Bus	2/Bus	3/Bus	1, 2, 3	7*
b. 4.16 kv Emergency Bus Undervoltage (Degraded Voltage)		4/Bus	2/Bus	3/Bus	1, 2, 3	7*

** Must be OPERABLE only in MODE 6 when the valves are required OPERABLE and they are open.

TABLE 3.3-3 (Continued)

ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION					
FUNCTIONAL UNIT	TOTAL NO. OF CHANNELS	CHANNELS TO TRIP	MINIMUM CHANNELS OPERABLE	APPLICABLE MODES	ACTION
8. CVCS ISOLATION					
a. Manual (CVCS Isolation Valve Control Switches)	1/Valve	1/Valve	1/Valve	1, 2, 3, 4	6
b. West Penetration Room/Letdown Heat Exchanger Room Pressure - High	4	2	3	1, 2, 3, 4	7*
9. AUXILIARY FEEDWATER					
a. Manual	2 sets of 2 per S/G	1 set of 2 per S/G	2 sets of 2 per S/G	1, 2, 3	6
b. Steam Generator Level - Low	4/SG	2/SG	3/SG	1, 2, 3	7
c. Steam Generator ΔP High	4/SG	2/SG	3/SG	1, 2, 3	7

TABLE 3.3-4

ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION TRIP VALUES

FUNCTIONAL UNIT	TRIP SETPOINT	ALLOWABLE VALUES
1. SAFETY INJECTION (SIAS)		
a. Manual (Trip Buttons)	Not Applicable	Not Applicable
b. Containment Pressure - High	≤ 4.75 psig	≤ 4.75 psig
c. Pressurizer Pressure - Low	> 1725 psia	> 1725 psia
2. CONTAINMENT SPRAY (CSAS)		
a. Manual (Trip Buttons)	Not Applicable	Not Applicable
b. Containment Pressure -- High	≤ 4.75 psig	≤ 4.75 psig
3. CONTAINMENT ISOLATION (CIS) #		
a. Manual CIS (Trip Buttons)	Not Applicable	Not Applicable
b. Containment Pressure - High	≤ 4.75 psig	≤ 4.75 psig
4. MAIN STEAM LINE ISOLATION		
a. Manual (MSIV Hand Switches and Feed Head Isolation Hand Switches)	Not Applicable	Not Applicable
b. Steam Generator Pressure - Low	> 685 psia	> 685 psia

Containment isolation of non-essential penetrations is also initiated by SIAS (functional units 1.a and 1.c).

TABLE 3.3-4 (Continued)

ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION TRIP VALUES

FUNCTIONAL UNIT	TRIP VALUE	ALLOWABLE VALUES
5. CONTAINMENT SUMP RECIRCULATION (RAS)		
a. Manual RAS (Trip Buttons)	Not Applicable	Not Applicable
b. Refueling Water Tank - Low	≥ 24 inches above tank bottom	≥ 24 inches above tank bottom
6. CONTAINMENT PURGE VALVES ISOLATION		
a. Manual (Purge Valve Control Switches)	Not Applicable	Not Applicable
b. Containment Radiation - High Area Monitor	≤ 220 mr/hr	≤ 220 mr/hr
7. LOSS OF POWER		
a. 4.16 kv Emergency Bus Undervoltage (Loss of Voltage)	2450 ± 105 volts with a 2 ± 0.2 second time delay	2450 ± 105 volts with a 2 ± 0.2 second time delay
b. 4.16 kv Emergency Bus Undervoltage (Degraded Voltage)	3628 ± 25 volts with a 8 ± 0.4 second time delay	3628 ± 25 volts with a 8 ± 0.4 second time delay

TABLE 4.3-2 (Continued)

ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION SURVEILLANCE REQUIREMENTS

FUNCTIONAL UNIT	CHANNEL CHECK	CHANNEL CALIBRATION	CHANNEL FUNCTIONAL TEST	MODES IN WHICH SURVEILLANCE REQUIRED
5. CONTAINMENT SUMP RECIRCULATION (RAS)				
a. Manual RAS (Trip Buttons)	NA	NA	R	NA
b. Refueling Water Tank - Low	NA	R	M	1, 2, 3
c. Automatic Actuation Logic	NA	NA	M(1)	1, 2, 3
6. CONTAINMENT PURGE VALVES ISOLATION				
a. Manual (Purge Valve Control Switches)	NA	NA	R	NA
b. Containment Radiation - High Area Monitor	S	R	M	6**
7. LOSS OF POWER				
a. 4.16 kv Emergency Bus Undervoltage (Loss of Voltage)	NA	R	M	1, 2, 3
b. 4.16 kv Emergency Bus Undervoltage (Degraded Voltage)	NA	R	M	1, 2, 3
8. CVCS ISOLATION				
West Penetration Room/Letdown Heat Exchanger Room Pressure - High	NA	R	M	1, 2, 3, 4
9. AUXILIARY FEEDWATER				
a. Manual (Trip Buttons)	NA	NA	R	NA
b. Steam Generator Level - Low	S	R	M	1, 2, 3
c. Steam Generator ΔP - High	S	R	M	1, 2, 3
d. Automatic Actuation Logic	NA	NA	M(1)	1, 2, 3

** Must be OPERABLE only in MODE 6 when the valves are required OPERABLE and they are open.

TABLE 4.3-2 (Continued)

TABLE NOTATION

- (1) The logic circuits shall be tested manually at least once per 31 days.
- (3) SIAS logic circuits A-5, B-5, A-10 and B-10 may be exempted from testing during operation; however, these logic circuits shall be tested at least once per 18 months during shutdown.
- (4) CIS logic circuits A-5 and B-5 may be exempted from testing during operation; however, these logic circuits shall be tested at least once per 18 months during shutdown.
- (5) SGIS logic circuits A-1 and B-1 may be exempted from testing during operation; however, these logic circuits shall be tested at least once per 18 months during shutdown.
- (6) CSAS logic circuits A-3 and B-3 may be exempted from testing during operation; however, these logic circuits shall be tested at least once per 18 months during shutdown.

TABLE 3.6-1 (Continued)
CONTAINMENT ISOLATION VALVES

<u>PENETRATION NUMBER</u>	<u>ISOLATION CHANNELS</u>	<u>ISOLATION VALVE IDENTIFICATION NO.</u>	<u>FUNCTION</u>	<u>ISOLATION TIME (SECONDS)</u>
7A	NA NA	Blind Flange ILRT-1	ILRT	NA NA
7B	NA NA	Blind Flange ILRT-2	ILRT	NA NA
8	SIAS A SIAS B	EAD-5462-MOV EAD-5463-MOV	Containment Normal Sump	< 13 ≤ 13
9	NA NA	SI-340 SI-326	Containment Spray	NA NA
10	NA NA	SI-330 SI-316	Containment Spray	NA NA
13	CRS A CRS B	CPA-1410-CV(3) CPA-1411-CV(3)	Purge Air Inlet	< 7** ≤ 7**

TABLE 3.6-1

CONTAINMENT ISOLATION VALVES

PENETRATION NO.	ISOLATION CHANNEL	ISOLATION VALVE IDENTIFICATION NO.	FUNCTION	ISOLATION TIME (SECONDS)
1A	SIAS A SIAS A SIAS A SIAS B	PS-5465-CV PS-5466-CV PS-5467-CV PS-5464-CV	R.C. and Pressurizer Sampling	<7
1B	SIAS A SIAS B	WGS-2180-CV WGS-2181-CV	Containment Vent Header to Waste Gas	<7 <7
1C	SIAS A SIAS B	CVC-506-CV CVC-505-CV	RCP Seals Controlled Bleedoff	<7 <7
1D	NA	PS-6529SV*	Post Accident Sampling Liquid Return to RC Drain Tank	NA
2A	SIAS A SIAS B NA NA	CVC-515-CV CVC-516-CV CVC-105 CVC-103	Letdown Line	<13 <13 NA NA
2B	NA NA NA NA NA	CVC-517-CV CVC-518-CV CVC-519-CV CVC-435-RV CVC-184	Charging Line	NA NA NA NA NA

TABLE 3.6-1 (Continued)

CONTAINMENT ISOLATION VALVES

PENETRATION NUMBER	ISOLATION CHANNELS	ISOLATION VALVE IDENTIFICATION NO.	FUNCTION	ISOLATION TIME (SECONDS)
14	CRS A CRS B	CPA-1412-CV(3) CPA-1413-CV(3)	Purge Air Outlet	<7** <7**
15	SIAS A SIAS B	RE-5291-CV RE-5292-CV	Purge Air Monitor	<7 <7
16	CIS A	CC-3832-CV	Component Cooling Water Inlet	< 18
18	CIS B	CC-3833-CV	Component Cooling Water Outlet	< 18
19A	NA CIS A	IA-175 IA-2080-MOV	Instrument Air	NA < 13
19B	NA NA	PA-137* PA-1044*	Plant Air	NA NA
20A	NA NA NA NA NA	N ₂ -34/ N ₂ -612-CV* N ₂ -622-CV* N ₂ -632-CV* N ₂ -642-CV*	Nitrogen Supply	NA NA NA NA NA

TABLE 3.6-1 (Continued)

CONTAINMENT ISOLATION VALVES

PENETRATION NO.	ISOLATION CHANNEL	ISOLATION VALVE IDENTIFICATION NO.	FUNCTION	ISOLATION TIME (SECONDS)
20B	NA NA	N2-348 N2-395	Nitrogen Supply	NA NA
20C	NA NA	N2-349 N2-398	Nitrogen Supply	NA NA
23	SIAS A	RCW-4260-CV	R.C. Drain Tank Drains	<7
24	SIAS B	PS-6531-SV	Oxygen Sample Line	<7
37	NA NA	PSW-1020 PSW-1009	Plant Water	NA NA
38	NA	DW-5460-CV*	Demineralized Water	NA
39	NA NA	SI-463 SI-455	Safety Injection Tank Test Line	NA NA
41	NA NA	SI-652-MOV (2) SI-651-MOV (2)	Shutdown Cooling	NA NA