



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

PHILADELPHIA ELECTRIC COMPANY

DOCKET NO. 50-352

LIMERICK GENERATING STATION, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 112  
License No. NPF-39

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Philadelphia Electric Company (the licensee) dated July 28, 1995, 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.

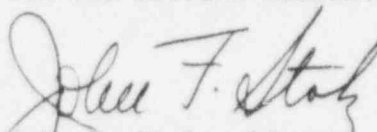
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. NPF-39 is hereby amended to read as follows:

Technical Specifications

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 112 , are hereby incorporated into this license. Philadelphia Electric Company shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of its date of issuance, to be implemented within 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION



John F. Stolz, Director  
Project Directorate I-2  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Attachment: Changes to the  
Technical Specifications

Date of Issuance: February 14, 1996

ATTACHMENT TO LICENSE AMENDMENT NO. 112

FACILITY OPERATING LICENSE NO. NPF-39

DOCKET NO. 50-352

Replace the following pages of the Appendix A Technical Specifications with the attached pages. The revised pages are identified by Amendment number and contain vertical lines indicating the area of change.

<u>Remove</u>	<u>Insert</u>
3/4 3-14	3/4 3-14
3/4 3-15	3/4 3-15
3/4 3-17	3/4 3-17
3/4 3-21	3/4 3-21
3/4 3-22	3/4 3-22
3/4 3-25	3/4 3-25
3/4 3-26	3/4 3-26
3/4 3-30	3/4 3-30
3/4 3-31	3/4 3-31
3/4 6-22	3/4 6-22
3/4 6-26	3/4 6-26

LIMERICK - UNIT 1

3/4 3-14

Amendment No. 6,112

TABLE 3.3.2-1 (Continued)  
ISOLATION ACTUATION INSTRUMENTATION

<u>TRIP FUNCTION</u>	<u>ISOLATION SIGNAL <sup>(a)</sup></u>	<u>MINIMUM OPERABLE CHANNELS PER TRIP SYSTEM <sup>(b)</sup></u>	<u>APPLICABLE OPERATIONAL CONDITION</u>	<u>ACTION</u>
6. <u>PRIMARY CONTAINMENT ISOLATION</u>				
a. Reactor Vessel Water Level				
1) Low, Low - Level 2	B	2	1, 2, 3	20
2) Low, Low, Low - Level 1	C	2	1, 2, 3	20
b. Drywell Pressure - High	H	2	1, 2, 3	20
c. North Stack Effluent				
Radiation - High <sup>(c)</sup>	W	1	1, 2, 3	23
d. Deleted				
e. Reactor Enclosure Ventilation Exhaust Duct-Radiation - High	S	2	1, 2, 3	23
f. Deleted				
g. Deleted				
h. Drywell Pressure - High/ Reactor Pressure - Low	G	2/2	1, 2, 3	26
i. Primary Containment Instrument Gas Line to Drywell $\Delta$ Pressure - Low	M	1	1, 2, 3	26
j. Manual Initiation	NA	1	1, 2, 3	24

LIMERICK - UNIT 1

3/4 3-15

Amendment No. 8, 22, 23, 40, 112

TABLE 3.3.2-1 (Continued)  
ISOLATION ACTUATION INSTRUMENTATION

<u>TRIP FUNCTION</u>	<u>ISOLATION SIGNAL</u> <sup>(a), (c)</sup>	<u>MINIMUM OPERABLE CHANNELS PER TRIP SYSTEM</u> <sup>(b)</sup>	<u>APPLICABLE OPERATIONAL CONDITION</u>	<u>ACTION</u>
7. <u>SECONDARY CONTAINMENT ISOLATION</u>				
a. Reactor Vessel Water Level Low, Low - Level 2	B	2	1, 2, 3	25
b. Drywell Pressure - High	H	2	1, 2, 3	25
c.1. Refueling Area Unit 1 Ventilation Exhaust Duct Radiation - High	R	2	*#	25
2. Refueling Area Unit 2 Ventilation Exhaust Duct Radiation - High	R	2	*#	25
d. Reactor Enclosure Ventilation Exhaust Duct Radiation - High	S	2	1, 2, 3	25
e. Deleted				
f. Deleted				
g. Reactor Enclosure Manual Initiation	NA	1	1, 2, 3	24
h. Refueling Area Manual Initiation	NA	1	*	25

TABLE 3.3.2-1 (Continued)

TABLE NOTATIONS

- (c) Actuates secondary containment isolation valves shown in Table 3.6.5.2.1-1 and/or 3.6.5.2.2-1 and signals B, H, S, and R also start the standby gas treatment system.
- (d) RWCU system inlet outboard isolation valve closes on SLCS "B" initiation. RWCU system inlet inboard isolation valve closes on SLCS "A" or SLCS "C" initiation.
- (e) Manual initiation isolates the steam supply line outboard isolation valve and only following manual or automatic initiation of the system.
- (f) In the event of a loss of ventilation the temperature - high setpoint may be raised by 50°F for a period not to exceed 30 minutes to permit restoration of the ventilation flow without a spurious trip. During the 30 minute period, an operator, or other qualified member of the technical staff, shall observe the temperature indications continuously, so that, in the event of rapid increases in temperature, the main steam lines shall be manually isolated.
- (g) Wide range accident monitor per Specification 3.3.7.5.

TABLE 3.3.2-2 (Continued)

ISOLATION ACTUATION INSTRUMENTATION SETPOINTS

<u>TRIP FUNCTION</u>	<u>TRIP SETPOINT</u>	<u>ALLOWABLE VALUE</u>
6. <u>PRIMARY CONTAINMENT ISOLATION</u>		
a. Reactor Vessel Water Level		
1. Low, Low - Level 2	$\geq -38$ inches*	$\geq -45$ inches
2. Low, Low, Low - Level 1	$\geq -129$ inches*	$\geq -136$ inches
b. Drywell Pressure - High	$\leq 1.68$ psig	$\leq 1.86$ psig
c. North Stack Effluent Radiation - High	$\leq 2.1$ $\mu$ Ci/cc	$\leq 4.0$ $\mu$ Ci/cc
d. Deleted		
e. Reactor Enclosure Ventilation Exhaust Duct - Radiation - High	$\leq 1.35$ mR/h	$\leq 1.5$ mR/h
f. Deleted		
g. Deleted		
h. Drywell Pressure - High/ Reactor Pressure - Low	$\leq 1.68$ psig/ $\geq 455$ psig (decreasing)	$\leq 1.88$ psig/ $\geq 435$ psig (decreasing)
i. Primary Containment Instrument Gas to Drywell $\Delta$ Pressure - Low	$\geq 2.0$ psi	$\geq 1.9$ psi
j. Manual Initiation	N.A.	N.A.

TABLE 3.3.2-2 (Continued)

ISOLATION ACTUATION INSTRUMENTATION SETPOINTS

<u>TRIP FUNCTION</u>	<u>TRIP SETPOINT</u>	<u>ALLOWABLE VALUE</u>
7. <u>SECONDARY CONTAINMENT ISOLATION</u>		
a. Reactor Vessel Water Level - Low, Low - Level 2	$\geq -38$ inches*	$\geq -45$ inches
b. Drywell Pressure - High	$\leq 1.68$ psig	$\leq 1.88$ psig
c.1. Refueling Area Unit 1 Ventilation Exhaust Duct Radiation - High	$\leq 2.0$ mR/h	$\leq 2.2$ mR/h
2. Refueling Area Unit 2 Ventilation Exhaust Duct Radiation - High	$\leq 2.0$ mR/h	$\leq 2.2$ mR/h
d. Reactor Enclosure Ventilation Exhaust Duct Radiation - High	$\leq 1.35$ mR/h	$\leq 1.5$ mR/h
e. Deleted		
f. Deleted		
g. Reactor Enclosure Manual Initiation	N.A.	N.A.
h. Refueling Area Manual Initiation	N.A.	N.A.

\* See Bases Figure B 3/4 3-1.

\*\* The low setpoints are for the RWCU Heat Exchanger Rooms; the high setpoints are for the pump rooms.



TABLE 3.3.2-3 (Continued)

ISOLATION SYSTEM INSTRUMENTATION RESPONSE TIME

<u>TRIP FUNCTION</u>	<u>RESPONSE TIME (Seconds)#</u>
<u>6. PRIMARY CONTAINMENT ISOLATION</u>	
a. Reactor Vessel Water Level	
1) Low, Low - Level 2	≤ 13 <sup>(a)</sup>
2) Low, Low, Low - Level 1	≤ 13 <sup>(a)</sup>
b. Drywell Pressure - High	≤ 13 <sup>(a)</sup>
c. North Stack Effluent Radiation - High	N.A.
d. Deleted	
e. Reactor Enclosure Ventilation Exhaust Duct - Radiation - High	N.A.
f. Deleted	
g. Deleted	
h. Drywell Pressure - High/ Reactor Pressure - Low	N.A.
i. Primary Containment Instrument Gas to Drywell Δ Pressure - Low	N.A.
j. Manual Initiation	N.A.
<u>7. SECONDARY CONTAINMENT ISOLATION</u>	
a. Reactor Vessel Water Level Low, Low - Level 2	N.A.
b. Drywell Pressure - High	N.A.
c.1. Refueling Area Unit 1 Ventilation Exhaust Duct Radiation - High	N.A.
2. Refueling Area Unit 2 Ventilation Exhaust Duct Radiation - High	N.A.
d. Reactor Enclosure Ventilation Exhaust Duct Radiation - High	N.A.
e. Deleted	

TABLE 3.3.2-3 (Continued)

ISOLATION SYSTEM INSTRUMENTATION RESPONSE TIME

<u>TRIP FUNCTION</u>	<u>RESPONSE TIME (Seconds)#</u>
f. Deleted	
g. Reactor Enclosure Manual Initiation	N.A.
h. Refueling Area Manual Initiation	N.A.

TABLE NOTATIONS

- (a) Isolation system instrumentation response time specified includes 10 seconds diesel generator starting and 3 seconds for sequence loading delays.
- (b) DELETED
- \* Isolation system instrumentation response time for MSIV only. No diesel generator delays assumed for MSIVs.
- \*\* Isolation system instrumentation response time for associated valves except MSIVs.
- # Isolation system instrumentation response time specified for the Trip Function actuating each valve group shall be added to isolation time shown in Tables 3.6.3-1, 3.6.5.2.1-1 and 3.6.5.2.2-1 for valves in each valve group to obtain ISOLATION SYSTEM RESPONSE TIME for each valve.
- ## With 45 second time delay.

TABLE 4.3.2.1-1 (Continued)

ISOLATION ACTUATION INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>TRIP FUNCTION</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>CHANNEL CALIBRATION</u>	<u>OPERATIONAL CONDITIONS FOR WHICH SURVEILLANCE REQUIRE</u>
6. <u>PRIMARY CONTAINMENT ISOLATION</u>				
a. Reactor Vessel Water Level				
1) Low, Low - Level 2	S	Q	R	1, 2, 3
2) Low, Low, Low - Level 1	S	Q	R	1, 2, 3
b. Drywell Pressure## - High	S	Q	R	1, 2, 3
c. North Stack Effluent Radiation - High	S	Q	R	1, 2, 3
d. Deleted				
e. Reactor Enclosure Ventilation Exhaust Duct - Radiation - High	S	Q	R	1, 2, 3
f. Deleted				
g. Deleted				
h. Drywell Pressure - High/ Reactor Pressure - Low	S	Q	R	1, 2, 3
i. Primary Containment Instrument Gas to Drywell $\Delta$ Pressure - Low	N.A.	M	Q	1, 2, 3
j. Manual Initiation	N.A.	R	N.A.	1, 2, 3

TABLE 4.3.2.1-1 (Continued)

ISOLATION ACTUATION INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>TRIP FUNCTION</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>CHANNEL CALIBRATION</u>	<u>OPERATIONAL CONDITIONS FOR WHICH SURVEILLANCE REQUIRED</u>
7. <u>SECONDARY CONTAINMENT ISOLATION</u>				
a. Reactor Vessel Water Level Low, Low - Level 2	S	Q	R	1, 2, 3
b. Drywell Pressure## - High	S	Q	R	1, 2, 3
c.1. Refueling Area Unit 1 Ventilation Exhaust Duct Radiation - High	S	Q	R	*#
2. Refueling Area Unit 2 Ventilation Exhaust Duct Radiation - High	S	Q	R	*#
d. Reactor Enclosure Ventilation Exhaust Duct Radiation - High	S	Q	R	1, 2, 3
e. Deleted				
f. Deleted				
g. Reactor Enclosure Manual Initiation	N.A.	R	N.A.	1, 2, 3
h. Refueling Area Manual Initiation	N.A.	R	N.A.	*

\*Required when (1) handling irradiated fuel in the refueling area secondary containment, or (2) during CORE ALTERATIONS, or (3) during operations with a potential for draining the reactor vessel with the vessel head removed and fuel in the vessel.

\*\*When not administratively bypassed and/or when any turbine stop valve is open.

#During operation of the associated Unit 1 or Unit 2 ventilation exhaust system.

##These trip functions (2a, 6b, and 7b) are common to the RPS actuation trip function.

TABLE 3.6.3-1 (Continued)

## PART A - PRIMARY CONTAINMENT ISOLATION VALVES

LIMERICK - UNIT 1	PENETRATION NUMBER	FUNCTION	INBOARD ISOLATION BARRIER	OUTBOARD ISOLATION BARRIER	MAX. ISOL. TIME. IF APP. (SEC)	ISOL. SIGNAL(S), IF APP. (20)	NOTES	P&ID
3/4 6-22 Amendment No. 8, 13, 18, 89, 112	025	DRYWELL PURGE SUPPLY	HV57-121(X-201A) HV57-123		5**	B,H,S,W,R	3,11,14	57
					5**	B,H,S,W,R	3,11,14	
			6**	B,H,S,W,R	11			
				HV57-109 (X-201A)				
			5**	B,H,S,W,R	11			
			6**	B,H,S,W,R	11			
		HYDROGEN RECOMBINER "B" INLET	HV57-163		9	B,H,R,S	3,11,14	
					FV-C-DO-101B	90	B,H,R,S	11
	026	DRYWELL PURGE EXHAUST	HV57-114 HV57-111 SV57-139		5**	B,H,S,W,R	3,11,14,33	57
					15**	B,H,S,R	11	
5						10		
6**					B,H,S,W,R	11,33		
5**					B,H,S,R	11		
5					B,H,R,S	11		
	HYDROGEN RECOMBINER "A" INLET	HV57-161		9	B,H,R,S,	3,11,14		
				FV-C-DO-101A	90	B,H,R,S	11	
027A	CONTAINMENT INSTRUMENT GAS SUPPLY TO ADS VALVES H,M,&S	59-1128(CK)		NA			59	
028A-1	RECIRC LOOP SAMPLE	HV43-1F019						
					HV43-1F020	10	B	43
028A-2	DRYWELL H2/O2 SAMPLE	SV57-132		5	B,H,R,S	11	57	
				5	B,H,R,S	11		
028A-3	DRYWELL H2/O2 SAMPLE	SV57-134		5	B,H,R,S	11	57	
				5	B,H,R,S	11		

TABLE 3.6.3-1 (Continued)  
PART A - PRIMARY CONTAINMENT ISOLATION VALVES

PENETRATION NUMBER	FUNCTION	INBOARD ISOLATION BARRIER	OUTBOARD ISOLATION BARRIER	MAX. ISOL. TIME. IF APP. (SEC) (26)	ISOL. SIGNAL(S), IF APP. (20)	NOTES	P&ID
			SV57-191 (X-220A)	5	B,H,R,S	11	
116	STANDBY LIQUID CONTROL	48-1F007(CK) (X-42)	HV48-1F006B	NA 60			48
117B-1	DRYWELL RADIATION MONITORING SUPPLY	SV26-190A	SV26-190B	5 5	B,H,R,S B,H,R,S	11 11	26
117B-2	DRYWELL RADIATION MONITORING RETURN	SV26-190C	SV26-190D	5 5	B,H,R,S B,H,R,S	11 11	26
201A	SUPPRESSION POOL PURGE SUPPLY	HV57-124 HV57-131(X-25)	HV57-109(X-25) HV57-147 HV57-121(X-25)	5** 5** 6** 6** 5**	B,H,S,W,R B,H,S,W,R B,H,S,W,R B,H,S,W,R B,H,S,W,R	3,11,14 3,11,14 11 11 11	57
	HYDROGEN RECOMBINER "B" EXHAUST	HV57-164	HV57-169	9 9	B,H,R,S B,H,R,S	3,11,14 11	
202	SUPPRESSION POOL PURGE EXHAUST	HV57-104 HV57-105	HV57-112 HV57-118 SV57-185	5** 15** 6** 5** 5	B,H,S,W,R B,H,S,R B,H,S,W,R B,H,S,R B,H,R,S	3,11,14,33 11 11,33 11 11	57
	HYDROGEN RECOMBINER "A" EXHAUST	HV57-162	HV57-166	9 9	B,H,R,S B,H,R,S	3,11,14 11	
203A(B,C,D)	RHR PUMP SUCTION		HV51-1F004A(B, C,D) PSV51-1F030A (B,C,D)	240 NA		29,35 35	51

LIMERICK - UNIT 1

3/4 6-26

Amendment No. 6, 13, 18, 33, 110, 112



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

PHILADELPHIA ELECTRIC COMPANY

DOCKET NO. 50-353

LIMERICK GENERATING STATION, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 74  
License No. NPF-85

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Philadelphia Electric Company (the licensee) dated July 28, 1995, 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.

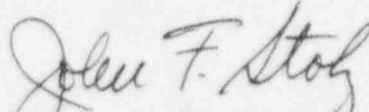
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. NPF-85 is hereby amended to read as follows:

Technical Specifications

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 74 , are hereby incorporated into this license. Philadelphia Electric Company shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of its date of issuance, to be implemented within 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION



John F. Stolz, Director  
Project Directorate I-2  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Attachment: Changes to the  
Technical Specifications

Date of Issuance: February 14, 1996



ATTACHMENT TO LICENSE AMENDMENT NO. 74

FACILITY OPERATING LICENSE NO. NPF-85

DOCKET NO. 50-353

Replace the following pages of the Appendix A Technical Specifications with the attached pages. The revised pages are identified by Amendment number and contain vertical lines indicating the area of change.

<u>Remove</u>	<u>Insert</u>
3/4 3-14	3/4 3-14
3/4 3-15	3/4 3-15
3/4 3-17	3/4 3-17
3/4 3-21	3/4 3-21
3/4 3-22	3/4 3-22
3/4 3-25	3/4 3-25
3/4 3-26	3/4 3-26
3/4 3-30	3/4 3-30
3/4 3-31	3/4 3-31
3/4 6-22	3/4 6-22
3/4 6-26	3/4 6-26

LIMERICK - UNIT 2

3/4 3-14

Amendment No. 74

TABLE 3.3.2-1 (Continued)  
ISOLATION ACTUATION INSTRUMENTATION

<u>TRIP FUNCTION</u>	<u>ISOLATION SIGNAL <sup>(a)</sup></u>	<u>MINIMUM OPERABLE CHANNELS PER TRIP SYSTEM <sup>(b)</sup></u>	<u>APPLICABLE OPERATIONAL CONDITION</u>	<u>ACTION</u>
6. <u>PRIMARY CONTAINMENT ISOLATION</u>				
a. Reactor Vessel Water Level				
1) Low, Low - Level 2	B	2	1, 2, 3	20
2) Low, Low, Low - Level 1	C	2	1, 2, 3	20
b. Drywell Pressure - High	H	2	1, 2, 3	20
c. North Stack Effluent Radiation - High <sup>(c)</sup>	W	1	1, 2, 3	23
d. Deleted				
e. Reactor Enclosure Ventilation Exhaust Duct-Radiation - High	S	2	1, 2, 3	23
f. Deleted				
g. Deleted				
h. Drywell Pressure - High/ Reactor Pressure - Low	G	2/2	1, 2, 3	26
i. Primary Containment Instrument Gas Line to Drywell $\Delta$ Pressure - Low	M	1	1, 2, 3	26
j. Manual Initiation	NA	1	1, 2, 3	24

LIMERICK - UNIT 2

3/4 3-15

Amendment NO. 74

TABLE 3.3.2-1 (Continued)  
ISOLATION ACTUATION INSTRUMENTATION

<u>TRIP FUNCTION</u>	<u>ISOLATION SIGNAL</u> <sup>(a),(c)</sup>	<u>MINIMUM OPERABLE CHANNELS PER TRIP SYSTEM</u> <sup>(b)</sup>	<u>APPLICABLE OPERATIONAL CONDITION</u>	<u>ACTION</u>
7. <u>SECONDARY CONTAINMENT ISOLATION</u>				
a. Reactor Vessel Water Level Low, Low - Level 2	B	2	1, 2, 3	25
b. Drywell Pressure - High	H	2	1, 2, 3	25
c.1. Refueling Area Unit 1 Ventilation Exhaust Duct Radiation - High	R	2	*#	25
2. Refueling Area Unit 2 Ventilation Exhaust Duct Radiation - High	R	2	*#	25
d. Reactor Enclosure Ventilation Exhaust Duct Radiation - High	S	2	1, 2, 3	25
e. Deleted				
f. Deleted				
g. Reactor Enclosure Manual Initiation	NA	1	1, 2, 3	24
h. Refueling Area Manual Initiation	NA	1	*	25

TABLE 3.3.2-1 (Continued)

TABLE NOTATIONS

- (c) Actuates secondary containment isolation valves shown in Table 3.6.5.2.1-1 and/or 3.6.5.2.2-1 and signal B, H, S, and R also start the standby gas treatment system.
- (d) RWCU system inlet outboard isolation valve closes on SLCS "B" initiation. RWCU system inlet inboard isolation valve closes on SLCS "A" or SLCS "C" initiation.
- (e) Manual initiation isolates the steam supply line outboard isolation valve and only following manual or automatic initiation of the system.
- (f) In the event of a loss of ventilation the temperature - high setpoint may be raised by 50°F for a period not to exceed 30 minutes to permit restoration of the ventilation flow without a spurious trip. During the 30 minute period, an operator, or other qualified member of the technical staff, shall observe the temperature indications continuously, so that, in the event of rapid increases in temperature, the main steamlines shall be manually isolated.
- (g) Wide range accident monitor per Specification 3.3.7.5.

TABLE 3.3.2-2 (Continued)

ISOLATION ACTUATION INSTRUMENTATION SETPOINTS

<u>TRIP FUNCTION</u>	<u>TRIP SETPOINT</u>	<u>ALLOWABLE VALUE</u>
6. <u>PRIMARY CONTAINMENT ISOLATION</u>		
a. Reactor Vessel Water Level		
1. Low, Low - Level 2	$\geq -38$ inches*	$\geq -45$ inches
2. Low, Low, Low, Level 1	$\geq -129$ inches*	$\geq -136$ inches
b. Drywell Pressure - High	$\leq 1.68$ psig	$\leq 1.88$ psig
c. North Stack Effluent Radiation - High	$\leq 2.1$ $\mu\text{Ci/cc}$	$\leq 4.0$ $\mu\text{Ci/cc}$
d. Deleted		
e. Reactor Enclosure Ventilation Exhaust Duct - Radiation - High	$\leq 1.35$ mR/h	$\leq 1.5$ mR/h
f. Deleted		
g. Deleted		
h. Drywell Pressure - High/ Reactor Pressure - Low	$\leq 1.68$ psig/ $\geq 455$ psig (decreasing)	$\leq 1.88$ psig/ $\geq 435$ psig (decreasing)
i. Primary Containment Instrument Gas to Drywell $\Delta$ Pressure - Low	$\geq 2.0$ psi	$\geq 1.9$ psi
j. Manual Initiation	N.A.	N.A.

TABLE 3.3.2-2 (Continued)

ISOLATION ACTUATION INSTRUMENTATION SETPOINTS

<u>TRIP FUNCTION</u>	<u>TRIP SETPOINT</u>	<u>ALLOWABLE VALUE</u>
7. <u>SECONDARY CONTAINMENT ISOLATION</u>		
a. Reactor Vessel Water Level - Low, Low - Level 2	$\geq -38$ inches*	$\geq -45$ inches
b. Drywell Pressure - High	$\leq 1.68$ psig	$\leq 1.88$ psig
c.1. Refueling Area Unit 1 Ventilation Exhaust Duct Radiation - High	$\leq 2.0$ mR/h	$\leq 2.2$ mR/h
2. Refueling Area Unit 2 Ventilation Exhaust Duct Radiation - High	$\leq 2.0$ mR/h	$\leq 2.2$ mR/h
d. Reactor Enclosure Ventilation Exhaust Duct Radiation - High	$\leq 1.35$ mR/h	$\leq 1.5$ mR/h
e. Deleted		
f. Deleted		
g. Reactor Enclosure Manual Initiation	N.A.	N.A.
h. Refueling Area Manual Initiation	N.A.	N.A.

\* See Bases Figure B 3/4 3-1.

\*\* The low setpoints are for the RWCU Heat Exchanger Rooms; the high setpoints are for the pump rooms.

TABLE 3.3.2-3 (Continued)

ISOLATION SYSTEM INSTRUMENTATION RESPONSE TIME

<u>TRIP FUNCTION</u>	<u>RESPONSE TIME (Seconds)#</u>
<b>6. <u>PRIMARY CONTAINMENT ISOLATION</u></b>	
a. Reactor Vessel Water Level	
1) Low, Low - Level 2	≤ 13 <sup>(a)</sup>
2) Low, Low, Low - Level 1	≤ 13 <sup>(a)</sup>
b. Drywell Pressure - High	≤ 13 <sup>(a)</sup>
c. North Stack Effluent Radiation - High	N.A.
d. Deleted	
e. Reactor Enclosure Ventilation Exhaust Duct - Radiation - High	N.A.
f. Deleted	
g. Deleted	
h. Drywell Pressure - High/ Reactor Pressure - Low	N.A.
i. Primary Containment Instrument Gas to Drywell Δ Pressure - Low	N.A.
j. Manual Initiation	N.A.
<b>7. <u>SECONDARY CONTAINMENT ISOLATION</u></b>	
a. Reactor Vessel Water Level Low, Low - Level 2	N.A.
b. Drywell Pressure - High	N.A.
c.1. Refueling Area Unit 1 Ventilation Exhaust Duct Radiation - High	N.A.
2. Refueling Area Unit 2 Ventilation Exhaust Duct Radiation - High	N.A.
d. Reactor Enclosure Ventilation Exhaust Duct Radiation - High	N.A.
e. Deleted	

TABLE 3.3.2-3 (Continued)

ISOLATION SYSTEM INSTRUMENTATION RESPONSE TIME

<u>TRIP FUNCTION</u>	<u>RESPONSE TIME (Seconds)#</u>
f. Deleted	
g. Reactor Enclosure Manual Initiation	N.A.
h. Refueling Area Manual Initiation	N.A.

TABLE NOTATIONS

- (a) Isolation system instrumentation response time specified includes 10 seconds diesel generator starting and 3 seconds for sequence loading delays.
- (b) DELETED
- \* Isolation system instrumentation response time for MSIV only. No diesel generator delays assumed for MSIVs.
- \*\* Isolation system instrumentation response time for associated valves except MSIVs.
- # Isolation system instrumentation response time specified for the Trip Function actuating each valve group shall be added to isolation time shown in Tables 3.6.3-1, 3.6.5.2.1-1 and 3.6.5.2.2-1 for valves in each valve group to obtain ISOLATION SYSTEM RESPONSE TIME for each valve.
- ## With 45 second time delay.



TABLE 4.3.2.1-1 (Continued)

ISOLATION ACTUATION INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>TRIP FUNCTION</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>CHANNEL CALIBRATION</u>	<u>OPERATIONAL CONDITIONS FOR WHICH SURVEILLANCE REQUIRE</u>
6. <u>PRIMARY CONTAINMENT ISOLATION</u>				
a. Reactor Vessel Water Level				
1) Low, Low - Level 2	S	Q	R	1, 2, 3
2) Low, Low, Low - Level 1	S	Q	R	1, 2, 3
b. Drywell Pressure ## - High	S	Q	R	1, 2, 3
c. North Stack Effluent Radiation - High	S	Q	R	1, 2, 3
d. Deleted				
e. Reactor Enclosure Ventilation Exhaust Duct - Radiation - High	S	Q	R	1, 2, 3
f. Deleted				
g. Deleted				
h. Drywell Pressure - High/ Reactor Pressure - Low	S	Q	R	1, 2, 3
i. Primary Containment Instrument Gas to Drywell $\Delta$ Pressure - Low	N.A.	M	Q	1, 2, 3
j. Manual Initiation	N.A.	R	N.A.	1, 2, 3

TABLE 4.3.2.1-1 (Continued)  
ISOLATION ACTUATION INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>TRIP FUNCTION</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>CHANNEL CALIBRATION</u>	<u>OPERATIONAL CONDITIONS FOR WHICH SURVEILLANCE REQUIRE</u>
7. <u>SECONDARY CONTAINMENT ISOLATION</u>				
a. Reactor Vessel Water Level Low, Low - Level 2	S	Q	R	1, 2, 3
b. Drywell Pressure## - High	S	Q	R	1, 2, 3
c.1. Refueling Area Unit 1 Ventilation Exhaust Duct Radiation - High	S	Q	R	*#
2. Refueling Area Unit 2 Ventilation Exhaust Duct Radiation - High	S	Q	R	*#
d. Reactor Enclosure Ventilation Exhaust Duct Radiation - High	S	Q	R	1, 2, 3
e. Deleted				
f. Deleted				
g. Reactor Enclosure Manual Initiation	N.A.	R	N.A.	1, 2, 3
h. Refueling Area Manual Initiation	N.A.	R	N.A.	*

\*Required when (1) handling irradiated fuel in the refueling area secondary containment, or (2) during CORE ALTERATIONS, or (3) during operations with a potential for draining the reactor vessel with the vessel head removed and fuel in the vessel.

\*\*When not administratively bypassed and/or when any turbine stop valve is open.

#During operation of the associated Unit 1 or Unit 2 ventilation exhaust system.

##These trip functions (2a, 6b, and 7b) are common to the RPS actuation trip function.

LIMERICK - UNIT 2

3/4 3-31

Amendment No. 17, 32, 52, 74

TABLE 3.6.3-1 (Continued)

PART A - PRIMARY CONTAINMENT ISOLATION VALVES

LIMERICK - UNIT 2	PENETRATION NUMBER	FUNCTION	INBOARD ISOLATION BARRIER	OUTBOARD ISOLATION BARRIER	MAX. ISOL. TIME. IF APP.		ISOL. SIGNAL(S), IF APP. (20)	NOYES	P&ID
					(SEC)	(26)			
3/4 6-22	025	DRYWELL PURGE SUPPLY	HV57-221(X-201A) HV57-223	HV57-209 (X-201A) HV57-231 (X-201A) HV57-235	5**		B,H,S,W,R	3,11,14	57
					5**		B,H,S,W,R	3,11,14	
					6**		B,H,S,W,R	11	
					5**		B,H,S,W,R	11	
					6**		B,H,S,W,R	11	
		HYDROGEN RECOMBINER "B" INLET	HV57-263	FV57-DO-201B	9		B,H,R,S	3,11,14	
					90		B,H,R,S	11,34	
	026	DRYWELL PURGE EXHAUST	HV57-214 HV57-211 SV57-239	HV57-215 HV57-217 SV57-245	5**		B,H,S,W,R	3,11,14,33	57
					15**		B,H,S,R	11	
					5			10	
6**						B,H,S,W,R	11,33		
5**						B,H,S,R	11		
	HYDROGEN RECOMBINER "A" INLET	HV57-261	FV57-DO-201A	9		B,H,R,S	3,11,14		
				90		B,H,R,S	11,34		
Amendment No. 52,74	027A	CONTAINMENT INSTRUMENT GAS SUPPLY TO ADS VALVES H,M,&S	59-2128(CK)	HV59-251A	NA		M		59
	028A-1	RECIRC LOOP SAMPLE	HV43-2F019		10		B		43
				HV43-2F020	10		B		
	028A-2	DRYWELL H2/O2 SAMPLE	SV57-232		5		B,H,R,S	11	57
				SV57-242	5		B,H,R,S	11	
028A-3	DRYWELL H2/O2 SAMPLE	SV57-234	SV57-244	5		B,H,R,S	11	57	
				5		B,H,R,S	11		

TABLE 3.6.3-1 (Continued)  
PART A - PRIMARY CONTAINMENT ISOLATION VALVES

LIMERICK - UNIT 2

3/4 6-26

Amendment No. 73, 74

PENETRATION NUMBER	FUNCTION	INBOARD ISOLATION BARRIER	OUTBOARD ISOLATION BARRIER	MAX. ISOL. TIME. IF APP. (SEC) (26)	ISOL. SIGNAL(S), IF APP. (20)	NOTES	P&ID
			SV57-291 (X-220A)	5	B,H,R,S	11	
116	STANDBY LIQUID CONTROL	48-2F007(CK) (X-42)	HV48-2F006B	NA 60		29	48
117B-1	DRYWELL RADIATION MONITORING SUPPLY	SV26-290A	SV26-290B	5 5	B,H,R,S B,H,R,S	11 11	26
117B-2	DRYWELL RADIATION MONITORING RETURN	SV26-290C	SV26-290D	5 5	B,H,R,S B,H,R,S	11 11	26
201A	SUPPRESSION POOL PURGE SUPPLY	HV57-224 HV57-231(X-25)	HV57-209(X-25) HV57-247 HV57-221(X-25)	5** 5** 6** 6** 5**	B,H,S,W,R B,H,S,W,R B,H,S,W,R B,H,S,W,R B,H,S,W,R	3,11,14 3,11,14 11 11 11	57
	HYDROGEN RECOMBINER "B" EXHAUST	HV57-264	HV57-269	9 9	B,H,R,S B,H,R,S	3,11,14 11	
202	SUPPRESSION POOL PURGE EXHAUST	HV57-204 HV57-205	HV57-212 HV57-218 SV57-285	5** 15** 6** 5** 5	B,H,S,W,R B,H,S,R B,H,S,W,R B,H,S,R B,H,R,S	3,11,14,33 11 11,33 11 11	57
	HYDROGEN RECOMBINER "A" EXHAUST	HV57-262	HV57-266	9 9	B,H,R,S B,H,R,S	3,11,14 11	
203A(B,C,D)	RHR PUMP SUCTION		HV51-2F004A (B,C,D) PSV51-2F030A (B,C,D)	240 NA		29,36 36	51