

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

### THE CLEVELAND ELECTRIC ILLUMINATING COMPANY, ET AL.

### DOCKET NO. 50-440

### PERRY NUCLEAR POWER PLANT, UNIT NO. 1

### AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 53 License No. NPF-58

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by The Cleveland Electric Illuminating Company, Centerior Service Company, Duquesne Light Company, Ohio Edison Company, Pennsylvania Power Company, and Toledo Edison Company (the licensees) dated March 19, 1991, 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.
- 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-58 is hereby amended to read as follows:

9312290043 931217 PDR ADDCK 05000440 P PDR

## (2) Technical Specifications

The Technical Specifications contained in Appendix A and the Environmental Protection Flan contained in Appendix B, as revised through Amendment No. 13 are hereby incorporated into this license. The Cleveland Electric Illuminating 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.

FOR THE NUCLEAR REGULATORY COMMISSION

Andrew J. Kugler, Asst. Project Manager Project Directorate III-3 Division of Reactor Projects III/IV/V Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical Specifications

Date of issuance: December 17, 1993

# ATTACHMENT TO LICENSE AMENDMENT NO. 53

### FACILITY OPERATING LICENSE NO. NPF-58

### DOCKET NO. 50-440

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. Overleaf pages are provided to maintain document completeness.

Remove	Insert
3/4 3-28	3/4 3-28
3/4 3-29	3/4 3-29
3/4 3-31	3/4 3-31

#### INSTRUMENTATION

3/4.3.3 EMERGENCY CORE COOLING SYSTEM ACTUATION INSTRUMENTATION

### LIMITING CONDITION FOR OPERATION

3.3.3 The emergency core cooling system (ECCS) actuation instrumentation channels shown in Table 3.3.3-1 shall be OPERABLE with their trip setpoints set consistent with the values shown in the Trip Setpoint column of Table 3.3.3-2 and with the EMERGENCY CORE COOLING SYSTEM RESPONSE TIME as shown in Table 3.3.3-3.

APPLICABILITY: As shown in Table 3.3.3-1.

#### ACTION:

- a. With an ECCS actuation instrumentation channel trip setpoint less conservative than the value shown in the Allowable Values column of Table 3.3.3-2, declare the channel inoperable until the channel is restored to OPERABLE status with its trip setpoint adjusted consistent with the Trip Setpoint value.
- b. With one or more ECCS actuation instrumentation channels inoperable, take the ACTION required by Table 3.3.3-1.
- c. With either ADS trip system "A" or "B" inoperable, restore the inoperable trip system to OPERABLE status:
  - Within 7 days, provided that the HPCS and RCIC systems are OPERABLE, or,
  - Within 72 hours, provided either the HPCS or RCIC system is inoperable.

Otherwise, be in at least HOT SHUTDOWN within the next 12 hours and reduce reactor steam dome pressure to less than or equal to 100 psig within the following 24 hours.

#### SURVEILLANCE REQUIREMENTS

4.3.3.1 Each ECCS actuation instrumentation channel shall be demonstrated OPERABLE by the performance of the CHANNEL CHECK, CHANNEL FUNCTIONAL TEST and CHANNEL CALIBRATION operations for the OPERATIONAL CONDITIONS and at the frequencies shown in Table 4.3.3.1-1.

4.3.3.2 LOGIC SYSTEM FUNCTIONAL TESTS and simulated automatic operation of all channels shall be performed at least once per 18 months.

4.3.3.3 The ECCS RESPONSE TIME of each ECCS trip function shown in Table 3.3.3-3 shall be demonstrated to be within the limit at least once per 18 months. Each test shall include at least one channel per trip system such that all channels are tested at least once every N times 18 months where N is the total number of redundant channels in a specific ECCS trip system.

PERRY - UNIT 1

# TABLE 3.3.3-1

# EMERGENCY CORE COOLING SYSTEM ACTUATION INSTRUMENTATION

IRIP	FUN	TION	MINIMUM OPERABLE CHANNELS PER IRIP FUNCTION <sup>(*)</sup>	APPLICABLE OPERATIONAL CONDITIONS	ACTION
Α.	DIV	ISION 1 TRIP SYSTEM			
	1.	RHR-A (LPCI MODE) AND LPCS SYSTEM			
		<ul> <li>a. Reactor Vessel Water Level - Low, Level 1</li> <li>b. Drywell Pressure - High</li> <li>c. LPCS Pump Discharge Flow - Low (Bypass)</li> <li>d. Reactor Vessel Pressure - Low (LPCS Injection Valve Permissive)</li> <li>e. Reactor Vessel Pressure - Low (LPCI Injection Valve Permissive)</li> <li>f. LPCI Pump A Start Time Delay Relay</li> <li>g. LPCI Pump A Discharge Flow - Low (Bypass)</li> <li>h. Manual Initiation</li> </ul>	2 <sup>(b)</sup> 2 <sup>(b)</sup> 1 1 1 1	1, 2, 3, 4°, 5° 1, 2, 3 1, 2, 3, 4°, 5° 1, 2, 3, 4°, 5° 1, 2, 3 4, 5 1, 2, 3 4, 5 1, 2, 3, 4°, 5° 1, 2, 3, 4°, 5° 1, 2, 3, 4°, 5° 1, 2, 3, 4°, 5°	30 39 31 32 31 32 31 32 31 39 33
4	2.	AUTOMATIC DEPRESSURIZATION SYSTEM TRIP SYSTEM "A""			
		<ul> <li>a. Reactor Vessel Water Level - Low, Level 1</li> <li>b. Manual Inhibit</li> <li>c. ADS Timer</li> <li>d. Reactor Vessel Water Level - Low, Level 3 (Permise</li> <li>e. LPCS Pump Discharge Pressure - High (Permissive)</li> <li>f. LPCI Pump A Discharge Pressure - High (Permissive)</li> <li>g. Manual Initiation</li> </ul>	2	1, 2, 3 1, 2, 3	30 31 31 31 31 31 31 31 33

1.18

PERRY - UNIT 1

# TABLE 3.3.3-1 (Continued)

# EMERGENCY CORE COOLING SYSTEM ACTUATION INSTRUMENTATION

IR	IP FUN	CTION	MINIMUM OPERABLE CHANNELS PER IRIP FUNCTION <sup>(®)</sup>	APPLICABLE OPERATIONAL CONDITIONS	ACTION
8.	DIV	ISION 2 TRIP SYSTEM			Literate
	1.	RHR B AND C (LPCI MODE)			
		<ul> <li>a. Reactor Vessel Water Level - Low, Level 1</li> <li>b. Drywell Pressure - High</li> <li>c. Reactor Vessel Pressure - Low (LPCI Injection Valve Permissive)</li> <li>d. LPCI Pump B Start Time Delay Relay</li> <li>e. LPCI Pump Discharge Flow - Low (Bypass)</li> <li>f. Manual Initiation</li> </ul>	2 <sup>(b)</sup> 2 <sup>(b)</sup> 1 1/pump 1	$1, 2, 3, 4^{\circ}, 5^{\circ}$ $1, 2, 3$ $1, 2, 3$ $4^{\circ}, 5^{\circ}$ $1, 2, 3, 4^{\circ}, 5^{\circ}$	30 30 31 32 31 39 33
	2.	AUTOMATIC DEPRESSURIZATION SYSTEM TRIP SYSTEM "B"			
		<ul> <li>a. Reactor Vessel Water Level - Low, Level 1</li> <li>b. Manual Inhibit</li> <li>c. ADS Timer</li> <li>d. Reactor Vessel Water Level - Low, Level 3 (Pere</li> <li>e. LPCI Pump B and C Discharge Pressure - High (Pere</li> <li>f. Manual Initiation</li> </ul>	2 <sup>(b)</sup> 1 1 ermissive) 1 2 2	1, 2, 3 1, 2, 3 1, 2, 3 1, 2, 3 1, 2, 3 1, 2, 3 1, 2, 3	30 31 31 31 31 31 31 33

PERRY - UNIT 1

	NSTRUBERTAT
(Continued)	RE COOLING SYSTEM ACTUATION I
3.3.3-1	SYSTEM
TABLE	COOLING
	CORE
	EMERGENCY

SYSTEM         M         Or Vessel Water Level - Low, Level 2       q(b)       1, 2, 3, 4°, 1         11 Pressure - High       q(b)       1, 2, 3, 4°, 1         11 Pressure - High       q(b)       1, 2, 3, 4°, 1         11 Pressure - High       q(c)       1, 2, 3, 4°, 1         12 Pressure - High       evel - Low       g(d)       1, 2, 3, 4°, 1         13 Pressure - High       2(d)       1, 2, 3, 4°, 1         ession Pool Water Level - Low       Bypass)       1       1, 2, 3, 4°, 1         Pump Discharge Pressure - Nich (Bypass)       1       1, 2, 3, 4°, 1         11 Initiation       2(d)       1, 2, 3, 4°, 1       1, 2, 3, 4°, 1         Pump Discharge Pressure - Nich (Bypass)       1       1, 2, 3, 4°, 1       1, 2, 3, 4°, 1         In Initiation <sup>86</sup> 1       1, 2, 3, 4°, 1       1, 2, 3, 4°, 1       1, 2, 3, 4°, 1         ergency Bus Undervoltage 868       2/bus       2/dus       1       1, 2, 3, 4°, 1       2, 2, 3, 4°, 1         0:Lage)       Bus Undervoltage 868       2/bus       2/bus       1, 2, 3, 4°, 1       2, 2, 3, 4°, 1       2, 2, 3, 4°, 1       2, 2, 3, 4°, 1       2, 2, 3, 4°, 1       2, 2, 3, 4°, 1       2, 2, 3, 4°, 1       2, 2, 3, 4°, 1       2, 2, 3, 4°, 1       2, 2, 3, 4°, 1	1919	ETINC TTOK				CHAMN	MINIMUM OPERABLE CHAMMELS PER TRIP FUNCTION <sup>(a)</sup>	APPL) OPERU CONDI	APPLICABLE OPERATIONAL CONDITIONS		ACTION
1.       HPCS SYSTEM         a.       Reactor Vessel Mater Level - Low, Level 2       4(b)       1, 2, 3, 4 <sup>n</sup> , 5         b.       Dryweil Pressure - High <sup>#</sup> 4(b)       1, 2, 3, 4 <sup>n</sup> , 5         c.       Reactor Vessel Mater Level - Nigh, Level 8       4(b)       1, 2, 3, 4 <sup>n</sup> , 5         c.       Reactor Vessel Mater Level - Nigh, Level 8       4(c)       1, 2, 3, 4 <sup>n</sup> , 5         d.       Condensate Storage Tank Level - Low       2(d)       1, 2, 3, 4 <sup>n</sup> , 5         e.       Suppression Pool Water Level - High       2(d)       1, 2, 3, 4 <sup>n</sup> , 5         f.       HPCS System Flow Rate - Low (Bypass)       1       1, 2, 3, 4 <sup>n</sup> , 5         g.       HPCS System Flow Rate - Low (Bypass)       1       1, 2, 3, 4 <sup>n</sup> , 5         h.       Manual Initiation <sup>##</sup> 1       1, 2, 3, 4 <sup>n</sup> , 5         h.       Manual Initiation <sup>##</sup> 1       1, 2, 3, 4 <sup>n</sup> , 1         i.       A.16 kv Emergency Bus Undervoltage       2 <sup>1</sup> 1       1, 2, 3, 4 <sup>n</sup> , 1         i.       A.16 kv Emergency Bus Undervoltage       2 <sup>1</sup> 1       1, 2, 3, 4 <sup>n</sup> , 1       2, 2, 3, 4 <sup>n</sup> , 1         i.       A.16 kv Emergency Bus Undervoltage       2 <sup>1</sup> 1       1       2, 2, 3, 4 <sup>n</sup> , 1       2, 2, 3, 4 <sup>n</sup> , 1       2, 3,		DIVISION	3 TRIP SYSTEM								
a. Reactor Vessel Water Level - Low, Level 2 b. Dryweil Pressure - High c. Reactor Vessel Water Level - Low, Level 2 d. Condensata Storage Tank Level - High, Level 9 d. Condensata Storage Tank Level - Low r. HPCS Fung Discharge Pressure - High Level 9 r. HPCS Fung Discharge Pressure - High Level 9 r. HPCS System Flow Rate - Low (Bypass) g. HPCS System Flow Rate - Low (Bypass) h. Manual Initiation <sup>9</sup> 1 1 1 2 1 1 2 4 1 1 2 3 4 4 5 4 1 1 2 3 4 4 5 4 1 1 2 3 4 4 5 4 5 4 1 1 2 3 4 4 5 4 5 4 4 5 4 5 4 4 5 4 4 5 4 4 5 4 4 5 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5			SYSTEM								
b.     Dryweil Pressure - High     evel *     High     Level *     1, 2, 3       c.     Reactor Vessel Water Level - High     Level *     10     2, 3, 4°, 3       d.     Condensate Storage Tank Level - Low     2(d)     1, 2, 3, 4°, 3       e.     Suppression Pool Water Level - High     2(d)     1, 2, 3, 4°, 3       f.     HPCS Fusep Discharge Pressure - High     2(d)     1, 2, 3, 4°, 3       g.     HPCS System Flow Rate - Low (Bypass)     1     1, 2, 3, 4°, 3       h.     Manual Initiation     1     1, 2, 3, 4°, 3       h.     Manual Initiation     1     1, 2, 3, 4°, 3       h.     Manual Initiation     1     1, 2, 3, 4°, 3       f.     Manual Initiation     1     1, 2, 3, 4°, 3       f.     Manual Initiation     1     1, 2, 3, 4°, 3       f.     Manual Initiation     1     1, 2, 3, 4°, 3       f.     Manual Initiation     1     1, 2, 3, 4°, 3       f.     Manual Initiation     1     1, 2, 3, 4°, 3       f.     Manual Initiation     1     1, 2, 3, 4°, 3       f.     Manual Initiation     1     1, 2, 3, 4°, 3       f.     Manual Initiation     1     1, 2, 3, 4°, 3       f.     Manual Initiation     1     1, 2, 3, 4°, 3			Reactor Vessel Water L	evel - Low, Level			(q) <sup>b</sup>	1. 2	3, 4'	8° 5%	34
<ul> <li>C. Reactor Vessel Mater Level - Nigh, Level 5 4(C) 1, 2, 3, 4<sup>h</sup>, 1</li> <li>d. Condensate Storage Tank Level - Low 2(d) 1, 2, 3, 4<sup>h</sup>, 2(d) 1, 2, 3, 4<sup>h</sup>, 1</li> <li>e. Suppression Pool Water Level - High 2(d) 1, 2, 3, 4<sup>h</sup>, 1</li> <li>f. NPCS Fuerp Discharge Pressure - high 2(d) 1, 2, 3, 4<sup>h</sup>, 1</li> <li>g. NPCS Systems Flow Rate - Low (Bypass) 1</li> <li>h. Manual Initiation<sup>8</sup></li> <li>h. Manual Initiation<sup>8</sup></li> <li>107AL NO. CHANNELS OPERABLE OPERABLE OPERABLE OFERABLE OF COMDITIO</li> <li>1. 2, 3, 4<sup>h</sup>, 1</li> <li>2. 4, 16 kv Emergency Bus Undervoltage <sup>668</sup></li> </ul>		à		1 B B			(p)	8-9 8-0 8-0	•		34
d. Condensate Storage Tank Level - Low 2(d) 1, 2, 3, 4°, 1 e. Suppression Pool Water Level - High 2(d) 1, 2, 3, 4°, 1 f. HPCS Pump Discharge Pressure - high (Bypass) 1 1 1, 2, 3, 4°, 1 g. HPCS System Flow Rate - Low (Bypass) 1 1 1, 2, 3, 4°, 1 h. Manual Initiation <sup>8</sup> 101AL MO. CHANNELS OF RABLE 076RATIO Annual Initiation <sup>8</sup> 201AL MO. CHANNELS OF RABLE 076RATIO 1, 2, 3, 4°, 1 1, 2, 3, 4°, 1 2, 4, 16 kv Emergency Bus Undervoltage <sup>88</sup> 2/bus 2/bus 2/bus 2/bus 1, 2, 3, 3, 3, 3, 2, 3, 3, 2, 3, 3, 4, 5, 3, 4, 5, 3, 4, 5, 3, 4, 5, 3, 4, 5, 3, 4, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5,		ij	Reactor Vessel Water L	evel - High, Leve	1 8		4(c)	1. A	3, 4'	* S*	34
e. Suppression Pool Water Level - High f. HPCS Fusep Discharge Pressure - High (Sypass) 1 1, 2, 3, 4°, 1 g. HPCS System Flow Rate - Low (Bypass) 1 1 1, 2, 3, 4°, 1 h. Manual Initiation <sup>8</sup> h. Manual Initiation <sup>8</sup> 101AL MO. CHANNELS OF RABLE OPERABLE OPERABLE OPERABLE OPERATIO 1 4, 15 k Emergency Bus Undervoltage <sup>888</sup> 2/bus 2/bus 2/bus 2/bus 1, 2, 3, 3, 4°, 3, 2, 3, 4°, 3, 2, 3, 4°, 3, 2, 3, 4°, 3, 2, 3, 4°, 3, 2, 3, 4°, 3, 3, 4°, 3, 3, 4°, 4°, 4°, 4°, 4°, 4°, 4°, 4°, 4°, 4°		đ.	Condensate Storage Tan	ik Level - Low			2 <sup>(d)</sup>	2. 2	3, 4'	* 5ª	50
f. NPCS Fuest Discharge Pressure - high (Bypass)       1       1, 2, 3, 4°, 1         g. NPCS Systems Flow Rate - Low (Bypass)       1       1, 2, 3, 4°, 1         h. Manual Initiation       1       1, 2, 3, 4°, 1         h. Manual Initiation       1       1, 2, 3, 4°, 1         h. Manual Initiation       1       1, 2, 3, 4°, 1         h. Manual Initiation       1       1, 2, 3, 4°, 1         h. Manual Initiation       1       1, 2, 3, 4°, 1         h. Manual Initiation       1       1, 2, 3, 4°, 1         h. Manual Initiation       1       1, 2, 3, 4°, 1         h. Manual Initiation       1       1, 2, 3, 4°, 1         h. Manual Initiation       1       1, 2, 3, 4°, 1         h. Manual Initiation       101AL MO.       CHANNELS OPERABLE       2, 3, 4°, 1         1       2, 5       1       1, 2, 3, 4°, 3       1, 2, 3, 3         1       4, 16 kv Emergency Bus Undervoltage       2/bus       2/bus       2/bus       2/bus       1, 2, 3, 3         2. 4, 16 kv Emergency Bus Undervoltage       2/bus       2/bus       2/bus       1, 2, 3, 3       1, 2, 3, 3		ė	Suppression Pool Water	Level - High			2 <sup>(d)</sup>	1. 2	3, 4'	* 5 *	35
<ul> <li>g. HPCS System Flow Rate - Low (Bypass)</li> <li>h. Manuel Initiation<sup>88</sup></li> <li>h. Manuel Initiation<sup>88</sup></li> <li>h. Manuel Initiation<sup>88</sup></li> <li>h. Manuel Initiation<sup>88</sup></li> <li>i. 4.16 kv Emergency Bus Undervoltage<sup>888</sup></li> <li>2. 4.16 kv Emergency Bus Undervoltage<sup>888</sup></li> </ul>			HPCS Pueso Discharge Pri	essure - high (By	(ssag)		1	1. 2	3, 4'	* 5 #	39
h. Marual Initiation <sup>66</sup> h. Marual Initiation <sup>66</sup> 107AL MO. CHANNELS OPERABLE 00F CHANNELS OPERABLE 00F CHANNELS TO TRIP CHANNELS 1. 4.16 kv Emergency Bus Undervoltage <sup>868</sup> 2. 4.16 kv Emergency Bus Undervoltage <sup>868</sup> 3. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5.		ei	HPCS System Flow Rate	- Low (Sypass)				3. 2	3, 41	4° 8'4	39
IDTAL NO.     MINIMUM     APPLICAB       1055 OF POWER     TOTAL NO.     CHANNELS     OFERABLE     OPERATIO       1.     4.16 kv Emergency Bus Undervoltage     2/bus     2/bus     2/bus     2/bus     1. 2. 3.       2.     4.16 kv Emergency Bus Undervoltage     868     2/bus     2/bus     2/bus     2/bus     1. 2. 3.		ė					1		ŝ	* 5ª	36
1. 4.16 kv Emergency Bus Undervoltage 868 2/bus 2/bus 2/bus 2/bus 1, 2, 3, 2, 4.16 kv Emergency Bus Undervoltage 868 2/bus 1, 2, 3, 3, 3, 3, 4, 16 kv Emergency Bus Undervoltage 868 2/bus 2/bus 2/bus 2/bus 2/bus 2/bus 1, 2, 3, 3, 3, 3, 4, 16 kv Emergency Bus Undervoltage 868 2/bus 2/bus 2/bus 2/bus 2/bus 2/bus 1, 2, 3, 3, 3, 4, 16 kv Emergency Bus Undervoltage 868 2/bus 2/bus 2/bus 2/bus 2/bus 2/bus 2/bus 1, 2, 3, 3, 4, 16 kv Emergency Bus Undervoltage 868 2/bus 2/				101A 0F CH		CHAMMELS TO TRIP	MINIMUM OPERABLE CHANNELS		APPL I( OPERA) COMD I	T TOWAL	
<ul> <li>4.16 kv Emergency Bus Undervoltage<sup>868</sup> 2/bus 2/bus 2/bus 2/bus 2/bus 1, 2, 3, 4, 16 kv Emergency Bus Undervoltage<sup>868</sup> 2/bus 2/bus 2/bus 2/bus 2/bus 1, 2, 3,</li> </ul>		L055 0F									
4.15 kv Emergency Bus Undergoltage 2/bus			Bus		Sud	2/bus	2/1048		2° 5°	3, 474	San
(Degraded Voltage)			Bus	838	sng	2/bus	2/bus		1, 2,	3 48 4 5	See

1104

23

繁

Provides signal to close MPCS pump injection valve only.

AUG 1 1 1993

Provides signal to HPCS pamp suction valves only.

When the system is required to be OPERABLE per Specification 3.5.2 or 3.5.3. 100 . .

Required when ESF equipment is required to be OPERABLE.

- Not required to be OPERABLE when reactor steam dome pressure is less then or equal to 100 psig. The injection function of Brywell Pressure - High and Manuel Initiation are not required to ....
  - be OPERABLE with indicated reactor vessel water level on the wide range instrument greater than 80) the level 8 setpoint coincident with the reactor pressure less than 450 psig. The Loss of Voltage and Degraded Voltage functions are common to Divisions 1, 2 and

-----

## TABLE 3.3.3-1 (Continued)

### EMERGENCY CORE COOLING SYSTEM ACTUATION INSTRUMENTATION ACTION

- With the number of OPERABLE channels less than required by the ACTION 30 -Minimum OPER'BLE Channels per Trip Function requirement:
  - With one channel inoperable, place the inoperable channel in 8. the tripped condition within one hour or declare the associated ADS trip system or ECCS inoperable.
  - With more than one channel inoperable, declare the b. associated ADS trip system or ECCS inoperable.
- With the number of OPERABLE channels less than required by the ACTION 31 -Minimum OPERABLE Channels per Trip Function requirement, declare the associated ADS trip system or ECCS inoperable.
- With the number of OPERABLE channels less than required by the ACTION 32 -Minimum OPERABLE Channels per Trip Function requirement, place the inoperable channel in the tripped condition within one hour.
- ACTION 33 -With the number of OPERABLE channels less than required by the Minimum OPERABLE Channels per Trip Function requirement, restore the inoperable channel to OPERABLE status within 8 hours or declare the associated ADS trip system or ECCS inoperable.
- ACTION 34 With the number of OPERABLE channels less than required by the Minimum OPERABLE Channels per Trip Function requirement, place the inoperable channel(s) in the tripped condition within one hour or declare the HPCS system inoperable.
- With the number of OPERABLE channels less than required by the ACTION 35 -Minimum OPERABLE Channels per Trip Function requirement, place at least one inoperable channel in the tripped condition within one hour, or align the HPCS system to take suction from the suppression pool, or declare the HPCS system inoperable.
- ACTION 36 -With the number of OPERABLE channels less than required by the Minimum OPERABLE Channels per Trip Function requirement, place at least one inoperable channel in the tripped condition within one hour or declare the HPCS system inoperable.
- ACTION 37 With the number of OPERABLE channels less than the Total Number of Channels, declare the associated emergency diesel generator inoperable and take the ACTION required by Specification 3.8.1.1 or 3.8.1.2 as appropriate.
- With the number of OPERABLE channels less than the Total Number ACTION 38 of Channels, place the inoperable channel in the tripped condition within one hour; operation may then continue until performance of the next required CHANNEL FUNCTIONAL TEST.
- With the number of OPERABLE channels less than required by the ACTION 39 -Minimum OPERABLE Channels per Trip Function requirement, place the inoperable channel in the tripped condition within one hour. Restore the inoperable channel to OPERABLE status within 7 days or declare the associated system inoperable.

PERRY - UNIT 1

3/4 3-31 Amendment No. 30, 50, 53

# TABLE 3.3.3-2

# EMERGENCY CORE COOLING SYSTEM ACTUATION INSTRUMENTATION SETPOINTS

## TRIP FUNCTION

2.

# TRIP SETPOINT

## ALLOWABLE VALUE

# A. DIVISION 1 TRIP SYSTEM

# 1. RHR-A (LPCI MODE) AND LPCS SYSTEM

	D.	Reactor Vessel Water Level - Low, Level 1 Drywell Pressure - High	≥ 16.5 inches <sup>*</sup> ≤ 1.68 psig	$\geq$ 14.3 inches $\leq$ 1.88 psig
	с.	LPCS Pump Discharge Flow - Low (Bypass)	> 1350 gpm	5 1:00 psig
	d.	Reactor Vessel Pressure - Low (LPCS Injection Valve Permissive)	≥ 1350 gpm 577.7 ± 15 psig	577.7 + 30, -95 psig
		Reactor Vessel Pressure - Low (LPCI Injection Valve Permissive)	502.5 + 5, -10 pstg	502.5 + 10, -40 psig
	f.	LPCI Pump A Start Time Delay Relay	< 5 seconds	≤ 5.25 seconds
	g.	LPCI Pump A Discharge Flow - Low (Bypass)	≥ 1650 gpm	
	h.	Manual Initiation	NA	≥ 1450 gpm NA
*	AUT	CMATIC DEPRESSURIZATION SYSTEM TRIP SYSTEM "A"		
	a.	Reactor Vessel Water Level - Low Level 1	$\geq$ 16.5 inches <sup>*</sup>	≥ 14.3 inches
	b.	Manual Inhibit	NA	NA
	с.	ADS Timer	≤ 105 seconds	
	d.	Reactor Vessel Water Level - Low, Level 3	≥ 177.7 inches"	≤ 117 seconds
		(Permissive)	Z 1/1.1 mones	≥ 177.1 inches
	e.	LPCS Pump Discharge Pressure - High	> 145 peta increasing	≥ 125 psig, increasing
		(Permissiva)	2 145 psig, increasing	2 125 psig, increasing
	f.	LPCI Pump A Discharge Pressure - High (Permissive)	$\geq$ 125 psig, increasing	$\geq$ 115 psig, increasing
	g.	Manual Initiation	NA	NA

PERRY - UNIT

-