- (3) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, possess, and use at any time any byproduct, source, and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
- (4) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, possess, and use in amounts as required any byproduct, source, or special nuclear material without restriction to chemical or physical form for sample analysis or equipment and instrument calibration or associated with radioactive apparatus or components;
- (5) Pursuant to the Act and 10 CFR Parts 30 and 70, to possess but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility.
- C. This renewed operating license shall be deemed to contain and is subject to the conditions specified in the following Commission regulations in 10 CFR Chapter I: Part 20, Section 30.34 of Part 30, Section 40.41 of Part 40, Sections 50.54 and 50.59 of Part 50, and Section 70.32 of Part 70; is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:
 - (1) <u>Maximum Power Level</u>

The licensee is authorized to operate the facility at steady state reactor core power levels not in excess of 3293 megawatts thermal.

(2) <u>Technical Specifications</u>

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. **257**, are hereby incorporated in the renewed operating license. The licensee shall operate the facility in accordance with the Technical Specifications.

For Surveillance Requirements (SRs) that are new in Amendment 234 to Facility Operating License DPR-33, the first performance is due at the end of the first surveillance interval that begins at implementation of the Amendment 234. For SRs that existed prior to Amendment 234, including SRs with modified acceptance criteria and SRs whose frequency of performance is being extended, the first performance is due at the end of the first surveillance interval that begins on the date the surveillance was last performed prior to implementation of Amendment 234.

> Renewed License No. DPR-33 Amendment No. 257

RPS Instrumentation 3.3.1.1

Table 3.3.1.1-1 (page 2 of 3) Reactor Protection System Instrumentation

	FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED	REQUIRED CHANNELS PER TRIP	CONDITIONS REFERENCED FROM REQUIRED	SURVEILLANCE REQUIREMENTS	ALLOWABLE
		CONDITIONS	SYSTEM	ACTION D.1		
2.	Average Power Range Monitors (continued)					
	d. Downscale	1	2	F	SR 3.3.1.1.7 SR 3.3.1.1.8 SR 3.3.1.1.14	≥ 3% RTP
	e. Inop	1,2	2	G	SR 3.3.1.1.7 SR 3.3.1.1.8 SR 3.3.1.1.14	NA
3.	Reactor Vessel Steam Dome Pressure - High ^(d)	1,2	2	G	SR 3.3.1.1.1 SR 3.3.1.1.8 SR 3.3.1.1.10 SR 3.3.1.1.14	≤ 1055 psig
4.	Reactor Vessel Water Level - Low, Level 3 ^(d)	1,2	2	G	SR 3.3.1.1.1 SR 3.3.1.1.8 SR 3.3.1.1.13 SR 3.3.1.1.14	≥ 538 inches above vessel zero
5.	Main Steam Isolation Valve - Closure	1	· 8	F	SR 3.3.1.1.8 SR 3.3.1.1.13 SR 3.3.1.1.14	≤ 10% closed
6.	Drywell Pressure - High	1,2	2	G	SR 3.3.1.1.8 SR 3.3.1.1.13 SR 3.3.1.1.14	≤ 2.5 psig
7.	Scram Discharge Volume Water Level - High					
	a. Resistance Temperature Detector	1,2	2	G	SR 3.3.1.1.8 SR 3.3.1.1.13 SR 3.3.1.1.14	≤ 50 gallons
		₅ (a)	2	H	SR 3.3.1.1.8 SR 3.3.1.1.13 SR 3.3.1.1.14	≤ 50 galions

(a) With any control rod withdrawn from a core cell containing one or more fuel assemblies.

(continued)

(d) During instrument calibrations, if the As Found channel setpoint is conservative with respect to the Allowable Value but outside its acceptable As Found band as defined by its associated Surveillance Requirement procedure, then there shall be an initial determination to ensure confidence that the channel can perform as required before returning the channel to service in accordance with the Surveillance. If the As Found instrument channel setpoint is not conservative with respect to the Allowable Value, the channel shall be declared inoperable.

Prior to returning a channel to service, the instrument channel setpoint shall be calibrated to a value that is within the acceptable As Left tolerance of the setpoint; otherwise, the channel shall be declared inoperable.

The nominal Trip Setpoint shall be specified on design output documentation which is incorporated by reference in the Updated Final Safety Analysis Report. The methodology used to determine the nominal Trip Setpoint, the predefined As Found Tolerance, and the As Left Tolerance band, and a listing of the setpoint design output documentation shall be specified in Chapter 7 of the Updated Final Safety Analysis Report.

RPS Instrumentation 3.3.1.1

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER TRIP SYSTEM	CONDITIONS REFERENCED FROM REQUIRED ACTION D.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE		
 Scram Discharge Volume Water Level - High (continued) 							
b. Float Switch	1,2	2	G	SR 3.3.1.1.8 SR 3.3.1.1.13 SR 3.3.1.1.14	≤ 50 gallons		
• • •	5(a)	2	н	SR 3.3.1.1.8 SR 3.3.1.1.13 SR 3.3.1.1.14	≤ 50 gallons		
8. Turbine Stop Valve - Closure	≥ 30% RTP	4	E	SR 3.3.1.1.8 SR 3.3.1.1.13 SR 3.3.1.1.14 SR 3.3.1.1.15	≤ 10% closed		
 Turbine Control Valve Fast Closure, Trip Oil Pressure - Low^(d) 	≥ 30% RTP	2	E	SR 3.3.1.1.8 SR 3.3.1.1.13 SR 3.3.1.1.14 SR 3.3.1.1.15	≥ 550 psig		
10. Reactor Mode Switch - Shutdown Position	1,2	1	G	SR 3.3.1.1.12 SR 3.3.1.1.14	NA		
	₅ (a)	1	Н	SR 3.3.1.1.12 SR 3.3.1.1.14	NA		
11. Manual Scram	1,2	1	G	SR 3.3.1.1.8 SR 3.3.1.1.14	NA		
•	5(a)	1	н	SR 3.3.1.1.8 SR 3.3.1.1.14	NA		
12. RPS Channel Test Switches	1,2	2	G	SR 3.3.1.1.4	NA		
•	5 ^(a)	2	н	SR 3.3.1.1.4	NA		

Table 3.3.1.1-1 (page 3 of 3) Reactor Protection System Instrumentation

(a) With any control rod withdrawn from a core cell containing one or more fuel assemblies.

(d) During instrument calibrations, if the As Found channel setpoint is conservative with respect to the Allowable Value but outside its acceptable As Found band as defined by its associated Surveillance Requirement procedure, then there shall be an initial determination to ensure confidence that the channel can perform as required before returning the channel to service in accordance with the Surveillance. If the As Found instrument channel setpoint is not conservative with respect to the Allowable Value, the channel shall be declared inoperable.

Prior to returning a channel to service, the instrument channel setpoint shall be calibrated to a value that is within the acceptable As Left tolerance of the setpoint; otherwise, the channel shall be declared inoperable.

The nominal Trip Setpoint shall be specified on design output documentation which is incorporated by reference in the Updated Final Safety Analysis Report. The methodology used to determine the nominal Trip Setpoint, the predefined As Found Tolerance, and the As Left Tolerance band, and a listing of the setpoint design output documentation shall be specified in Chapter 7 of the Updated Final Safety Analysis Report.

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Table 3.3.5.1-1 (page 1 of 6)
Emergency Core Cooling System Instrumentation

	FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER FUNCTION	CONDITIONS REFERENCED FROM REQUIRED ACTION A.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
i. c	ore Spray System					
a	. Reactor Vessel Water Level - Low Low Low, Level 1 ^(e)	1,2,3, ₄ (a) _{, 5} (a)	4(b)	В	SR 3.3.5.1.1 SR 3.3.5.1.2 SR 3.3.5.1.5 SR 3.3.5.1.6	≥ 398 inches above vessel zero
b.	Drywell Pressure - High ^(e)	1,2,3	4(b)	B	SR 3.3.5.1.2 SR 3.3.5.1.5 SR 3.3.5.1.6	≤ 2.5 psig
C.	Reactor Steam Dome Pressure - Low (Injection Permissive and ECCS Initiation) ^(e)	1,2,3	4(b) 2 per trip system	C	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ 435 psig and ≤ 465 psig
		4(a), 5(a)	4 2 per trip system	B	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ 435 psig and ≤ 465 psig
d.	Core Spray Pump Discharge Flow - Low (Bypass)	1,2,3, 4 ^(a) , 5 ^(a)	2 1 per subsystem	E	SR 3.3.5.1.2 SR 3.3.5.1.5	≥ 1647 gpm and ≤ 2910 gpm
e	Core Spray Pump Start - Time Delay Relay			•		
	Pumps A,B,C,D (with diesel power)	1,2,3, ₄ (a) _{, 5} (a)	4 1 per pump	С	SR 3.3.5.1.5 SR 3.3.5.1.6	≥ 6 seconds and ≤ 8 seconds
	Pump A (with normal power)	1,2,3, 4(a) _{, 5} (a)	1	С	SR 3.3.5.1.5 SR 3.3.5.1.6	≥ 0 seconds and ≤ 1 second
	Pump B (with normal power)	1,2,3, 4(a) _{, 5} (a)	1	C	SR 3.3.5.1.5 SR 3.3.5.1.6	≥ 6 seconds and ≤ 8 seconds
			•	• .		(continued)

(a) When associated subsystem(s) are required to be OPERABLE.

(b) Channels affect Common Accident Signal Logic. Refer to LCO 3.8.1, "AC Sources - Operating."

(e) During instrument calibrations, if the As Found channel setpoint is conservative with respect to the Allowable Value but outside its acceptable As Found band as defined by its associated Surveillance Requirement procedure, then there shall be an initial determination to ensure confidence that the channel can perform as required before returning the channel to service in accordance with the Surveillance. If the As Found instrument channel setpoint is not conservative with respect to the Allowable Value, the channel shall be declared inoperable.

Prior to returning a channel to service, the instrument channel setpoint shall be calibrated to a value that is within the acceptable As Left tolerance of the setpoint; otherwise, the channel shall be declared inoperable.

The nominal Trip Setpoint shall be specified on design output documentation which is incorporated by reference in the Updated Final Safety Analysis Report. The methodology used to determine the nominal Trip Setpoint, the predefined As Found Tolerance, and the As Left Tolerance band, and a listing of the setpoint design output documentation shall be specified in Chapter 7 of the Updated Final Safety Analysis Report.

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Amendment No. 234, 257

Table 3.3.5.1-1 (pa	ige 2 of 6)
Emergency Core Cooling Sys	stem Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER FUNCTION	CONDITIONS REFERENCED FROM REQUIRED ACTION A.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
1. Core Spray System (continued)					
e. Core Spray Pump Start - Time Delay Relay (continued)	•••	•		• .	
Pump C (with normal power)	1,2,3, 4(a) _{, 5} (a)	1	č	SR 3.3.5.1.5 SR 3.3.5.1.6	≥ 12 seconds and ≤ 16 seconds
Pump D (with normal power)	1,2,3, ₄ (a) _{, 5} (a)	.1	С	SR 3.3.5.1.5 SR 3.3.5.1.6	≥ 18 seconds and ≤ 24 seconds
 Low Pressure Coolant Injection (LPCI) System 					
a. Reactor Vessel Water Level - Low Low Low, Level 1 ^(e)	1,2,3, 4(a) _{, 5} (a)	4	В	SR 3.3.5.1.1 SR 3.3.5.1.2 SR 3.3.5.1.5 SR 3.3.5.1.6	≥ 398 inches above vessel zero
b. Drywell Pressure - High ^(e)	1,2,3	4	В	SR 3.3.5.1.2 SR 3.3.5.1.5 SR 3.3.5.1.6	≤ 2.5 psig
 c. Reactor Steam Dome Pressure - Low (Injection Permissive and ECCS Initiation)^(e) 	1,2,3	.4	С	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ 435 psig and ≤ 465 psig
	4(a) _{, 5} (a)	4	В .	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ 435 psig and ≤ 465 psig
					(continued)

(a) When associated subsystem(s) are required to be OPERABLE.

(b) Deleted.

(e) During instrument calibrations, if the As Found channel setpoint is conservative with respect to the Allowable Value but outside its acceptable As Found band as defined by its associated Surveillance Requirement procedure, then there shall be an initial determination to ensure confidence that the channel can perform as required before returning the channel to service in accordance with the Surveillance. If the As Found instrument channel setpoint is not conservative with respect to the Allowable Value, the channel shall be declared inoperable.

Prior to returning a channel to service, the instrument channel setpoint shall be calibrated to a value that is within the acceptable As Left tolerance of the setpoint; otherwise, the channel shall be declared inoperable.

The nominal Trip Setpoint shall be specified on design output documentation which is incorporated by reference in the Updated Final Safety Analysis Report. The methodology used to determine the nominal Trip Setpoint, the predefined As Found Tolerance, and the As Left Tolerance band, and a listing of the setpoint design output documentation shall be specified in Chapter 7 of the Updated Final Safety Analysis Report.

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		Emergency Core	e Cooling System	Instrumentation		
	FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER FUNCTION	CONDITIONS REFERENCED FROM REQUIRED ACTION A.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
2.	LPCI System (continued)					
•	d. Reactor Steam Dome Pressure - Low (Recirculation Discharge Valve Permissive) ^(e)	1(c),2(c), 3(c)	4	С	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ 215 psig and ≤ 245 psig
	e. Reactor Vessel Water Level - Level 0	1,2,3	2 1 per subsystem	В	SR 3.3.5.1.1 SR 3.3.5.1.2 SR 3.3.5.1.5 SR 3.3.5.1.6	≥ 312 5/16 inches above vessel zero
	 Low Pressure Coolant Injection Pump Start - Time Delay Relay 					·
	Pump A,B,C,D (with diesel power)	1,2,3, 4 ^(a) , 5 ^(a)	4	С	SR 3.3.5.1.5 SR 3.3.5.1.6	≥ 0 seconds and ≤ 1 second
	Pump A (with normal power)	1,2,3, 4 ^(a) , 5 ^(a)	1	C	SR 3.3.5.1.5 SR 3.3.5.1.6	≥ 0 seconds and ≤ 1 second
	Pump B (with normal power)	1,2,3, 4(a) _{, 5} (a)	1	C .	SR 3.3.5.1.5 SR 3.3.5.1.6	≥ 6 seconds and ≤ 8 seconds
	Pump C (with normal power)	1,2,3, 4(a) _{, 5} (a)	1	С	SR 3.3.5.1.5 SR 3.3.5.1.6	≥ 12 seconds and ≤ 16 seconds
	Pump D (with normal power)	1,2,3, 4(a) _{, 5} (a)	1	с	SR 3.3.5.1.5 SR 3.3.5.1.6	≥ 18 seconds and ≤ 24 seconds (continued)

Table 3.3.5.1-1 (page 3 of 6) mergency Core Cooling System Instrumentation

(a) When the associated subsystem(s) are required to be OPERABLE.

(c) With associated recirculation pump discharge valve open.

(e) During instrument calibrations, if the As Found channel setpoint is conservative with respect to the Allowable Value but outside its acceptable As Found band as defined by its associated Surveillance Requirement procedure, then there shall be an initial determination to ensure confidence that the channel can perform as required before returning the channel to service in accordance with the Surveillance. If the As Found instrument channel setpoint is not conservative with respect to the Allowable Value, the channel shall be declared inoperable.

Prior to returning a channel to service, the instrument channel setpoint shall be calibrated to a value that is within the acceptable As Left tolerance of the setpoint; otherwise, the channel shall be declared inoperable.

The nominal Trip Setpoint shall be specified on design output documentation which is incorporated by reference in the Updated Final Safety Analysis Report. The methodology used to determine the nominal Trip Setpoint, the predefined As Found Tolerance, and the As Left Tolerance band, and a listing of the setpoint design output documentation shall be specified in Chapter 7 of the Updated Final Safety Analysis Report.

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Amendment No.-234, 250, 257

Table 3.3.5.1-1 (page 4 of 6) Emergency Core Cooling System Instrumentation

	FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER FUNCTION	CONDITIONS REFERENCED FROM REQUIRED ACTION A.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
3.	High Pressure Coolant Injection (HPCI) System					
	a. Reactor Vessel Water Level - Low Low, Level 2 ^(e)	1, 2(d) _{, 3} (d)	4	В	SR 3.3.5.1.1 SR 3.3.5.1.2 SR 3.3.5.1.5 SR 3.3.5.1.6	≥ 470 inches above vessel zero
	b. Drywell Pressure - High ^(e)	1, 2(d),3(d)	4	В	SR 3.3.5.1.2 SR 3.3.5.1.5 SR 3.3.5.1.6	≤ 2.5 psig
	 c. Reactor Vessel Water Level - High, Level 8 	1, 2 ^(d) , 3 ^(d)	, 2	С	SR 3.3.5.1.1 SR 3.3.5.1.2 SR 3.3.5.1.5 SR 3.3.5.1.6	≤ 583 inches above vessel zero
	 Condensate Header Level - Low 	1, 2 ^(d) , 3 ^(d)	1	D	SR 3.3.5.1.2 SR 3.3.5.1.3 SR 3.3.5.1.6	≥ Elev. 551 feet
	e. Suppression Pool Water Level - High	1. 2 ^(d) , 3 ^(d)	1	D	SR 3.3.5.1.2 SR 3.3.5.1.3 SR 3.3.5.1.6	≤ 7 inches above instrument zero
	f. High Pressure Coolant Injection Pump Discharge Flow - Low (Bypass)	1, 2(d) _{, 3} (d)	· 1	E	SR 3.3.5.1.2 SR 3.3.5.1.5 SR 3.3.5.1.6	≥ 671 gpm
4.	Automatic Depressurization System (ADS) Trip System A			•		
	a. Reactor Vessel Water Level - Low Low Low, Level 1 ^(e)	1, 2(d) _{, 3} (d)	2	F	SR 3.3.5.1.1 SR 3.3.5.1.2 SR 3.3.5.1.5 SR 3.3.5.1.6	≥ 398 inches above vessel zero
						(continued)

(d) With reactor steam dome pressure > 150 psig.

(e) During instrument calibrations, if the As Found channel setpoint is conservative with respect to the Allowable Value but outside its acceptable As Found band as defined by its associated Surveillance Requirement procedure, then there shall be an initial determination to ensure confidence that the channel can perform as required before returning the channel to service in accordance with the Surveillance. If the As Found instrument channel setpoint is not conservative with respect to the Allowable Value, the channel shall be declared inoperable.

Prior to returning a channel to service, the instrument channel setpoint shall be calibrated to a value that is within the acceptable As Left tolerance of the setpoint; otherwise, the channel shall be declared inoperable.

The nominal Trip Setpoint shall be specified on design output documentation which is incorporated by reference in the Updated Final Safety Analysis Report. The methodology used to determine the nominal Trip Setpoint, the predefined As Found Tolerance, and the As Left Tolerance band, and a listing of the setpoint design output documentation shall be specified in Chapter 7 of the Updated Final Safety Analysis Report.

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Amendment No. 234, 257

Table 3.3.5.1-	1 (page 5 of 6)
Emergency Core Cooling	System Instrumentation

I. ADS Trip System A (continued)b. Drywell Pressure - High(e)1, $2(d), 3(d)$ 2FSR 3.3.5.1.2 SR 3.3.5.1.5 SR 3.3.5.1.6 $\leq 2.5 \text{ psig}$ c. Automatic Depressurization System Initiation Timer1, $2(d), 3(d)$ 1GSR 3.3.5.1.5 SR 3.3.5.1.6 ≤ 115 seconds.d. Reactor Vessel Water Level - Low, Level 3 (Confirmatory)(e)1, $2(d), 3(d)$ 1FSR 3.3.5.1.1 SR 3.3.5.1.2 stress 3.3.5.1.6 ≥ 544 inches seconds.e. Core Spray Pump Discharge Pressure - High1, $2(d), 3(d)$ 2GSR 3.3.5.1.2 SR 3.3.5.1.6 $\geq 175 \text{ psig}$ and SR 3.3.5.1.6f. Low Pressure Coolant Injection Pump Discharge Pressure - High1, $2(d), 3(d)$ 8GSR 3.3.5.1.2 SR 3.3.5.1.6 $\geq 195 \text{ psig}$ f. Low Pressure Coolant Injection Pump Discharge Pressure - High1, $2(d), 3(d)$ 2GSR 3.3.5.1.5 SR 3.3.5.1.6 $\leq 195 \text{ psig}$ g. Automatic Depressurization System High Drywell Pressure Bypass Timer1, $2(d), 3(d)$ 2GSR 3.3.5.1.5 SR 3.3.5.1.6 ≤ 322 secondss. ADS Trip System BaReactor Vessel Water Level $- Low Low Low, Level 1^{(e)}$ 1, $2(d), 3(d)$ 2FSR 3.3.5.1.1 SR 3.3.5.1.5 ≥ 398 inches SR 3.3.5.1.6b. Drywell Pressure - High(e)1, $2(d), 3(d)$ 2FSR 3.3.5.1.2 SR 3.3.5.1.6 $\leq 2.5 \text{ psig}$		FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER FUNCTION	CONDITIONS REFERENCED FROM REQUIRED ACTION A.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	\$. A	DS Trip System A (continued)		······································			
System Initiation Timer $2(d), 3(d)$ SR 3.3.5.1.6secondsd. Reactor Vessel Water Level - Low, Level 3 (Confirmatory) ^(e) 1, $2(d), 3(d)$ 1FSR 3.3.5.1.1 SR 3.3.5.1.5 ≥ 544 inches above vessel SR 3.3.5.1.5e. Core Spray Pump Discharge Pressure - High1, $2(d), 3(d)$ 4GSR 3.3.5.1.2 SR 3.3.5.1.6 ≥ 175 psig and SR 3.3.5.1.6e. Core Spray Pump Discharge Pressure - High1, $2(d), 3(d)$ 4GSR 3.3.5.1.2 SR 3.3.5.1.6 ≥ 175 psig and SR 3.3.5.1.6f. Low Pressure Coolant Injection Pump Discharge Pressure - High1, $2(d), 3(d)$ 8GSR 3.3.5.1.2 SR 3.3.5.1.6 ≥ 90 psig and ≤ 110 psigg. Automatic Depressurization System High Drywell Pressure Bypass Timer1, $2(d), 3(d)$ 2GSR 3.3.5.1.5 SR 3.3.5.1.5 ≤ 322 secondsb. Drywell Pressure - High1, $2(d), 3(d)$ 2FSR 3.3.5.1.2 SR 3.3.5.1.5 ≥ 398 inches above vessel zerob. Drywell Pressure - High1, $2(d), 3(d)$ 2FSR 3.3.5.1.2 SR 3.3.5.1.5 ≤ 2.5 psig	Þ	. Drywell Pressure - High ^(e)	1, 2(d) _{, 3} (d)	2	F	SR 3.3.5.1.5	≤ 2.5 psig
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	с			1	G		
Pressure - High $2(d), 3(d)$ SR $3.3.5.1.3$ SR $3.3.5.1.6$ and SR $3.3.5.1.6$ f. Low Pressure Coolant Injection Pump Discharge 	d	- Low, Level 3		1	F	SR 3.3.5.1.2 SR 3.3.5.1.5	above vessel
Injection Pump Discharge Pressure - High $2(d), 3(d)$ SR $3.3.5.1.3$ SR $3.3.5.1.6$ $2 00 plog differenceSR 3.3.5.1.3SR 3.3.5.1.6g. Automatic DepressurizationSystem High DrywellPressure Bypass Timer1,2GSR 3.3.5.1.5SR 3.3.5.1.6\leq 322secondsi. ADS Trip System Ba. Reactor Vessel Water Level- Low Low Low, Level 1^{(e)}1,2FSR 3.3.5.1.2SR 3.3.5.1.5\geq 398 inchesabove vesselSR 3.3.5.1.5b. Drywell Pressure - High (e)1,2FSR 3.3.5.1.2SR 3.3.5.1.5\geq 209 plog differenceSR 3.3.5.1.6b. Drywell Pressure - High (e)1,2FSR 3.3.5.1.2SR 3.3.5.1.5\leq 2.5 psig$	e	Core Spray Pump Discharge Pressure - High	1, 2(d) _{, 3} (d)	4	G	SR 3.3.5,1.3	and
System High Drywell Pressure Bypass Timer $2(d), 3(d)$ SR 3.3.5.1.6secondsi. ADS Trip System Ba. Reactor Vessel Water Level - Low Low, Level 1(e)1,2FSR 3.3.5.1.1 \geq 398 inches s SR 3.3.5.1.2b. Drywell Pressure - High(e)1,2FSR 3.3.5.1.2 SR 3.3.5.1.5 \geq 2.5 psig SR 3.3.5.1.5	f.	Injection Pump Discharge		8	G	SR 3.3.5.1.3	≥ 90 psig and ≤ 110 psig
a. Reactor Vessel Water Level 1, 2 - Low Low, Level 1 ^(e) 2 ^(d) , 3 ^(d) F SR 3.3.5.1.1 \geq 398 inches 2 ^(d) , 3 ^(d) SR 3.3.5.1.2 above vessel SR 3.3.5.1.5 zero SR 3.3.5.1.6 \leq 2.5 psig 2 ^(d) , 3 ^(d) SR 3.3.5.1.2 \leq 2.5 psig	·g	System High Drywell		2	G		
- Low Low, Level 1 ^(e) 2 ^(d) , 3 ^(d) SR 3.3.5.1.2 SR 3.3.5.1.5 SR 3.3.5.1.6 above vessel SR 3.3.5.1.5 SR 3.3.5.1.6 b. Drywell Pressure - High ^(e) 1, 2 F SR 3.3.5.1.2 SR 3.3.5.1.2 ≤ 2.5 psig b. Drywell Pressure - High ^(e) 1, 2 F SR 3.3.5.1.2 SR 3.3.5.1.5 ≤ 2.5 psig	5. A	DS Trip System B					
2(d) 3(d) SR 3.3.5.1.5	а			2	F	SR 3.3.5.1.2 SR 3.3.5.1.5	above vessel
	b.	Drywell Pressure - High ^(e)		2	F	SR 3.3.5.1.5	≤ 2.5 psig

(d) With reactor steam dome pressure > 150 psig.

(e) During instrument calibrations, if the As Found channel setpoint is conservative with respect to the Allowable Value but outside its acceptable As Found band as defined by its associated Surveillance Requirement procedure, then there shall be an initial determination to ensure confidence that the channel can perform as required before returning the channel to service in accordance with the Surveillance. If the As Found instrument channel setpoint is not conservative with respect to the Allowable Value, the channel shall be declared inoperable.

Prior to returning a channel to service, the instrument channel setpoint shall be calibrated to a value that is within the acceptable As Left tolerance of the setpoint; otherwise, the channel shall be declared inoperable.

The nominal Trip Setpoint shall be specified on design output documentation which is incorporated by reference in the Updated Final Safety Analysis Report. The methodology used to determine the nominal Trip Setpoint, the predefined As Found Tolerance, and the As Left Tolerance band, and a listing of the setpoint design output documentation shall be specified in Chapter 7 of the Updated Final Safety Analysis Report.

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Table 3.3.5.1-1 (page 6 of 6)

Emergency Core Cooling System Instrumentation

		FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER FUNCTION	CONDITIONS REFERENCED FROM REQUIRED ACTION A.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
5.	A	OS Trip System B (continued)	· ·				
	C.	Automatic Depressurization System Initiation Timer	1, 2(d) _{, 3} (d)	່1	G	SR 3.3.5.1.5 SR 3.3.5.1.6	≤ 115 seconds
	d.	Reactor Vessel Water Level - Low, Level 3 (Confirmatory) ^(e)	1, 2 ^(d) , 3 ^(d)	1	F .	SR 3.3.5.1.1 SR 3.3.5.1.2 SR 3.3.5.1.5 SR 3.3.5.1.6	≥ 544 inches above vessel zero
	e.	Core Spray Pump Discharge Pressure - High	1, 2 ^(d) , 3 ^(d)	4	G	SR 3.3.5.1.2 SR 3.3.5.1.3 SR 3.3.5.1.6	≥ 175 psig and ≤ 195 psig
	f.	Low Pressure Coolant Injection Pump Discharge Pressure - High	1, 2 ^(d) , 3 ^(d)	8	G	SR 3.3.5.1.2 SR 3.3.5.1.3 SR 3.3.5.1.6	≥ 90 psig and ≤ 110 psig
	g.	Automatic Depressurization System High Drywell Pressure Bypass Timer	1, 2 ^(d) , 3(d)	2	G	SR 3.3.5.1.5 SR 3.3.5.1.6	≤ 322 seconds

(d) With reactor steam dome pressure > 150 psig.

(e) During instrument calibrations, if the As Found channel setpoint is conservative with respect to the Allowable Value but outside its acceptable As Found band as defined by its associated Surveillance Requirement procedure, then there shall be an initial determination to ensure confidence that the channel can perform as required before returning the channel to service in accordance with the Surveillance. If the As Found instrument channel setpoint is not conservative with respect to the Allowable Value, the channel shall be declared inoperable.

Prior to returning a channel to service, the instrument channel setpoint shall be calibrated to a value that is within the acceptable As Left tolerance of the setpoint; otherwise, the channel shall be declared inoperable.

The nominal Trip Setpoint shall be specified on design output documentation which is incorporated by reference in the Updated Final Safety Analysis Report. The methodology used to determine the nominal Trip Setpoint, the predefined As Found Tolerance, and the As Left Tolerance band, and a listing of the setpoint design output documentation shall be specified in Chapter 7 of the Updated Final Safety Analysis Report.

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	FUNCTION	REQUIRED CHANNELS PER FUNCTION	CONDITIONS REFERENCED FROM REQUIRED ACTION A.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
1.	Reactor Vessel Water Level - Low Low, Level 2 ^(a)	4	В	SR 3.3.5.2.1 SR 3.3.5.2.2 SR 3.3.5.2.3	≥ 470 inches above vessel zero
_			·	SR 3.3.5.2.4	. 500
.	Reactor Vessel Water Level - High, Level 8	2	C	SR 3.3.5.2.1 SR 3.3.5.2.2 SR 3.3.5.2.3 SR 3.3.5.2.4	≤ 583 inches above vessel . zero

Table 3.3.5.2-1 (page 1 of 1) Reactor Core Isolation Cooling System Instrumentation

(a) During instrument calibrations, if the As Found channel setpoint is conservative with respect to the Allowable Value but outside its acceptable As Found band as defined by its associated Surveillance Requirement procedure, then there shall be an initial determination to ensure confidence that the channel can perform as required before returning the channel to service in accordance with the Surveillance. If the As Found instrument channel setpoint is not conservative with respect to the Allowable Value, the channel shall be declared inoperable.

Prior to returning a channel to service, the instrument channel setpoint shall be calibrated to a value that is within the acceptable As Left tolerance of the setpoint; otherwise, the channel shall be declared inoperable.

The nominal Trip Setpoint shall be specified on design output documentation which is incorporated by reference in the Updated Final Safety Analysis Report. The methodology used to determine the nominal Trip Setpoint, the predefined As Found Tolerance, and the As Left Tolerance band, and a listing of the setpoint design output documentation shall be specified in Chapter 7 of the Updated Final Safety Analysis Report.

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	FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER TRIP SYSTEM	CONDITIONS REFERENCED FROM REQUIRED ACTION C.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE			
1. N	lain Steam Line Isolation	• . •		· .					
a	. Reactor Vessel Water Level - Low Low Low, Level 1	1,2,3	2	· D ·	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.5 SR 3.3.6.1.6	≥ 398 inches above vessel zero			
ь	Main Steam Line Pressure - Low ^(C)	1	2	Ę	SR 3.3.6.1.2 SR 3.3.6.1.5 SR 3.3.6.1.6	≥ 825 psig			
c.	Main Steam Line Flow - High	1,2,3	2 per MSL	D	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.5 SR 3.3.6.1.6	≤ 140% rated steam flow			
d.	Main Steam Tunnel Temperature - High	1,2,3	8	D	SR 3.3.6.1.2 SR 3.3.6.1.5 SR 3.3.6.1.6	≤ 200°F			
2. P	rimary Containment Isolation								
a.	Reactor Vessel Water Level - Low, Level 3	1,2,3	2	G	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.5 SR 3.3.6.1.6	≥ 538 inches above vessel zero			
b.	Drywell Pressure - High	1,2,3	2	G	SR 3.3.6.1.2 SR 3.3.6.1.5 SR 3.3.6.1.6	≤ 2.5 psig			
in	igh Pressure Coolant jection (HPCI) System olation								
a.	HPCI Steam Line Flow - High	1,2,3	1	F	SR 3.3.6.1.2 SR 3.3.6.1.5 SR 3.3.6.1.6	≤ 90 psi			
b.	HPCI Steam Supply Line Pressure - Low	1,2,3	3	F	SR 3.3.6.1.2 SR 3.3.6.1.5 SR 3.3.6.1.6	≥ 100 psig			
C.	HPCI Turbine Exhaust Diaphragm Pressure - High	1,2,3	3	F	SR 3.3.6.1.2 SR 3.3.6.1.5 SR 3.3.6.1.6	≤ 20 psig			

Table 3.3.6.1-1 (page 1 of 3) Primary Containment Isolation Instrumentation

(c) During instrument calibrations, if the As Found channel setpoint is conservative with respect to the Allowable Value but outside its acceptable As Found band as defined by its associated Surveillance Requirement procedure, then there shall be an initial determination to ensure confidence that the channel can perform as required before returning the channel to service in accordance with the Surveillance. If the As Found instrument channel setpoint is not conservative with respect to the Allowable Value, the channel shall be declared inoperable.

Prior to returning a channel to service, the instrument channel setpoint shall be calibrated to a value that is within the acceptable As Left tolerance of the setpoint; otherwise, the channel shall be declared inoperable.

The nominal Trip Setpoint shall be specified on design output documentation which is incorporated by reference in the Updated Final Safety Analysis Report. The methodology used to determine the nominal Trip Setpoint, the predefined As Found Tolerance, and the As Left Tolerance band, and a listing of the setpoint design output documentation shall be specified in Chapter 7 of the Updated Final Safety Analysis Report.

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(continued)

sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;

- (4) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, possess, and use in amounts as required any byproduct, source, or special nuclear material without restriction to chemical or physical form for sample analysis or equipment and instrument calibration or associated with radioactive apparatus or components;
- (5) Pursuant to the Act and 10 CFR Parts 30 and 70, to possess but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility.
- C. This renewed operating license shall be deemed to contain and is subject to the conditions specified in the following Commission regulations in 10 CFR Chapter I: Part 20, Section 30.34 of Part 30, Section 40.41 of Part 40, Sections 50.54 and 50.59 of Part 50, and Section 70.32 of Part 70; is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:
 - (1) <u>Maximum Power Level</u>

The licensee is authorized to operate the facility at steady state reactor core power levels not in excess of 3458 megawatts thermal.

(2) <u>Technical Specifications</u>

1

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. **296**, are hereby incorporated in the renewed operating license. The licensee shall operate the facility in accordance with the Technical Specifications.

For Surveillance Requirements (SRs) that are new in Amendment 253 to Facility Operating License DPR-52, the first performance is due at the end of the first surveillance interval that begins at implementation of Amendment 253. For SRs that existed prior to Amendment 253, including SRs with modified acceptance criteria and SRs whose frequency of performance is being extended, the first performance is due at the end of the first surveillance interval that begins on the date the surveillance was last performed prior to implementation of Amendment 253.

(3) The licensee is authorized to relocate certain requirements included in Appendix A and the former Appendix B to licensee-controlled documents. Implementation of this amendment shall include the relocation of these requirements to the appropriate documents, as described in the licensee's

> Renewed License No. DPR-52 Amendment No. 296

Table 3.3.1.1-1 (page 2 of 3) Reactor Protection System Instrumentation

	FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER TRIP SYSTEM	CONDITIONS REFERENCED FROM REQUIRED ACTION D.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
2.	Average Power Range Monitors (continued)					
	d. Inop	1,2	3(p)	G	SR 3.3.1.1.16	NA
	e. 2-Out-Of-4 Voter	1,2	2	G	SR 3.3.1.1.1 SR 3.3.1.1.14 SR 3.3.1.1.16	NA
	f. OPRM Upscale	1 .	3(p)	I	SR 3.3.1.1.1 SR 3.3.1.1.7 SR 3.3.1.1.13 SR 3.3.1.1.16 SR 3.3.1.1.17	NA
3.	Reactor Vessel Steam Dome Pressure - High ^(d)	1,2	2	G	SR 3.3.1.1.1 SR 3.3.1.1.8 SR 3.3.1.1.10 SR 3.3.1.1.14	≤ 1090 psig
4.	Reactor Vessel Water Level - Low, Level 3 ^(d)	· 1,2 ·	2	G	SR 3.3.1.1.1 SR 3.3.1.1.8 SR 3.3.1.1.13 SR 3.3.1.1.14	≥ 528 inches above vessel zero
5.	Main Steam Isolation Valve - Closure	1	8	F	SR 3.3.1.1.8 SR 3.3.1.1.13 SR 3.3.1.1.14	≤ 10% closed
6.	Drywell Pressure - High	1,2	2	G	SR 3.3.1.1.8 SR 3.3.1.1.13 SR 3.3.1.1.14	≤ 2.5 psig
7.	Scram Discharge Volume Water Level - High					
	a. Resistance Temperature Detector	1,2	2	G	SR 3.3.1.1.8 SR 3.3.1:1.13 SR 3.3.1.1.14	≤ 50 gallons
		5(a)	2	н	SR 3.3.1.1.8 SR 3.3.1.1.13 SR 3.3.1.1.14	≤ 50 gallons (continued)

(a) With any control rod withdrawn from a core cell containing one or more fuel assemblies.

(b) Each APRM channel provides inputs to both trip systems.

(d) During instrument calibrations, if the As Found channel setpoint is conservative with respect to the Allowable Value but outside its acceptable As Found band as defined by its associated Surveillance Requirement procedure, then there shall be an initial determination to ensure confidence that the channel can perform as required before returning the channel to service in accordance with the Surveillance. If the As Found instrument channel setpoint is not conservative with respect to the Allowable Value, the channel shall be declared inoperable.

Prior to returning a channel to service, the instrument channel setpoint shall be calibrated to a value that is within the acceptable As Left tolerance of the setpoint; otherwise, the channel shall be declared inoperable.

The nominal Trip Setpoint shall be specified on design output documentation which is incorporated by reference in the Updated Final Safety Analysis Report. The methodology used to determine the nominal Trip Setpoint, the predefined As Found Tolerance, and the As Left Tolerance band, and a listing of the setpoint design output documentation shall be specified in Chapter 7 of the Updated Final Safety Analysis Report.

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' 3.3-8 Amendment No. 253 254 258 260 296

RPS Instrumentation 3.3.1.1

Reactor Protection System Instrumentation								
FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER TRIP SYSTEM	CONDITIONS REFERENCED FROM REQUIRED ACTION D.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE			
 Scram Discharge Volume Water Level - High (continued) 								
b. Float Switch	1,2	2	G	SR 3.3.1.1.8 SR 3.3.1.1.13 SR 3.3.1.1.14	≤ 46 gallons			
	₅ (a)	2	Н	SR 3.3.1.1.8 SR 3.3.1.1.13 SR 3.3.1.1.14	≤ 46 gallons			
8. Turbine Stop Valve - Closure	≥ 30% RTP	4	E	SR 3.3.1.1.8 SR 3.3.1.1.13 SR 3.3.1.1.14 SR 3.3.1.1.15	≤ 10% closed			
 Turbine Control Valve Fast Closure, Trip Oil Pressure - Low^(d) 	≥ 30% RTP	2	E	SR 3.3.1.1.8 SR 3.3.1.1.13 SR 3.3.1.1.14 SR 3.3.1.1.15	≥ 550 psig			
10. Reactor Mode Switch - Shutdown Position	1,2	1	G	SR 3.3.1.1.12 SR 3.3.1.1.14	NA			
	₅ (a)	. 1	н	SR 3.3.1.1.12 SR 3.3.1.1.14	NA			
11. Manual Scram	1,2	1	G	SR 3.3.1.1.8 SR 3.3.1.1.14	NA			
	₅ (a)	1	н	SR 3.3.1.1.8 SR 3.3.1.1.14	NA			
12. RPS Channel Test Switches	1,2	2	G	SR 3.3.1.1.4	NA			
	5 ^(a)	2	н	SR 3.3.1.1.4	NA			
13. Deleted								

Table 3.3.1.1-1 (page 3 of 3) eactor Protection System Instrumentation

(a) With any control rod withdrawn from a core cell containing one or more fuel assemblies.

(d) During instrument calibrations, if the As Found channel setpoint is conservative with respect to the Allowable Value but outside its acceptable As Found band as defined by its associated Surveillance Requirement procedure, then there shall be an initial determination to ensure confidence that the channel can perform as required before returning the channel to service in accordance with the Surveillance. If the As Found instrument channel setpoint is not conservative with respect to the Allowable Value, the channel shall be declared inoperable.

Prior to returning a channel to service, the instrument channel setpoint shall be calibrated to a value that is within the acceptable. As Left tolerance of the setpoint; otherwise, the channel shall be declared inoperable.

The nominal Trip Setpoint shall be specified on design output documentation which is incorporated by reference in the Updated Final Safety Analysis Report. The methodology used to determine the nominal Trip Setpoint, the predefined As Found Tolerance, and the As Left Tolerance band, and a listing of the setpoint design output documentation shall be specified in Chapter 7 of the Updated Final Safety Analysis Report.

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Amendment No. 258, 276, 296

	FUNCTION		APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER FUNCTION	CONDITIONS REFERENCED FROM REQUIRED ACTION A.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
1.	Core Spray System		•			· .	
	a. Reactor Vessel Level - Low Lo Level 1(e)		1,2,3, ₄ (a) _{, 5} (a)	4(b)	В	SR 3.3.5.1.1 SR 3.3.5.1.2 SR 3.3.5.1.5 SR 3.3.5.1.6	≥ 398 inches above vessel zero
:	b. Drywell Pressur High ^(e)	·e -	1,2,3	4(b)	В	SR 3.3.5.1.2 SR 3.3.5.1.5 SR 3.3.5.1.6	≤ 2.5 psig
1	c. Reactor Steam Pressure - Lov Permissive and Initiation) ^(e)	v (Injection	1,2,3	4(b) 2 per trip system	C	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ 435 psig and ≤ 465 psig
	in a company of the c		4(a) _{, 5} (a)	4 2 per trip system	В	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ 435 psig and ≤ 465 psig
l	d. Core Spray Pur Discharge Flow (Bypass)		1,2,3, ₄ (a) _{, 5} (a)	2 1 per subsystem	E	SR 3.3.5.1.2 SR 3.3.5.1.5	≥ 1647 gpm and ≤ 2910 gpm
	e. Core Spray Pur Time Delay Rel		•				
	Pumps A,B,C,D diesel power)	(with	1,2,3, ₄ (a) _{, 5} (a)	4 1 per pump	С	SR 3.3.5.1.5 SR 3.3.5.1.6	≥ 6 seconds and ≤ 8 seconds
	Pump A (with no power)	ormal	1,2,3, 4 ^(a) , 5 ^(a)	1	С	SR 3.3.5.1.5 SR 3.3.5.1.6	≥ 0 seconds and ≤ 1 second
	Pump B (with no power)	omal	1,2,3, 4(a) _{, 5} (a)	1	С	SR 3.3.5.1.5 SR 3.3.5.1.6	≥ 6 seconds and ≤ 8 seconds
	•						(continued)

Table 3.3.5.1-1 (page 1 of 6) Emergency Core Cooling System Instrumentation

(a) When associated subsystem(s) are required to be OPERABLE.

(b) Channels affect Common Accident Signal Logic. Refer to LCO 3.8.1, "AC Sources - Operating."

(e) During instrument calibrations, if the As Found channel setpoint is conservative with respect to the Allowable Value but outside its acceptable As Found band as defined by its associated Surveillance Requirement procedure, then there shall be an initial determination to ensure confidence that the channel can perform as required before returning the channel to service in accordance with the Surveillance. If the As Found instrument channel setpoint is not conservative with respect to the Allowable Value, the channel shall be declared inoperable.

Prior to returning a channel to service, the instrument channel setpoint shall be calibrated to a value that is within the acceptable As Left tolerance of the setpoint; otherwise, the channel shall be declared inoperable.

The nominal Trip Setpoint shall be specified on design output documentation which is incorporated by reference in the Updated Final Safety Analysis Report. The methodology used to determine the nominal Trip Setpoint, the predefined As Found Tolerance, and the As Left Tolerance band, and a listing of the setpoint design output documentation shall be specified in Chapter 7 of the Updated Final Safety Analysis Report.

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Table 3.3.5.1-1 (page 2 of 6) **Emergency Core Cooling System Instrumentation**

	FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER FUNCTION	CONDITIONS REFERENCED FROM REQUIRED ACTION A.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
1.	Core Spray System (continued)	•	•			
	e. Core Spray Pump Start - Time Delay Relay (continued)					
	Pump C (with normal power)	1,2,3, ₄ (a) _{, 5} (a)	1	С	SR 3.3.5.1.5 SR 3.3.5.1.6	≥ 12 seconds and ≤ 16 seconds
	Pump D (with normal power)	1,2,3, ₄ (a) _{, 5} (a)	1	С	SR 3.3.5.1.5 SR 3.3.5.1.6	≥ 18 seconds and ≤ 24 seconds
2.	Low Pressure Coolant Injection (LPCI) System				·	2270000000
	a. Reactor Vessel Water Level - Low Low Low, Level 1 ^(e)	1,2,3, 4(a) _{, 5} (a)	4	В	SR 3.3.5.1.1 SR 3.3.5.1.2 SR 3.3.5.1.5 SR 3.3.5.1.6	≥ 398 inches above vessel zero
	b. Drywell Pressure - High(e)	1,2,3	4	В	SR 3.3.5.1.2 SR 3.3.5.1.5 SR 3.3.5.1.6	≤ 2.5 psig
	c. Reactor Steam Dome Pressure - Low (Injection Permissive and ECCS Initiation) ^(e)	1,2,3	. 4	С	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ 435 psig and ≤ 465 psig
		4(a) _{, 5} (a)	4	В	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ 435 psig and ≤ 465 psig
				•		(continued)

(e) During instrument calibrations, if the As Found channel setpoint is conservative with respect to the Allowable Value but outside its acceptable As Found band as defined by its associated Surveillance Requirement procedure, then there shall be an initial determination to ensure confidence that the channel can perform as required before returning the channel to service in accordance with the Surveillance. If the As Found instrument channel setpoint is not conservative with respect to the Allowable Value, the channel shall be declared inoperable.

Prior to returning a channel to service, the instrument channel setpoint shall be calibrated to a value that is within the acceptable As Left tolerance of the setpoint; otherwise, the channel shall be declared inoperable.

The nominal Trip Setpoint shall be specified on design output documentation which is incorporated by reference in the Updaled Final Safety Analysis Report. The methodology used to determine the nominal Trip Setpoint, the predefined As Found Tolerance, and the As Left Tolerance band, and a listing of the setpoint design output documentation shall be specified in Chapter 7 of the Updated Final Safety Analysis Report.

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⁽b) Deleted.

				re Cooling Syste	m Instrumentation		
		FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER FUNCTION	CONDITIONS REFERENCED FROM REQUIRED ACTION A,1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
2.	LP	CI System (continued)					
	d.	Reactor Steam Dome Pressure - Low (Recirculation Discharge Valve Permissive) ^(e)	1 ^{(c),2(c),} 3 ^(c)	4	С	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ 215 psig and ≤ 245 psig
	e.	Reactor Vessel Water Level - Level 0	1,2,3	2 1 per subsystem	В	SR 3.3.5.1.1 SR 3.3.5.1.2 SR 3.3.5.1.5 SR 3.3.5.1.6	≥ 312 5/16 inches above vessel zero
	f.	Low Pressure Coolant Injection Pump Start - Time Delay Relay	·	. *		•	
		Pump A,B,C,D (with diesel power)	1,2,3, 4(a) _{, 5} (a)	4	С	SR 3.3.5.1.5 SR 3.3.5.1.6	≥ 0 seconds and ≤ 1 second
		Pump A (with normal power)	1,2,3, 4 ^(a) , 5 ^(a)	1	С	SR 3.3.5.1.5 SR 3.3.5.1.6	≥ 0 seconds and ≤ 1 second
		Pump B (with normal power)	1,2,3, 4(a) _{, 5} (a)	1	с	SR 3.3.5.1.5 SR 3.3.5.1.6	≥ 6 seconds and ≤ 8 seconds
		Pump C (with normal power)	1,2,3, 4(a) _{, 5} (a)	1	C	SR 3.3.5.1.5 SR 3.3.5.1.6	≥ 12 seconds and ≤ 16 seconds
		Pump D (with normal power)	1,2,3, 4 ^(a) , 5 ^(a)	1	C	SR 3.3.5.1.5 SR 3.3.5.1.6	≥ 18 seconds and ≤ 24 seconds (continued)

Table 3.3.5.1-1 (page 3 of 6)

When the associated subsystem(s) are required to be OPERABLE. (a)

(c) With associated recirculation pump discharge valve open.

(e) During instrument calibrations, if the As Found channel setpoint is conservative with respect to the Allowable Value but outside its acceptable As Found band as defined by its associated Surveillance Requirement procedure, then there shall be an initial determination to ensure confidence that the channel can perform as required before returning the channel to service in accordance with the Surveillance. If the As Found instrument channel setpoint is not conservative with respect to the Allowable Value, the channel shall be declared inoperable.

Prior to returning a channel to service, the instrument channel setpoint shall be calibrated to a value that is within the acceptable As Left tolerance of the setpoint; otherwise, the channel shall be declared inoperable.

The nominal Trip Setpoint shall be specified on design output documentation which is incorporated by reference in the Updated Final Safety Analysis Report. The methodology used to determine the nominal Trip Setpoint, the predefined As Found Tolerance, and the As Left Tolerance band, and a listing of the setpoint design output documentation shall be specified in Chapter 7 of the Updated Final Safety Analysis Report.

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	FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER FUNCTION	CONDITIONS REFERENCED FROM REQUIRED ACTION A.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE		
3.	High Pressure Coolant Injection (HPCI) System	~		·	· · · · · · · · · · · ·			
	 a. Reactor Vessel Water Level - Low Low, Level 2^(e) 	1, 2 ^(d) , 3 ^(d)	4	В	SR 3.3.5.1.1 SR 3.3.5.1.2 SR 3.3.5.1.5 SR 3.3.5.1.6	≥ 470 inches above vessel zero		
	b. Drywell Pressure - High ^(e)	1, 2 ^(d) ,3 ^(d)	4 .	В .	SR 3.3.5.1.2 SR 3.3.5.1.5 SR 3.3.5.1.6	≤ 2.5 psig		
	 c. Reactor Vessel Water Level - High, Level 8 	1, 2(d) _{, 3} (d)	2	С	SR 3.3.5.1.1 SR 3.3.5.1.2 SR 3.3.5.1.5 SR 3.3.5.1.6	≤ 583 inches above vessel zero		
	d. Condensate Header Level - Low	1, 2(d) _{, 3} (d)	1	D	SR 3.3.5.1.2 SR 3.3.5.1.3 SR 3.3.5.1.6	≥ Elev. 551 feet		
	e. Suppression Pool Water Level - High	1, 2(d) _{, 3} (d)	1	D	SR 3.3.5.1.2 SR 3.3.5.1.3 SR 3.3.5.1.6	≤ 7 inches above instrument zero		
	 High Pressure Coolant Injection Pump Discharge Flow - Low (Bypass) 	1, 2 ^(d) , 3 ^(d)	1.	E	SR 3.3.5.1.2 SR 3.3.5.1.5 SR 3.3.5.1.6	≥ 671 gpm		
4.	Automatic Depressurization System (ADS) Trip System A				•	. •		
	a. Reactor Vessel Water Level - Low Low Low, Level 1 ^(e)	1, 2 ^(d) , 3 ^(d)	2	F	SR 3.3.5.1.1 SR 3.3.5.1.2 SR 3.3.5.1.5 SR 3.3.5.1.6	≥ 398 inches above vessel zero		
						(continued)		

Table 3.3.5.1-1 (page 4 of 6) Emergency Core Cooling System Instrumentation

(d) With reactor steam dome pressure > 150 psig.

(e) During instrument calibrations, if the As Found channel setpoint is conservative with respect to the Allowable Value but outside its acceptable As Found band as defined by its associated Surveillance Requirement procedure, then there shall be an initial determination to ensure confidence that the channel can perform as required before returning the channel to service in accordance with the Surveillance. If the As Found instrument channel setpoint is not conservative with respect to the Allowable Value, the channel shall be declared inoperable.

Prior to returning a channel to service, the instrument channel setpoint shall be calibrated to a value that is within the acceptable As Left tolerance of the setpoint; otherwise, the channel shall be declared inoperable.

The nominal Trip Setpoint shall be specified on design output documentation which is incorporated by reference in the Updated Final Safety Analysis Report. The methodology used to determine the nominal Trip Setpoint, the predefined As Found Tolerance, and the As Left Tolerance band, and a listing of the setpoint design output documentation shall be specified in Chapter 7 of the Updated Final Safety Analysis Report.

BFN-UNIT 2

Amendment No.-253, 296

			Emergency Cor	e Cooling Syster	n Instrumentation			
		FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER FUNCTION	CONDITIONS REFERENCED FROM REQUIRED ACTION A.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE	_
4.	AE	DS Trip System A (continued)						_
	b.	Drywell Pressure - High(e)	1, 2(d) _{, 3} (d)	2	F	SR 3.3.5.1.2 SR 3.3.5.1.5 SR 3.3.5.1.6	≤2.5 psig]
	C.	Automatic Depressurization System Initiation Timer	1, 2(d) _{, 3} (d)	1	G	SR 3.3.5.1.5 SR 3.3.5.1.6	≤ 115 seconds	
	d.	Reactor Vessel Water Level - Low, Level 3 (Confirmatory) ^(e)	1, 2 ^(d) , 3 ^(d)	1.	F	SR 3.3.5.1.1 SR 3.3.5.1.2 SR 3.3.5.1.5 SR 3.3.5.1.6	≥ 528 inches above vessel zero	1
	e.	Core Spray Pump Discharge Pressure - High	1, 2(d) _{, 3} (d)	4	G	SR 3.3.5.1.2 SR 3.3.5.1.3 SR 3.3.5.1.6	≥ 175 psig and ≤ 195 psig	
	ţ.	Low Pressure Coolant Injection Pump Discharge Pressure - High	1, 2 ^(d) , 3 ^(d)	8	G	SR 3.3.5.1.2 SR 3.3.5.1.3 SR 3.3.5.1.6	≥ 90 psig and ≤ 110 psig	
•	g.	Automatic Depressurization System High Drywell Pressure Bypass Timer	1, 2(d) _{, 3} (d)	2	G	SR 3.3.5.1.5 SR 3.3.5.1.6	≤ 322 seconds	
5.	AD	OS Trip System B	•					
	a.	Reactor Vessel Waler Level - Low Low Low, Level 1 ^(e)	1, 2(d) _{, 3} (d)	2	F	SR 3.3.5.1.1 SR 3.3.5.1.2 SR 3.3.5.1.5 SR 3.3.5.1.6	≥ 398 inches above vessel zero	1
							(continued)	_

Table 3.3.5.1-1 (page 5 of 6) mergency Core Cooling System Instrumentation

(d) With reactor steam dome pressure > 150 psig.

(e) During instrument calibrations, if the As Found channel setpoint is conservative with respect to the Allowable Value but outside its acceptable As Found band as defined by its associated Surveillance Requirement procedure, then there shall be an initial determination to ensure confidence that the channel can perform as required before returning the channel to service in accordance with the Surveillance. If the As Found instrument channel setpoint is not conservative with respect to the Allowable Value, the channel shall be declared inoperable.

Prior to returning a channel to service, the instrument channel setpoint shall be calibrated to a value that is within the acceptable As Left tolerance of the setpoint; otherwise, the channel shall be declared inoperable.

The nominal Trip Setpoint shall be specified on design output documentation which is incorporated by reference in the Updated Final Safety Analysis Report. The methodology used to determine the nominal Trip Setpoint, the predefined As Found Tolerance, and the As Left Tolerance band, and a listing of the setpoint design output documentation shall be specified in Chapter 7 of the Updated Final Safety Analysis Report.

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Amendment No. 253, 260, 296

Emergency Core Cooling System Instrumentation							
		FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER FUNCTION	CONDITIONS REFERENCED FROM REQUIRED ACTION A.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
5.	A	OS Trip System B (continued)	· .				
	b.	Drywell Pressure - High(e)	1, 2(d) _{, 3} (d)	2	F	SR 3.3.5.1.2 SR 3.3.5.1.5 SR 3.3.5.1.6	≤ 2.5 psig
	C.	Automatic Depressurization System Initiation Timer	1, 2 ^(d) , 3 ^(d)	1	G	SR 3.3.5.1.5 SR 3.3.5.1.6	≤ 115 seconds
	d.	Reactor Vessel Water Level - Low, Level 3 (Confirmatory) ^(e)	1, 2(d) _{, 3} (d)	1	F	SR 3.3.5.1.1 SR 3.3.5.1.2 SR 3.3.5.1.5 SR 3.3.5.1.6	≥ 528 inches above vessei zero
	e.	Core Spray Pump Discharge Pressure - High	1, 2(d) _{, 3} (d)	. 4	G	SR 3.3.5.1.2 SR 3.3.5.1.3 SR 3.3.5.1.6	≥ 175 psig and ≤ 195 psig
	f.	Low Pressure Coolant Injection Pump Discharge Pressure - High	1, 2(d) _{, 3} (d)	8	G	SR 3.3.5.1.2 SR 3.3.5.1.3 SR 3.3.5.1.6	≥ 90 psig and ≤ 110 psig
	g.	Automatic Depressurization System High Drywell Pressure Bypass Timer	1, 2(d) _{, 3} (d)	2	G	SR 3.3.5.1.5 SR 3.3.5.1.6	≤ 322 seconds

Table 3.3.5.1-1 (page 6 of 6) nergency Core Cooling System Instrumentation

(d) With reactor steam dome pressure > 150 psig.

(c) During instrument calibrations, if the As Found channel sctpoint is conservative with respect to the Allowable Value but outside its acceptable As Found band as defined by its associated Surveillance Requirement procedure, then there shall be an initial determination to ensure confidence that the channel can perform as required before returning the channel to service in accordance with the Surveillance. If the As Found instrument channel setpoint is not conservative with respect to the Allowable Value, the channel shall be declared inoperable.

Prior to returning a channel to service, the instrument channel setpoint shall be calibrated to a value that is within the acceptable As Left tolerance of the setpoint; otherwise, the channel shall be declared inoperable.

The nominal Trip Setpoint shall be specified on design output documentation which is incorporated by reference in the Updated Final Safety Analysis Report. The methodology used to determine the nominal Trip Setpoint, the predefined As Found Tolerance, and the As Left Tolerance band, and a listing of the setpoint design output documentation shall be specified in Chapter 7 of the Updated Final Safety Analysis Report.

BFN-UNIT 2

Amendment No.-253, 296

	FUNCTION	REQUIRED CHANNELS PER FUNCTION	CONDITIONS REFERENCED FROM REQUIRED ACTION A.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
۱.	Reactor Vessel Water Level - Low Low, Level 2 ^(a)	4	B	SR 3.3.5.2.1 SR 3.3.5.2.2 SR 3.3.5.2.3 SR 3.3.5.2.4	≥ 470 inches above vessel zero
2.	Reactor Vessel Water Level - High, Level 8	2	С	SR 3.3.5.2.1 SR 3.3.5.2.2 SR 3.3.5.2.3 SR 3.3.5.2.4	≤ 583 inches above vessel zero

Table 3.3.5.2-1 (page 1 of 1) teactor Core Isolation Cooling System Instrumentation

(a) During instrument calibrations, if the As Found channel setpoint is conservative with respect to the Allowable Value but outside its acceptable As Found band as defined by its associated Surveillance Requirement procedure, then there shall be an initial determination to ensure confidence that the channel can perform as required before returning the channel to service in accordance with the Surveillance. If the As Found instrument channel setpoint is not conservative with respect to the Allowable Value, the channel shall be declared inoperable.

Prior to returning a channel to service, the instrument channel setpoint shall be calibrated to a value that is within the acceptable As Left tolerance of the setpoint; otherwise, the channel shall be declared inoperable.

The nominal Trip Setpoint shall be specified on design output documentation which is incorporated by reference in the Updated Final Safety Analysis Report. The methodology used to determine the nominal Trip Setpoint, the predefined As Found Tolerance, and the As Left Tolerance band, and a listing of the setpoint design output documentation shall be specified in Chapter 7 of the Updated Final Safety Analysis Report.

BFN-UNIT 2

Amendment No.-253, 296

Primary Containment Isolation Instrumentation 3.3.6.1

	<u>. </u>		Primary Cont	ainment isolatior			
		FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER TRIP SYSTEM	CONDITIONS REFERENCED FROM REQUIRED ACTION C.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
1.	Main S	Steam Line Isolation					
	Le	actor Vessel Water vel - Low Low Low, vel 1	1,2,3	2	D	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.5 SR 3.3.6.1.6	≥ 398 inches above vessel zero
		in Steam Line Pressure .ow ^(c)	1	2	E	SR 3.3.6.1.2 SR 3.3.6.1.5 SR 3.3.6.1.6	≥ 825 psig
	c. Ma Hig	in Steam Line Flow - h	1,2,3	2 per MSL	D	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.5 SR 3.3.6.1.6	≤ 140% rated steam flow
		in Steam Tunnel mperature - High	1,2,3	8	D	SR 3.3.6.1.2 SR 3.3.6.1.5 SR 3.3.6.1.6	≲ 200°F
2.	Primar	y Containment Isolation					
		actor Vessel Water /el - Low, Level 3	1,2,3	2	G	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.5 SR 3.3.6.1.6	≥ 528 inches above vessel zero
	b. Dry	well Pressure - High	1,2,3	2.	G	SR 3.3.6.1.2 SR 3.3.6.1.5 SR 3.3.6.1.6	≤ 2.5 psig
3.		ressure Coolant n (HPCI) System n	• •	. <i>.</i>			
	a. HP Hig	CI Steam Line Flow - h	1,2,3	1 .	. F	SR 3.3.6.1.2 SR 3.3.6.1.5 SR 3.3.6.1.6	≤ 90 psi
		Cl Steam Supply Line ssure - Low	1,2,3	3	F	SR 3.3.6.1.2 SR 3.3.6.1.5 SR 3.3.6.1.6	≥ 100 psig
	Exh	Cl Turbine laust Diaphragm ssure - High	1,2,3	3	F	SR 3.3.6.1.2 SR 3.3.6.1.5 SR 3.3.6.1.6	≤ 20 psig

Table 3.3.6.1-1 (page 1 of 3) Primary Containment Isolation Instrumentation

(c) During instrument calibrations, if the As Found channel setpoint is conservative with respect to the Allowable Value but outside its acceptable As Found band as defined by its associated Surveillance Requirement procedure, then there shall be an initial determination to ensure confidence that the channel can perform as required before returning the channel to service in accordance with the Surveillance. If the As Found instrument channel setpoint is not conservative with respect to the Allowable Value, the channel shall be declared inoperable.

Prior to returning a channel to service, the instrument channel setpoint shall be calibrated to a value that is within the acceptable As Left tolerance of the setpoint; otherwise, the channel shall be declared inoperable.

The nominal Trip Setpoint shall be specified on design output documentation which is incorporated by reference in the Updated Final Safety Analysis Report. The methodology used to determine the nominal Trip Setpoint, the predefined As Found Tolerance, and the As Left Tolerance band, and a listing of the setpoint design output documentation shall be specified in Chapter 7 of the Updated Final Safety Analysis Report.

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Amendment No. 253, 260, 296

(continued)

- (3) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, possess, and use at any time any byproduct, source, and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
- (4) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, possess, and use in amounts as required any byproduct, source, or special nuclear material without restriction to chemical or physical form for sample analysis or equipment and instrument calibration or associated with radioactive apparatus or components;
- (5) Pursuant to the Act and 10 CFR Parts 30 and 70, to possess but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility.
- C. This renewed operating license shall be deemed to contain and is subject to the conditions specified in the following Commission regulations in 10 CFR Chapter I: Part 20, Section 30.34 of Part 30, Section 40.41 of Part 40, Sections 50.54 and 50.59 of Part 50, and Section 70.32 of Part 70; is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:
 - (1) <u>Maximum Power Level</u>

The licensee is authorized to operate the facility at steady state reactor core power levels not in excess of 3458 megawatts thermal.

(2) <u>Technical Specifications</u>

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 254, except for Amendment No. 248, are hereby incorporated in the renewed operating license. The licensee shall operate the facility in accordance with the Technical Specifications.

For Surveillance Requirements (SRs) that are new in Amendment 212 to Facility Operating License DPR-68, the first performance is due at the end of the first surveillance interval that begins at implementation of the Amendment 212. For SRs that existed prior to Amendment 212, including SRs with modified acceptance criteria and SRs whose frequency of performance is being extended, the first performance is due at the end of the first surveillance interval that begins on the date the surveillance was last performed prior to implementation of Amendment 212.

> Renewed License No. DPR-68 Amendment No. 254

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RPS Instrumentation 3.3.1.1

Table 3.3.1.1-1 (page 2 of 3) Reactor Protection System Instrumentation

	FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER TRIP SYSTEM	CONDITIONS REFERENCED FROM REQUIRED ACTION D.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
2.	Average Power Range Monitors (continued)	•				
	d. Inop	1,2	3(b)	Ģ	SR 3.3.1.1.16	NA
	e. 2-Out-Of-4 Voter	1,2	· 2	G	SR 3.3.1.1.1 SR 3.3.1.1.14 SR 3.3.1.1.16	NA
	f. OPRM Upscale	1	3(b)	l	SR 3.3.1.1.1 SR 3.3.1.1.7 SR 3.3.1.1.13 SR 3.3.1.1.16 SR 3.3.1.1.17	NA
3.	Reactor Vessel Steam Dome Pressure - High ^(d)	1,2	2	G	SR 3.3.1.1.1 SR 3.3.1.1.8 SR 3.3.1.1.10 SR 3.3.1.1.14	≤ 1090 psig
! .	Reactor Vessel Water Level - Low, Level 3 ^(d)	1,2	2	G	SR 3.3.1.1.1 SR 3.3.1.1.8 SR 3.3.1.1.13 SR 3.3.1.1.14	≥ 528 inches above vessel zero
5.	Main Steam Isolation Valve - Closure	<u>1</u>	8	F	SR 3.3.1.1.8 SR 3.3.1.1.13 SR 3.3.1.1.14	≤ 10% closed
5.	Drywell Pressure - High	1,2	2	G	SR 3.3.1.1.8 SR 3.3.1.1.13 SR 3.3.1.1.14	≤ 2.5 psig
•	Scram Discharge Volume Water Level - High	· ·				
	a. Resistance Temperature Detector	1,2	2	G	SR 3.3.1.1.8 SR 3.3.1.1.13 SR 3.3.1.1.14	≤ 50 gallons
		5(a)	2	Н	SR 3.3.1.1.8 SR 3.3.1.1.13	≲ 50 gallons
					SR 3.3.1.1.14	

(a) With any control rod withdrawn from a core cell containing one or more fuel assemblies.

(b) Each APRM channel provides inputs to both trip systems.

(d) During instrument calibrations, if the As Found channel setpoint is conservative with respect to the Allowable Value but outside its acceptable As Found band as defined by its associated Surveillance Requirement procedure, then there shall be an initial determination to ensure confidence that the channel can perform as required before returning the channel to service in accordance with the Surveillance. If the As Found instrument channel setpoint is not conservative with respect to the Allowable Value, the channel shall be declared inoperable.

Prior to returning a channel to service, the instrument channel setpoint shall be calibrated to a value that is within the acceptable As Left tolerance of the setpoint; otherwise, the channel shall be declared inoperable.

The nominal Trip Setpoint shall be specified on design output documentation which is incorporated by reference in the Updated Final Safety Analysis Report. The methodology used to determine the nominal Trip Setpoint, the predefined As Found Tolerance, and the As Left Tolerance band, and a listing of the setpoint design output documentation shall be specified in Chapter 7 of the Updated Final Safety Analysis Report.

3.3-8 Amendment No 212-213-214-219-221 254

RPS Instrumentation 3.3.1.1

Reactor Protection System Instrumentation							
FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER TRIP SYSTEM	CONDITIONS REFERENCED FROM REQUIRED ACTION D.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE		
 Scram Discharge Volume Water Level - High 	• •						
b. Float Switch	1 ,2	2	G	SR 3.3.1.1.8 SR 3.3.1.1.13 SR 3.3.1.1.14	≤ 46 gailons		
	₅ (a)	. 2	H ·	SR 3.3.1.1.8 SR 3.3.1.1.13 SR 3.3.1.1.14	≤ 46 gailons		
8. Turbine Stop Valve - Closure	≥ 30% RTP	4 .	E	SR 3.3.1.1.8 SR 3.3.1.1.13 SR 3.3.1.1.14 SR 3.3.1.1.15	≤ 10% closed		
 Turbine Control Valve Fast Closure, Trip Oil Pressure - Low^(d) 	≥ 30% RTP	2	· E ·	SR 3.3.1.1.8 SR 3.3.1.1.13 SR 3.3.1.1.14 SR 3.3.1.1.15	≥ 550 psig		
10. Reactor Mode Switch - Shutdown Position	1,2	1	Ğ	SR 3.3.1.1.12 SR 3.3.1.1.14	NA		
· .	₅ (a)	1	н	SR 3.3.1.1.12 SR 3.3.1.1.14	NA .		
11. Manual Scram	1,2	1	G	SR 3.3.1.1.8 SR 3.3.1.1.14	NA		
	₅ (a)	1	н	SR 3.3.1.1.8 SR 3.3.1.1.14	NA		
12. RPS Channel Test Switches	1,2	2	G	SR 3.3.1.1.4	NA		
	5(a)	2	. H	SR 3.3.1.1.4	NA		
13. Deleted				2			

Table 3.3.1.1-1 (page 3 of 3) Reactor Protection System Instrumentation

(a) With any control rod withdrawn from a core cell containing one or more fuel assemblies.

(d) During instrument calibrations, if the As Found channel setpoint is conservative with respect to the Allowable Value but outside its acceptable As Found band as defined by its associated Surveillance Requirement procedure, then there shall be an initial determination to ensure confidence that the channel can perform as required before returning the channel to service in accordance with the Surveillance. If the As Found instrument channel setpoint is not conservative with respect to the Allowable Value, the channel shall be declared inoperable.

Prior to returning a channel to service, the instrument channel setpoint shall be calibrated to a value that is within the acceptable As Left tolerance of the setpoint; otherwise, the channel shall be declared inoperable.

The nominal Trip Setpoint shall be specified on design output documentation which is incorporated by reference in the Updated Final Safety Analysis Report. The methodology used to determine the nominal Trip Setpoint, the predefined As Found Tolerance, and the As Left Tolerance band, and a listing of the setpoint design output documentation shall be specified in Chapter 7 of the Updated Final Safety Analysis Report.

BFN-UNIT 3

3.3-9 Amendment No.-212-213-221-235 254

Pressure — Low (Injection2 per tripSR 3.3.5.1.4≤ 465 psigPermissive and ECCSsystemSR 3.3.5.1.6Initiation) ^(f)		FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER FUNCTION	CONDITIONS REFERENCED FROM REQUIRED ACTION A.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Co	ore Spray System	_				
b. Drywent riessure — Linght1.2.3 Pressure — Low (Injection Permissive and ECCS Initiation) ^(f) SR 3.3.5.1.5 Spectrum Spectrum (a), 5(a)SR 3.3.5.1.2 Spectrum Spectrum Spectrum (a), 5(a)SR 3.3.5.1.2 Spectrum 	a.			4(b)	В	SR 3.3.5.1.2 SR 3.3.5.1.5	above vessel
Pressure — Low (Injection Permissive and ECCS Initiation)(f) $2 \text{ per trip}systemSR 3.3.5.1.4SR 3.3.5.1.6\leq 465 \text{ psig}4^{(a)}, 5^{(a)}4BSR 3.3.5.1.2SR 3.3.5.1.4\geq 435 \text{ psig} an\leq 465 \text{ psig}d. Core Spray Pump DischargeFlow — Low (Bypass)1,2,3,4^{(a)}, 5^{(a)}2ESR 3.3.5.1.2SR 3.3.5.1.6\geq 1647 \text{ gpm}and\leq 2910 \text{ gpm}e. Core Spray Pump Start —Time Delay Relay1,2,3,4^{(a)}, 5^{(a)}4CSR 3.3.5.1.5SR 3.3.5.1.6\geq 6 \text{ seconds}and\leq 8 \text{ seconds}Pump A (with normal power)1,2,3,4^{(a)}, 5^{(a)}1CSR 3.3.5.1.5SR 3.3.5.1.6\geq 0 \text{ seconds}and\leq 1 \text{ second}Pump B (with normal power)1,2,3,4^{(a)}, 5^{(a)}1CSR 3.3.5.1.5SR 3.3.5.1.6\geq 0 \text{ seconds}and\leq 1 \text{ second}Pump B (with normal power)1,2,3,4^{(a)}, 5^{(a)}1CSR 3.3.5.1.5SR 3.3.5.1.6\geq 0 \text{ seconds}and\leq 1 \text{ second}$	b.	Drywell Pressure — High ^(f)	1,2,3	4(b)	B	SR 3.3.5.1.5	≤ 2.5 psig [°]
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	C.	Pressure — Low (Injection Permissive and ECCS	1,2,3	2 per trip	С	SR 3.3.5.1.4	≥ 435 psig and ≤ 465 psig
Flow — Low (Bypass) $4(a), 5(a)$ 1 per subsystemSR 3.3.5.1.5and ≤ 2910 gpme. Core Spray Pump Start — Time Delay RelayPumps A,B,C,D (with diesel $4(a), 5(a)$ 1.2.3, 4 1 per pumpCSR 3.3.5.1.5 SR 3.3.5.1.6 ≥ 6 seconds 		· · · · · · · · ·	₄ (a) _{, 5} (a)	2 per trip	В	SR 3.3.5.1.4	≥ 435 psig and ≤ 465 psig
Time Delay RelayPumps A,B,C,D (with diesel power)1,2,3, $4(a),5(a)$ 4CSR 3.3.5.1.5 SR 3.3.5.1.6 ≥ 6 seconds 	d.			1 per	E		and
power) $4(a), 5(a)$ 1 per pump SR 3.3.5.1.6 and Pump A (with normal power) $1,2,3, 4(a), 5(a)$ 1 C SR 3.3.5.1.5 ≥ 0 seconds Pump B (with normal power) $1,2,3, 4(a), 5(a)$ 1 C SR 3.3.5.1.6 ≥ 0 seconds Pump B (with normal power) $1,2,3, 4(a), 5(a)$ 1 C SR 3.3.5.1.5 ≥ 0 seconds Pump B (with normal power) $1,2,3, 4(a), 5(a)$ 1 C SR 3.3.5.1.5 ≥ 6 seconds	e.						
$4^{(a)}, 5^{(a)}$ SR 3.3.5.1.6and ≤ 1 secondPump B (with normal power)1,2,3,1CSR 3.3.5.1.5 ≥ 6 seconds $4^{(a)}, 5^{(a)}$ SR 3.3.5.1.6and				4 1 per pump	С		and
4(a) 5(a) SR 3.3.5.1.6 and		Pump A (with normal power)		. 1	C		and
		Pump B (with normal power)		1	C		and

Table 3.3.5.1-1 (page 1 of 6) Emergency Core Cooling System Instrumentation

(a) When associated subsystem(s) are required to be OPERABLE.

(b) Channels affect Common Accident Signal Logic. Refer to LCO 3.8.1, "AC Sources - Operating."

(f) During instrument calibrations, if the As Found channel setpoint is conservative with respect to the Allowable Value but outside its acceptable As Found band as defined by its associated Surveillance Requirement procedure, then there shall be an initial determination to ensure confidence that the channel can perform as required before returning the channel to service in accordance with the Surveillance. If the As Found instrument channel setpoint is not conservative with respect to the Allowable Value, the channel shall be declared inoperable.

Prior to returning a channel to service, the instrument channel setpoint shall be calibrated to a value that is within the acceptable As Left tolerance of the setpoint; otherwise, the channel shall be declared inoperable.

The nominal Trip Setpoint shall be specified on design output documentation which is incorporated by reference in the Updated Final Safety Analysis Report. The methodology used to determine the nominal Trip Setpoint, the predefined As Found Tolerance, and the As Left Tolerance band, and a listing of the setpoint design output documentation shall be specified in Chapter 7 of the Updated Final Safety Analysis Report.

BFN-UNIT 3

Amendment No.-213, 254

Table 3.3.5.1-1 (page 2 of 6) Emergency Core Cooling System Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER FUNCTION	CONDITIONS REFERENCED FROM REQUIRED ACTION A.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
 Core Spray System (continued) 					
e. Core Spray Pump Start — Time Delay Relay (continued)			•		
Pump C (with normal power)	1,2,3, 4(a) _{, 5} (a)	1	С	SR 3.3.5.1.5 SR 3.3.5.1.6	≥ 12 seconds and ≤ 16 seconds
Pump D (with normal power)	1,2,3, ₄ (a) _{, 5} (a)	1	С	SR 3.3.5.1.5 SR 3.3.5.1.6 .	≥ 18 seconds and ≤ 24 seconds
 Low Pressure Coolant Injection (LPCI) System 		·		•	s 24 seconds
a. Reactor Vessel Water Level — Low Low Low, Level 1 ^(f)	1,2,3, 4(a) _{, 5} (a)	4	В	SR 3.3.5.1.1 SR 3.3.5.1.2 SR 3.3.5.1.5 SR 3.3.5.1.6	≥ 398 inches above vessel zero
b. Drywell Pressure — High ^(f)	1,2,3	4	B	SR 3.3.5.1.2 SR 3.3.5.1.5 SR 3.3.5.1.6	≤2.5 psig
c. Reactor Steam Dome Pressure — Low (Injection Permissive and ECCS	1,2,3	4	c	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ 435 psig an ≤ 465 psig
Initiation) ^(f)	4(a) _{, 5} (a)	4	B	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ 435 psig an ≤ 465 psig
			•		(continued

(a) When associated subsystem(s) are required to be OPERABLE.

(b) Deleted.

(f) During instrument calibrations, if the As Found channel setpoint is conservative with respect to the Allowable Value but outside its acceptable As Found band as defined by its associated Surveillance Requirement procedure, then there shall be an initial determination to ensure confidence that the channel can perform as required before returning the channel to service in accordance with the Surveillance. If the As Found instrument channel setpoint is not conservative with respect to the Allowable Value, the channel shall be declared inoperable.

Prior to returning a channel to service, the instrument channel setpoint shall be calibrated to a value that is within the acceptable As Left tolerance of the setpoint; otherwise, the channel shall be declared inoperable.

The nominal Trip Setpoint shall be specified on design output documentation which is incorporated by reference in the Updated Final Safety Analysis Report. The methodology used to determine the nominal Trip Setpoint, the predefined As Found Tolerance, and the As Left Tolerance band, and a listing of the setpoint design output documentation shall be specified in Chapter 7 of the Updated Final Safety Analysis Report.

Table 3.3.5.1-1 (page 3 of 6) Emergency Core Cooling System Instrumentation							·
		FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER FUNCTION	CONDITIONS REFERENCED FROM REQUIRED ACTION A.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
2.	LF	CI System (continued)					
	d.	Reactor Steam Dome Pressure — Low (Recirculation Discharge Valve Permissive) ^(f)	1(c),2(c), 3(c)	4	С	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ 215 psig and ≤ 245 psig
	e.	Reactor Vessel Water Level — Level 0	1,2,3	2 1 per subsystem	В	SR 3.3.5.1.1 SR 3.3.5.1.2 SR 3.3.5.1.5 SR 3.3.5.1.6	≥ 312 5/16 inches above vessel zero
	f.	Low Pressure Coolant Injection Pump Start — Time Delay Relay				·	
		Pump A,B,C,D (with diesel power)	1,2,3, ₄ (a) _{, 5} (a)	4	C	SR 3.3.5.1.5 SR 3.3.5.1.6	≥ 0 seconds and ≤ 1 second
		Pump A (with normal power)	1,2,3, 4(a) _{, 5} (a)	1	С	SR 3.3.5.1.5 SR 3.3.5.1.6	≥ 0 seconds and ≤ 1 second
		Pump B (with normal power)	1,2,3, 4 ^(a) , 5 ^(a)	1	С	SR 3.3.5.1.5 SR 3.3.5.1.6	≥ 6 seconds and ≤ 8 seconds
		Pump C (with normal power)	1,2,3, 4 ^(a) , 5 ^(a)	1	C	SR 3.3.5.1.5 SR 3.3.5.1.6	≥ 12 seconds and ≤ 16 seconds
		Pump D (with normal power)	1,2,3, 4 ^(a) , 5 ^(a)	1	С	SR 3.3.5.1.5 SR 3.3.5.1.6	≥ 18 seconds and ≤ 24 seconds
				•	·		(continued)

(a) When the associated subsystem(s) are required to be OPERABLE.

(c) With associated recirculation pump discharge valve open.

(f) During instrument calibrations, if the As Found channel setpoint is conservative with respect to the Allowable Value but outside its acceptable As Found band as defined by its associated Surveillance Requirement procedure, then there shall be an initial determination to ensure confidence that the channel can perform as required before returning the channel to service in accordance with the Surveillance. If the As Found instrument channel setpoint is not conservative with respect to the Allowable Value, the channel shall be declared inoperable.

Prior to returning a channel to service, the instrument channel setpoint shall be calibrated to a value that is within the acceptable As Left tolerance of the setpoint; otherwise, the channel shall be declared inoperable.

The nominal Trip Setpoint shall be specified on design output documentation which is incorporated by reference in the Updated Final Safety Analysis Report. The methodology used to determine the nominal Trip Setpoint, the predefined As Found Tolerance, and the As Left Tolerance band, and a listing of the setpoint design output documentation shall be specified in Chapter 7 of the Updated Final Safety Analysis Report.

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FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER FUNCTION	CONDITIONS REFERENCED FROM REQUIRED ACTION A.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
High Pressure Coolant Injection (HPCI) System				· · · · · · · · · · · · · · · · · · ·	
a. Reactor Vessel Water Level — Low Low, Level 2 ^(f)	1, 2 ^(d) , 3 ^(d)	4	В	SR 3.3.5.1.1 SR 3.3.5.1.2 SR 3.3.5.1.5 SR 3.3.5.1.6	≥ 470 inches above vessel zero
b. Drywell Pressure — High ^(f)	1, 2(d) _{,3} (d)	4	В	SR 3.3.5.1.2 SR 3.3.5.1.5 SR 3.3.5.1.6	_ ≤ 2.5 psig
c. Reactor Vessel Water Level — High, Level 8	1, 2 ^(d) , 3 ^(d)	2	С	SR 3.3.5.1.1 SR 3.3.5.1.2 SR 3.3.5.1.5 SR 3.3.5.1.6	≤ 583 inches above vessel zero
d. Condensate Header Level — Low	1, 2 ^(d) , 3 ^(d)	1	D	SR 3.3.5.1.2 SR 3.3.5.1.3 SR 3.3.5.1.6	≥ Elev. 551 feet
e. Suppression Pool Water Level — High	1, 2 ^(d) , 3 ^(d)	1	D	SR 3.3.5.1.2 SR 3.3.5.1.3 SR 3.3.5.1.6	≤ 7 inches above instrument zero
f. High Pressure Coolant Injection Pump Discharge Flow—Low (Bypass)	1, 2 ^(d) , 3 ^(d)	1	E	SR 3.3.5.1.2 SR 3.3.5.1.5 SR 3.3.5.1.6	≥ 671 gpm
Automatic Depressurization System (ADS) Trip System A		· .			•
a. Reactor Vessel Water Level — Low Low Low, Level 1 ^(f)	1, 2 ^(d) , 3 ^(d)	2	7	SR 3.3.5.1.1 SR 3.3.5.1.2 SR 3.3.5.1.5 SR 3.3.5.1.6	≥ 398 inches above vessel zero
· ·					(continued

Table 3.3.5.1-1 (page 4 of 6) Emergency Core Cooling System Instrumentation

(d) With reactor steam dome pressure > 150 psig.

(f) During instrument calibrations, if the As Found channel setpoint is conservative with respect to the Allowable Value but outside its acceptable As Found band as defined by its associated Surveillance Requirement procedure, then there shall be an initial determination to ensure confidence that the channel can perform as required before returning the channel to service in accordance with the Surveillance. If the As Found instrument channel setpoint is not conservative with respect to the Allowable Value, the channel shall be declared inoperable.

Prior to returning a channel to service, the instrument channel setpoint shall be calibrated to a value that is within the acceptable As Left tolerance of the setpoint; otherwise, the channel shall be declared inoperable.

The nominal Trip Setpoint shall be specified on design output documentation which is incorporated by reference in the Updated Final Safety Analysis Report. The methodology used to determine the nominal Trip Setpoint, the predefined As Found Tolerance, and the As Left Tolerance band, and a listing of the setpoint design output documentation shall be specified in Chapter 7 of the Updated Final Safety Analysis Report.

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Table 3.3.5.1-1 (page 5 of 6)
Emergency Core Cooling System Instrumentation

-		FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER FUNCTION	CONDITIONS REFERENCED FROM REQUIRED ACTION A.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE
	AD	S Trip System A (continued)					
	b.	Drywell Pressure — High ^(†)	1, 2 ^(d) , 3 ^(d)	2	F	SR 3.3.5.1.2 SR 3.3.5.1.5 SR 3.3.5.1.6	≤ 2.5 psig
	C.	Automatic Depressurization System Initiation Timer	1, 2 ^(d) , 3 ^(d)	1 .	G	SR 3.3.5.1.5 SR 3.3.5.1.6	≤ 115 seconds
	d.	Reactor Vessel Water Level — Low, Level 3 (Confirmatory) ^(f)	1, 2 ^(d) , 3 ^(d)	1	F	SR 3.3.5.1.1 SR 3.3.5.1.2 SR 3.3.5.1.5 SR 3.3.5.1.6	≥ 528 inches above vessel zerc
	e.	Core Spray Pump Discharge Pressure — High	1, 2 ^(d) , 3 ^(d)	4	G	SR 3.3.5.1.2 SR 3.3.5.1.3 SR 3.3.5.1.6	≥ 175 psig and ≤ 195 psig
	f.	Low Pressure Coolant Injection Pump Discharge Pressure — High	1, 2 ^(d) , 3 ^(d)	8	G	SR 3.3.5.1.2 SR 3.3.5.1.3 SR 3.3.5.1.6	≥ 90 psig and ≤ 110 psig
	g.	Automatic Depressurization System High Drywell Pressure Bypass Timer	.1, 2 ^(d) , 3 ^(d)	2	G	SR 3.3.5.1.5 SR 3.3.5.1.6	≤ 322 seconds
•	AD	S Trip System B					
	a.	Reactor Vessel Water Level — Low Low Low, Level 1 ^(f)	1, 2 ^(d) , 3 ^(d)	2	·F	SR 3.3.5.1.1 SR 3.3.5.1.2 SR 3.3.5.1.5 SR 3.3.5.1.6	≥ 398 inches above vessel zero

(d) With reactor steam dome pressure > 150 psig.

(f) During instrument calibrations, if the As Found channel setpoint is conservative with respect to the Allowable Value but outside its acceptable As Found band as defined by its associated Surveillance Requirement procedure, then there shall be an initial determination to ensure confidence that the channel can perform as required before returning the channel to service in accordance with the Surveillance. If the As Found instrument channel setpoint is not conservative with respect to the Allowable Value, the channel shall be declared inoperable.

Prior to returning a channel to service, the instrument channel setpoint shall be calibrated to a value that is within the acceptable As Left tolerance of the setpoint; otherwise, the channel shall be declared inoperable.

The nominal Trip Setpoint shall be specified on design output documentation which is incorporated by reference in the Updated Final Safety Analysis Report. The methodology used to determine the nominal Trip Setpoint, the predefined As Found Tolerance, and the As Left Tolerance band, and a listing of the setpoint design output documentation shall be specified in Chapter 7 of the Updated Final Safety Analysis Report.

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-	Emergency Core Cooling System Instrumentation									
		FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER FUNCTION	CONDITIONS REFERENCED FROM REQUIRED ACTION A.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE			
5.	AĽ	DS Trip System B (continued)								
	b.	Drywell Pressure — High ^(f)	1, 2(d) _{, 3} (d)	2	F	SR 3.3.5.1.2 SR 3.3.5.1.5 SR 3.3.5.1.6	≤ 2.5 psig			
	c.	Automatic Depressurization System Initiation Timer	1, 2 ^(d) , 3 ^(d)	1	G	SR 3.3.5.1.5 SR 3.3.5.1.6	≤ 115 seconds			
	d.	Reactor Vessel Water Level — Low, Level 3 (Confirmatory ^(f)	1, 2(d) _{, 3} (d)	1	F	SR 3.3.5.1.1 SR 3.3.5.1.2 SR 3.3.5.1.5 SR 3.3.5.1.6	≥ 528 inches above vessel zero			
	e.	Core Spray Pump Discharge Pressure — High	1, 2 ^(d) , 3 ^(d)	4	G	SR 3.3.5.1.2 SR 3.3.5.1.3 SR 3.3.5.1.6	≥ 175 psig and ≤ 195 psig			
	f.	Low Pressure Coolant Injection Pump Discharge Pressure — High	1, 2 ^(d) , 3 ^(d)	8	G	SR 3.3.5.1.2 SR 3.3.5.1.3 SR 3.3.5.1.6	≥ 90 psig and ≤ 110 psig			
	g.	Automatic Depressurization System High Drywell Pressure Bypass Timer	1, 2(d) _{, 3} (d)	2	G	SR 3.3.5.1.5 SR 3.3.5.1.6	≤ 322 seconds			

Table 3.3.5.1-1 (page 6 of 6)

(d) With reactor steam dome pressure > 150 psig.

During instrument calibrations, if the As Found channel setpoint is conservative with respect to the Allowable Value but outside its acceptable As Found band as defined by its associated Surveillance Requirement procedure, then there shall be an initial **(f)** determination to ensure confidence that the channel can perform as required before returning the channel to service in accordance with the Surveillance. If the As Found instrument channel setpoint is not conservative with respect to the Allowable Value, the channel shall be declared inoperable.

Prior to returning a channel to service, the instrument channel setpoint shall be calibrated to a value that is within the acceptable As Left tolerance of the setpoint; otherwise, the channel shall be declared inoperable.

The nominal Trip Setpoint shall be specified on design output documentation which is incorporated by reference in the Updated Final Safety Analysis Report. The methodology used to determine the nominal Trip Setpoint, the predefined As Found Tolerance, and the As Left Tolerance band, and a listing of the setpoint design output documentation shall be specified in Chapter 7 of the Updated Final Safety Analysis Report.

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Table 3.3.5.2-1 (page 1 of 1) Reactor Core Isolation Cooling System Instrumentation

FUNCTION	REQUIRED CHANNELS PER FUNCTION	CONDITIONS REFERENCED FROM REQUIRED ACTION A.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
 Reactor Vessel Water Level - Low Low, Level 2^(a) 	4	В	SR 3.3.5.2.1 SR 3.3.5.2.2 SR 3.3.5.2.3 SR 3.3.5.2.4	≥ 470 inches above vessel zero
 Reactor Vessel Water Level - High, Level 8 	2	С	SR 3.3.5.2.1 SR 3.3.5.2.2 SR 3.3.5.2.3 SR 3.3.5.2.4	≤ 583 inches above vessel zero

(a) During instrument calibrations, if the As Found channel setpoint is conservative with respect to the Allowable Value but outside its acceptable As Found band as defined by its associated Surveillance Requirement procedure, then there shall be an initial determination to ensure confidence that the channel can perform as required before returning the channel to service in accordance with the Surveillance. If the As Found instrument channel setpoint is not conservative with respect to the Allowable Value, the channel shall be declared inoperable.

Prior to returning a channel to service, the instrument channel setpoint shall be calibrated to a value that is within the acceptable As Left tolerance of the setpoint; otherwise, the channel shall be declared inoperable.

The nominal Trip Setpoint shall be specified on design output documentation which is incorporated by reference in the Updated Final Safety Analysis Report. The methodology used to determine the nominal Trip Setpoint, the predefined As Found Tolerance, and the As Left Tolerance band, and a listing of the setpoint design output documentation shall be specified in Chapter 7 of the Updated Final Safety Analysis Report.

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FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER TRIP SYSTEM	CONDITIONS REFERENCED FROM REQUIRED ACTION C.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE	
1. Main Steam Line Isolation		······			· · · · ·	
a. Reactor Vessel Water Level - Low Low Low, Level 1	1,2,3	2	D	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.5 SR 3.3.6.1.6	≥ 398 inches above vessel zero	
 b. Main Steam Line Pressure Low^(C) 	1	2	E	SR 3.3.6.1.2 SR 3.3.6.1.5 SR 3.3.6.1.6	≥ 825 psig	
c. Main Steam Line Flow - High	1,2,3	2 per MSL	D	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.5 SR 3.3.6.1.6	≤ 140% rated steam flow	
d. Main Steam Tunnel Temperature - High	1,2,3	·8	D	SR 3.3.6.1.2 SR 3.3.6.1.5 SR 3.3.6 1.6	≤ 200°F	
2. Primary Containment Isolation				•		
a. Reactor Vessel Water Level - Low, Level 3	1,2,3	2	G	SR 3.3.6.1.1 SR 3.3.6.1.2 SR 3.3.6.1.5 SR 3.3.6.1.6	≥ 528 inches above vessel zero	
[•] b. Drywell Pressure - High	1,2,3	2	G	SR 3.3.6.1.2 SR 3.3.6.1.5 SR 3.3.6.1.6	≤ 2.5 psig	
 High Pressure Coolant Injection (HPCI) System Isolation 						
a. HPCI Steam Line Flow - High	1,2,3	1	F	SR 3.3.6.1.2 SR 3.3.6.1.5 SR 3.3.6.1.6	≤ 90 psi	
b. HPCI Steam Supply Line Pressure - Low	1,2,3	3	F	SR 3.3.6.1.2 SR 3.3.6.1.5 SR 3.3.6.1.6	≥ 100 psig	
c. HPCI Turbine Exhaust Diaphragm Pressure - High	1,2,3	3	F	SR 3.3.6.1.2 SR 3.3.6.1.5 SR 3.3.6.1.6	≤ 20 psig	

Table 3.3.6.1-1 (page 1 of 3) Primary Containment Isolation Instrumentation

(c)

(continued)

During instrument calibrations, if the As Found channel setpoint is conservative with respect to the Allowable Value but outside its acceptable As Found band as defined by its associated Surveillance Requirement procedure, then there shall be an initial determination to ensure confidence that the channel can perform as required before returning the channel to service in accordance with the Surveillance. If the As Found instrument channel setpoint is not conservative with respect to the Allowable Value, the channel shall be declared inoperable.

Prior to returning a channel to service, the instrument channel setpoint shall be calibrated to a value that is within the acceptable As Left tolerance of the setpoint; otherwise, the channel shall be declared inoperable.

The nominal Trip Setpoint shall be specified on design output documentation which is incorporated by reference in the Updated Final Safety Analysis Report. The methodology used to determine the nominal Trip Setpoint, the predefined As Found Tolerance, and the As Left Tolerance band, and a listing of the setpoint design output documentation shall be specified in Chapter 7 of the Updated Final Safety Analysis Report.

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