

UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

DOCKET NO. 50-397

NUCLEAR PROJECT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 150 License No. NPF-21

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by the Washington Public Power Supply System (licensee) dated March 22, 1997, as supplemented by letters dated April 2, April 3, April 9, April 15, May 14, and telefax dated May 19, 1997, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public: and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
- 2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and paragraph 2.C.(2) of Facility Operating License No. NPF-21 is hereby amended to read as follows:

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(2) <u>Technical Specifications and Environmental Protection Plan</u>

The Technical Specifications contained in Appendix A, as revised through Amendment No. 150 and the Environmental Protection Plan contained in Appendix B, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

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

FOR THE NUCLEAR REGULATORY COMMISSION

Timothy G. Colburn, Senior Project Manager

Project Directorate IV-2

Division of Reactor Projects III/IV Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical

Specifications

Date of Issuance: June 11, 1997

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ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO. 150 TO FACILITY OPERATING LICENSE NO. NPF-21

DOCKET NO. 50-397

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

REMOVE	<u>INSERT</u>
1i 3.3-6 3.3-42 3.3-43 3.3-44 3.3-54 3.5-5 3.5-6 3.5-7 3.5-8 3.5-9 3.5-10	3.3-6 3.3-42 3.3-43 3.3-44 3.3-54 3.5-5 3.5-6 3.5-7 3.5-9 3.5-10 3.5-11
3.5-11 3.5-12	3.5-12 3.5-13

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,	SURVEILLANCE					
SR 3.3.1.1.15	1. Neutron detectors are excluded.					
	Channel sensors for Functions 3 and 4 are excluded.					
	3. For Function 5, "n" equals 4 channels for the purpose of determining the STAGGERED TEST BASIS Frequency.					
,	Verify the RPS RESPONSE TIME is within limits.	24 months on a STAGGERED TEST BASIS				

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SURVEILLANCE REQUIREMENTS

-----NOTES-----1. Refer to Table 3.3.5.1-1 to determine which SRs apply for each ECCS

- Function.
- When a channel is placed in an inoperable status solely for performance of required Surveillances, entry into associated Conditions and Required Actions may be delayed as follows: (a) for up to 6 hours for Functions 3.c, 3.f, and 3.g; and (b) for up to 6 hours for Functions other than 3.c, 3.f, and 3.g provided the associated Function or the redundant Function maintains ECCS initiation capability.

		FREQUENCY	
SR	3.3.5.1.1	Perform CHANNEL CHECK.	12 hours
SR	3.3.5.1.2	Perform CHANNEL FUNCTIONAL TEST.	92 days
SR	3.3.5.1.3	Perform CHANNEL CALIBRATION.	92 days
SR	3.3.5.1.4	Perform CHANNEL CALIBRATION.	18 months
SR	3.3.5.1.5	Perform CHANNEL CALIBRATION.	24 months
SR	3.3.5.1.6	Perform LOGIC SYSTEM FUNCTIONAL TEST.	24 months

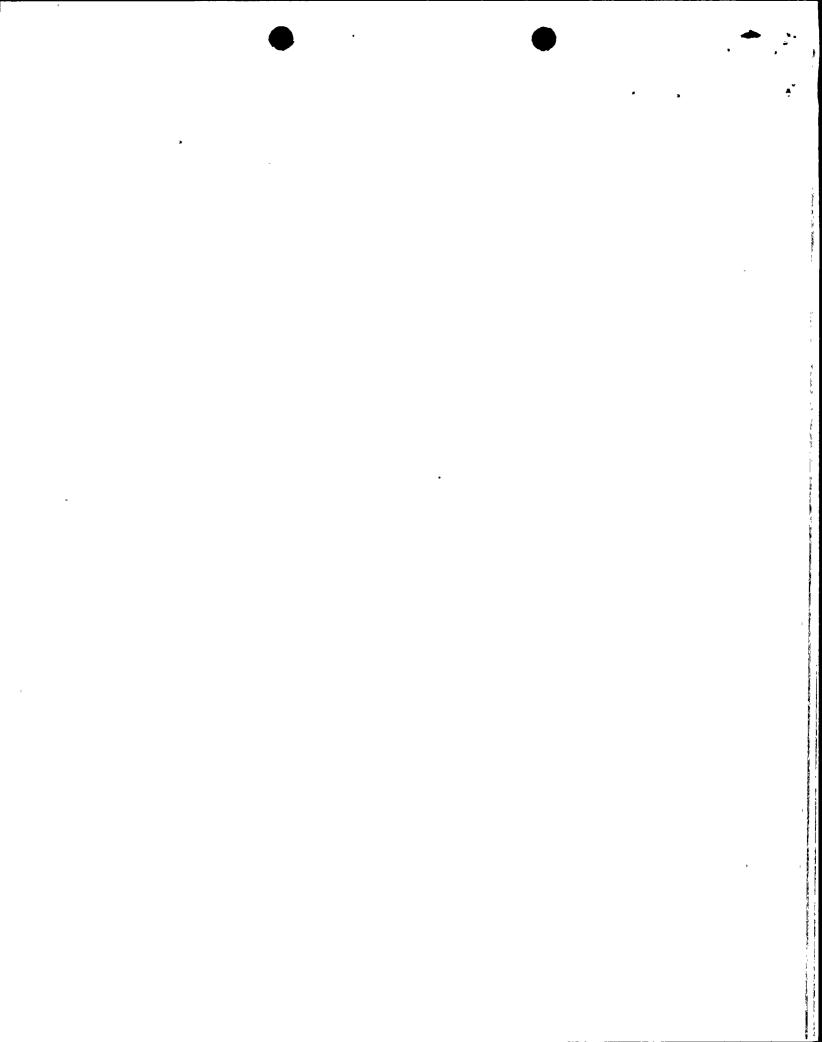
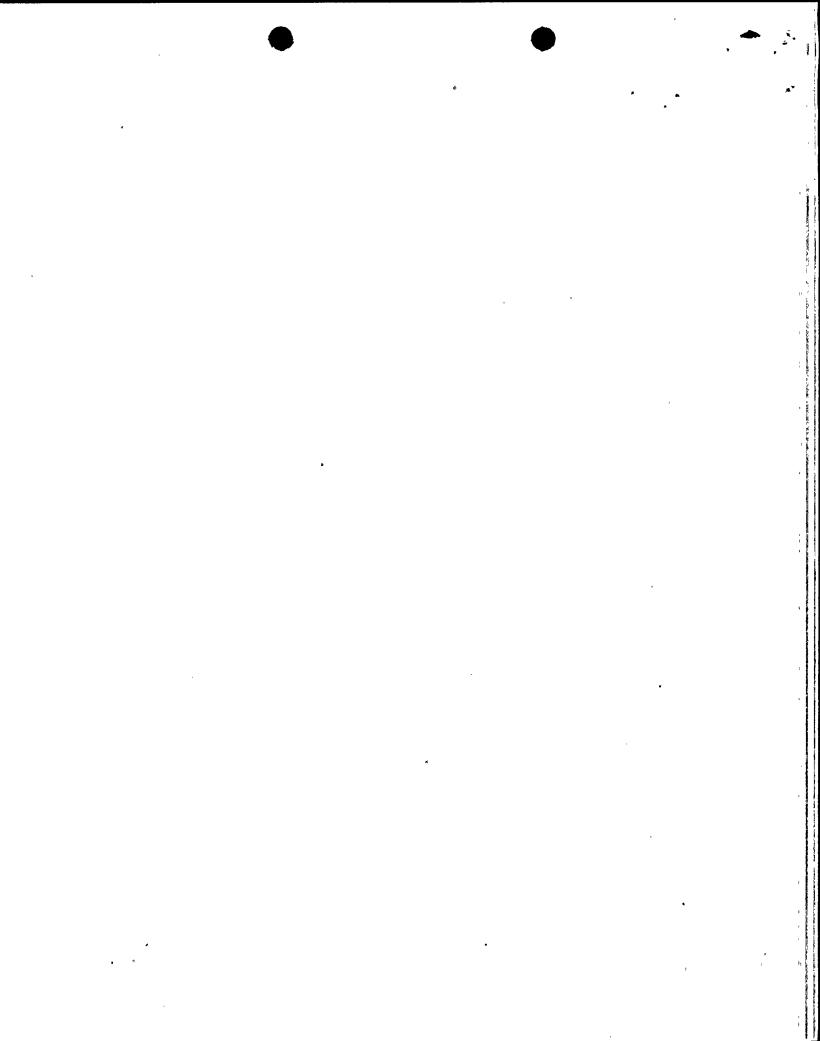


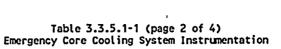
Table 3.3.5.1-1 (page 1 of 4)
Emergency Core Cooling System Instrumentation

	FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER FUNCTION	CONDITIONS REFERENCED FROM REQUIRED ACTION A.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
In Pro	W Pressure Coolant jection-A (LPCI) and Low essure Core Spray (LPCS) bsystems					
8.	Reactor Vessel Water Level - Low Low Low, Level 1	1,2,3, 4 ^(a) ,5 ^(a)	2(p)	В	SR 3.3.5.1.2 SR 3.3.5.1.2 SR 3.3.5.1.4	
b.	Drywell Pressure — High	1,2,3	2 ^(b)	В	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	• -
c.	LPCS Pump Start — LOCA Time Delay Relay	1,2,3, 4 ^(a) ,5 ^(a)	1	C	SR 3.3.5.1.5 SR 3.3.5.1.6	
d.	LPCI Pump A Start LOCA Time Delay Relay	1,2,3, 4 ^(a) ,5 ^(a)	1 .	c	SR 3.3.5.1.5 SR 3.3.5.1.6	
е.	LPCI Pump A Start — LOCA/LOOP Time Delay Relay	1,2,3, 4 ^(a) ,5 ^(a)	1	С	SR 3.3.5.1.2 SR 3.3.5.1.3 SR 3.3.5.1.6	seconds and
f.	Reactor Vessel Pressure — Low (Injection Permissive)	1,2,3	1 per valve	c	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	and
		4 ^(a) ,5 ^(a)	1 per valve	В	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ 448 psig and ≤ 492 psig
g.	LPCS Pump Discharge Flow — Low (Minimum Flow)	1,2,3, 4 ^(a) ,5 ^(a)	1	E *	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ 668 gpm and ≤ 1067 gpm
h.	LPCI Pump A Discharge Flow — Low (Minimum Flow)	1,2,3, 4 ^(a) ,5 ^(a)	1	E	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ 605 gpm and ≤ 984 gpm
i.	Manual Initiation	1,2,3, 4 ^(a) ,5 ^(a)	2	C "	SR 3.3.5.1.6	NA -

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

⁽b) Also required to initiate the associated diesel generator (DG).





	FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER FUNCTION	CONDITIONS REFERENCED FROM REQUIRED ACTION A.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
	PCI B and LPCI C ubsystems					•
8.	Reactor Vessel Water Level — Low Low Low, Level 1	1,2,3, 4 ^(a) ,5 ^(a)	2(p)	В	SR 3.3.5.1.1 SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ -148 inches
. b.	. Drywell Pressure — High	1,2,3	^{5(p)}	В	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≤ 1.88 psig
c.	. LPCI Pump B Start - LOCA Time Delay Relay	1,2,3, 4 ^(a) ,5 ^(a)	1	С	SR 3.3.5.1.5 SR 3.3.5.1.6	≥ 17.24 seconds and ≤ 21.53 seconds
d.	. LPCI Pump C Start - LOCA Time Delay Relay	1,2,3, 4 ^(a) ,5 ^(a)	1	С	SR 3.3.5.1.5 SR 3.3.5.1.6	≥ 8.53 seconds and ≤ 10.64 seconds
e.	LPCI Pump B Start — LOCA/LOOP Time Delay Relay	1,2,3, 4 ^(a) ,5 ^(a)	1	с	SR 3.3.5.1.2 SR 3.3.5.1.3 SR 3.3.5.1.6	≥ 3.04 seconds and ≤ 6.00 seconds
f.	Reactor Vessel Pressure — Low (Injection Permissive)	1,2,3	1 per valve	С	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ 448 psig and ≤ 492 psig
		4(a),5(a)	1 per valve	B	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ 448 psig and ≤ 492 psig
g.	. LPCI Pumps B & C Discharge Flow — Low (Minimum Flow)	1,2,3, 4 ^(a) ,5 ^(a)	1 per pump	E	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ 605 gpm and ≤ 984 gpm
h.	. Manual Initiation	1,2,3, 4 ^(a) ,5 ^(a)	2	Ċ	'SR 3.3.5.1.6	NA
	gh Pressure Core Spray IPCS) System					
8.	Reactor Vessel Water Level — Low Low, Level 2	1,2,3, 4 ^(a) ,5 ^(a)	₄ (b)	В	SR 3.3.5.1.1 SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ -58 inches

⁽continued)

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

⁽b) Also required to initiate the associated DG.

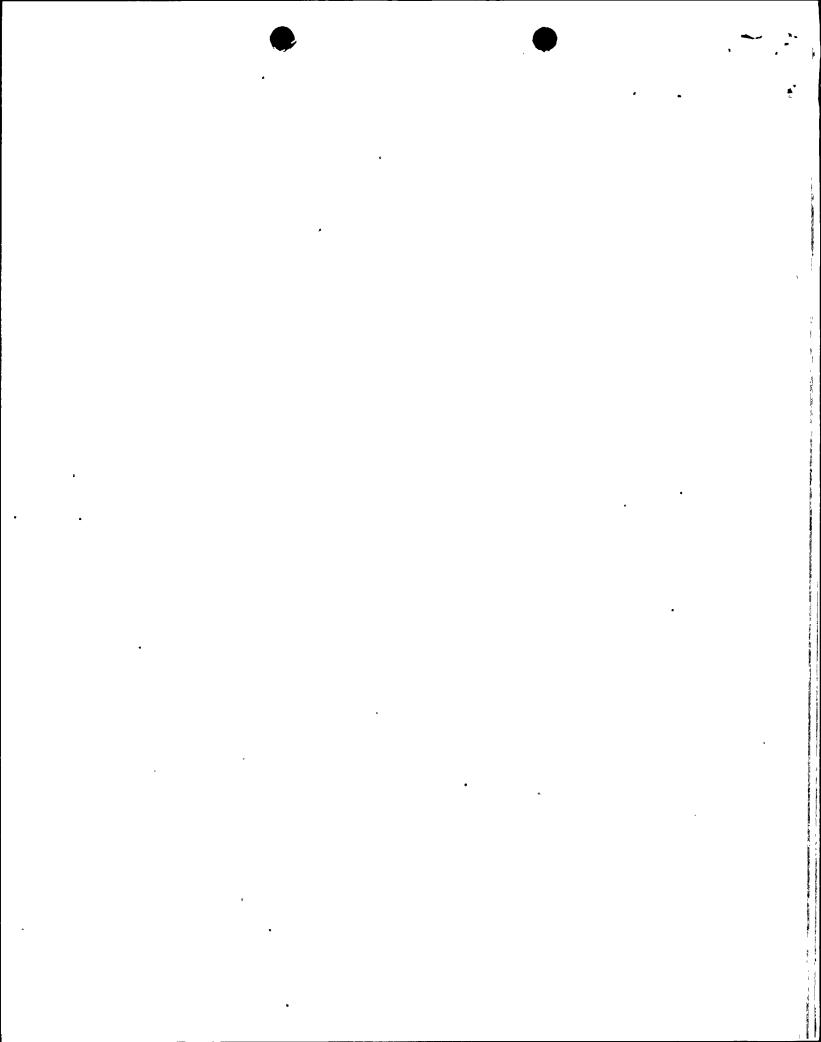


Table 3.3.5.1-1 (page 3 of 4)
Emergency Core Cooling System Instrumentation

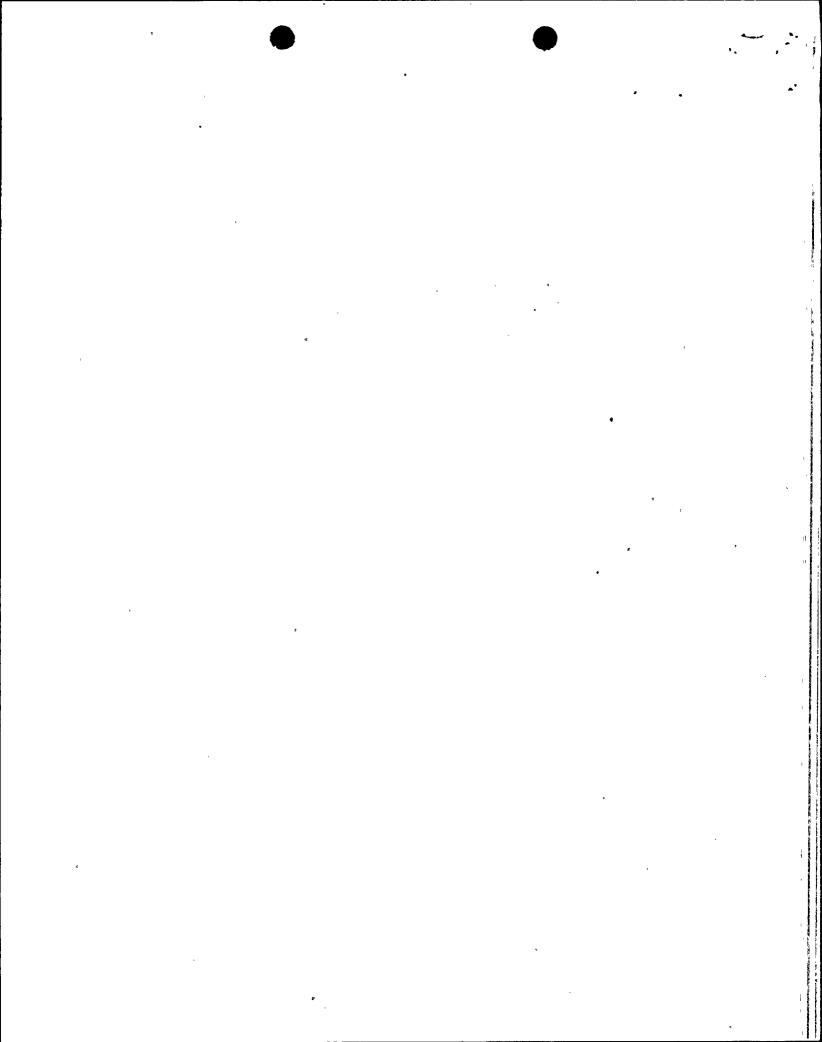
		, FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER FUNCTION	CONDITIONS REFERENCED FROM REQUIRED ACTION A.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
3		S System ntinued)					
	b.	Drywell Pressure — High	1,2,3	₄ (b)	В	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≤ 1.88 psig
	c.	Reactor Vessel Water Level - High,	1,2,3, 4 ^(a) .5 ^(a)	2	C	SR 3.3.5.1.1 SR 3.3.5.1.2	≤ 56.0 inches
		Level 8	4,5			SR 3.3.5.1.4 SR 3.3.5.1.6	
	d.	Condensate Storage Tank Level - Low	1,2,3, 4(c),5(c)	2	D	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ 448 ft 1 inch elevation
	e.	Suppression Pool Water Level — High	1,2,3	2	D	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≤ 466 ft 11 inches elevation
	f.	HPCS System Flow Rate — Low (Minimum Flow)	1,2,3, 4 ^(a) ,5 ^(a)	1	E	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ 1200 gpm and ≤ 1512 gpm
	9.	Manual Initiation	1,2,3, 4 ^(a) .5 ^(a)	2	С	SR 3.3.5.1.6	NA
	Dep Sys	omatic ressurization tem (ADS) Trip tem A				,	•
	a.	Reactor Vessel Water Level - Low Low Low, Level 1	1,2 ^(d) ,3 ^(d)	2	F	SR 3.3.5.1.1 SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ -148 inches
1	b.	ADS Initiation Timer	1,2 ^(d) ,3 ^(d)	1	G '	SR 3.3.5.1.2 SR 3.3.5.1.3 SR 3.3.5.1.6	≤ 115.0 seconds
•	c.	Reactor Vessel Water Level – Low, Level 3 (Permissive)	1,2 ^(d) ,3 ^(d)	1	F ,	SR 3.3.5.1.1 SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ 9.5 inches
1	d.	LPCS Pump Discharge Pressure — High	1,2 ^(d) ,3 ^(d)	2	G	SR 3.3.5.1.2 SR 3.3.5.1.4 SR 3.3.5.1.6	≥ 119 psig and ≤ 171 psig
							(continued

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

⁽b) Also required to initiate the associated DG.

⁽c) When HPCS is OPERABLE for compliance with LCO 3.5.2, "ECCS — Shutdown," and aligned to the condensate storage tank while tank water level is not within the limit of SR 3.5.2.2.

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



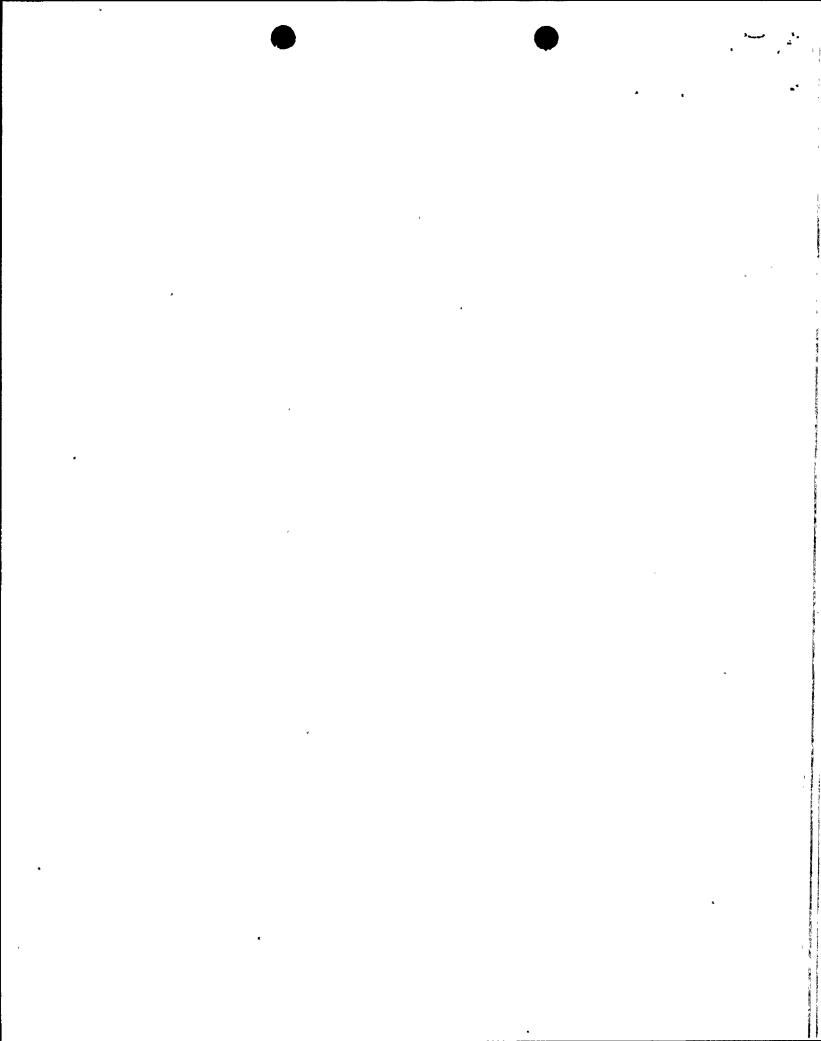
SURVEILLANCE REQUIREMENTS

1. Refer to Table 3.3.6.1-1 to determine which SRs apply for each Primary

Containment Isolation Function.

2. When a channel is placed in an inoperable status solely for performance of required Surveillances, entry into associated Conditions and Required Actions may be delayed for up to 6 hours provided the associated Function maintains isolation capability.

		SURVEILLANCE	FREQUENCY
SR	3.3.6.1.1	Perform CHANNEL CHECK.	12 hours
SR	3.3.6.1.2	Perform CHANNEL FUNCTIONAL TEST.	92 days
SR	3.3.6.1.3	Perform CHANNEL FUNCTIONAL TEST.	184 days
SR	3.3.6.1.4	Perform CHANNEL CALIBRATION.	18 months
SR	3.3.6.1.5	Perform CHANNEL CALIBRATION.	24 months
SR	3.3.6.1.6	Perform LOGIC SYSTEM FUNCTIONAL TEST.	24 months
SR	3.3.6.1.7	Channel sensors for Functions 1.a, 1.b, and 1.c are excluded.	
		Verify the ISOLATION SYSTEM RESPONSE TIME is within limits.	24 months on a STAGGERED TEST BASIS



<u>Surv</u> e	ILLANCE RE	QUIREMENTS	(continued)	-	
		FREQUENCY			
SR	3.5.1.4	Verify each specified to developed h	n ECCS pump deve flow rate with t nead. <u>FLOW RATE</u>	elops the the specified TOTAL DEVELOPED <u>HEAD</u>	In accordance with the Inservice Testing Program
•		LPCS LPCI HPCS	≥ 6350 gpm ≥ 7450 gpm ≥ 6350 gpm	≥ 128 psid ≥ 26 psid ≥ 200 psid	
SR	3.5.1.5		ection/spray may		24 months
		actuates or automatic	n an actual or s initiation signa	simulated al.	
SR	3.5.1.6	Valve actua	ation may be exc	luded.	
	,	Verify the simulated a	ADS actuates or automatic initia	n an actual or ntion signal.	24 months
SR	3.5.1.7	Not require after react adequate to			
		Verify each	n required ADS v ctuated.	valve opens when	24 months on a STAGGERED TEST BASIS for each valve solenoid
				-	(continued)

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SURVEILLANCE REQUIREMENTS (continued)

	FREQUENC	Y_	
SR 3.5.1.8	ECCS actuation instrumentation is excluded.		
•	Verify the ECCS RESPONSE TIME for each ECCS injection/spray subsystem is within limits.	24 months	

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- 3.5 EMERGENCY CORE COOLING SYSTEMS (ECCS) AND REACTOR CORE ISOLATION COOLING (RCIC) SYSTEM
- 3.5.2 ECCS Shutdown

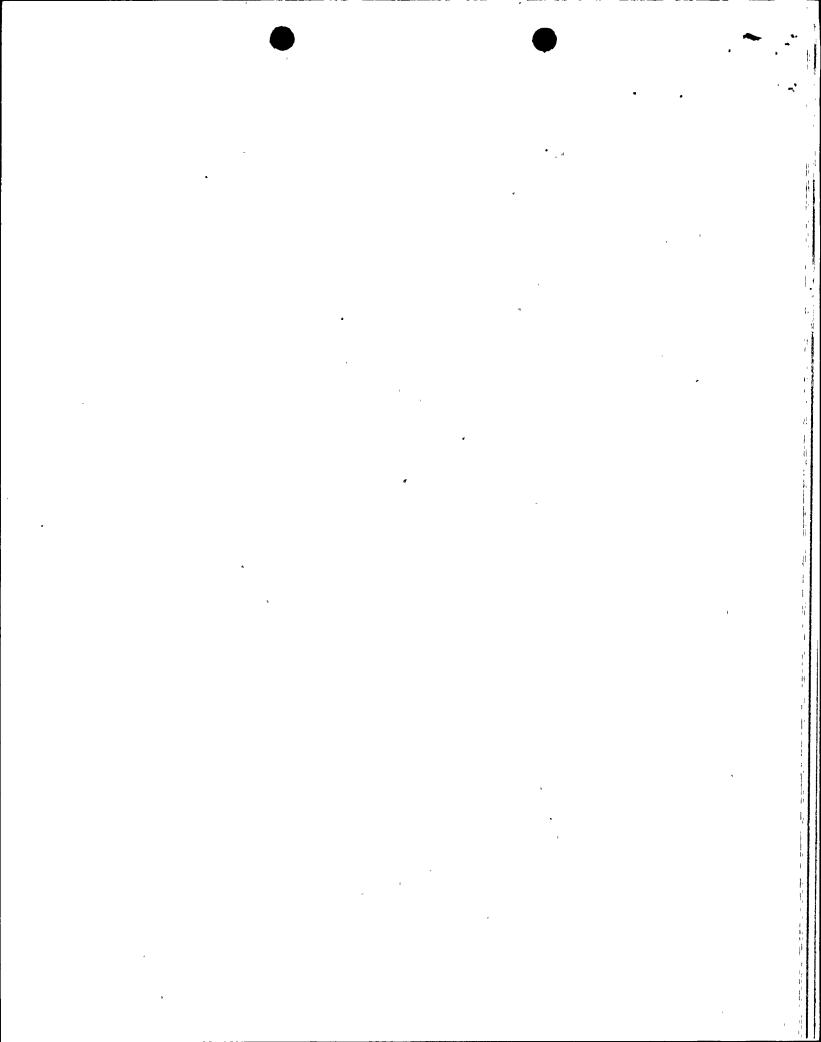
Two ECCS injection/spray subsystems shall be OPERABLE. LCO 3.5.2

APPLICABILITY: MODE 4,

MODE 5 except with the spent fuel storage pool gates removed and water level ≥ 22 ft over the top of the reactor pressure vessel flange.

ACTIONS

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	CONDITION	REQUIRED ACTION		COMPLETION TIME			
A:	One required ECCS injection/spray subsystem inoperable.	A.1	Restore required ECCS injection/spray subsystem to OPERABLE status.	4 hours · ·			
В.	Required Action and associated Completion Time of Condition A not met.	B.1	Initiate action to suspend operations with a potential for draining the reactor vessel (OPDRVs).	Immediately			
C.	Two required ECCS injection/spray subsystems inoperable.	C.1 <u>AND</u>	Initiate action to suspend OPDRVs.	Immediately			
	ъ	C.2	Restore one ECCS injection/spray subsystem to OPERABLE status.	4 hours			

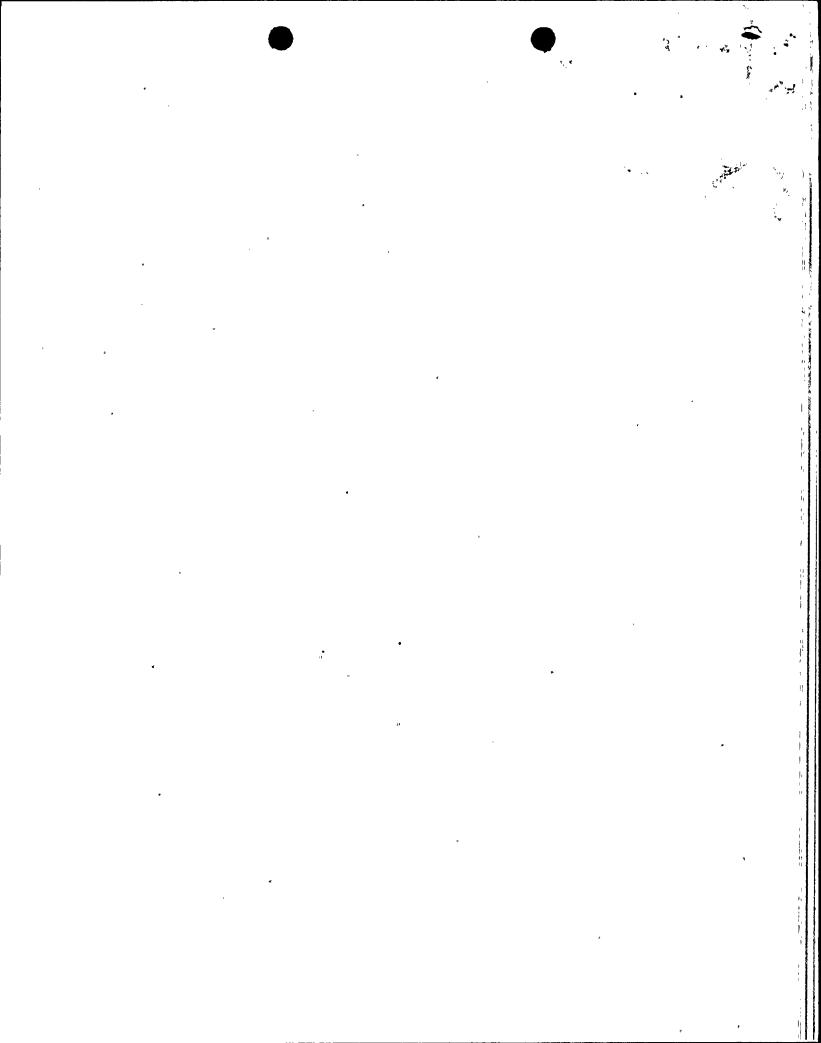


ACTIONS (continued)

CONDITION		REQUIRED ACTION	COMPLETION TIME
D. Required Action C.2 and associated Completion Time not met.	D.1	Initiate action to restore secondary containment to OPERABLE status.	Immediately
-	<u>AND</u>		,
•	D.2	Initiate action to restore one standby gas treatment subsystem to OPERABLE status.	Immediately
•	<u>AND</u>	,	•
	D.3	Initiate action to restore isolation capability in each required secondary containment penetration flow path not isolated.	Immediately

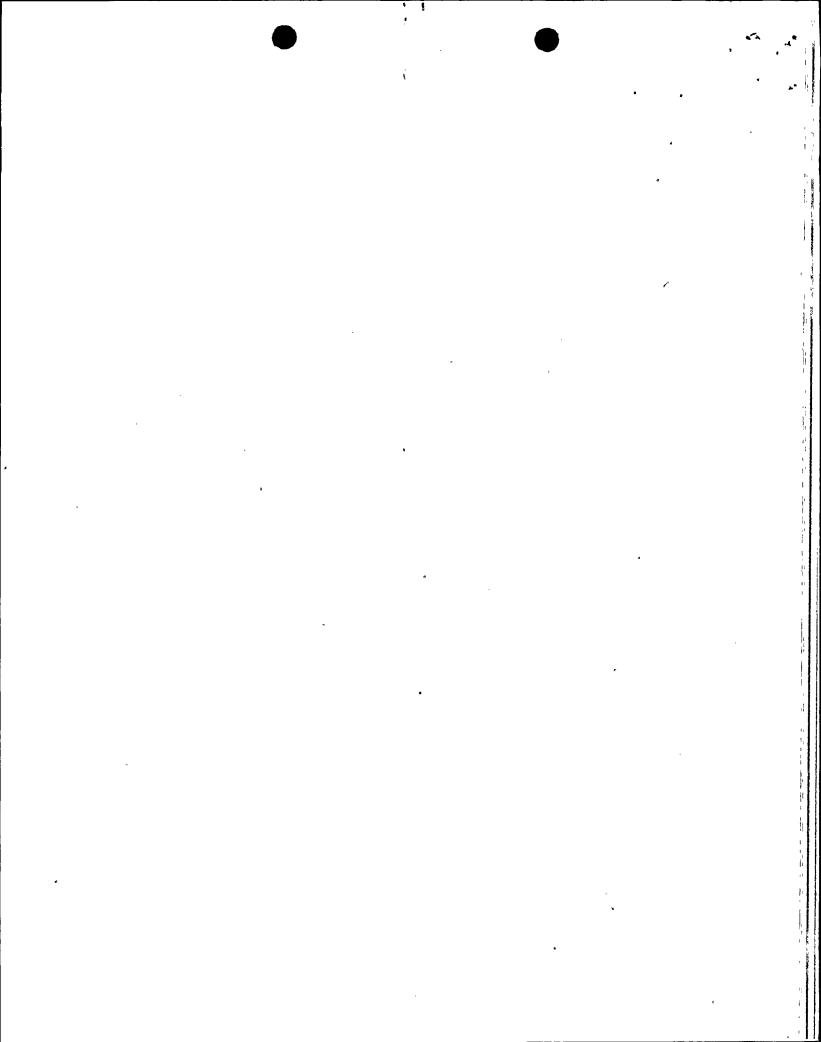
SURVEILLANCE REQUIREMENTS

	SURVEILLANCE	FREQUENCY
SR 3.5.2.1	Verify, for each required low pressure ECCS injection/spray subsystem, the suppression pool water level is ≥ 18 ft 6 inches.	12 hours



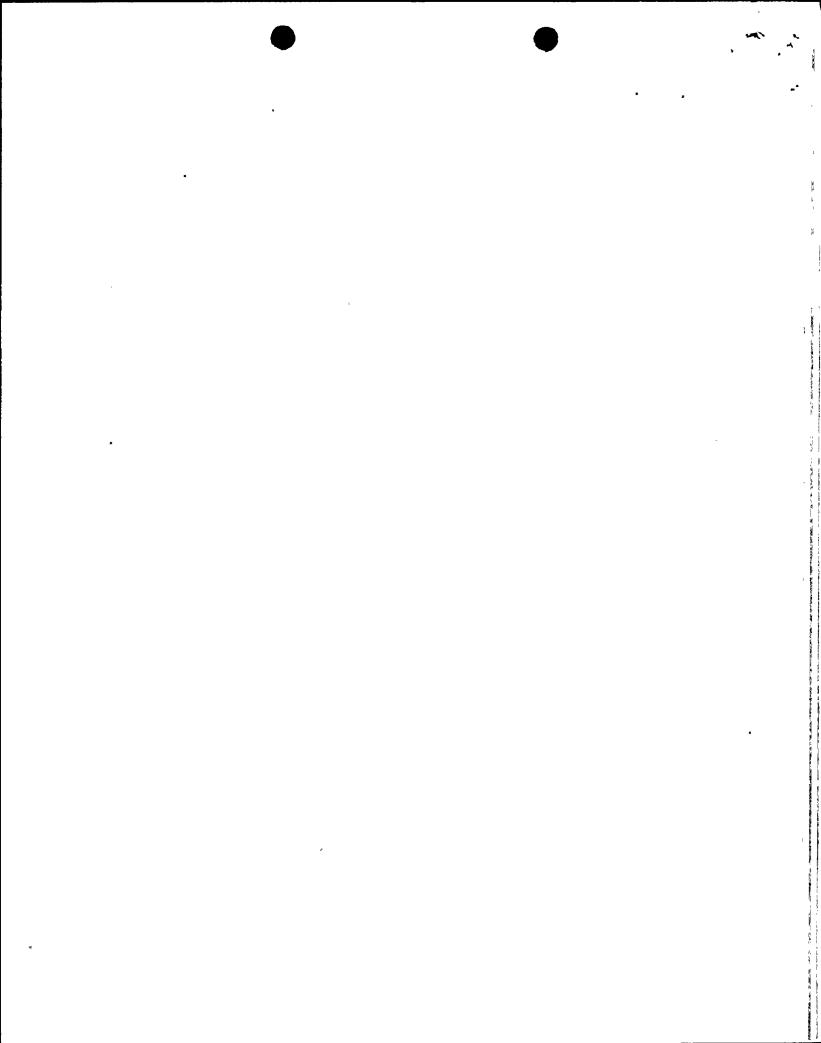
SOLVETERANCE REQUIREMENTS (CONCINECA	SURVEILLANCE	REQUIREMENTS	(continued)
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	,	SURVEILLANCE	. FREQUENCY
SR	3.5.2.2	 Verify, for the required High Pressure Core Spray (HPCS) System, the: a. Suppression pool water level is ≥ 18 ft 6 inches; or b. Condensate storage tank (CST) water level is ≥ 13.25 ft in a single CST or ≥ 7.6 ft in each CST. 	12 hours :
SR	3.5.2.3	Verify, for each required ECCS injection/ spray subsystem, the piping is filled with water from the pump discharge valve to the injection valve.	31 days
SR	3.5.2.4	One low pressure coolant injection (LPCI) subsystem may be considered OPERABLE during alignment and operation for decay heat removal, if capable of being manually realigned and not otherwise inoperable. Verify each required ECCS injection/spray subsystem manual, power operated, and automatic valve in the flow path, that is not locked, sealed, or otherwise secured in position, is in the correct position.	31 days



SURVEILLANCÉ REQUIREMENTS (continued)

		Sl	JRVEILLANCE		FREQUENCY
SR	3.5.2.5	Verify eac specified developed	flow rate with	pump develops the the specified	In accordance with the Inservice Testing Program
		<u>System</u>	FLOW RATE	TOTAL DEVELOPED <u>HEAD</u>	
		LPCS LPCI HPCS	≥ 6350 gpm ≥ 7450 gpm ≥ 6350 gpm	≥ 128 psid ≥ 26 psid ≥ 200 psid	
SR	3.5.2.6	Vessel inj	NOTE ection/spray ma		
		subsystem	h required ECCS actuates on an a automatic initia		24 months



3.5 EMERGENCY CORE COOLING SYSTEMS (ECCS) AND REACTOR CORE ISOLATION COOLING (RCIC) SYSTEM

3.5.3 RCIC System ·

LCO 3.5.3

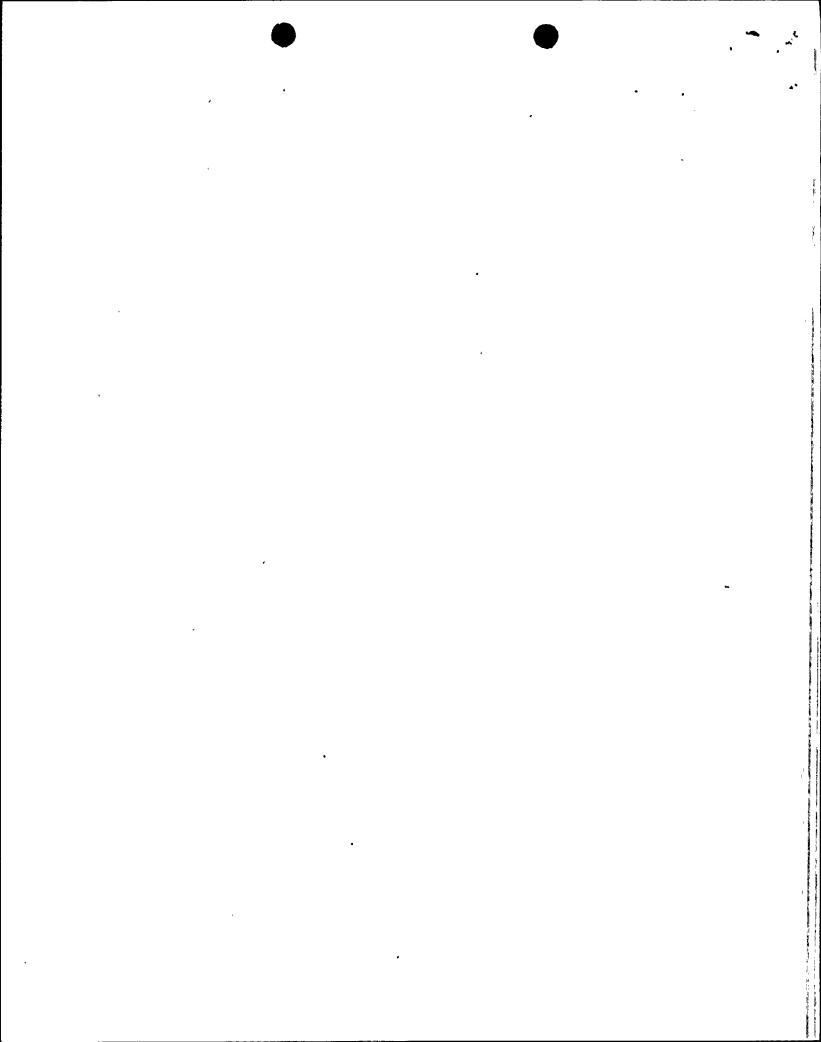
The RCIC System shall be OPERABLE.

APPLICABILITY:

MODE 1, MODES 2 and 3 with reactor steam dome pressure > 150 psig.

ACTIONS

	CONDITION		REQUIRED ACTION	COMPLETION TIME
Α.	RCIC System inoperable.	A.1	Verify by administrative means High Pressure Core Spray System is OPERABLE.	Immediately
		<u>AND</u>		•
		A.2	Restore RCIC System to OPERABLE status	14 days
В.	Required Action and associated Completion Time not met.	B.1 AND	Be in MODE 3.	12 hours
		B.2	Reduce reactor steam dome pressure to ≤ 150 psig.	36 hours



SURVEILLANCE REQUIREMENTS

3017	EILLANCE RE		
		SURVEILLANCE	FREQUENCY
SR	3.5.3.1	Verify the RCIC System piping is filled with water from the pump discharge valve to the injection valve.	31 days
SŘ	3.5.3.2	Verify each RCIC System manual, power operated, and automatic valve in the flow path, that is not locked, sealed, or otherwise secured in position, is in the correct position.	31 days .
SR	3.5.3.3	Not required to be performed until 12 hours after reactor steam pressure and flow are adequate to perform the test. Verify, with reactor pressure ≤ 1035 psig and ≥ 935 psig, the RCIC pump can develop a flow rate ≥ 600 gpm against a system head corresponding to reactor pressure.	92 days
SR	3.5.3.4	Not required to be performed until 12 hours after reactor steam pressure and flow are adequate to perform the test. Verify, with reactor pressure ≤ 165 psig, the RCIC pump can develop a flow rate ≥ 600 gpm against a system head corresponding to reactor pressure.	24 months

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SURVEILLANCE REQUIREMENTS (continued)

	SURVEILLANCE	FREQUENCY
SR 3.5.3.5	Versel injection may be excluded. Verify the RCIC System actuates on an actual or simulated automatic initiation	24 months
•	signal.	

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