



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

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

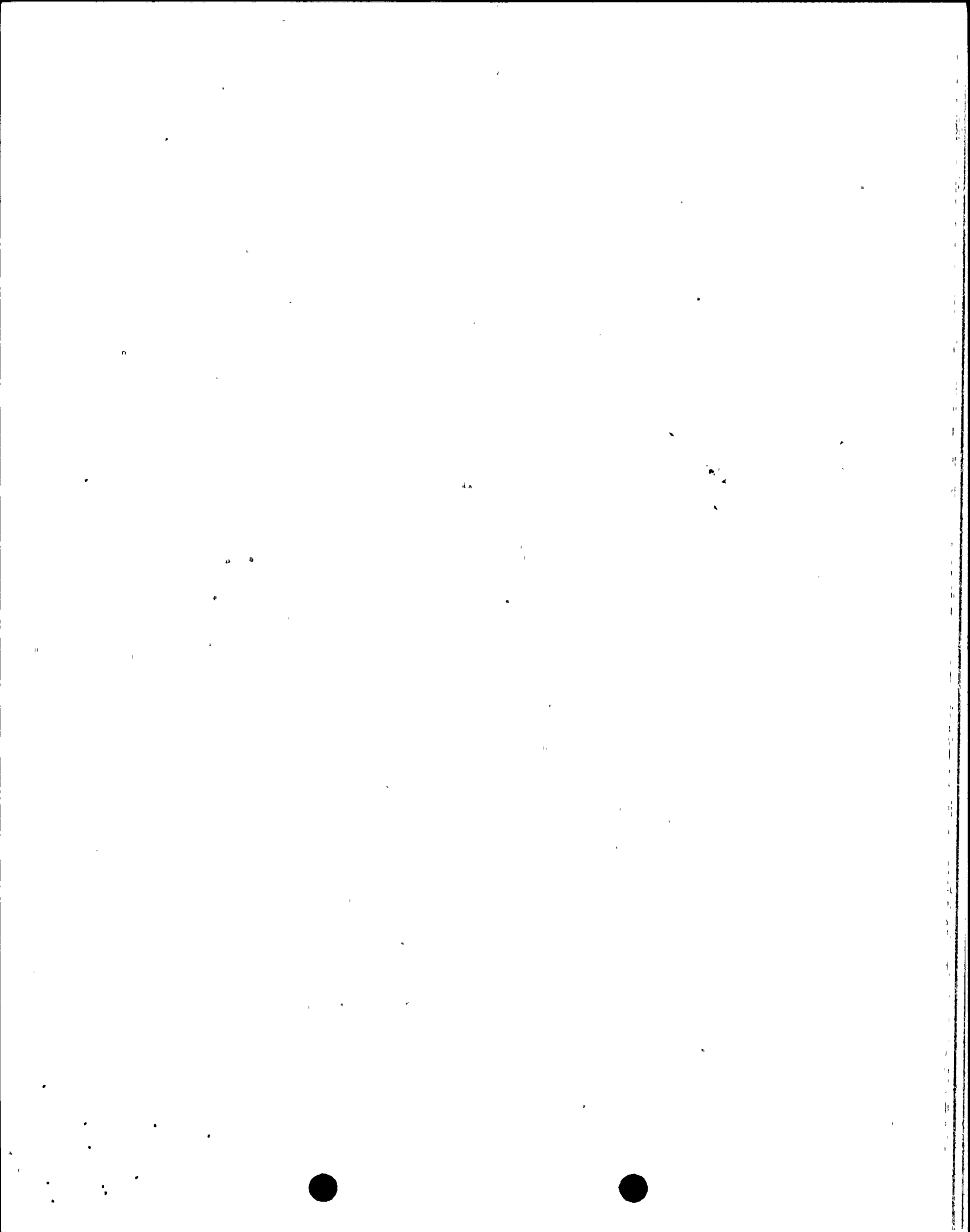
DOCKET NO. 50-397

NUCLEAR PROJECT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 147
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 April 25, 1995, 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:



ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO. 147 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

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3/4 3-15
3/4 3-17
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INSERT

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TABLE 3.3.2-1 (Continued)

ISOLATION ACTUATION INSTRUMENTATION

<u>TRIP FUNCTION</u>	<u>VALVE GROUPS OPERATED BY SIGNAL</u>	<u>MINIMUM OPERABLE CHANNELS PER TRIP SYSTEM (a)</u>	<u>APPLICABLE OPERATIONAL CONDITION</u>	<u>ACTION</u>
3. <u>REACTOR WATER CLEANUP SYSTEM ISOLATION</u>				
a. Δ Flow - High	7	1	1, 2, 3	22
b. Heat Exchanger Area Temperature - High	7	1	1, 2, 3	22
c. Heat Exchanger Area Ventilation Δ Temp. - High	7	1	1, 2, 3	22
d. Pump Area Temperature - High				
1) Pump Room A	7	1	1, 2, 3	22
2) Pump Room B	7	1	1, 2, 3	22
e. Pump Area Ventilation Δ Temp. - High				
1) Pump Room A	7	1	1, 2, 3	22
2) Pump Room B	7	1	1, 2, 3	22
f. SLCS Initiation	7(f)	N.A.	1, 2, 3	22
g. Reactor Vessel Water Level - Low Low, Level 2	7	2	1, 2, 3	22
h. RWCU/RCIC Line Routing Area Temperature - High	7	1	1, 2, 3	22
i. RWCU Line Routing Area Temperature - High				
Room 509	7	1	1, 2, 3	22
Room 511	7	1	1, 2, 3	22
Room 408	7	1	1, 2, 3	22
Room 409	7	1	1, 2, 3	22
j. Manual Initiation	7	1/group	1, 2, 3	24
k. Blowdown Flow - High	7	1	1, 2, 3	27

TABLE 3.3.2-1 (Continued)

		<u>ISOLATION ACTUATION INSTRUMENTATION</u>			
<u>TRIP FUNCTION</u>	<u>VALVE GROUPS OPERATED BY SIGNAL</u>	<u>MINIMUM OPERABLE CHANNELS PER TRIP SYSTEM (a)</u>	<u>APPLICABLE OPERATIONAL CONDITION</u>	<u>ACTION</u>	
4. REACTOR CORE ISOLATION COOLING SYSTEM ISOLATION					
a.	RCIC Steam Line Flow - High	8	1	1, 2, 3	22
b.	RCIC/RHR Steam Line Flow - High	8	1	1, 2, 3	22
c.	RCIC Steam Supply Pressure - Low	8, 9	2	1, 2, 3	22
d.	RCIC Turbine Exhaust Diaphragm Pressure - High	8	2	1, 2, 3	22
e.	RCIC Equipment Room Temperature - High	8	1	1, 2, 3	22
f.	RCIC Equipment Room Δ Temperature - High	8	1	1, 2, 3	22
g.	RWCU/RCIC Steam Line Routing Area Temperature - High	8	1	1, 2, 3	22
h.	Drywell Pressure - High	9	2	1, 2, 3	22
i.	Manual Initiation(h)	8	1	1, 2, 3	24
5. RHR SYSTEM SHUTDOWN COOLING MODE ISOLATION (i)					
a.	Reactor Vessel Water Level - Low, Level 3	6	2	1, 2, 3	26
b.	Reactor Vessel (RHR Cut-in Permissive) Pressure - High	6	1	1, 2, 3	26
c.	Equipment Area Temperature - High	6	1	1, 2, 3	26
d.	Equipment Area Ventilation Δ Temp. - High	6	1	1, 2, 3	26
e.	Shutdown Cooling Suction Flow Rate - High	6	1	1, 2, 3	26
f.	RHR Heat Exchanger Area Temperature - High				
	Room 606	6	1	1, 2, 3	26
	Room 507	6	1	1, 2, 3	26
	Room 605	6	1	1, 2, 3	26
	Room 505	6	1	1, 2, 3	26
g.	Manual Initiation	6	1/group	1, 2, 3	24

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TABLE 3.3.2-1 (Continued)
ISOLATION ACTUATION INSTRUMENTATION

ACTION STATEMENTS

- ACTION 20 - Be in at least HOT SHUTDOWN within 12 hours and in COLD SHUTDOWN within the next 24 hours.
- ACTION 21 - Be in at least STARTUP with the associated isolation valves closed within 6 hours or be in at least HOT SHUTDOWN within 12 hours and in COLD SHUTDOWN within the next 24 hours.
- ACTION 22 - Close the affected system isolation valves within 1 hour and declare the affected system inoperable.
- ACTION 23 - Be in at least STARTUP within 6 hours.
- ACTION 24 - Restore the manual initiation function to OPERABLE status within 8 hours or close the affected system isolation valves within the next hour and declare the affected system inoperable or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.
- ACTION 25 - Establish SECONDARY CONTAINMENT INTEGRITY with the standby gas treatment system operating within 1 hour.
- ACTION 26 - Lock close or close, as applicable, the affected system isolation valves within 1 hour and declare the affected system inoperable.
- ACTION 27 - Close valve RWCU-V-32 within 1 hour or perform ACTION 22.

TABLE NOTATIONS

*May be bypassed with reactor steam pressure \leq 1060 psig and all turbine stop valves closed.

**When handling irradiated fuel in the secondary containment and during CORE ALTERATIONS and operations with a potential for draining the reactor vessel.

#During CORE ALTERATIONS and operations with a potential for draining the reactor vessel.

- (a) A channel may be placed in an inoperable status for up to 6 hours for required surveillance without placing the trip system in the tripped condition provided at least one other OPERABLE channel in the same trip system is monitoring that parameter.
- (b) Also actuates the standby gas treatment system.
- (c) DELETED
- (d) A channel is OPERABLE if 2 of 4 detectors in that channel are OPERABLE.
- (e) Also actuates secondary containment ventilation isolation dampers per Table 3.6.5.2-1.
- (f) Closes only RWCU system outboard isolation valve RWCU-V-4.
- (g) Only valves RHR-V-123A and RHR-V-123B in Valve Group 5 are required for primary isolation.
- (h) Manual initiation isolates RCIC-V-8 only and only with a coincident reactor vessel level-low, level 3.
- (i) Not required for RHR-V-8 when control is transferred to the alternate remote shutdown panel during operational conditions 1, 2 & 3 and the isolation interlocks are bypassed. When RHR-V-8 control is transferred to the remote shutdown panel under operational modes 1, 2, and 3 the associated key lock switch will be locked with the valve in the closed position. Except RHR-V-8 can be returned to, and operated from, the control room, with the interlocks and automatic isolation capability reestablished in operational conditions 2 and 3 when reactor pressure is less than 135 psig.

TABLE 3.3.2-2

ISOLATION ACTUATION INSTRUMENTATION SETPOINTS

<u>TRIP FUNCTION</u>	<u>TRIP SETPOINT</u>	<u>ALLOWABLE VALUE</u>
1. <u>PRIMARY CONTAINMENT ISOLATION</u>		
a. Reactor Vessel Water Level		
1) Low, Level 3	≥ 13.0 inches*	≥ 11.0 inches
2) Low Low, Level 2	≥ -50 inches*	≥ -57 inches
b. Drywell Pressure - High	≤ 1.68 psig	≤ 1.88 psig
c. Main Steam Line		
1) DELETED		
2) Pressure - Low	≥ 831 psig	≥ 811 psig
3) Flow - High	≤ 115.6 psid	≤ 124.6 psid
d. Main Steam Line Tunnel Temperature - High	≤ 164°F	≤ 170°F
e. Main Steam Line Tunnel ΔTemperature - High	≤ 80°F	≤ 90°F
f. Condenser Vacuum - Low	≥ 23 inches Hg absolute pressure	≥ 24.5 inches Hg absolute pressure
g. Manual Initiation	N.A.	N.A.
2. <u>SECONDARY CONTAINMENT ISOLATION</u>		
a. Reactor Building Vent Exhaust Plenum Radiation - High	≤ 13.0 mR/h	≤ 16.0 mR/h
b. Drywell Pressure - High	≤ 1.68 psig	≤ 1.88 psig
c. Reactor Vessel Water Level - Low Low, Level 2	≥ -50 inches*	≥ -57 inches
d. Manual Initiation	N.A.	N.A.

TABLE 3.3.2-2 (Continued)
ISOLATION ACTUATION INSTRUMENTATION SETPOINTS

<u>TRIP FUNCTION</u>	<u>TRIP SETPOINT</u>	<u>ALLOWABLE VALUE</u>
3. <u>REACTOR WATER CLEANUP SYSTEM ISOLATION</u>		
a. Δ Flow - High	≤ 58.5 gpm	≤ 65.5 gpm
b. Heat Exchanger Area Temperature - High	$\leq 150^{\circ}\text{F}$	$\leq 160^{\circ}\text{F}$
c. Heat Exchanger Area Ventilation Δ Temp. - High	$\leq 60^{\circ}\text{F}$	$\leq 70^{\circ}\text{F}$
d. Pump Area Temperature - High Pump Room A	$\leq 160^{\circ}\text{F}$	$\leq 180^{\circ}\text{F}$
Pump Room B	$\leq 160^{\circ}\text{F}$	$\leq 180^{\circ}\text{F}$
e. Pump Area Ventilation Δ Temp. - High Pump Room A	$\leq 70^{\circ}\text{F}$	$\leq 100^{\circ}\text{F}$
Pump Room B	$\leq 70^{\circ}\text{F}$	$\leq 100^{\circ}\text{F}$
f. SLCS Initiation	N.A.	N.A.
g. Reactor Vessel Water Level - Low Low, Level 2	≥ -50 inches*	≥ -57 inches
h. RWCU/RCIC Line Routing Area Temperature - High	$\leq 160^{\circ}\text{F}$	$\leq 180^{\circ}\text{F}$
i. RWCU Line Routing Area Temperature - High Room 409	$\leq 160^{\circ}\text{F}$	$\leq 175^{\circ}\text{F}$
Room 511	$\leq 160^{\circ}\text{F}$	$\leq 180^{\circ}\text{F}$
Room 408	$\leq 160^{\circ}\text{F}$	$\leq 180^{\circ}\text{F}$
Room 409	$\leq 160^{\circ}\text{F}$	$\leq 175^{\circ}\text{F}$
j. Manual Initiation	N.A.	N.A.
k. Blowdown Flow - High	≤ 264.5 gpm	≤ 271.7 gpm
4. <u>REACTOR CORE ISOLATION COOLING SYSTEM ISOLATION</u>		
a. RCIC Steam Line Flow - High	$\leq 290\%$ of rated flow	$\leq 300\%$ of rated flow
b. RHR/RCIC Steam Line Flow - High	≤ 101.5 inches H_2O	≤ 107.5 inches H_2O
c. RCIC Steam Supply Pressure - Low	≥ 62 psig	≥ 58 psig
d. RCIC Turbine Exhaust Diaphragm Pressure - High	≤ 10.0 psig	≤ 20.0 psig
e. RCIC Equipment Room Temperature - High	$\leq 160^{\circ}\text{F}$	$\leq 180^{\circ}\text{F}$

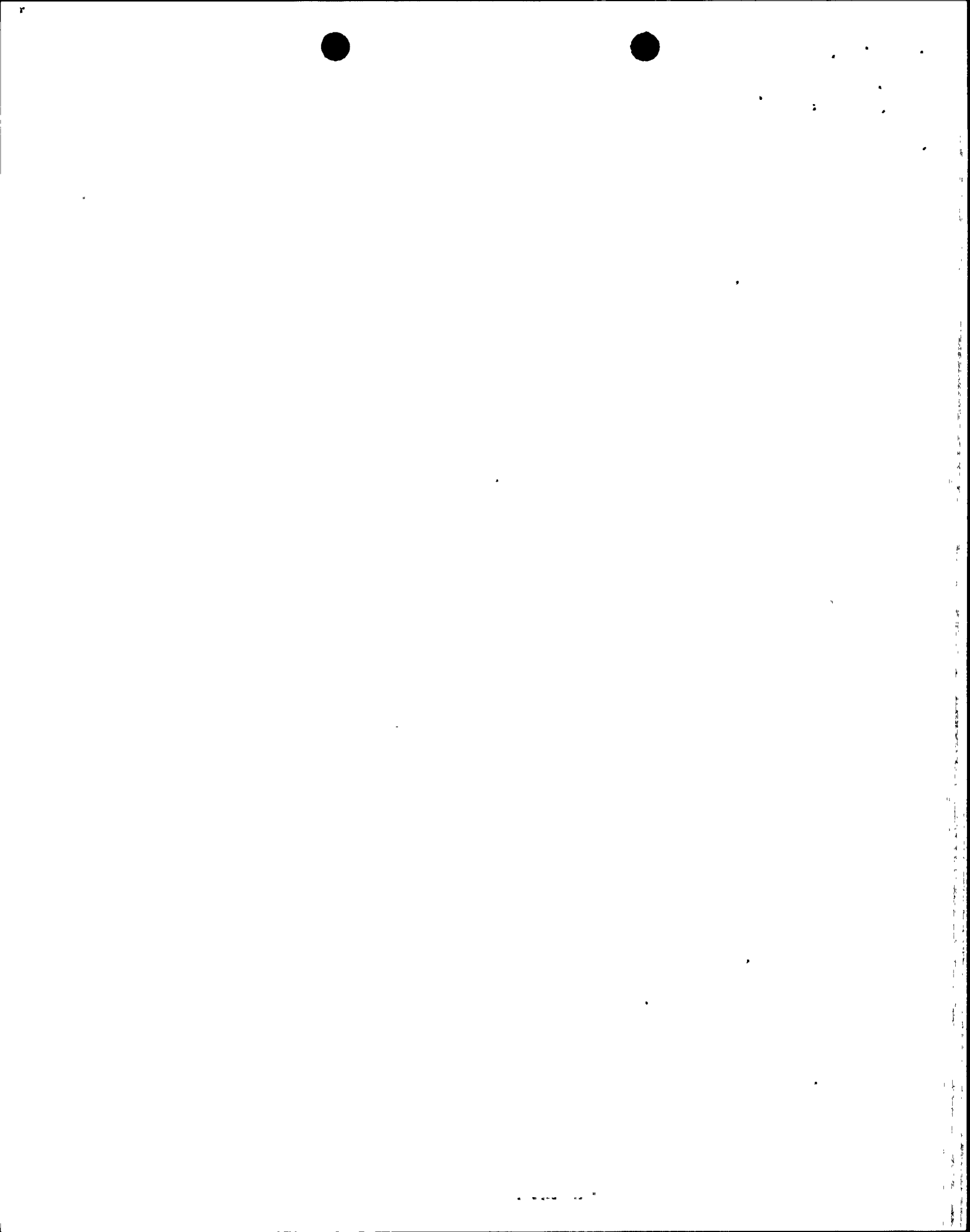


TABLE 4.3.2.1-1 (Continued)
ISOLATION ACTUATION INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>TRIP FUNCTION</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>CHANNEL CALIBRATION</u>	<u>OPERATIONAL CONDITIONS FOR WHICH SURVEILLANCE REQUIRED</u>
3. REACTOR WATER CLEANUP SYSTEM ISOLATION				
a. Δ Flow - High	S	Q	R	1, 2, 3
b. Heat Exchanger Area Temperature - High	N.A.	SA	R	1, 2, 3
c. Heat Exchanger Area Ventilation Δ Temperature - High	N.A.	SA	R	1, 2, 3
d. Pump Area Temperature - High				
Pump Room A	N.A.	SA	R	1, 2, 3
Pump Room B	N.A.	SA	R	1, 2, 3
e. Pump Area Ventilation Δ Temp. - High				
Pump Room A	N.A.	SA	R	1, 2, 3
Pump Room B	N.A.	SA	R	1, 2, 3
f. SLCS Initiation	N.A.	R	N.A.	1, 2, 3
g. Reactor Vessel Water Level - Low Low, Level 2	N.A.	Q	R	1, 2, 3
h. RWCU/RCIC Line Routing Area Temperature - High	N.A.	SA	R	1, 2, 3
i. RWCU Line Routing Area Temperature - High	N.A.	SA	R	1, 2, 3
j. Manual Initiation	N.A.	R	N.A.	1, 2, 3
k. Blowdown Flow - High	S	Q	R	1, 2, 3
4. REACTOR CORE ISOLATION COOLING SYSTEM ISOLATION				
a. RCIC Steam Line Flow - High	S	Q	R	1, 2, 3
b. RCIC/RHR Steam Line Flow - High	S	Q	R	1, 2, 3
c. RCIC Steam Supply Pressure - Low	N.A.	Q	R	1, 2, 3
d. RCIC Turbine Exhaust Diaphragm Pressure - High	N.A.	Q	R	1, 2, 3
e. RCIC Equipment Room Temperature - High	N.A.	SA	R	1, 2, 3
f. RCIC Equipment Room Δ Temperature - High	N.A.	SA	R	1, 2, 3

TABLE 4.3.2.1-1 (Continued)

ISOLATION ACTUATION INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>TRIP FUNCTION</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>CHANNEL CALIBRATION</u>	<u>OPERATIONAL CONDITIONS FOR WHICH SURVEILLANCE REQUIRED</u>
4. <u>REACTOR CORE ISOLATION COOLING SYSTEM ISOLATION (Continued)</u>				
g. RWCU/RCIC Steam Line Routing Area Temperature - High	N.A.	SA	R	1, 2, 3
h. Drywell Pressure - High	N.A.	Q	R	1, 2, 3
i. Manual Initiation	N.A.	R	N.A.	1, 2, 3
5. <u>RHR SYSTEM SHUTDOWN COOLING MODE ISOLATION</u>				
a. Reactor Vessel Water Level - Low, Level 3	S	Q	R	1, 2, 3
b. Reactor Vessel (RHR Cut-in Permissive) Pressure - High	N.A.	Q	R	1, 2, 3
c. Equipment Area Temperature - High	N.A.	SA	R	1, 2, 3
d. Equipment Area Ventilation Δ Temp. - High	N.A.	SA	R	1, 2, 3
e. Shutdown Cooling Return Flow Rate - High	N.A.	Q	R	1, 2, 3
f. RHR Heat Exchanger Area Temperature - High	N.A.	SA	R	1, 2, 3
g. Manual Initiation	N.A.	R	N.A.	1, 2, 3

TABLE NOTATIONS

- * When reactor steam pressure \geq 1060 psig and/or any turbine stop valve is open.
- ** When handling irradiated fuel in the secondary containment and during CORE ALTERATIONS and operations with a potential for draining the reactor vessel.
- # During CORE ALTERATION and operations with a potential for draining the reactor vessel.