3.7 PLANT SYSTEMS

3.7.1 Emergency Circulating Water (ECW) System

LCO 3.7.1 The following ECW subsystem(s) shall be OPERABLE:
a. MODES 1, 2 and 3, two subsystems
b. MODES 4, and 5, the subsystem(s) associated with system or components required OPERABLE by Specifications 3.7.3, 3.8.2, 3.4.10, 3.9.8, and 3.9.9.

APPLICABILITY: MODES 1,2,3,4, and 5.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One ECW subsystem inoperable in MODE 1, 2, or 3.	A.1 Declare the affected Residual Heat Removal (RHR) Shutdown Cooling System, Emergency Diesel Generator (EDG), and Emergency Chilled water (ECHW) System inoperable, and enter applicable Conditions and Required Actions. AND A.2 Restore ECW subsystem to OPERABLE status.	Immediately 72 hours

(continued)

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
B. Required Action and associated Completion Time of Condition A not met. OR Both ECW subsystems inoperable in MODE 1, 2, or 3. OR Intake structure water temperature＞35℃	B.1 Be in MODE 3. AND B.2 Be in MODE 4.	12 hours 36 hours
C. Required ECW subsystem(s) inoperable in MODE 4, or 5.	C.1 Declare the affected Residual Heat Removal (RHR) Shutdown Cooling System, Emergency Diesel Generator (EDG), and Emergency Chilled water (ECHW) System inoperable, and enter applicable Conditions and Required Actions.	Immediately

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.7.1.1	Verify the water temperature in the intake structure is ≤ 35℃.	24 hours
SR 3.7.1.2	----------NOTE---------- Isolation of flow to individual components does not render ECW System inoperable. ---------- Verify each ECW subsystem manual, power operated, and automatic valve in the flow path servicing safety related systems or components, that is not locked, sealed, or otherwise secured in position, is in the correct position.	31 days
SR 3.7.1.3	Verify each ECW subsystem actuates on an actual or simulated initiation signal.	18 months

3.7 PLANT SYSTEMS

3.7.2 High Pressure Core Spray (HPCS) Service Water System (SWS)

LCO 3.7.2 The HPCS SWS shall be OPERABLE.

APPLICABILITY: When the HPCS system is required to be OPERABLE.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. HPCS SWS inoperable.	A.1 Declare HPCS System inoperable.	Immediately

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.7.2.1	----------NOTE---------- Isolation of flow to individual components does not render HPCS SWS System inoperable. ----------	
	Verify each HPCS SWS manual valve in the flow path servicing safety related systems or components, that is not locked, sealed, or otherwise secured in position, is in the correct position.	31 days
SR 3.7.2.2	Verify the HPCS SWS pump develops a flow rate of ≥ 51.1 lps (810gpm).	In accordance with the Inservice Testing Program or 92 days. 5
SR 3.7.2.3	Verify the HPCS SWS actuates on an actual or simulated initiation signal.	18 months

3.7 PLANT SYSTEMS

3.7.3 Emergency Chilled Water (ECHW) System

LCO 3.7.3 The following ECHW subsystem(s) shall be OPERABLE:
a. MODES 1,2 and 3, two subsystems
b. MODES 4, and 5, the subsystem(s) associated with system or components required OPERABLE by Specification 3.7.4, and 3.7.10.

APPLICABILITY: MODES 1, 2, 3, 4 and 5.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One ECHW subsystem inoperable in MODE 1, 2, or 3.	A.1 Declare the affected Main Control Room Emergency Cooling System (MCRECS) , and Switchgear Room Emergency Cooling System (SWGRECS) inoperable, and enter applicable Conditions and Required Actions. AND A2. Restore ECHW subsystem to OPERABLE status.	Immediately 72 hours
B. Both ECHW subsystems inoperable in MODE 1, 2, or 3.	B.1 Restore one ECHW subsystem to OPERABLE status.	8 hours
C. Required Action and associated Completion Time of Condition A or B not met.	C.1 Be in MODE 3. AND C.2 Be in MODE 4.	12 hours 36 hours

(continued)

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
D. Required ECHW subsystem(s) inoperable in MODE 4, or 5.	D.1 Declare the affected Main Control Room Emergency Cooling System (MCRECS), and Switchgear Room Emergency Cooling System (SWGRECS) inoperable, and enter applicable Conditions and Required Actions.	Immediately

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.7.3.1	Verify the expansion tank water level is not lower than 12.7 cm (5inches) below the tank centerline.	24 hours
SR 3.7.3.2	----------NOTE---------- Isolation of flow to individual components does not render ECHW System inoperable. ----------	
	Verify each ECHW subsystem manual, power operated, and automatic valve in the flow path servicing safety related systems or components, that is not locked, sealed, or otherwise secure in position, is in the correct position.	31 days

(continued)

SURVEILLANCE REQUIREMENTS

	SURVEILLANCE	FREQUENCY
SR 3.7.3.3	Verify each ECHW chilled pump develops a discharge pressure ≥ 3.84 kg/cm^2 (54.59 psig) at a flow as followed: a. For Unit 1 Loop A, ≥ 19.0 1/s (300.9 gpm) b. For Unit 1 Loop B, ≥ 17.2 1/s (272.6 gpm) c. For Unit 2 Loop A, ≥ 20.1 1/s (318.2 gpm) d. For Unit 2 Loop B, ≥ 17.2 1/s (272.6 gpm)	In accordance with the Inservice Testing Program on 92 days.
SR 3.7.3.4	Verify each ECHW subsystem actuated on an actual or simulated initiation signal.	18 months
SR 3.7.3.5	Verify each chiller is capable of carrying a cooling load of 6 × 10^5 Kcal/hr (2.4×10^6 Btu/hr)	18 months

3.7 PLANT SYSTEMS

3.7.4 Main Control Room Emergency Cooling System (MCRECS)

LCO 3.7.4 Four MCRECS subsystems with the pressurization and cooling function shall be OPERABLE.

APPLICABILITY: With any one of the two reactor unit is in the following MODES:
MODES 1, 2, and 3,
During movement of irradiated fuel assemblies in the primary containment or fuel building,
During CORE ALTERATIONS,
During operations with a potential for draining the reactor vessel (OPDRVs),
During movement of heavy loads over irradiated fuel assemblies in the primary containment or fuel building.

----------NOTE----------
All of the four MCRECS subsystems are not required to be OPERABLE when both units are in MODES 4, or 5, without during movement of irradiated fuel assemblies in the primary containment or fuel building, CORE ALTERATIONS, operations with a potential for draining the reactor vessel (OPDRVs), movement of heavy loads over irradiated fuel assemblies in the primary containment or fuel building..

ACTIONS

----------NOTES----------
1. Separate Condition entry is allowed for each MCRECS subsystem and isolation flow paths.

2. Isolation flow paths may be unisolated intermittently under administrative controls.

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One of the four MCRECS subsystem with pressurization function inoperable	A.1 Restore MCRECS subsystem to OPERABLE status.	7 days
B. --------NOTES-------- Only applicable to both units are in MODE 1, 2, or 3. ---------- Required Action and Associated Completion Time of Condition A not met.	B.1 Be in MODE 3. AND B.2 Be in MODE 4.	12 hours 36 hours

(continued)

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
C. ------NOTES-------- Only applicable to one or both units are during movement of irradiated fuel assemblies in the primary containment or fuel building, during movement of heavy loads over irradiated fuel assemblies in the primary containment or fuel building, during CORE ALTERATIONS, or during OPDRVs. ---------- Required Action and Associated Completion Time of Condition A not met.	----------NOTES---------- 1. Required Actions C.1.1, C1.2 and C.2 are only applicable to the affected unit is in MODE 1, 2,or 3. 2. Required Action C.3 is only applicable to the affected unit is not in MODE 1, 2, or 3. 3. LCO 3.0.4 is not applicable to the unaffected unit where the affected unit is not in MODE 1, 2, or 3. ---------- C.1.1 Be in MODE 3. AND C.1.2 Be in MODE 4. AND C.2 Place one MCRECS subsystems in the unaffected unit in pressurization mode. AND C.3 Perform SR 3.7.4.1 for each OPERABLE MCRECS subsystem.	12 hours 36 hours 6 hours 24 hours, if not performed within the previous 14 days AND Once per 14days thereafter

(continued)

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
D. Two of the four MCRECS subsystems with pressurization function inoperable	D.1 Restore one MCRECS subsystem to OPERABLE status.	8 hours
E. --------NOTES--------- Only applicable to both units are in MODE 1, 2, or 3. ---------- Required Action and Associated Completion Time of Condition D not met.	E.1 Be in MODE 3. AND E.2 Be in MODE 4.	12 hours 36 hours
F. --------NOTES--------- Only applicable to one or both units are during movement of irradiated fuel assemblies in the primary containment or fuel building, during movement heavy load over irradiated fuel assemblies in the primary containment or fuel building, during CORE ALTERATIONS, or during OPDRVs. ---------- Required Action and Associated Completion Time of Condition D not met.	F.1.1 Be in MODE 3. AND F.1.2 Be in MODE 4. AND F.2 Place one MCRECS subsystems in pressurization mode.	12 hours 36 hours 6 hours

(continued)

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
G. Any one of the four MCRECS subsystem with cooling function inoperable.	----------NOTES---------- LCO 3.0.4 is not applicable to the unaffected unit. ----------	
	G.1 Restore MCRECS subsystem to OPERABLE status.	30 days
	OR	
	G.2 Place one MCRECS subsystems in the unaffected unit in cooling mode.	30 days
H. Any two of the four MCRECS subsystems with cooling function inoperable	H.1 Place one MCRECS subsystems in cooling mode.	Immediately
	AND	
	H.2 Restore one MCRECS subsystem to OPERABLE status.	30 days
I. Required Action and Associated Completion Time of Condition G or H not met, and for unit that in MODE 1, 2, or 3.	I.1 Be in MODE 3.	12 hours
	AND	
	I.2 Be in MODE 4.	36 hours

(continued)

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
J. Required Action and associated Completion Time of Condition G or H not met, and for unit that during movement of irradiated fuel assemblies in the primary containment or fuel building, during movement of heavy load over irradiated fuel assemblies in the primary containment or fuel building, during CORE ALTERATIOS, or during OPDRVs.	----------NOTE---------- LCO 3.0.3 is not applicable. ---------- J.1 Place two MCRECS subsystems in cooling mode. OR J.2.1 Suspend movement of irradiated fuel assemblies in the primary containment or fuel building. AND J.2.2 Suspend movement of heavy load over irradiated fuel assemblies in the primary containment or fuel building. AND J.2.3 Suspend CORE ALTERATIONS. AND J.2.4 Initiate action to suspend OPDRVs.	Immediately Immediately Immediately Immediately

(continued)

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
K. Any three or four MCRECS subsystems with pressurization or cooling function inoperable, and for unit that in MODE 1, 2, or 3.	K.1 Enter LCO 3.0.3.	Immediately
L. Any three or four MCRECS subsystems with pressurization or cooling function inoperable, and for unit that during movement of irradiated fuel assemblies in the primary containment or fuel building, during movement of heavy load over irradiated fuel assemblies in the primary containment or fuel building, during CORE ALTERATIONS, or during OPDRVs.	----------NOTE---------- LCO 3.0.3 is not applicable. ---------- L.1 Suspend movement of irradiated fuel assemblies in the primary containment or fuel building. AND L.2 Suspend movement of heavy load over irradiated fuel assembles in the primary containment or fuel building. AND L.3 Suspend CORE ALTERATIONS. AND L.4 Initiate action to suspend OPDRVs.	 Immediately Immediately Immediately Immediately

(continued)

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
M. One or more main control room isolation flow paths with one isolation damper inoperable.	M.1 Restore isolation damper to OPERABLE. OR M.2.1 Isolate the affected isolation flow path by use of at least one closed and de - activated automatic valve, closed manual valve, or blind flange. AND M.2.2 Verify the affected isolation flow path is isolated.	72 hours 72 hours Once per 31 days
N. One or more main control room isolation flow paths with two isolation dampers inoperable.	N.1 Isolate the affected isolation flow path by use of at least one closed and de - activated automatic valve, closed manual valve, or blind flange.	4 hours
O. Required Action and Associated Completion Time of Condition M or N not met, and for unit that in MODE 1, 2, or 3.	O.1 Be in MODE 3. AND O.2 Be in MODE 4.	12 hours 36 hours

(continued)

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
P. Required Action and associated Completion Time of Condition M or N not met, and for unit that during movement of irradiated fuel assemblies in the primary containment or fuel building, during movement of heavy load over irradiated fuel assemblies in the primary containment or fuel building, during CORE ALTERATIONS, or during OPDRVs.	----------NOTE---------- LCO 3.0.3 is not applicable. ---------- P.1 Suspend movement of irradiated fuel assemblies in the primary containment or fuel building. AND P.2 Suspend movement of heavy load over irradiated fuel assembles in the primary containment or fuel building. AND P.3 Suspend CORE ALTERATIONS. AND P.4 Initiate action to suspend OPDRVs.	 Immediately Immediately Immediately Immediately

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.7.4.1	Operate each MCRECS subsystem for ≥ 10 continuous hours with the heaters operating.	31 days
SR 3.7.4.2	Perform required MCRECS filter testing in accordance with Ventilation Filter Testing Program (VFTP).	In accordance with the VFTP
SR 3.7.4.3	Verify each MCRECS subsystem actuates on an actual or simulated initiation signal.	18 months
SR 3.7.4.4	Verify each main control room isolation damper actuates to the isolation position on an actual or simulated initiation signal with isolation time ≤ 10 seconds.	18 months
SR 3.7.4.5	Verify with two MCRECS subsystem operating can maintain a positive pressure of ≥ 0.44 cm (0.17inch) water gauge in the main control room with each outside air makeup subsystem at a flow rate ≤ 188.8 lps + 10% (400 scfm + 10%).	18 months

3.7 PLANT SYSTEMS

3.7.5 Main Condenser Offgas

LCO 3.7.5 The gross gamma activity rate of the noble gases measured at the main condenser air ejector shall be ≤ 1.073×10^{10} Bq/sec (290mCi/sec) after decay of 30 minutes.

APPLICABILITY: MODE 1,
MODES 2 and 3 with any main steam line not isolated and steam jet air ejector (SJAE) in operation.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. Gross gamma activity rate of the noble gases not within limit.	A.1 Restore gross gamma activity rate of the noble gases to within limit.	72 hours
B. Required Action and associated Completion Time not met.	B.1 Isolate all main steam lines. OR	12 hours
	B.2 Isolate SJAE. OR	12 hours
	B.3.1 Be in MODE 3. AND	12 hours
	B.3.2 Be in MODE 4.	36 hours

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.7.5.1	----------NOTE---------- Not required to be performed until 31 days after any main steam line not isolated and SJAE in operation. ----------	
	Verify the gross gamma activity rate of the noble gases is $\leq 1.073 \times 10^{10}$ Bq/sec (290mCi/sec) after decay of 30 minutes.	31 days AND Once within 4 hours after a $\geq 50\%$ increase in the nominal steady state fission gas release after factoring out increases due to changes in THERMAL POWER level

3.7 PLANT SYSTEMS

3.7.6 Main Turbine Bypass System

LCO 3.7.6 The Main Turbine Bypass System shall be OPERABLE.

OR

LCO 3.2.2, "MINIMUM CRITICAL POWER RATIO (MCPR)," limits for an inoperable Main Turbine Bypass System, as specified in the COLR, are made applicable.

APPLICABILITY: THERMAL POWER ≥ 25% RTP.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. Requirements of the LCO not met.	A.1 Satisfy the requirements of the LCO.	2 hours
B. Required Action and associated Completion Time not met.	B.1 Reduce THERMAL POWER to < 25% RTP.	4 hours

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.7.6.1	Verify one complete cycle of each main turbine bypass valve.	31 days
SR 3.7.6.2	Perform a system functional test.	18 months
SR 3.7.6.3	Verify the TURBINE BYPASS SYSTEM RESPONSE TIME is within limits as the following requirements when measured from the initial movement of main turbine stop valve or control valve: a. 80% of turbine bypass system capability shall be established within 0.3 second. b. Bypass valve opening shall start within 0.1 second.	18 months

3.7 PLANT SYSTEMS

3.7.7 Fuel Pool Water Level

LCO 3.7.7 The fuel pool water level shall be ≥ 7.01m (23ft) over the top of irradiated fuel assemblies seated in the spent fuel storage pool and upper containment fuel storage pool racks.

APPLICABILITY: During movement of irradiated fuel assemblies or movement of heavy load over irradiated fuel assembles in the associated fuel storage pool.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. Fuel pool water level not within limit.	A.1 ----------NOTE---------- LCO 3.0.3 is not applicable. ---------- Suspend movement of irradiated fuel assemblies and movement of heavy load over irradiated fuel assemblies in the associated fuel storage pool(s).	Immediately

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.7.7.1	Verify the fuel pool water level is ≥ 23 ft over the top of irradiated fuel assemblies seated in the storage racks.	7 days

3.7 PLANT SYSTEMS

3.7.8 Fuel Storage Building

LCO 3.7.8 The fuel storage building shall be OPERABLE.

APPLICABILITY: During movement of irradiated fuel assemblies or movement of heavy load over irradiated fuel assemblies in the fuel storage building.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. Fuel storage building inoperable.	A.1 Restore fuel storage building to OPERABLE status.	4 hours
B. Required Action and associated Completion Time not met.	----------NOTE---------- LCO 3.0 is not applicable. ----------	
	B.1 Suspend movement of irradiated fuel assemblies in the fuel storage building.	Immediately
	AND	
	B.2 Suspend movement of heavy load over irradiated fuel assemblies in the fuel storage building.	Immediately

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.7.8.1	----------NOTE---------- Not required to be met for doors that are opening under administrative controls. ---------- Verify each fuel storage building access door is closed, except when the access opening is being used for routine entry and exit.	31 days
SR 3.7.8.2	Verify the fuel storage building ventilation back draft damper is OPERABLE or secured in the closed position.	92 days
SR 3.7.8.3	Verify each fuel storage building exhaust subsystem will draw down the fuel storage building to ≥ 0.635 cm (0.25 inches) of vacuum water gauge in ≤ 60 seconds.	18 months on a STAGGERED TEST BASIS
SR 3.7.8.4	Verify each fuel storage building exhaust subsystem can maintain ≥ 0.635 cm (0.25 inch) of vacuum water gauge in the fuel storage building at a flow rate ≤ 1888 lps + 10% (4000 scfm + 10%).	18 months on a STAGGERED TEST BASIS

3.7 PLANT SYSTEMS

3.7.9 Fuel Storage Building Exhaust System

LCO 3.7.9 Two fuel storage building exhaust subsystems shall be OPERABLE.

APPLICABILITY: During movement of irradiated fuel assemblies or movement of heavy load over irradiated fuel assemblies in the fuel storage building.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One fuel storage building exhaust subsystem inoperable.	A.1 Restore fuel storage building exhaust subsystem to OPERABLE status.	7 days
B. Required Action and associated Completion Time of Condition A not met.	----------NOTE---------- LCO 3.0 3 is not applicable. ----------	
	B.1 Place OPERABLE fuel storage building exhaust subsystem in operation..	Immediately
	OR	
	B.2.1 Suspend movement of irradiated fuel assemblies in the fuel storage building.	Immediately
	AND	
	B.2.2 Suspend movement of heavy load over irradiated fuel assemblies in the fuel storage building.	Immediately

(continued)

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
C. Two fuel storage building exhaust subsystems inoperable	----------NOTE---------- LCO 3.0 3 is not applicable. ----------	
	C.1 Suspend movement of irradiated fuel assemblies in the fuel storage building	Immediately
	AND	
	C.2 Suspend movement of heavy loads over irradiated fuel assemblies in the fuel storage building.	Immediately

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.7.9.1	Operate each fuel storage building exhaust subsystem for ≥ 10 continuous hours with heaters operating.	31 days
SR 3.7.9.2	Perform required fuel storage building exhaust subsystem filter testing in accordance with the Ventilation Filter Testing Program (VFTP).	In accordance with the VFTP
SR 3.7.9.3	Verify each fuel storage building exhaust subsystem actuates on actual or simulated initiation signal.	18 months

3.7 PLANT SYSTEMS

3.7.10 Switchgear Room Emergency Cooling System (SWGRECS)

LCO 3.7.10 Four SWGRECS subsystems shall be OPERABLE.

APPLICABILITY: With any one of the two reactor unit is in the following MODES:
MODES 1, 2, and 3,
During movement of irradiated fuel assemblies in the primary containment or fuel building,
During CORE ALTERATIONS,
During operations with a potential for draining the reactor vessel (OPDRVs),
During movement of heavy loads over irradiated fuel assemblies in the primary containment or fuel building.

----------NOTE----------
All of the four SWGRECS subsystems are not required to be OPERABLE when both units are in MODES 4, or 5, without during movement of irradiated fuel assemblies in the primary containment or fuel building, CORE ALTERATIONS, operations with a potential for draining the reactor vessel (OPDRVs), movement of heavy loads over irradiated fuel assemblies in the primary containment or fuel building..

(continued)

ACTIONS

----------NOTES----------

1. Separate Condition entry is allowed for each SWGRECS subsystem and isolation flow paths.

2. Isolation flow paths may be unisolated intermittently under administrative controls.

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. Any one of the four SWGRECS subsystem inoperable.	----------NOTES---------- LCO 3.0.4 is not applicable to the unaffected unit. ---------- A.1 Restore SWGRECS subsystem to OPERABLE status. <u>OR</u> A.2 Place one SWGRECS subsystems in the unaffected unit in cooling operation.	 30 days 30 days
B. Any two of the four SWGRECS subsystems inoperable	B.1 Place one SWGRECS subsystems in cooling operation. <u>AND</u> B.2 Restore one SWGRECS subsystem to OPERABLE status.	Immediately 30 days
C. Required Action and Associated Completion Time of Condition A or B not met, and for unit that in MODE 1, 2, or 3.	C.1 Be in MODE 3. <u>AND</u> C.2 Be in MODE 4.	12 hours 36 hours

(continued)

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
D. Required Action and associated Completion Time of Condition A or B not met, and for unit that during movement of irradiated fuel assemblies in the primary containment or fuel building, during movement of heavy load over irradiated fuel assemblies in the primary containment or fuel building, during CORE ALTERATIONS, or during OPDRVs.	----------NOTE---------- LCO 3.0.3 is not applicable. ---------- D.1 Place two SWGRECS subsystems in cooling operation. OR D.2.1 Suspend movement of irradiated fuel assemblies in the primary containment or fuel building. AND D.2.2 Suspend movement of heavy load over irradiated fuel assemblies in the primary containment or fuel building. AND D.2.3 Suspend CORE ALTERATIONS. AND D.2.4 Initiate action to suspend OPDRVs.	Immediately Immediately Immediately Immediately Immediately

(continued)

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
E. Any three or four SWGRECS subsystems inoperable, and for unit that in MODE 1, 2, or 3.	E.1 Enter LCO 3.0.3.	Immediately
F. Any three or four SWGRECS subsystems inoperable, and for unit that during movement of irradiated fuel assemblies in the primary containment or fuel building, during movement of heavy load over irradiated fuel assemblies in the primary containment or fuel building, during COREALTERATIONS, or during OPDRVs.	----------NOTE---------- LCO 3.0.3 is not applicable. ---------- F.1 Suspend movement of irradiated fuel assemblies in the primary containment or fuel building. AND F.2 Suspend movement of heavy load over irradiated fuel assemblies in the primary containment or fuel building. AND F.3 Suspend CORE ALTERATIONS. AND F.4 Initiate action to suspend OPDRVs.	 Immediately Immediately Immediately Immediately

(continued)

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
G. Isolation flow paths with one isolation damper inoperable.	G.1 Restore isolation damper to OPERABLE. OR	72 hours
	G.2.1 Isolate the affected isolation flow path by use of at least one closed and de - activated automatic valve, closed manual valve, or blind flange. AND	72 hours
	G.2.2 Verify the affected isolation flow path is isolated.	Once per 31 days
H. Isolation flow paths with two isolation dampers inoperable.	H.1 Isolate the affected isolation flow path by use of at least one closed and de - activated automatic valve, closed manual valve, or blind flange.	4 hours
I. Required Action and Associated Completion Time of Condition G or H not met, and for unit that in MODE 1, 2, or 3.	I.1 Be in MODE 3. AND	12 hours
	I.2 Be in MODE 4.	36 hours

(continued)

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
J. Required Action and associated Completion Time of Condition G or H not met, and for unit that during movement of irradiated fuel assemblies in the primary containment or fuel building, during movement of heavy load over irradiated fuel assemblies in the primary containment or fuel building, during CORE ALTERATIONS, or during OPDRVs.	----------NOTE---------- LCO 3.0.3 is not applicable. ---------- J.1 Suspend movement of irradiated fuel assemblies in the primary containment or fuel building. AND J.2 Suspend movement of heavy load over irradiated fuel assemblies in the primary containment or fuel building. AND J.3 Suspend CORE ALTERATIONS. AND J.4 Initiate action to suspend OPDRVs.	 Immediately Immediately Immediately Immediately

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.7.10.1	Operate each SWGRECS subsystem for ≥ 15 minutes.	31 days
SR 3.7.10.2	Verify each SWGRECS subsystem actuates on an actual or simulated initiation signal.	18 months
SR 3.7.10.3	Verify each isolation dampers actuates to the isolation position on an actual or simulated initiation signal with isolation time ≤ 20 seconds.	18 months
SR 3.7.10.4	Verify each SWGRECS subsystem operating at a flow rate ≥ 2359.8 lps (5000 scfm) for ≥ 1 hours.	18 months

3.7 PLANT SYSTEMS

3.7.11 Penetration Room Cooling System (PERCS)

LCO 3.7.11 The Division 1, Division 2, and Division 3 PERCS subsystems, for Division 1, 2 with two cooling trains and for Division 3 with one cooling train, shall be OPERABLE.

APPLICABILITY: MODES 1, 2, and 3.

----------NOTE----------
Division 3 PERCS subsystems is not required to be OPERABLE when High Pressure Core Spray System is inoperable.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. Division 1 or 2 PERCS subsystem inoperable.	A.1 Restore the inoperable Division to OPERABLE status.	72 hours
B. Division 1 and 2 PERCS subsystem inoperable.	B.1 Restore one inoperable Division to OPERABLE status.	8 hours
C. Required Action and Associated Completion Time of Condition A or B not met.	C.1 Be in MODE 3. AND C.2 Be in MODE 4.	12 hours 36 hours
D. Division 3 PERCS subsystem inoperable	D.1 Restore the inoperable Division to OPERABLE status.	24 hours

(continued)

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
E. Required Action and Associated Completion Time of Condition D not met.	E.1 Declare HPCS System inoperable.	Immediately

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.7.11.1	Operate Division 3 PERCS cooling train for ≥ 15 minutes.	31 days
SR 3.7.11.2	Verify each PERCS cooling train operating at a flow rate as followed for ≥ 1 hours: a. For VA1A ≥ 1179.8 liters per second (2500 scfm) minus 10% b. For VA1B ≥ 1179.8 liters per second (2500 scfm) minus 10% c. For VA1C ≥ 4247.4 liters per second (9000 scfm) minus 10% d. For VA1D ≥ 4274 liters per second (9000 scfm) minus 10% e. For VA1F ≥ 5899.2 liters per second (12500 scfm) minus 10%	18 months

3.7 PLANT SYSTEMS

3.7.12 Control Building Battery Room Ventilation System

LCO 3.7.12 Two Building room ventilating fans shall be OPERABLE.

APPLICABILITY: At all times when batteries are installed.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One battery room ventilating fan inoperable.	A.1 Restore battery room ventilating fan to OPERABLE status.	7 days
B. Two battery room ventilating fans inoperable.	B.1 Restore one battery room ventilating fan to OEPRABLE status.	8 hours
C.1 Required Action and Associated Completion Time of Condition A or B not met.	C.1 Be in MODE 3. AND C.2 Be in MODE 4.	12 hours 36 hours

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.7.12.1	Operate the alternate battery room ventilating fan for ≥ 15 minutes.	31 days
SR 3.7.12.2	Verify each battery room ventilating fan operating at a flow rate ≥ 472 liters per second (1000 scfm) minus 10% for ≥ 1 hours.	18 months

3.7 PLANT SYSTEMS

3.7.13 Control Building HVAC Equipment Room Ventilation System

LCO 3.7.13 Four control building HVAC equipment room ventilation fans that are two supply and two exhaust fans shall be OPERABLE.

APPLICABILITY: MODES 1, 2, and 3.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. Any one or two of the four ventilation fans inoperable.	A.1 Restore the inoperable ventilation fans to OPERABLE status.	30 days
B. Any three of the four ventilation fans inoperable.	B.1 Restore one ventilation fan to OPERABLE status.	8 hours
C. Required Action and Associated Completion Time of Condition A or B not met.	C.1 Be in MODE 3. AND C.2 Be in MODE 4.	12 hours 36 hours
D. Four ventilation fans inoperable.	D.1 Enter LCO 3.0.3.	Immediately

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.7.13.1	Operate the alternate supply and exhaust fans ≥ 15 minutes.	31 days
SR 3.7.13.2	Verify each ventilating fan operating at a flow rate ≥ 14158 liters per second (30,000 scfm) minus 10% for ≥ 1 hours.	18 months