

1.1 Definitions (continued)

CHANNEL FUNCTIONAL TEST A CHANNEL FUNCTIONAL TEST shall be the injection of a simulated or actual signal into the channel as close to the sensor as practicable to verify OPERABILITY, including required alarm, interlock, display, and trip functions, and channel failure trips. The CHANNEL FUNCTIONAL TEST may be performed by means of any series of sequential, overlapping, or total channel steps so that the entire channel is tested.

CORE ALTERATION CORE ALTERATION shall be the movement of any fuel, sources, or reactivity control components within the reactor vessel with the vessel head removed and fuel in the vessel. The following exceptions are not considered to be CORE ALTERATIONS:

- a. Movement of source range monitors, local power range monitors, intermediate range monitors, traversing incore probes, or special movable detectors (including undervessel replacement); and
- b. Control rod movement provided there are no fuel assemblies in the associated core cell.

Suspension of CORE ALTERATIONS shall not preclude completion of movement of a component to a safe position.

CORE OPERATING LIMITS REPORT (COLR) The COLR is the unit specific document that provides cycle specific parameter limits for the current reload cycle. These cycle specific limits shall be determined for each reload cycle in accordance with Specification 5.6.5. Plant operation within these limits is addressed in individual Specifications.

DOSE EQUIVALENT I-131 DOSE EQUIVALENT I-131 shall be that concentration of I-131 (microcuries/gram) that alone would produce the same thyroid dose as the quantity and isotopic mixture of I-131, I-132, I-133, I-134, and I-135 actually present. The thyroid dose conversion factors used for this calculation shall be those listed in Federal Guidance Report (FGR) 11, "Limiting Values of Radionuclide Intake and Air Concentration and Dose Conversion Factors for Inhalation, Submersion, and Ingestion," 1989.

(continued)

Table 3 3 7.1-1 (page 1 of 1)
Control Room Fresh Air System Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER TRIP SYSTEM	CONDITIONS REFERENCED FROM REQUIRED ACTION A.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
1 Reactor Vessel Water Level - Low Low, Level 2	1,2,3	2	B	SR 33711 SR 33712 SR 33713 SR 33714 SR 33715	≥ -47 inches
2 Drywell Pressure - High	1,2,3	2	C	SR 33711 SR 33712 SR 33713 SR 33714 SR 33715	≤ 188 psid
3 Control Room Local Intake Ventilation Radiation Monitors	1,2,3 (a),(b)	1	D	SR 33711 SR 33712 SR 33714 SR 33715	≤ 0.97 x 10 ⁻⁵ μCi/cc

- (a) During operations with a potential for draining the reactor vessel
- (b) During movement of recently irradiated fuel assemblies in the primary containment or fuel building

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.6.1.2.1	<p>-----NOTES-----</p> <ol style="list-style-type: none"> 1. An inoperable air lock door does not invalidate the previous successful performance of the overall air lock leakage test. 2. Results shall be evaluated against acceptance criteria applicable to SR 3.6.1.1.1. <p>-----</p> <p>Perform required primary containment air lock leakage rate testing in accordance with the Primary Containment Leakage Rate Testing Program.</p>	In accordance with the Primary Containment Leakage Rate Testing Program
SR 3.6.1.2.2	Verify primary containment air lock seal air flask pressure is ≥ 90 psig.	7 days
SR 3.6.1.2.3	<p>-----NOTE-----</p> <p>Only required to be performed upon entry or exit through the primary containment air lock.</p> <p>-----</p> <p>Verify only one door in the primary containment air lock can be opened at a time.</p>	184 days

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SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE		FREQUENCY
SR 3.6.1.2.4	Verify, from an initial pressure of 90 psig, the primary containment air lock seal pneumatic system pressure does not decay at a rate equivalent to > 1.50 psig for a period of 24 hours.	18 months

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE		FREQUENCY
SR 3.6.1.3.8	<p>Verify in-leakage rate of ≤ 340 scfh for each of the following valve groups when tested at 11.5 psid for MS-PLCS valves.</p> <ul style="list-style-type: none"> a. Division I MS-PLCS valves b. Division II MS-PLCS valves 	18 months
SR 3.6.1.3.9	<p>-----NOTE----- Only required to be met in MODES 1, 2, and 3. -----</p> <p>Verify the combined leakage rate for all secondary containment bypass leakage paths is $\leq 580,000$ cc/hr when pressurized to $\geq P_a$.</p>	In accordance with the Primary Containment Leakage Rate Testing Program

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SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.6.1.3.10</p> <p>-----NOTE----- Only required to be met in MODES 1, 2, and 3.</p> <hr/> <p>Verify leakage rate through each main steam line is ≤ 50 scfh when tested at $\geq P_a$, and the total leakage rate through the valves served by each division of MS-PLCS is ≤ 150 scfh per division when tested at $\geq P_a$.</p>	<p>In accordance with the Primary Containment Leakage Rate Testing Program</p>
<p>SR 3.6.1.3.11</p> <p>-----NOTE----- Only required to be met in MODES 1, 2, and 3.</p> <hr/> <p>Verify combined leakage rate through hydrostatically tested lines that penetrate the primary containment is within limits.</p>	<p>In accordance with the Primary Containment Leakage Rate Testing Program</p>

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
SR 3.6.1.3.12 Deleted.	

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE		FREQUENCY
SR 3.6.4.1.2	Verify all secondary containment equipment hatches are closed and sealed and loop seals filled.	31 days
SR 3.6.4.1.3	Verify each secondary containment access door is closed, except when the access opening is being used for entry and exit.	31 days
SR 3.6.4.1.4	Verify each standby gas treatment (SGT) subsystem will draw down the shield building annulus and auxiliary building to ≥ 0.5 and ≥ 0.25 inch of vacuum water gauge in ≤ 18.5 and ≤ 34.5 seconds, respectively.	18 months on a STAGGERED TEST BASIS
SR 3.6.4.1.5	Deleted	Not Applicable
SR 3.6.4.1.6	Verify each SGT subsystem can maintain ≥ 0.5 and ≥ 0.25 inch of vacuum water gauge in the shield building annulus and auxiliary building, respectively, for 1 hour.	18 months on a STAGGERED TEST BASIS
SR 3.6.4.1.7	Deleted	Not Applicable

3.6 CONTAINMENT SYSTEMS

3.6.5.1 Drywell

LCO 3.6.5.1 The drywell shall be OPERABLE.

APPLICABILITY: MODES 1, 2, and 3.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. Drywell inoperable.	A.1 Restore drywell to OPERABLE status.	1 hour
B. Required Action and associated Completion Time not met	B.1 Be in MODE 3.	12 hours
	<u>AND</u> B.2 Be in MODE 4.	36 hours

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.6.5.1.1 Verify personnel door inflatable seal air flask pressure \geq 75 psig.	7 days
SR 3.6.5.1.2 Verify from an initial pressure of 75 psig, the personnel door inflatable seal pneumatic system pressure does not decay at a rate equivalent to \geq 20.0 psig for a period of 24 hours.	18 months

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SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.6.5.2.1	Deleted	
SR 3.6.5.2.2	Verify drywell air lock seal air flask pressure is ≥ 75 psig.	7 days
SR 3.6.5.2.3	<p>-----NOTE-----</p> <p>Only required to be performed upon entry into drywell.</p> <p>-----</p> <p>Verify only one door in the drywell air lock can be opened at a time.</p>	24 months
SR 3.6.5.2.4	Deleted	
SR 3.6.5.2.5	Verify, from an initial pressure of 75 psig, the drywell air lock seal pneumatic system pressure does not decay at a rate equivalent to > 20.0 psig for a period of 24 hours.	18 months

3.7 PLANT SYSTEM

3.7.2 Control Room Fresh Air (CRFA) System

LCO 3.7.2 Two CRFA subsystems shall be OPERABLE.

APPLICABILITY: MODES 1, 2, and 3,
During movement of recently irradiated fuel assemblies in the primary
containment, or fuel building.

During operations with a potential for draining the reactor vessel
(OPDRVs).

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One CRFA subsystem inoperable.	A.1 Restore CRFA subsystem to OPERABLE status.	7 days
B. Required Action and Associated Completion Time of Condition A not met in MODE 1, 2, or 3.	B.1 Be in MODE 3.	12 hours
	<u>AND</u> B.2 Be in MODE 4.	36 hours

(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>C. Required Action and associated Completion Time of Condition A not met during movement of recently irradiated fuel assemblies in the primary containment or fuel building or during OPDRVs.</p>	<p>-----NOTE----- LCO 3.0.3 is not applicable. -----</p>	
	<p>C.1 Place OPERABLE CRFA subsystem in emergency mode.</p> <p><u>OR</u></p>	<p>Immediately</p>
	<p>C.2.1 Suspend movement of recently irradiated fuel assemblies in the primary containment and fuel building.</p> <p><u>AND</u></p> <p>C.2.2 Initiate action to suspend OPDRVs.</p>	<p>Immediately</p>
<p>D. Two CRFA subsystems inoperable in MODE 1, 2, or 3.</p>	<p>D.1 Enter LCO 3.0.3.</p>	<p>Immediately</p>

(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
E. Two CRFA subsystems inoperable during movement of recently irradiated fuel assemblies in the primary containment or fuel building, or during OPDRVs.	E.1 Suspend movement of recently irradiated fuel assemblies in the primary containment and fuel building.	Immediately
	<u>AND</u> E.2 Initiate action to suspend OPDRVs.	Immediately

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.7.2.1 Operate each CRFA subsystem for ≥ 10 continuous hours with the heaters operating.	31 days
SR 3.7.2.2 Perform required CRFA filter testing in accordance with the Ventilation Filter Testing Program (VFTP).	In accordance with the VFTP
SR 3.7.2.3 Verify each CRFA subsystem actuates on an actual or simulated initiation signal.	18 months

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3.7 PLANT SYSTEMS

3.7.3 Control Room Air Conditioning (AC) System

LCO 3.7.3 Two control room AC subsystems shall be OPERABLE.

APPLICABILITY: MODES 1, 2, and 3,
During movement of recently irradiated fuel assemblies in the primary
containment or fuel building.

During operations with a potential for draining the reactor vessel
(OPDRVs).

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One control room AC subsystem inoperable.	A.1 Restore control room AC subsystem to OPERABLE status.	30 days
B. Two control room AC subsystems inoperable.	B.1 Verify control room area temperature $\leq 104^{\circ}\text{F}$. <u>AND</u> B.2 Restore one control room AC subsystem to OPERABLE status.	Once per 4 hours 7 days
C. Required Action and Associated Completion Time of Condition A or B not met 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 (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>D. Required Action and associated Completion Time of Condition A not met during movement of recently irradiated fuel assemblies in the primary containment or fuel building, or during OPDRVs.</p>	<p>-----NOTE----- LCO 3.0.3 is not applicable. -----</p>	
	<p>D.1 Place OPERABLE control room AC subsystem in operation.</p>	<p>Immediately</p>
	<p><u>OR</u></p> <p>D.2.1 Suspend movement of recently irradiated fuel assemblies in the primary containment and fuel building.</p>	<p>Immediately</p>
	<p><u>AND</u></p> <p>D.2.2 Initiate action to suspend OPDRVs.</p>	<p>Immediately</p>

(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
E. Required Action and associated Completion Time of Condition B not met during movement of recently irradiated fuel assemblies in the primary containment or fuel building, or during OPDRVs.	E.1 Suspend movement of recently irradiated fuel assemblies in the primary containment and fuel building.	Immediately
	<u>AND</u> E.2 Initiate action to suspend OPDRVs.	Immediately

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.7.3.1 Verify each control room AC subsystem has the capability to remove the assumed heat load.	18 months

3.8 ELECTRICAL POWER SYSTEMS

3.8.2 AC Sources–Shutdown

LCO 3.8.2 The following AC electrical power sources shall be OPERABLE:

- a. One qualified circuit between the offsite transmission network and the onsite Class 1E AC electrical power distribution subsystem(s) required by LCO 3.8.10, "Distribution Systems–Shutdown";
- b. One diesel generator (DG) capable of supplying one division of the Division I or II onsite Class 1E AC electrical power distribution subsystem(s) required by LCO 3.8.10; and
- c. One qualified circuit, other than the circuit in LCO 3.8.2.a, between the offsite transmission and the Division III onsite Class 1E electrical power distribution subsystem, or the Division III DG capable of supplying the Division III onsite Class 1E AC electrical power distribution subsystem, when the Division III onsite Class 1E electrical power distribution subsystem is required by LCO 3.8.10.

APPLICABILITY: MODES 4 and 5,
During movement of recently irradiated fuel assemblies in the primary
containment or fuel building. |

ACTIONS

-----NOTE-----

LCO 3.0.3 is not applicable.

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>A. LCO Item a not met.</p>	<p>-----NOTE----- Enter applicable Condition and Required Actions of LCO 3.8.10, when any required division is de-energized as a result of Condition A. -----</p> <p>A.1 Declare affected required feature(s) with no offsite power available from a required circuit inoperable.</p> <p><u>OR</u></p> <p>A.2.1 Suspend CORE ALTERATIONS.</p> <p><u>AND</u></p> <p>A.2.2 Suspend movement of recently irradiated fuel assemblies in the primary containment and fuel building.</p> <p><u>AND</u></p> <p>A.2.3 Initiate action to suspend operations with a potential for draining the reactor vessel (OPDRVs).</p> <p><u>AND</u></p>	<p>Immediately</p> <p>Immediately</p> <p>Immediately</p> <p>Immediately</p> <p>(continued)</p>

ACTIONS		
CONDITION	REQUIRED ACTION	COMPLETION TIME
A. (continued)	A.2.4 Initiate action to restore required offsite power circuit to OPERABLE status.	Immediately
B. LCO Item b not met.	B.1 Suspend CORE ALTERATIONS.	Immediately
	<u>AND</u>	Immediately
	B.2 Suspend movement of recently irradiated fuel assemblies in primary containment and fuel building.	Immediately
	<u>AND</u>	Immediately
C. LCO Item c not met.	B.3 Initiate action to suspend OPDRVs.	Immediately
	<u>AND</u>	Immediately
	B.4 Initiate action to restore required DG to OPERABLE status.	Immediately
C. LCO Item c not met.	C.1 Declare High Pressure Core Spray System and Standby Service Water System pump 2C inoperable.	72 hours

3.8 ELECTRICAL POWER SYSTEMS

3.8.5 DC Sources–Shutdown

LCO 3.8.5 The following shall be OPERABLE:

- a. One Class 1E DC electrical power subsystem capable of supplying one division of the Division I or II onsite Class 1E DC electrical power distribution subsystem(s) required by LCO 3.8.10, "Distribution Systems-Shutdown";
- b. One Class 1E battery or battery charger, other than the DC electrical power subsystem in LCO 3.8.5.a, capable of supplying the remaining Division I or II onsite Class 1E DC electrical power distribution subsystem(s) when required by LCO 3.8.10; and
- c. The Division III DC electrical power subsystem capable of supplying the Division III onsite Class 1E DC electrical power distribution subsystem, when the Division III onsite Class 1E DC electrical power distribution subsystem is required by LCO 3.8.10.

APPLICABILITY: MODES 4 and 5,
During movement of recently irradiated fuel assemblies in the primary containment or fuel building. |

ACTIONS

-----NOTE-----

LCO 3.0.3 is not applicable

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>A. One or more required DC electrical power subsystems inoperable.</p>	<p>A.1 Declare affected required feature(s) inoperable.</p>	<p>Immediately</p>
	<p><u>OR</u></p>	
	<p>A.2.1 Suspend CORE ALTERATIONS.</p>	<p>Immediately</p>
	<p><u>AND</u></p>	
	<p>A.2.2 Suspend movement of recently irradiated fuel assemblies in the primary containment and fuel building.</p>	<p>Immediately</p>
	<p><u>AND</u></p>	
	<p>A.2.3 Initiate action to suspend operations with a potential for draining the reactor vessel.</p>	<p>Immediately</p>
	<p><u>AND</u></p>	
	<p>A.2.4 Initiate action to restore required DC electrical power subsystems to OPERABLE status.</p>	<p>Immediately</p>

3.8 ELECTRICAL POWER SYSTEMS

3.8.8 Inverters-Shutdown

LCO 3.8.8 One Divisional inverter shall be OPERABLE capable of supplying one division of the Division I or II onsite Class 1E uninterruptible AC vital bus electrical power distribution subsystem(s) required by LCO 3.8.10, "Distribution Systems-Shutdown".

APPLICABILITY: MODES 4 and 5,
During movement of recently irradiated fuel assemblies in the primary containment or fuel building.

ACTIONS

-----NOTE-----

LCO 3.0.3 is not applicable

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or more required inverters inoperable.	A.1 Declare affected required feature(s) inoperable.	Immediately
	<u>OR</u>	
	A.2.1 Suspend CORE ALTERATIONS.	Immediately
	<u>AND</u>	
	A.2.2 Suspend handling of recently irradiated fuel assemblies in the primary containment or fuel building.	Immediately
	<u>AND</u>	(continued)

3.8 ELECTRICAL POWER SYSTEMS

3.8.10 Distribution Systems–Shutdown

LCO 3.8.10 The necessary portions of the Division I, Division II, and Division III AC, DC, and Division I and II AC vital bus electrical power distribution subsystems shall be OPERABLE to support equipment required to be OPERABLE.

APPLICABILITY: MODES 4 and 5,
During movement of recently irradiated fuel assemblies in the primary containment or fuel building.

ACTIONS

NOTE

LCO 3.0.3 is not applicable

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>A. One or more required AC, DC, or AC vital bus electrical power distribution subsystems inoperable.</p>	<p>A.1 Declare associated supported required feature(s) inoperable.</p>	<p>Immediately</p>
	<p><u>OR</u></p> <p>A.2.1 Suspend CORE ALTERATIONS.</p>	<p>Immediately</p>
	<p><u>AND</u></p> <p>A.2.2 Suspend movement of recently irradiated fuel assemblies in the primary containment and fuel building.</p> <p><u>AND</u></p>	<p>Immediately</p> <p>(continued)</p>

5.5 Programs and Manuals

5.5.7 Ventilation Filter Testing Program (VFTP) (continued)

- b. Demonstrate for each of the ESF systems that an inplace test of the charcoal adsorber shows a penetration and system bypass < 0.05% when tested in accordance with Regulatory Guide 1.52, Revision 2, and ANSI N510-1989 at the system flowrate specified below $\pm 10\%$:

<u>ESF Ventilation System</u>	<u>Flowrate</u>
SGTS	12,500 cfm
FBVS	10,000 cfm
CRFAS	4,000 cfm

- c. Demonstrate for each of the ESF systems that a laboratory test of a sample of the charcoal adsorber, when obtained as described in Regulatory Guide 1.52, Revision 2, shows the methyl iodide penetration less than the value specified below when tested in accordance with ASTM D3803-1989 at a temperature of 30°C and the relative humidity specified below:

<u>ESF Ventilation System</u>	<u>Penetration</u>	<u>RH</u>
SGTS	5.0%	70%
FBVS	0.5%	70%
CRFAS	1.0%	70%

- d. Demonstrate for each of the ESF systems that the pressure drop across the combined HEPA filters, the prefilters, and the charcoal adsorbers is less than the value specified below when tested in accordance with Regulatory Guide 1.52, Revision 2, and ANSI N510-1989 at the system flowrate specified below $\pm 10\%$:

<u>ESF Ventilation System</u>	<u>Delta P</u>	<u>Flowrate</u>
SGTS	< 8" WG	12,500 cfm
FBVS	< 8" WG	10,000 cfm
CRFAS	< 8" WG	4,000 cfm

(continued)

5.5 Programs and Manuals

5.5.11 Technical Specifications (TS) Bases Control Program (continued)

- c. The Bases Control Program shall contain provisions to ensure that the Bases are maintained consistent with the USAR.
- d. Proposed changes that do not meet the criteria of either Specification 5.5.11.b.1 or Specification 5.5.11.b.2 above shall be reviewed and approved by the NRC prior to implementation. Changes to the Bases implemented without prior NRC approval shall be provided to the NRC on a frequency consistent with 10 CFR 50.71(e).

5.5.12 DELETED

5.5.13 Primary Containment Leakage Rate Testing Program

A program shall be established to implement the leakage rate testing of the containment as required by 10 CFR 50.54(o) and 10 CFR 50, Appendix J, Option B, as modified by approved exemptions. This program shall be in accordance with the guidelines contained in Regulatory Guide 1.163, "Performance-Based Containment Leak-Test Program," dated September 1995, except that the next Type A test performed after the August 15, 1992, Type A test shall be performed no later than August 14, 2007.

The peak calculated containment internal pressure for the design basis loss of coolant accident, P_a , is 7.6 psig.

The maximum allowable primary containment leakage rate, L_a , at P_a , shall be 0.325% of primary containment air weight per day.

The Primary Containment leakage rate acceptance criterion is $\leq 1.0 L_a$. During the first unit startup following testing in accordance with this program, the leakage rate acceptance criteria are $\leq 0.60 L_a$ for the Type B and Type C tests and $\leq 0.75 L_a$ for Type A tests.

The provisions of SR 3.0.2 do not apply to test frequencies specified in the Primary Containment Leakage Rate Testing Program.

The provisions of SR 3.0.3 are applicable to the Primary Containment Leakage Rate Testing Program.
