

3.1 REACTIVITY CONTROL SYSTEMS

3.1.7 Rod Position Indication

LCO 3.1.7 The Digital Rod Position Indication (DRPI) System and the Demand Position Indication System shall be OPERABLE.

APPLICABILITY: MODES 1 and 2.

ACTIONS

-----NOTE-----  
Separate Condition entry is allowed for each inoperable rod position indicator and each demand position indicator.  
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CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One DRPI per group inoperable for one or more groups.	A.1 Verify the position of the rods with inoperable position indicators indirectly by using core power distribution measurement information.	Once per 8 hours
	<u>OR</u> A.2 Reduce THERMAL POWER to $\leq 50\%$ RTP.	8 hours
B. More than one DRPI per group inoperable.	B.1 Place the control rods under manual control	Immediately
	<u>AND</u> B.2 Monitor and record reactor coolant system Tavg.	Once per 1 hour
	<u>AND</u>	(continued)

**SURVEILLANCE REQUIREMENTS (continued)**

SURVEILLANCE	FREQUENCY
<p>SR 3.3.1.6</p> <p>-----NOTE----- Not required to be performed until 72 hours after THERMAL POWER <math>\geq</math> 75% RTP. -----</p> <p>Calibrate excore channels to agree with incore power distribution measurements.</p>	<p>92 EFPD</p>
<p>SR 3.3.1.7</p> <p>-----NOTE-----</p> <ol style="list-style-type: none"> <li>1. Not required to be performed for source range instrumentation prior to entering MODE 3 from MODE 2 until 4 hours after entry into MODE 3.</li> <li>2. For source range instrumentation, this Surveillance shall include verification that interlocks P-6 and P-10 are in their required state for existing unit conditions.</li> </ol> <p>-----</p> <p>Perform COT.</p>	<p>184 days</p>

(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>C. -----NOTE----- Only applicable during movement of recently irradiated fuel assemblies within containment.</p> <p>-----</p> <p>Required automatic actuation train inoperable.</p> <p><u>OR</u></p> <p>Required radiation monitoring channel inoperable.</p>	<p>C.1 Place and maintain containment ventilation valves in closed position.</p> <p><u>OR</u></p> <p>C.2 Enter applicable Conditions and Required Actions of LCO 3.9.4, "Containment Penetrations," for containment ventilation isolation valves made inoperable by isolation instrumentation.</p>	<p>Immediately</p> <p>Immediately</p>

Table 3.3.6-1 (page 1 of 1)

Containment Ventilation Isolation Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS	SURVEILLANCE REQUIREMENTS	TRIP SETPOINT
1. Not used				
2. Automatic Actuation Logic and Actuation Relays	1, 2, 3, 4	2 trains	SR 3.3.6.2 SR 3.3.6.3 SR 3.3.6.5	NA
	(a)	1 train	SR 3.3.6.2 SR 3.3.6.3 SR 3.3.6.5	NA
3. Containment Purge Radiation Gaseous and Particulate	1, 2, 3, 4	2	SR 3.3.6.1 SR 3.3.6.4 SR 3.3.6.7 SR 3.3.6.8	Per ODCM
	(a)	1	SR 3.3.6.1 SR 3.3.6.4 SR 3.3.6.7 SR 3.3.6.8	Per ODCM
4. Containment Isolation-SI	Refer to LCO 3.3.2, "ESFAS Instrumentation," Functions 1 and 3, for all initiation functions and requirements.			

(a) During movement of recently irradiated fuel assemblies within containment.

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
D. Required Action and associated Completion Time for Condition A or B not met during movement of recently irradiated fuel assemblies.	D.1 Suspend movement of recently irradiated fuel assemblies.	Immediately
E. Required Action and associated Completion Time for Condition A or B not met in MODE 5 or 6.	E.1 Initiate action to restore one CRVS train to OPERABLE status.	Immediately

SURVEILLANCE REQUIREMENTS

NOTE

Refer to Table 3.3.7-1 to determine which SRs apply for each CRVS Actuation Function.

SURVEILLANCE	FREQUENCY
SR 3.3.7.1 Perform CHANNEL CHECK.	12 hours
SR 3.3.7.2 Perform CFT.	92 days
SR 3.3.7.3 Perform ACTUATION LOGIC TEST.	92 days
SR 3.3.7.4 Perform MASTER RELAY TEST.	92 days
SR 3.3.7.5 Perform SLAVE RELAY TEST.	92 days
SR 3.3.7.6	
-----NOTE----- Verification of setpoint is not required.	
Perform TADOT.	18 months
SR 3.3.7.7 Perform CHANNEL CALIBRATION	18 months

Table 3.3.7-1 (page 1 of 1)  
CRVS Actuation Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS	SURVEILLANCE REQUIREMENTS	TRIP SETPOINT
1. Manual Initiation	1, 2, 3, 4, 5, 6, and (a)	2 trains	SR 3.3.7.6	NA
2. Automatic Actuation Relays	1, 2, 3, 4, 5, 6, and (a)	2 trains	SR 3.3.7.3 SR 3.3.7.4 SR 3.3.7.5	NA
3. Control Room Radiation Atmosphere Air Intakes	1, 2, 3, 4, 5, 6, and (a)	2	SR 3.3.7.1 SR 3.3.7.2 SR 3.3.7.7	Per ODCM
4. Safety Injection	Refer to LCO 3.3.2, "ESFAS Instrumentation," Function 1, for all initiation functions and requirements.			

(a) During movement of recently irradiated fuel assemblies.

3.3 INSTRUMENTATION

3.3.8 Fuel Building Ventilation System (FBVS) Actuation Instrumentation

LCO 3.3.8            The FBVS actuation instrumentation for each Function in Table 3.3.8-1 shall be OPERABLE.

APPLICABILITY:    According to Table 3.3.8-1.

ACTIONS

-----NOTE-----

Separate Condition entry is allowed for each Function.

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CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or more Functions with one channel or train inoperable.	A.1.1    Place and maintain one FBVS train in the Iodine Removal mode.	Immediately
	<u>AND</u>	
	A.1.2.1    Install an appropriate portable continuous monitor with the same alarm setpoint.	Immediately
	<u>OR</u>	
	A.1.2.2    Station an individual qualified in radiation protection procedures with a dose rate monitoring device in the spent fuel pool area.	Immediately
	<u>AND</u>	
	A.1.3    Restore the inoperable monitors to OPERABLE status.	30 days
B. Required Action and associated Completion Time for Condition A not met or, two manual channels inoperable.	B.1    Suspend movement of recently irradiated fuel assemblies in the fuel building.	Immediately

Table 3.3.8-1 (page 1 of 1)  
FBACS Actuation Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS	SURVEILLANCE REQUIREMENTS	TRIP SETPOINT
1. Manual Initiation	(a)	2	SR 3.3.8.4	NA
2. Fuel Handling Building Radiation				
a. Spent Fuel Pool	(a)	1	SR 3.3.8.1 SR 3.3.8.2 SR 3.3.8.5	Per ODCM
b. New Fuel Storage Vault	(a)	1	SR 3.3.8.1 SR 3.3.8.2 SR 3.3.8.5	Per ODCM

(a) During movement of recently irradiated fuel assemblies in the fuel handling building.



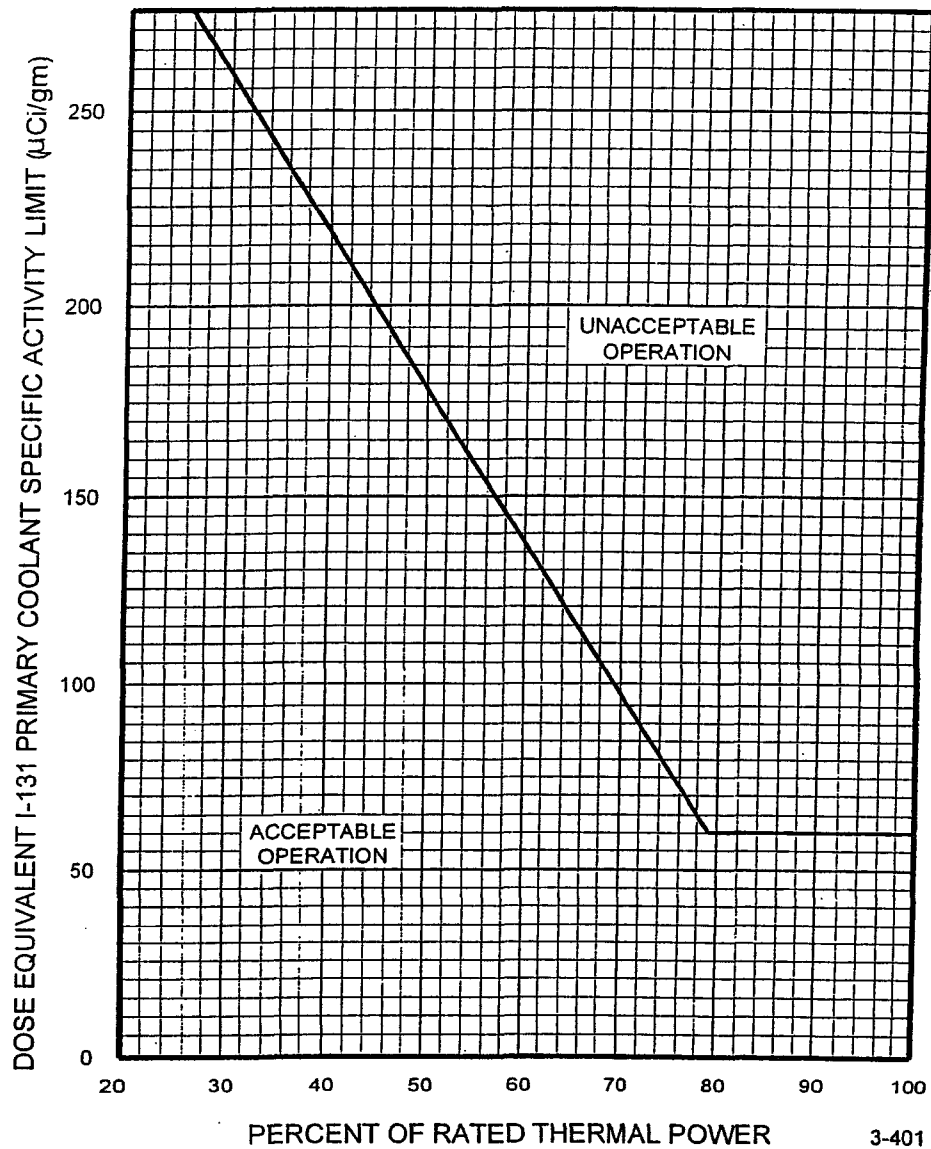


Figure 3.4.16-1  
DOSE EQUIVALENT I-131 REACTOR COOLANT SPECIFIC ACTIVITY LIMIT  
VERSUS PERCENT OF RATED THERMAL POWER WITH THE REACTOR COOLANT  
SPECIFIC ACTIVITY > 1 µCi/GRAM DOSE EQUIVALENT I-131.

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE		FREQUENCY
SR 3.7.3.3	Verify each MFIV, MFRV, MFRV bypass valve, and MFWP turbine stop valve actuates to the closed position on an actual or simulated actuation signal.	24 months
SR 3.7.3.4	Verify the closure time of each MFWP turbine stop valve is $\leq 1$ second.	At each COLD SHUTDOWN, but not more frequently than once per 92 days.

3.7 PLANT SYSTEMS

3.7.10 Control Room Ventilation System (CRVS)

LCO 3.7.10 Two CRVS trains shall be OPERABLE.

-----NOTE-----

The Control Room boundary may be opened intermittently under administrative controls.

APPLICABILITY: MODES 1, 2, 3, 4, 5, and 6.  
During movement of recently irradiated fuel assemblies.

ACTIONS

-----NOTE-----

ACTIONS apply simultaneously to both units.

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One CRVS train inoperable.	A.1 Restore CRVS train to OPERABLE status.	7 days
B. Two CRVS trains inoperable due to inoperable control room boundary in MODE 1, 2, 3, or 4.	B.1 Restore control room boundary to OPERABLE status.	24 hours
C. Required Action and associated Completion Time of Condition A not met in MODE 1, 2, 3, or 4.	C.1 Be in MODE 3.	6 hours
	<u>AND</u> C.2 Be in MODE 5.	36 hours

(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
D. Required Action and associated Completion Time of Condition A not met in MODE 5 or 6, or during movement of recently irradiated fuel assemblies.	D.1.1 Place OPERABLE CRVS train in pressurization mode.  <u>AND</u>	Immediately
	D.1.2 Verify that the OPERABLE CRVS train is capable of being powered by an OPERABLE emergency power source.	Immediately
	<u>OR</u> D.2 Suspend movement of recently irradiated fuel assemblies.	Immediately

(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
E. Two CRVS trains inoperable in MODE 5 OR 6, or during movement of recently irradiated fuel assemblies.	E.1 Suspend movement of recently irradiated fuel assemblies.	Immediately
F. Two CRVS trains inoperable in MODE 1, 2, 3, or 4 for reasons other than Condition B.	F.1 Enter LCO 3.0.3.	Immediately

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.7.10.1	Operate each CRVS train for $\geq 15$ minutes.	31 days
SR 3.7.10.2	Verify that each CRVS redundant fan is aligned to receive electrical power from a separate OPERABLE vital bus.	31 days
SR 3.7.10.3	Perform required CRVS filter testing in accordance with the Ventilation Filter Testing Program (VFTP).	In accordance with VFTP
SR 3.7.10.4	Verify each CRVS train automatically switches into the pressurization mode of operation on an actual or simulated actuation signal.	24 months
SR 3.7.10.5	Verify one CRVS train can maintain a positive pressure of $\geq 0.125$ inches water gauge, relative to the outside atmosphere during the pressurization mode of operation.	24 months on a STAGGERED TEST BASIS

3.7 PLANT SYSTEMS

3.7.13 Fuel Handling Building Ventilation System (FHBVS)

LCO 3.7.13 Two FHBVS trains shall be OPERABLE.

APPLICABILITY: During movement of recently irradiated fuel assemblies in the fuel handling building.

-----NOTE-----

LCO 3.0.3 is not applicable.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One FHBVS train inoperable.	A.1 Restore FHBVS train to OPERABLE status.	Immediately
B. Required Action and associated Completion Time of Condition A not met during movement of recently irradiated fuel assemblies in the fuel building.	B.1 Place the OPERABLE FHBVS train in operation and verify that it is capable of being powered from an OPERABLE emergency power source.	Immediately
	<u>OR</u> B.2 Suspend movement of recently irradiated fuel assemblies in the fuel handling building.	Immediately
C. Two FHBVS trains inoperable during movement of recently irradiated fuel assemblies in the fuel building.	C.1 Suspend movement of recently irradiated fuel assemblies in the fuel handling building.	Immediately

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 the onsite Class 1E AC electrical power distribution subsystem(s) required by LCO 3.8.10; and
- c. One supply train of the diesel fuel oil (DFO) transfer system.

APPLICABILITY: MODES 5 and 6,  
During movement of recently irradiated fuel assemblies.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME	
<p>A. One required offsite circuit inoperable.</p>	<p>-----NOTE----- Enter applicable Conditions and Required Actions of LCO 3.8.10, with one required Class 1E AC electrical power distribution subsystem de-energized as a result of Condition A. -----</p>		
	<p>A.1 Declare affected required feature(s) with no offsite power available 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.</p> <p><u>AND</u></p>		<p>Immediately</p>

(continued)

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>A. (continued)</p>	<p>A.2.3 Suspend operations involving positive reactivity additions that could result in loss of required SDM or boron concentration.</p> <p><u>AND</u></p> <p>A.2.4 Initiate action to restore required offsite power circuit to OPERABLE status.</p>	<p>Immediately</p> <p>Immediately</p>
<p>B. The required DG inoperable.</p> <p><u>OR</u></p> <p>The required supply train of the DFO transfer system inoperable.</p>	<p>B.1 Suspend CORE ALTERATIONS.</p> <p><u>AND</u></p> <p>B.2 Suspend movement of recently irradiated fuel assemblies.</p> <p><u>AND</u></p> <p>B.3 Suspend operations involving positive reactivity additions that could result in loss of required SDM or boron concentration.</p> <p><u>AND</u></p> <p>B.4 Initiate action to restore required DG to OPERABLE status.</p>	<p>Immediately</p> <p>Immediately</p> <p>Immediately</p> <p>Immediately</p>



3.8 ELECTRICAL POWER SYSTEMS

3.8.5 DC Sources-Shutdown

LCO 3.8.5            The Class 1E DC electrical power subsystem shall be OPERABLE to support the DC electrical power distribution subsystem(s) required by LCO 3.8.10, "Distribution Systems-Shutdown."

APPLICABILITY:    MODES 5 and 6,  
During movement of recently irradiated fuel assemblies.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or more required DC electrical power subsystems 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 movement of recently irradiated fuel assemblies.	Immediately
	<u>AND</u>	
	A.2.3    Suspend operations involving positive reactivity additions that could result in loss of required SDM or boron concentration.	Immediately
	<u>AND</u>	
	A.2.4    Initiate action to restore required DC electrical power subsystems to OPERABLE status.	Immediately

3.8 ELECTRICAL POWER SYSTEMS

3.8.8 Inverters-Shutdown

LCO 3.8.8 The Class 1E UPS Inverters shall be OPERABLE to support the onsite Class 1E 120 VAC vital bus electrical power distribution subsystem(s) required by LCO 3.8.10, "Distribution Systems-Shutdown."

APPLICABILITY: MODES 5 and 6,  
During movement of recently irradiated fuel assemblies.

ACTIONS

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. <u>AND</u>	Immediately
	A.2.2 Suspend movement of recently irradiated fuel assemblies. <u>AND</u>	Immediately
	A.2.3 Suspend operations involving positive reactivity additions that could result in loss of required SDM or boron concentration. <u>AND</u>	Immediately
A.2.4 Initiate action to restore required inverters to OPERABLE status.	Immediately	

3.8 ELECTRICAL POWER SYSTEMS

3.8.10 Distribution Systems-Shutdown

LCO 3.8.10 The necessary portion of the Class 1E AC, DC, and 120 VAC vital bus electrical power distribution subsystems shall be OPERABLE to support equipment required to be OPERABLE.

APPLICABILITY: MODES 5 and 6,  
During movement of recently irradiated fuel assemblies.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or more required AC, DC, or 120 VAC vital bus electrical power distribution subsystems inoperable.	A.1 Declare associated supported required feature(s) inoperable.  <u>OR</u>	Immediately
	A.2.1 Suspend CORE ALTERATIONS.  <u>AND</u>	Immediately
	A.2.2 Suspend movement of recently irradiated fuel assemblies.  <u>AND</u>	Immediately
	A.2.3 Suspend operations involving positive reactivity additions that could result in loss of required SDM or boron concentration.  <u>AND</u>	Immediately

(continued)