

Containment Ventilation Isolation Instrumentation  
3.3.6

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. Manual Initiation	1.2.3.4.(a)	2	SR 3.3.6.6	NA
2. Automatic Actuation Logic and Actuation Relays	1.2.3.4.(a)	2 trains	SR 3.3.6.2 SR 3.3.6.3 SR 3.3.6.5	NA
3. Containment Radiation				
a. Gaseous	1.2.3.4.(a)	1	SR 3.3.6.1 SR 3.3.6.4 SR 3.3.6.7	(b)
b. Particulate	1.2.3.4.(a)	1	SR 3.3.6.1 SR 3.3.6.4 SR 3.3.6.7	(b)
4. Safety Injection	Refer to LCO 3.3.2. "ESFAS Instrumentation," Functions 1.a-f. for all initiation functions and requirements.			

- (a) During movement of recently irradiated fuel assemblies within the containment.  
(b) Trip Setpoint shall be in accordance with the methodology in the Offsite Dose Calculation Manual.

3.3 INSTRUMENTATION

3.3.7 Control Room Emergency Filtration System (CREFS) Actuation Instrumentation

LCO 3.3.7 The CREFS actuation instrumentation for each Function in Table 3.3.7-1 shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3, 4  
During movement of irradiated fuel assemblies

ACTIONS

-----NOTE-----  
Separate Condition entry is allowed for each Function.  
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CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One automatic actuation train inoperable.	A.1 Place one CREFS train in emergency pressurization mode.	7 days
B. Two automatic actuation trains inoperable.  <u>OR</u>  One radiation monitoring channel inoperable.	B.1 Place one CREFS train in emergency pressurization mode.	Immediately

(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
C. Required Action and associated Completion Time for Condition A or B 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
D. Required Action and associated Completion Time for Condition A or B not met during movement of irradiated fuel assemblies.	D.1 Suspend movement of irradiated fuel assemblies.	Immediately

SURVEILLANCE REQUIREMENTS

.....NOTE.....  
Refer to Table 3.3.7-1 to determine which SRs apply for each CREFS Actuation Function.  
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SURVEILLANCE	FREQUENCY
SR 3.3.7.1 Perform CHANNEL CHECK.	12 hours
SR 3.3.7.2 Perform COT.	92 days
SR 3.3.7.3 Perform ACTUATION LOGIC TEST.	31 days on a STAGGERED TEST BASIS

(continued)

3.7 PLANT SYSTEMS

3.7.9 Control Room Emergency Filtration System (CREFS)

LCO 3.7.9 Two CREFS trains shall be OPERABLE.

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

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One CREFS train inoperable.	A.1 Restore CREFS train to OPERABLE status.	7 days
B. Required Action and associated Completion Time of Condition A not met in MODE 1, 2, 3, or 4.	B.1 Be in MODE 3.	6 hours
	<u>AND</u> B.2 Be in MODE 5.	36 hours
C. Required Action and associated Completion Time of Condition A not met during movement of irradiated fuel assemblies.	C.1 Place OPERABLE CREFS train in emergency pressurization mode.	Immediately
	<u>OR</u> C.2 Suspend movement of irradiated fuel assemblies.	Immediately

(continued)

ACTIONS (continued)

D. Two CREFS trains inoperable during movement of irradiated fuel assemblies.	D.1 Suspend movement of irradiated fuel assemblies.	Immediately
E. Two CREFS trains inoperable in MODE 1, 2, 3, or 4.	E.1 Restore at least one CREFS train to OPERABLE status.	48 hours
F. Required Action and associated Completion Time of Condition E not met in MODE 1, 2, 3, or 4.	F.1 Be in MODE 3.	6 hours
	AND F.2 Be in MODE 5.	36 hours

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.7.9.1	Operate each CREFS train for $\geq$ 15 minutes.	31 days
SR 3.7.9.2	Perform required CREFS filter testing in accordance with the Ventilation Filter Testing Program (VFTP).	In accordance with VFTP
SR 3.7.9.3	Verify each CREFS train actuates on an actual or simulated actuation signal.	18 months
SR 3.7.9.4	Verify one CREFS train can maintain a positive pressure of $\geq$ 0.125 inches water gauge, relative to the outside atmosphere and a positive pressure relative to adjacent building areas during the emergency pressurization mode of operation at a makeup flow rate of $\leq$ 400 cfm.	18 months on a STAGGERED TEST BASIS

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3.7 PLANT SYSTEMS

3.7.10 Control Room Emergency Air Temperature Control (CREATC)

LCO 3.7.10 Two CREATC Water Cooled Condensing Unit (WCCU) trains shall be OPERABLE.

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

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One CREATC WCCU train inoperable.	A.1 Restore CREATC WCCU train to OPERABLE status.	30 days
B. Required Action and associated Completion Time of Condition A not met in MODE 1, 2, 3, or 4.	B.1 Be in MODE 3.	6 hours
	<u>AND</u> B.2 Be in MODE 5.	36 hours

(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
C. Required Action and associated Completion Time of Condition A not met during movement of irradiated fuel assemblies.	C.1 Place OPERABLE CREATC WCCU train in operation.  <u>OR</u>  C.2 Suspend movement of irradiated fuel assemblies.	Immediately    Immediately
D. Two CREATC WCCU trains inoperable during movement of irradiated fuel assemblies.	D.1 Suspend movement of irradiated fuel assemblies.	Immediately
E. Two CREATC WCCU trains inoperable in MODE 1, 2, 3, or 4.	E.1 Restore at least one CREATC WCCU train to OPERABLE status.	48 hours
F. Required Action and associated Completion Time of Condition E not met in MODE 1, 2, 3, or 4.	F.1 Be in MODE 3.  <u>AND</u>  F.2 Be in MODE 5.	6 hours   36 hours



3.9 REFUELING OPERATIONS

3.9.3 Containment Penetrations

LC0 3.9.3 The containment penetrations shall be in the following status:

- a. The equipment hatch closed and held in place by four bolts;
- b. One door in the air lock closed; and
- c. Each penetration providing direct access from the containment atmosphere to the outside atmosphere either:
  - 1. closed by a manual or automatic isolation valve, blind flange, or equivalent, or
  - 2. capable of being closed by an OPERABLE Containment Ventilation Isolation System.

APPLICABILITY: During movement of recently irradiated fuel assemblies within containment.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or more containment penetrations not in required status.	A.1 Suspend movement of recently irradiated fuel assemblies within containment.	Immediately

3.9 REFUELING OPERATIONS

3.9.6 Refueling Cavity Water Level

LCO 3.9.6 Refueling cavity water level shall be maintained  $\geq$  23 ft above the top of reactor vessel flange.

APPLICABILITY: During movement of irradiated fuel assemblies within containment.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. Refueling cavity water level not within limit.	A.1 Suspend movement of irradiated fuel assemblies within containment.	Immediately

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.9.6.1 Verify refueling cavity water level is $\geq$ 23 ft above the top of reactor vessel flange.	24 hours

3.9 REFUELING OPERATIONS

3.9.7 Containment Purge Filter System

LCO 3.9.7 The Containment Purge Filter System shall be OPERABLE and operating.

APPLICABILITY: During movement of recently irradiated fuel assemblies in containment.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>A. Containment Purge Filter System inoperable.</p> <p><u>OR</u></p> <p>Containment Purge Filter System not in operation.</p>	<p>A.1 Close each penetration providing direct access from the containment atmosphere to the outside atmosphere by a manual or automatic valve, blind flange, or equivalent method.</p> <p><u>OR</u></p> <p>A.2 Suspend movement of recently irradiated fuel assemblies within containment.</p>	<p>Immediately</p> <p>Immediately</p>