



Table 3.3.6-1 (page 1 of 1)  
Containment Purge Isolation Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS	SURVEILLANCE REQUIREMENTS	NOMINAL TRIP SETPOINT
1. Manual Initiation	1, 2, 3, 4, (a), (b)	2	SR 3.3.6.4	NA
2. Automatic Actuation Logic and Actuation Relays (BOP ESFAS)	1, 2, 3, 4,	2 trains	SR 3.3.6.2 SR 3.3.6.6	NA
3. Containment Purge Exhaust Radiation - Gaseous	1, 2, 3, 4,	2	SR 3.3.6.1 SR 3.3.6.3 SR 3.3.6.5	(c)
4. Containment Isolation - Phase A	Refer to LCO 3.3.2, "ESFAS Instrumentation," Function 3.a, for all initiation functions and requirements			

- (a) During CORE ALTERATIONS  
 (b) During movement of irradiated fuel assemblies within containment.  
 (c) Set to ensure ODCM limits are not exceeded.

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
C. Both radiation monitoring channels inoperable.	C.1.1 Enter applicable Conditions and Required Actions of LCO 3.7.10, "Control Room Emergency Ventilation System (CREVS)," for one CREVS train made inoperable by inoperable CREVS actuation instrumentation.	Immediately
	<u>AND</u>	
	C.1.2 Place one CREVS train in CRVIS mode.	1 hour
	<u>OR</u>	
	C.2 Place both trains in CRVIS mode.	1 hour
D. Required Action and associated Completion Time for Conditions A, B, or C not met in MODE 1, 2, 3, or 4.	D.1 Be in MODE 3.	6 hours
	<u>AND</u>	
	D.2 Be in MODE 5.	36 hours
E. Required Action and associated Completion Time for Conditions A, B, or C not met in MODE 5 or 6, or during CORE ALTERATIONS, or during movement of irradiated fuel assemblies.	E.1 Suspend CORE ALTERATIONS.	Immediately
	<u>AND</u>	
	E.2 Suspend movement of irradiated fuel assemblies.	Immediately

SURVEILLANCE REQUIREMENTS

----- NOTE -----  
Refer to Table 3.3.7-1 to determine which SRs apply for each CREVS 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	----- NOTE ----- The continuity check may be excluded. ----- Perform ACTUATION LOGIC TEST.	31 days on a STAGGERED TEST BASIS
SR 3.3.7.4	----- NOTE ----- Verification of setpoint is not required. ----- Perform TADOT.	18 months
SR 3.3.7.5	Perform CHANNEL CALIBRATION.	18 months
SR 3.3.7.6	----- NOTE ----- Radiation monitor detectors are excluded from response time testing. ----- Verify Control Room Ventilation Isolation ESF RESPONSE TIMES are within limits	18 months on a STAGGERED TEST BASIS

Table 3 3.7-1 (page 1 of 1)  
CREVS Actuation Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS	SURVEILLANCE REQUIREMENTS	NOMINAL TRIP SETPOINT
1. Manual Initiation	1, 2, 3, 4, 5, 6, (a), and (c)	2	SR 3.3 7.4	NA
2. Automatic Actuation Logic and Actuation Relays (BOP ESFAS)	1, 2, 3, 4, 5, 6, (a), and (c)  (a)	2 trains  2 trains	SR3.3 7.3  SR 3.3.7.6	NA  NA
3. Control Room Radiation - Control Room Air Intakes	1, 2, 3, 4, 5, 6, and (a)  (a)	2  2	SR 3.3.7.1 SR 3 3.7.2 SR 3.3.7.5  SR 3.3.7.6	(b)  (b)
4. Containment Isolation - Phase A	Refer to LCO 3 3 2, "ESFAS Instrumentation," Function 3 a, for all initiation functions and requirements.			
5. Fuel Building Exhaust Radiation-Gaseous	Refer to LCO 3 3.8, "EES Actuation Instrumentation," for all initiation functions and requirements			

- (a) During CORE ALTERATIONS or during movement of irradiated fuel assemblies within containment.
- (b) Nominal Trip Setpoint concentration value ( $\mu\text{Ci}/\text{cm}^3$ ) shall be established such that the actual submersion dose rate would not exceed 2 mR/hr in the control room
- (c) During movement of irradiated fuel assemblies in the fuel building

3.3 INSTRUMENTATION

3.3.8 Emergency Exhaust System (EES) Actuation Instrumentation

LCO 3.3.8 The EES 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 Place one EES train in the Fuel Building Ventilation Isolation Signal (FBVIS) mode.	7 days
	AND A.2 Place one CREVS train in Control Room Ventilation Isolation Signal (CRVIS) mode.	7 days

(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>B. ----- NOTE----- Not applicable to Function 3. -----</p> <p>One or more Functions with two channels or two trains inoperable.</p>	<p>B.1.1 Place one EES train in the FBVIS mode and one CREVS train in the CRVIS mode.</p>	<p>Immediately</p>
	<p><u>AND</u></p> <p>B.1.2 Enter applicable Conditions and Required Actions of LCO 3.7.10, "Control Room Emergency Ventilation System (CREVS)," for one CREVS train made inoperable and enter applicable Conditions and Required Actions of LCO 3.7.13, "Emergency Exhaust System (EES)," for one EES train made inoperable by inoperable EES actuation instrumentation.</p>	<p>Immediately</p>
	<p><u>OR</u></p> <p>B.2 Place both EES trains in the FBVIS mode and both CREVS trains in the CRVIS mode.</p>	<p>Immediately</p>

(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>C. Both radiation monitoring channels inoperable.</p>	<p>C.1.1 Enter applicable Conditions and Required Actions of LCO 3.7.10, "Control Room Emergency Ventilation System (CREVS)," for one CREVS train made inoperable and enter applicable Conditions and Required Actions of LCO 3.7.13, "Emergency Exhaust System (EES)," for one EES train made inoperable by inoperable EES actuation instrumentation.</p>	<p>Immediately</p>
	<p><u>AND</u></p>	
	<p>C.1.2 Place one EES train in the FBVIS mode and one CREVS train in the CRVIS mode.</p>	<p>1 hour</p>
	<p><u>OR</u></p>	
	<p>C.2 Place both EES trains in the FBVIS mode and both CREVS trains in the CRVIS mode.</p>	<p>1 hour</p>
<p>D. Required Action and associated Completion Time for Conditions A, B, or C not met during movement of irradiated fuel assemblies in the fuel building.</p>	<p>D.1 Suspend movement of irradiated fuel assemblies in the fuel building.</p>	<p>Immediately</p>

SURVEILLANCE REQUIREMENTS

----- NOTE -----  
Refer to Table 3.3.8-1 to determine which SRs apply for each EES Actuation Function.  
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SURVEILLANCE		FREQUENCY
SR 3.3.8.1	Perform CHANNEL CHECK.	12 hours
SR 3.3.8.2	Perform COT.	92 days
SR 3.3.8.3	----- NOTE ----- The continuity check may be excluded. ----- Perform ACTUATION LOGIC TEST.	31 days on a STAGGERED TEST BASIS
SR 3.3.8.4	----- NOTE ----- Verification of setpoint is not required. ----- Perform TADOT.	18 months
SR 3.3.8.5	Perform CHANNEL CALIBRATION.	18 months

3.9 REFUELING OPERATIONS

3.9.4 Containment Penetrations

LCO 3.9.4 The containment penetrations shall be in the following status:

- a. The equipment hatch closed and held in place by four bolts, or if open, capable of being closed;
- b. One door in the emergency air lock and one door in the personnel air lock capable of being 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 Purge Isolation valve.

----- NOTE -----  
 Penetration flow path(s) providing direct access from the containment atmosphere to the outside atmosphere may be unisolated under administrative controls.  
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APPLICABILITY: During CORE ALTERATIONS,  
 During movement of irradiated fuel assemblies within containment.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or more containment penetrations not in required status.	A.1 Suspend CORE ALTERATIONS.	Immediately
	<u>AND</u> A.2 Suspend movement of irradiated fuel assemblies within containment.	Immediately

**SURVEILLANCE REQUIREMENTS**

SURVEILLANCE		FREQUENCY
SR 3.9.4.1	Verify each required containment penetration is in the required status.	7 days
SR 3.9.4.2	<p style="text-align: center;">----- NOTE -----</p> <p style="text-align: center;">Only required for an open equipment hatch.</p> <p style="text-align: center;">-----</p> <p>Verify the capability to install the equipment hatch</p>	7 days
SR 3.9.4.3	Verify each required containment purge isolation valve actuates to the isolation position on a manual actuation signal.	18 months