

Table 3.3.2-1 (page 3 of 5)
Engineered Safety Feature Actuation System Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS	CONDITIONS	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE (a)
4. Steam Line Isolation (continued)					
e. Steam Line Pressure					
(1) Low	1,2(i),3(b)(i)	3 per steam line	D	SR 3.3.2.1 SR 3.3.2.5 SR 3.3.2.9 SR 3.3.2.10	≥ 571 psig ^(c)
(2) Negative Rate - High	3(g)(i)	3 per steam line	D	SR 3.3.2.1 SR 3.3.2.5 SR 3.3.2.9 SR 3.3.2.10	≤ 125 ^(h) psi
5. Turbine Trip and Feedwater Isolation					
a. Automatic Actuation Logic and Actuation Relays (SSPS)	1,2(j),3(j)	2 trains	G	SR 3.3.2.2 SR 3.3.2.4 SR 3.3.2.6 SR 3.3.2.14	NA
b. Automatic Actuation Logic (MSFIS)	1,2(k),3(k)	2 trains	G	SR 3.3.2.6	NA
c. SG Water Level -High High (P-14)	1,2(j)	4 per SG	I	SR 3.3.2.1 SR 3.3.2.5 SR 3.3.2.9 SR 3.3.2.10	≤ 79.7% of Narrow Range Instrument Span
d. Safety Injection	Refer to Function 1 (Safety Injection) for all initiation functions and requirements.				

(continued)

- (a) The Allowable Value defines the Limiting Safety System Setting. See the Bases for the Trip Setpoints.
- (b) Above the P-11 (Pressurizer Pressure) Interlock and below P-11 unless the Function is blocked.
- (c) Time constants used in the lead/lag controller are $t_1 \geq 50$ seconds and $t_2 \leq 5$ seconds.
- (g) Below the P-11 (Pressurizer Pressure) Interlock; however, may be blocked below P-11 when safety injection on low steam line pressure is not blocked.
- (h) Time constant utilized in the rate/lag controller is ≥ 50 seconds.
- (i) Except when all MSIVs are closed.
- (j) Except when all MFIVs are closed and de-activated; and all MFRVs are closed and de-activated or closed and isolated by a closed manual valve; and all MFRV bypass valves are closed and de-activated, or closed and isolated by a closed manual valve, or isolated by two closed manual valves.
- (k) Except when all MFIVs are closed and de-activated.

Table 3.3.2-1 (page 4 of 5)
Engineered Safety Feature Actuation System Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS	CONDITIONS	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE (a)
6. Auxiliary Feedwater					
a. Manual Initiation	1,2,3	1 per pump	O	SR 3.3.2.8	NA
b. Automatic Actuation Logic and Actuation Relays (Solid State Protection System)	1,2,3	2 trains	G	SR 3.3.2.2 SR 3.3.2.4 SR 3.3.2.6	NA
c. Automatic Actuation Logic and Actuation Relays (Balance of Plant ESFAS)	1,2,3	2 trains	N	SR 3.3.2.3	NA
d. SG Water Level Low - Low	1,2,3	4 per SG	D	SR 3.3.2.1 SR 3.3.2.5 SR 3.3.2.9 SR 3.3.2.10	≥ 22.3% of Narrow Range Instrument Span
e. Safety Injection	Refer to Function 1 (Safety Injection) for all initiation functions and requirements.				
f. Loss of Offsite Power	1,2,3	2 trains	P	SR 3.3.2.7 SR 3.3.2.10	NA
g. Trip of all Main Feedwater Pumps	1	2 per pump	J	SR 3.3.2.8	NA
h. Auxiliary Feedwater Pump Suction Transfer on Suction Pressure - Low	1,2,3	3	M	SR 3.3.2.1 SR 3.3.2.9 SR 3.3.2.10 SR 3.3.2.12	≥ 20.53 psia

(continued)

(a) The Allowable Value defines the Limiting Safety System Setting. See the Bases for the Trip Setpoints.

3.7 PLANT SYSTEMS

3.7.3 Main Feedwater Isolation Valves (MFIVs) and Main Feedwater Regulating Valves (MFRVs) and MFRV Bypass Valves

LCO 3.7.3 Each MFIV and its associated actuator trains, MFRV and MFRV bypass valve for the four main feedwater lines shall be OPERABLE.

APPLICABILITY: MODE 1
 MODES 2 and 3, except for each affected main feedwater line when:

- a. The MFIV is closed and deactivated; or
- b. The MFRV is closed and deactivated or closed and isolated by a closed manual valve; and the MFRV bypass valve is either closed and deactivated, closed and isolated by a closed manual valve, or isolated by two closed manual valves.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One MFIV actuator train inoperable.	A.1 Restore MFIV actuator train to OPERABLE status.	7 days
B. Two MFIV actuator trains inoperable for different MFIVs when the inoperable actuator trains are not in the same separation group.	B.1 Restore one MFIV actuator train to OPERABLE status.	72 hours
C. Two MFIV actuator trains inoperable when the inoperable actuator trains are in the same separation group.	C.1 Restore one MFIV actuator train to OPERABLE status.	24 hours

(continued)

SURVEILLANCE REQUIRMENTS (continued)

SURVEILLANCE		FREQUENCY
SR 3.7.3.2	<p>-----NOTE----- Only required to be performed in MODES 1 and 2.</p> <p>-----</p> <p>Verify each actuator train actuates the MFIV to the isolation position on an actual or simulated actuation signal.</p>	18 months
SR 3.7.3.3	<p>-----NOTE----- Only required to be performed in MODES 1 and 2.</p> <p>-----</p> <p>Verify each MFRV and MFRV bypass valve actuates to the isolation position on an actual or simulated actuation signal.</p>	18 months

3.7 PLANT SYSTEMS

3.7.4 Atmospheric Relief Valves (ARVs)

LCO 3.7.4 Four ARV lines shall be OPERABLE.

APPLICABILITY: MODES 1, 2, and 3.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One ARV line inoperable for reasons other than excessive leakage.	A.1 Restore required ARV line to OPERABLE status.	7 days
B. Two ARV lines inoperable for reasons other than excessive leakage.	B.1 Restore all but one required ARV line to OPERABLE status.	72 hours
C. Three or more ARV lines inoperable for reasons other than excessive leakage.	C.1 Restore all but two ARV lines to OPERABLE status.	24 hours

(continued)