

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
J. One train inoperable.	J.1 -----NOTE----- One train may be bypassed for up to 4 hours for surveillance testing, provided the other train is OPERABLE. ----- Restore train to OPERABLE status.	6 hours
K. One RTB train inoperable.	K.1 -----NOTE----- One train may be bypassed for up to 4 hours for surveillance testing, provided the other train is OPERABLE. ----- Restore train to OPERABLE status.	24 hours
L. One or more channels inoperable.	L.1 Verify interlock is in required state for existing unit conditions.	1 hour
M. One trip mechanism inoperable for one RTB.	M.1 Restore inoperable trip mechanism to OPERABLE status.	48 hours
N. Required Action and associated Completion Time of Condition D not met for Function 8.a, 9, 10, 11, 12, or 13.	N.1 Reduce THERMAL POWER to < P-7.	6 hours

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>O. Required Action and associated Completion Time of Condition D not met for Function 16.a or 16.b.</p>	<p>O.1 Reduce THERMAL POWER to < P-8.</p>	<p>6 hours</p>
<p>P. Required Action and associated Completion Time of Condition L not met for Function 18.b, 18.c, or 18.e.</p>	<p>P.1 Be in MODE 2.</p>	<p>6 hours</p>
<p>Q. Required Action and associated Completion Time of Condition B, J, K, or M not met in MODE 1 or 2.</p> <p><u>OR</u></p> <p>Required Action and associated Completion Time of Condition C not met.</p> <p><u>OR</u></p> <p>Required Action and associated Completion Time of Condition D not met for Function 2.b, 3.a, 3.b, 6, 7, 8.b, 14, or 15.</p> <p><u>OR</u></p> <p>Required Action and associated Completion Time of Condition L not met for Function 18.a or 18.d.</p>	<p>Q.1 Be in MODE 3.</p>	<p>6 hours</p>

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME	
<p>R. Required Action and associated Completion Time of Condition B not met in MODE 3, 4, or 5.</p> <p><u>OR</u></p> <p>Required Action and associated Completion Time of Condition L not met in MODE 3, 4, or 5 for Function 18.a.</p> <p><u>OR</u></p> <p>Required Action and associated Completion Time of Condition I not met.</p>	<p>R.1 Initiate action to fully insert all rods.</p>	<p>Immediately</p>	
	<p><u>AND</u></p>		
	<p>R.2 Place the Rod Control System in a condition incapable of rod withdrawal.</p>	<p>1 hour</p>	

SURVEILLANCE REQUIREMENTS

NOTE

Refer to Table 3.3.1-1 to determine which SRs apply for each RTS Function.

SURVEILLANCE	FREQUENCY
SR 3.3.1.1 Perform CHANNEL CHECK.	12 hours

Table 3.3.1-1 (page 3 of 6)
Reactor Trip System Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS	CONDITIONS	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
15. SG Water Level – Low (per SG)	1,2	2	D ^(f)	SR 3.3.1.1 SR 3.3.1.11 SR 3.3.1.13	≥ 9.7%
Coincident with Steam Flow/Feedwater Flow Mismatch (per SG)	1,2	2	D ^(f)	SR 3.3.1.1 SR 3.3.1.11 SR 3.3.1.13	≤ 0.73E6 lb/hr steam flow at RTP
16. Turbine Trip					
a. Low Fluid Oil Pressure	1 ^(h)	3	D	SR 3.3.1.13 SR 3.3.1.18	≥ 750 psig
b. Turbine Stop Valve Closure (per train)	1 ^(h)	4	D	SR 3.3.1.13 SR 3.3.1.18	≥ 1% open
17. Safety Injection (SI) Input from Engineered Safety Feature Actuation System (ESFAS)	1,2	2 trains	J	SR 3.3.1.6 SR 3.3.1.19	NA
18. Reactor Trip System Interlocks					
a. Intermediate Range Neutron Flux, P-6	2 ^(d) , 3 ^(a) , 4 ^(a) , 5 ^(a)	2	L	SR 3.3.1.14 SR 3.3.1.16	≥ 6E-11 amp
b. Low Power Reactor Trips Block, P-7	1	1 per train	L	SR 3.3.1.5	NA
c. Power Range Neutron Flux, P-8	1	4	L	SR 3.3.1.14 SR 3.3.1.16	≤ 31% RTP
d. Power Range Neutron Flux, P-10	1,2	4	L	SR 3.3.1.14 SR 3.3.1.16	≥ 9% RTP and ≤ 11% RTP
e. Turbine First Stage Pressure, P-13	1	2	L	SR 3.3.1.1 SR 3.3.1.13 SR 3.3.1.16	≤ 37 psig

(a) With Rod Control System capable of rod withdrawal or one or more rods not fully inserted.

(d) Below the P-6 (Intermediate Range Neutron Flux) interlock.

(f) Separate condition entry is allowed per SG for only 1 of the 4 total Reactor Trip System Instrumentation Function 15 channels inoperable on each SG (i.e., for only 1 of 2 SG Water Level – Low channels or 1 of 2 Steam Flow/Feedwater Flow Mismatch channels inoperable on each SG). Any combination of 2 or more inoperable Reactor Trip System Instrumentation Function 15 channels on any SG requires immediate entry into LCO 3.0.3.

(h) Above the P-8 (Power Range Neutron Flux) Interlock.

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
J. One train inoperable.	<p>J.1 -----NOTE----- One train may be bypassed for up to 4 hours for surveillance testing, provided the other train is OPERABLE. ----- Restore train to OPERABLE status.</p>	6 hours
K. One RTB train inoperable.	<p>K.1 -----NOTE----- One train may be bypassed for up to 4 hours for surveillance testing, provided the other train is OPERABLE. ----- Restore train to OPERABLE status.</p>	24 hours
L. One or more channels inoperable.	L.1 Verify interlock is in required state for existing unit conditions.	1 hour
M. One trip mechanism inoperable for one RTB.	M.1 Restore inoperable trip mechanism to OPERABLE status.	48 hours
N. Required Action and associated Completion Time of Condition D not met for Function 8.a, 9, 10, 11, 12, or 13.	N.1 Reduce THERMAL POWER to < P-7.	6 hours

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>O. Required Action and associated Completion Time of Condition D not met for Function 16.a or 16.b.</p>	<p>O.1 Reduce THERMAL POWER to < P-8.</p>	<p>6 hours</p>
<p>P. Required Action and associated Completion Time of Condition L not met for Function 18.b, 18.c, or 18.e.</p>	<p>P.1 Be in MODE 2.</p>	<p>6 hours</p>
<p>Q. Required Action and associated Completion Time of Condition B, J, K, or M not met in MODE 1 or 2.</p> <p><u>OR</u></p> <p>Required Action and associated Completion Time of Condition C not met.</p> <p><u>OR</u></p> <p>Required Action and associated Completion Time of Condition D not met for Function 2.b, 3.a, 3.b, 6, 7, 8.b, 14, or 15.</p> <p><u>OR</u></p> <p>Required Action and associated Completion Time of Condition L not met for Function 18.a or 18.d.</p>	<p>Q.1 Be in MODE 3.</p>	<p>6 hours</p>

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>R. Required Action and associated Completion Time of Condition B not met in MODE 3, 4, or 5.</p> <p><u>OR</u></p> <p>Required Action and associated Completion Time of Condition L not met in MODE 3, 4, or 5 for Function 18.a.</p> <p><u>OR</u></p> <p>Required Action and associated Completion Time of Condition I not met.</p>	<p>R.1 Initiate action to fully insert all rods.</p> <p><u>AND</u></p> <p>R.2 Place the Rod Control System in a condition incapable of rod withdrawal.</p>	<p>Immediately</p> <p>1 hour</p>

SURVEILLANCE REQUIREMENTS

-----NOTE-----

Refer to Table 3.3.1-1 to determine which SRs apply for each RTS Function.

SURVEILLANCE	FREQUENCY
<p>SR 3.3.1.1 Perform CHANNEL CHECK.</p>	<p>12 hours</p>

Table 3.3.1-1 (page 3 of 6)
Reactor Trip System Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS	CONDITIONS	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
15. SG Water Level – Low (per SG)	1,2	2	D ^(f)	SR 3.3.1.1 SR 3.3.1.11 SR 3.3.1.13	≥ 25.0%
Coincident with Steam Flow/Feedwater Flow Mismatch (per SG)	1,2	2	D ^(f)	SR 3.3.1.1 SR 3.3.1.11 SR 3.3.1.13	≤ 1.56E6 lb/hr steam flow at RTP
16. Turbine Trip					
a. Low Fluid Oil Pressure	1 ^(h)	3	D	SR 3.3.1.13 SR 3.3.1.18	≥ 57 psig
b. Turbine Stop Valve Closure (per train)	1 ^(h)	4	D	SR 3.3.1.13 SR 3.3.1.18	≥ 1% open
17. Safety Injection (SI) Input from Engineered Safety Feature Actuation System (ESFAS)	1,2	2 trains	J	SR 3.3.1.6 SR 3.3.1.19	NA
18. Reactor Trip System Interlocks					
a. Intermediate Range Neutron Flux, P-6	2 ^(d) , 3 ^(a) , 4 ^(a) , 5 ^(a)	2	L	SR 3.3.1.14 SR 3.3.1.16	≥ 6E-11 amp
b. Low Power Reactor Trips Block, P-7	1	1 per train	L	SR 3.3.1.5	NA
c. Power Range Neutron Flux, P-8	1	4	L	SR 3.3.1.14 SR 3.3.1.16	≤ 31% RTP
d. Power Range Neutron Flux, P-10	1,2	4	L	SR 3.3.1.14 SR 3.3.1.16	≥ 9% RTP and ≤ 11% RTP
e. Turbine First Stage Pressure, P-13	1	2	L	SR 3.3.1.1 SR 3.3.1.13 SR 3.3.1.16	≤ 51 psig

(a) With Rod Control System capable of rod withdrawal or one or more rods not fully inserted.

(d) Below the P-6 (Intermediate Range Neutron Flux) interlock.

(f) Separate condition entry is allowed per SG for only 1 of the 4 total Reactor Trip System Instrumentation Function 15 channels inoperable on each SG (i.e., for only 1 of 2 SG Water Level – Low channels or 1 of 2 Steam Flow/Feedwater Flow Mismatch channels inoperable on each SG). Any combination of 2 or more inoperable Reactor Trip System Instrumentation Function 15 channels on any SG requires immediate entry into LCO 3.0.3.

(h) Above the P-8 (Power Range Neutron Flux) Interlock.