TABLE 2.2-1

REACTOR PROTECTIVE INSTRUMENTATION TRIP SETPOINT LIMITS

FUNCTIONAL UNIT	TRIP SETPOINT	ALLOWABLE VALUES
I. TRIP GENERATION		
A. Process		
1. Pressurizer Pressure - High	≤ 2383 psia	≤ 2388 psia
2. Pressurizer Pressure - Low	≥ 1837 psia (2)	≥ 1822 psia (2)
3. Steam Generator Level - Low	≥ 44.2% (4)	≥ 43.7% (4)
4. Steam Generator Level - High	≤ 91.0% (9)	≤ 91.5% (9)
5. Steam Generator Pressure - Low	≥ 919 psia (3)	≥ 912 psia (3)
6. Containment Pressure - High	≤ 3.0 psig	≤ 3.2 psig
7. Reactor Coolant Flow - Low		
a. Rate (0.115 psi/sec →)	≤ ~~1.05%/s~~ (6)(7)	≤ ~~1.10%/s~~ (6)(7) ← 0.118 psi/sec
b. Floor (11.9 psid →)	≥ ~~52.2%~~ (6)(7)	≥ ~~47.2%~~ (6)(7) ← 11.7 psid
c. Band (10.0 psid →)	≤ ~~40.0%~~ (6)(7)	≤ ~~42.1%~~ (6)(7) ← 10.2 psid
8. Local Power Density - High	≤ 21.0 kW/ft (5)	≤ 21.0 kW/ft (5)
9. DNBR - Low	≥ 1.231 (5)	≥ 1.231 (5)
B. Excore Neutron Flux		
1. Variable Overpower Trip		
a. Rate	≤ 10.6%/min of RATED THERMAL POWER (8)	≤ 11.0%/min of RATED THERMAL POWER (8)
b. Ceiling	≤ 110.0% of RATED THERMAL POWER (8)	≤ 111.0% of RATED THERMAL POWER (8)
c. Band	≤ 9.8% of RATED THERMAL POWER (8)	≤ 10.0% of RATED THERMAL POWER (8)

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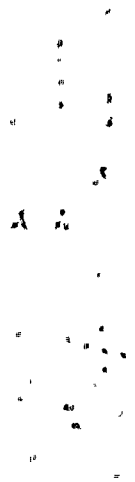

TABLE 2.2-1 (Continued)

REACTOR PROTECTIVE INSTRUMENTATION TRIP SETPOINT LIMITS

TABLE NOTATIONS (Continued)

(6) RATE is the maximum rate of decrease of the trip setpoint. There are no restrictions on the rate at which the setpoint can increase.
FLOOR is the minimum value of the trip setpoint.
BAND is the amount by which the trip setpoint is below the input signal unless limited by Rate or Floor.
~~Setpoints are % of 100% power flow conditions.~~ Setpoints are based on Steam Generator Differential pressure

(7) The setpoint may be altered to disable trip function during testing pursuant to Specification 3.10.3.

(8) RATE is the maximum rate of increase of the trip setpoint. There are no restrictions on the rate at which the setpoint can decrease.
CEILING is the maximum value of the trip setpoint.
BAND is the amount by which the trip setpoint is above the input signal unless limited by the rate or the ceiling.

(9) % of the distance between steam generator upper and lower level narrow range instrument nozzles.

TABLE 3.3-2

REACTOR PROTECTIVE INSTRUMENTATION RESPONSE TIMES

FUNCTIONAL UNIT	RESPONSE TIME
I. TRIP GENERATION	
A. Process	
1. Pressurizer Pressure - High	≤ 1.15 seconds
2. Pressurizer Pressure - Low	≤ 1.15 seconds
3. Steam Generator Level - Low	≤ 1.15 seconds
4. Steam Generator Level - High	≤ 1.15 seconds
5. Steam Generator Pressure - Low	≤ 1.15 seconds
6. Containment Pressure - High	≤ 1.15 seconds
7. Reactor Coolant Flow - Low	≤ 0.~~65~~ second0.58
8. Local Power Density - High	
a. Neutron Flux Power from Excore Neutron Detectors	≤ 0.75 second*
b. CEA Positions	≤ 1.35 second**
c. CEA Positions: CEAC Penalty Factor	≤ 0.75 second**
9. DNBR - Low	
a. Neutron Flux Power from Excore Neutron Detectors	≤ 0.75 second*
b. CEA Positions	≤ 1.35 second**
c. Cold Leg Temperature	≤ 0.75 second##
d. Hot Leg Temperature	≤ 0.75 second##
e. Primary Coolant Pump Shaft Speed	≤ 0.75 second#
f. Reactor Coolant Pressure from Pressurizer	≤ 0.75 second###
g. CEA Positions: CEAC Penalty Factor	≤ 0.75 second**
B. Excore Neutron Flux	
1. Variable Overpower Trip	≤ 0.55 second*
2. Logarithmic Power Level - High	
a. Startup and Operating	≤ 0.55 second*
b. Shutdown	≤ 0.55 second*

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TABLE 2.2-1

REACTOR PROTECTIVE INSTRUMENTATION TRIP SETPOINT LIMITS

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I. TRIP GENERATION		
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a. Rate	0.115 psi/sec → ≤ ~~1.05%/s~~ (6)(7)	≤ ~~1.10%/s~~ (6)(7) ← 0.118 psi/sec
b. Floor	11.9 psid → ≥ ~~52.2%~~ (6)(7)	≥ ~~47.2%~~ (6)(7) ← 11.7 psid
c. Band	10.0 psid → ≤ ~~40.0%~~ (6)(7)	≤ ~~42.1%~~ (6)(7) ← 10.2 psid
8. Local Power Density - High	≤ 21.0 kW/ft (5)	≤ 21.0 kW/ft (5)
9. DNBR - Low	≥ 1.231 (5)	≥ 1.231 (5)
B. Excore Neutron Flux		
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b. Ceiling	≤ 110.0% of RATED THERMAL POWER (8)	≤ 111.0% of RATED THERMAL POWER (8)
c. Band	≤ 9.8% of RATED THERMAL POWER (8)	≤ 10.0% of RATED THERMAL POWER (8)

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TABLE 2.2-1 (Continued)

REACTOR PROTECTIVE INSTRUMENTATION TRIP SETPOINT LIMITS

TABLE NOTATIONS (Continued)

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Setpoints are based on Steam Generator Differential pressure

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(9) % of the distance between steam generator upper and lower level narrow range instrument nozzles.

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4. Steam Generator Level - High	≤ 1.15 seconds
5. Steam Generator Pressure - Low	≤ 1.15 seconds
6. Containment Pressure - High	≤ 1.15 seconds
7. Reactor Coolant Flow - Low	≤ ~~0.65~~ second 0.58
8. Local Power Density - High	
a. Neutron Flux Power from Excore Neutron Detectors	≤ 0.75 second*
b. CEA Positions	≤ 1.35 second**
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9. DNBR - Low	
a. Neutron Flux Power from Excore Neutron Detectors	≤ 0.75 second*
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d. Hot Leg Temperature	≤ 0.75 second##
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f. Reactor Coolant Pressure from Pressurizer	≤ 0.75 second###
g. CEA Positions: CEAC Penalty Factor	≤ 0.75 second**
B. Excore Neutron Flux	
1. Variable Overpower Trip	≤ 0.55 second*
2. Logarithmic Power Level - High	
a. Startup and Operating	≤ 0.55 second*
b. Shutdown	≤ 0.55 second*

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